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101 SPEED TEST - SOLUTIONS S-1-106

NUMBER SYSTEM

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./...............

1. Sum of eight consecutive numbers of Set A is 376. What is the sum of five consecutive numbers of another set if its minimum number is 15 ahead of average of Set A ?
   (a) 296   (b) 320   (c) 324
   (d) 284   (e) None of these

2. Deepak has some hens and some goats. If the total number of animal heads is 90 and the total number of animal feet is 248, what is the total number of goats Deepak has ?
   (a) 32   (b) 36
   (c) 34   (d) Cannot be determined
   (e) None of these

3. The sum of the two digits of a number is 15 and the difference between them is 3. What is the product of the two digit number ?
   (a) 56   (b) 63
   (c) 42   (d) Cannot be determined
   (e) None of these

4. There are some parrots and some tigers in a forest. If the total number of animal heads in the forest are 858 and total number of animal legs are 1746, what is the number of parrots in the forest ?
   (a) 845   (b) 833
   (c) 800   (d) Cannot be determined
   (e) None of these

5. On Republic Day sweets to be equally distributed among 450 children. But on that particular day, 150 children remained absent. Thus, each child got 3 sweets extra. How many sweets did each child get ?
   (a) 6   (b) 12
   (c) 9   (d) Cannot be determined
   (e) None of these

6. The difference between a two digit number and the number obtained by interchanging the two digit is of the number is 9. If the sum of the two digits of the number is 15, then what is the original number ?
   (a) 89   (b) 67
   (c) 87   (d) Cannot be determined
   (e) None of these

7. An AC consume 8 units of electricity in 30 minutes and a bulb consumes 18 units of electricity in 6 hours. How much total unit of electricity will both AC and bulb consume in 8 days if they run 10 hours a day ?
   (a) 1280 unit   (b) 1528 unit   (c) 1248 unit
   (d) 1520 unit   (e) 1620 unit

8. If the positions of the digits of a two digit number are interchanged, the number obtained is smaller than the original number by 27. If the digits of the number are in the ratio of 1 : 2, what is the original number ?
   (a) 36   (b) 63
   (c) 48   (d) Cannot be determined
   (e) None of these

9. On a School's Annual Day sweets were to be equally distributed amongst 112 children. But on that particular day, 32 children were absent. Thus the remaining children got 6 extra sweets. How many sweets was each child originally supposed to get ?
   (a) 24   (b) 18
   (c) 15   (d) Cannot be determined
   (e) None of these

10. At the first stop on his route, a driver uploaded 2/5 of the packages in his van. After he uploaded another three packages at his next stop, 1/2 of the original number of packages remained. How many packages were in the van before the first delivery?
    (a) 25   (b) 10   (c) 30
    (d) 36   (e) None of these

11. An army Commander wishing to draw up his 5180 men in the form of a solid square found that he had 4 men less. If he could get four more men and form the solid square, the number of men in the front row is
    (a) 72   (b) 68   (c) 78
    (d) 82   (e) None of these

12. The number zero (0) is surrounded by the same 2-digit number on both (left and right) the sides; for example, 25025, 67067, etc. The largest number that always divides such a number is
    (a) 7   (b) 11   (c) 13
    (d) 1001   (e) None of these

13. A certain type of wooden board is sold only in lengths of multiples of 25 cm from 2 to 10 metres. A carpenter needs a large quantity of this type of boards in 1.65 meter length. For the minimum waste, the lengths to be purchased should be:
    (a) 3.30 m   (b) 6.60 m   (c) 8.25 m
    (d) 9.95 m   (e) None of these

14. Students of a class are preparing for a drill and are made to stands in a row. If 4 students are extra in a row, then there would be 2 rows less. But there would be 4 more rows if 4 students are less in a row. The number of students in the class is :
    (a) 96   (b) 56   (c) 69
    (d) 65   (e) None of these

15. Heera dealt some cards to Mohan and himself from a full pack of playing cards and laid the rest aside. Heera then said to Mohan, "If you give me a certain number of your cards, I will have 4 times as many card as you have. If I give you the same number of cards, I will have thrice as many card as you have." How many cards did Heera have ?
    (a) 31   (b)   (c) 29
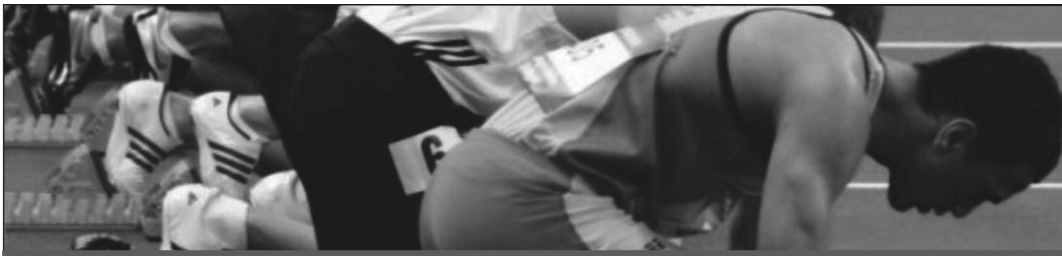   (d) 30   (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. A student was asked to divide a number by 6 and add 12 to the quotient. He, however, first added 12 to the number and then divided it by 6, getting 112 as the answer. The correct answer should have been :
(a) 122 (b) 118 (c) 114
(d) 124 (e) None of these

17. The charges for a five-day trip by a tourist bus for one full ticket and a half-ticket are ₹ 1,440 inclusive of boarding charges which are same for a full ticket and a half -ticket. The charges for the same trip for 2 full tickets and one half-tickets inclusive of boarding charges are ₹ 2,220. The fare for a half -ticket is 75% of the full ticket. Find the fare and the boarding charges separately for one full ticket.
(a) ₹ 580, ₹ 400 (b) ₹ 280, ₹ 200
(c) ₹ 480, ₹ 300 (d) ₹ 380, ₹ 400
(e) None of these

18. A number of friends decided to go on a picnic and planned to spend ₹ 96 on eatables. Four of them, did not turn up. As a consequence, the remaining ones had to contribute ₹ 4 each extra. The number of those who attended the picnic was ?
(a) 8 (b) 16 (c) 12
(d) 24 (e) None of these

19. An office has as many four-legged chairs and as many four-legged tables as workers, and as many three-legged stools as four-legged almirahs. If the number of stools be one more than the number of workers and the total number of legs be 585, the number of workers in the office are?
(a) 17 (b) 34
(c) 16 (d) Cannot be determined
(e) None of these

20. A, B, C and D play a game of cards. A says to B. 'If I give you 8 cards, you will have as many as C has and I shall have 3 less than what C has. Also if I take 6 cards from C, I shall have twice as many as D has. If B and D together have 50 cards, how many cards has A got ?
(a) 27 (b) 23 (c) 37
(d) 40 (e) None of these

21. The students present in an auditorium are asked to stand in rows. If there were 4 students extra in a row there would be 4 less rows. However, if 2 students were less in a row, there would be 4 more rows. The number of students present in the auditorium is
(a) 80 (b) 96 (c) 100
(d) 128 (e) None of these

22. A hostel has provisions for 250 students for 35 days. After 5 days, a fresh batch of 25 students was admitted to the hostel. Again after 10 days, a batch of 25 students left the hostel. How long will the remaining provisions survive?
(a) 18 days (b) 19 days (c) 20 days
(d) 17 days (e) None of these

23. A class of students attended a charity show with entrance ticket of ₹ 3.70 per girl and ₹ 4.50 per boy. If the strength of the class and the amount collected from the class are 160 and 640 respectively, find the number of girls and boys in the class (respectively) who attended the show.

(a) 80, 80 (b) 40, 120 (c) 70, 90
(d) 60, 100 (e) None of these

24. A number when divided by a divisor leaves a remainder of 24. When twice the original number is divided by the same divisor, the remainder is 11. What is the value of the divisor?
(a) 13 (b) 59 (c) 35
(d) 37 (e) None of these

25. When 242 is divided by a certain divisor the remainder obtained is 8. When 698 is divided by the same divisor the remainder obtained is 9. However, when the sum of the two numbers 242 and 698 is divided by the divisor, the remainder obtained is 4. What is the value of the divisor?
(a) 11 (b) 17 (c) 13
(d) 23 (e) None of these

26. A, B and C start at the same time in the same direction to run around a circular stadium. A completes a round in 252 seconds, B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they again at the starting point?
(a) 26 minutes and 18 seconds
(b) 42 minutes and 36 seconds
(c) 45 minutes
(d) 46 minutes and 12 seconds
(e) None of these

27. In Arun's opinion, his weight is greater than 65 kg but less than 72 kg. His brother does not agree with Arun and he thinks that Arun's weight is greater than 60 kg but less than 70 kg. His mother's view is that his weight cannot be greater than 68 kg. If all are them are correct in their estimation, what is the average of different probable weights of Arun?
(a) 67 kg. (b) 68 kg.
(c) 69 kg. (d) Data inadequate
(e) None of these

28. The difference between a two-digit number and the number obtained by interchanging the digits is 27. The sum of the digits is 15 and the digit at tens place is bigger than the digit at the unit's place. What is the two-digit number?
(a) 87 (b) 96 (c) 78
(d) 69 (e) None of these

29. There are 500 rooms in a multi-floored hotel. However, due to a change in rule, the hotel has to decrease the number of floors by 5. However, the management is able to put 5 more rooms in each floor. Over all, the number of rooms in the hotel decreases by 10%. Find the number of floors and the number of rooms/floor the hotel originally had?
(a) 10 floors 50 rooms (b) 20 floors 20 rooms
(c) 20 floors 25 rooms (d) 50 floors 10 rooms
(e) Cannot be determined

30. In a regular week, there are 6 working days for each day the working hours are seven. A man gets ₹ 80 per hour for regular work and ₹ 100 per hour for over time. If he earns ₹ 30,880 in 8 weeks, then for how many hours does he work?
(a) 380 hours (b) 376 hours
(c) 296 hours (d) 384 hours
(e) 388 hours

RESPONSE GRID					
	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

HCF AND LCM

Max. Marks : 30   **No. of Qs. 30**   **Time : 25 min.**   **Date : ..../......../................**

1. The respective ratio between the present ages of Ram and Rakesh is 6 : 11. Four years ago, the ratio of the ages was 1 : 2 respectively. What will be Rakesh's age after five years ?
   - (a) 45 years
   - (b) 29 years
   - (c) 49 years
   - (d) Cannot be determined
   - (e) None of these

2. If the numerator of a fraction is increased by 150% and the denominator of the fraction is increased by 350%, the resultant fraction is $\dfrac{25}{51}$, what is the original fraction ?
   - (a) $\dfrac{11}{17}$
   - (b) $\dfrac{11}{15}$
   - (c) $\dfrac{15}{17}$
   - (d) $\dfrac{13}{15}$
   - (e) None of these

3. When 30% of one number is subtracted from another number, the second number reduces to its four-fifth. What is the ratio between the first and the second number respectively ?
   - (a) 4 : 7
   - (b) 3 : 2
   - (c) 2 : 3
   - (d) Cannot be determined
   - (e) None of these

4. If the numerator of a fraction is increased by 400% and the denominator is increased by 500%. The resultant fraction is $\dfrac{20}{27}$. What was the original fraction ?
   - (a) $\dfrac{9}{8}$
   - (b) $\dfrac{11}{12}$
   - (c) $\dfrac{8}{9}$
   - (d) Cannot be determined
   - (e) None of these

5. The difference between the $\dfrac{3}{4}$th of $\dfrac{4}{5}$th of a number and $\dfrac{1}{6}$th of $\dfrac{2}{5}$th of the same number is 648. What is the number ?
   - (a) 1110
   - (b) 1215
   - (c) 1325
   - (d) 1440
   - (e) None of these

6. If $3\dfrac{4}{5}$ is subtracted from $6\dfrac{3}{5}$ and difference is multiplied by 355 then what will be the final number ?
   - (a) 1004
   - (b) 884
   - (c) 774
   - (d) 994
   - (e) None of these

7. If the numerator of a fraction is increased by 240% and the denominator of the fraction is decreased by 50%, the resultant fraction is $2\dfrac{5}{6}$. What is the original fraction?
   - (a) $\dfrac{1}{4}$
   - (b) $\dfrac{2}{3}$
   - (c) $\dfrac{5}{12}$
   - (d) $\dfrac{4}{11}$
   - (e) None of these

8. If the numerator of a fraction is increased by 200% and the denominator is increased by 300%, the resultant fraction is $\dfrac{15}{26}$. What was the original fraction ?
   - (a) $\dfrac{8}{11}$
   - (b) $\dfrac{10}{11}$
   - (c) $\dfrac{9}{13}$
   - (d) $\dfrac{10}{13}$
   - (e) None of these

9. Philip, Tom and Brad start jogging around a circular field and complete a single round in 18, 22 and 30 seconds respectively, In how much time, will they meet again at the starting point ?
   - (a) 3 min 15 sec
   - (b) 21 min
   - (c) 16 min 30 sec
   - (d) 12 min
   - (e) None of these

10. Amit, Sucheta and Neeti start running around a circular track and complete one round in 18, 24 and 32 seconds respectively. In how many seconds will the three meet again at the starting point if they all have started running at the same time ?
    - (a) 196
    - (b) 288
    - (c) 324
    - (d) Cannot be determined
    - (e) None of these

11. The numbers 11284 and 7655, when divided by a certain number of three digits, leave the same remainder. Find that number of three digits.
    - (a) 161
    - (b) 171
    - (c) 181
    - (d) 191
    - (e) None of these

12. The LCM of two numbers is 2079 and their HCF is 27. if one of the numbers is 189, find the other.
    - (a) 273
    - (b) 279
    - (c) 297
    - (d) 307
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. Find the least number which, when divided by 18, 24, 30 and 42, will leave in each case the same remainder 1.
    (a) 2521   (b) 2556   (c) 2456
    (d) 2473   (e) None of these

14. Find the greatest number of six digits which, no being divided by 6, 7, 8, 9 and 10, leaves 4, 5, 6, 7 and 8 as remainder respectively.
    (a) 997918   (b) 997919   (c) 997914
    (d) 997916   (e) None of these

15. what least number must be subtracted from 1936 so that the remainder when divided by 9, 10, 15 will leave in each case the same remainder 7?
    (a) 29   (b) 39   (c) 49
    (d) 59   (e) None of these

16. What greatest number can be subtracted from 10,000 so that the remainder may be divisible by 32, 36, 48 and 54 ?
    (a) 9136   (b) 9191   (c) 9933
    (d) 9216   (e) None of these

17. Find the least number which, when divided by 8, 12 and 16, leaves 3 as the remainder in each case; by 7 leaves no remainder.
    (a) 145   (b) 147   (c) 148
    (d) 157   (e) None of these

18. Find the greatest number that will divide 55, 127 and 175 so as to leave the same remainder in each case.
    (a) 26   (b) 24   (c) 23
    (d) 29   (e) None of these

19. What least number should be added to 3500 to make it exactly divisible by 42, 49, 56 and 63?
    (a) 10   (b) 18   (c) 25
    (d) 28   (e) None of these

20. Find the least number which, when divided by 72, 80 and 88, leaves the remainders 52, 60 and 68 respectively.
    (a) 7900   (b) 7800   (c) 7200
    (d) 7600   (e) None of these

21. Find the greatest number of 4 digits which, when divided by 2, 3, 4, 5, 6 and 7, should leave remainder 1 in each case.
    (a) 9661   (b) 9671   (c) 9695
    (d) 9696   (e) None of these

22. The traffic lights at three different road crossings change after every 48 sec., 72 sec., and 108 sec. respectively. If they all change simultaneously at 8:20:00 hrs, then at what time will they again change simultaneously?

    (a) 8 : 47 : 15   (b) 8 : 27 : 12   (c) 8 : 37 : 14
    (d) 8 : 57 : 12   (e) None of these

23. The HCF and LCM of two numbers are 44 and 264 respectively. If the first number is devided by 2, the quotient is 44. What is the other number?
    (a) 108   (b) 44   (c) 124
    (d) 132   (e) None of these

24. The product of two number is 2160 and their HCF is 12. Find the possible pairs of numbers.
    (a) 1   (b) 2   (c) 3
    (d) 4   (e) None of these

25. Find the greatest number of 4 digits and the least number of 5 digits that have 144 as their HCF.
    (a) 10080   (b) 10980   (c) 10008
    (d) 10990   (e) None of these

26. Find the least number that, being increased by 8, is divisible by 32, 36 and 40.
    (a) 1432   (b) 1492   (c) 1472
    (d) 1570   (e) None of these

27. Three bells toll at intervals of 9, 12 and 15 minutes respectively. All the three begin to toll at 8 a.m. At what time will they toll together again?
    (a) 8.45 a.m.   (b) 10.30 a.m.   (c) 11.00 a.m.
    (d) 1.30 p.m.   (e) None of these

28. Four metal rods of lengths 78 cm, 104 cm, 117 cm and 169 cm are to be cut into parts of equal length. Each part must be as long as possible. What is the maximum number of pieces that can be cut?
    (a) 27   (b) 36   (c) 43
    (d) 400   (e) 402

29. In a morning walk, three persons step off together, their steps measure 80 cm, 85 cm and 90 cm respectively. What is the minimum distance each should walk so that they can cover the distance in complete steps?
    (a) 122 m 40 cm   (b) 123 m 45 cm
    (c) 122 m 45 cm   (d) 122 m 50 cm
    (e) None of these

30. HCF of 3240, 3600 and a third number is 36 and their LCM is $2^4 \times 3^5 \times 5^2 \times 7^2$. The third number is :

    (a) $2^4 \times 5^3 \times 7^2$ (b) $2^2 \times 3^5 \times 7^2$
    (c) $2^3 \times 3^5 \times 7^2$ (d) $2^5 \times 5^2 \times 7^2$
    (e) None of these

RESPONSE GRID	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ
	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ		

SQUARE ROOT & CUBE ROOT

Max. Marks : 20   **No. of Qs. 20**   **Time : 30 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-10): What should come in place of the question mark (?) in the following questions?

1. $\sqrt{1681} + \sqrt{3481} \div \sqrt{100}$?

    (a) 15   (b) 10
    (c) 25   (d) 20
    (e) 110

2. 59^2 11^3 $\sqrt{7744}$?

    (a) 4500   (b) 4850
    (c) 4900   (d) 4860
    (e) 5110

3. $\sqrt{13225} \times \sqrt{7225} \div \sqrt{625}$?

    (a) 391   (b) 410
    (c) 397   (d) 381
    (e) 411

4. $\sqrt{\dfrac{625}{225} \times \dfrac{3375}{15625} \times 15}$?

    (a) 7   (b) 13
    (c) 3   (d) 12
    (e) 9

5. $\sqrt{665}$ $\sqrt{112}$ $\sqrt{75}$ $\sqrt{36}$?

    (a) 12   (b) 23
    (c) 26   (d) 24
    (e) None of these

6. $\sqrt{15625} \times \sqrt{18225} \times \sqrt{21025} \div \sqrt{5625}$?

    (a) 32125   (b) 34235
    (c) 32625   (d) 34245
    (e) None of these

7. $\left[58^2 \ 12^3 \ \sqrt{1874891} \right] \div \sqrt{7225}$?

    (a) 75   (b) 74
    (c) 56   (d) 65
    (e) None of these

8. $\left[\sqrt[3]{4913} \times \sqrt{12167} + 409 \right] \div \sqrt[3]{4096}$?

    (a) 75   (b) 70
    (c) 50   (d) 60
    (e) None of these

9. $\sqrt{11449} \times \sqrt{6241} - 54^2$ $\sqrt{?}$ 74^2

    (a) 384   (b) 3721
    (c) 381   (d) 3638
    (e) None of these

10. $\sqrt[3]{4096} \div \sqrt[3]{64}$ $\sqrt[3]{?}$

    (a) 16   (b) 8
    (c) 64   (d) 80
    (e) None of these

11. $\sqrt[3]{3.375} = 1.5$ and $\sqrt[3]{15.625} = 2.5$ then, find the value of $\sqrt[3]{0.003375} \times \sqrt[3]{0.015625}$

    (a) 2.375   (b) 13.75
    (c) 0.00375   (d) 0.0375
    (e) 3.75

12. A group of students decided to collect as many paise from each member of group as is the number of members. If the total collection amounts to ₹ 62.41, the number of the member is the group is:

    (a) 57   (b) 67
    (c) 79   (d) 87
    (e) 74

13. A man plants 104976 apple trees in his garden and arranges them so that there are as many rows as there are apples trees in each row. The number of rows is

    (a) 324   (b) 328
    (c) 364   (d) 380
    (e) None of these

14. If $\sqrt{6} = 2.449$, then the value of $\dfrac{\sqrt{6}}{2} - \dfrac{12}{\sqrt{6}}$ $\sqrt{216}$ is equal to

    (a) 11.021   (b) 12.067
    (c) 13.079   (d) 12.187
    (e) 15.174

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ   2. ⓐⓑⓒⓓⓔ   3. ⓐⓑⓒⓓⓔ   4. ⓐⓑⓒⓓⓔ   5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ   7. ⓐⓑⓒⓓⓔ   8. ⓐⓑⓒⓓⓔ   9. ⓐⓑⓒⓓⓔ   10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ   12. ⓐⓑⓒⓓⓔ   13. ⓐⓑⓒⓓⓔ   14. ⓐⓑⓒⓓⓔ

15. If the sum of a number and its square is 182, what is the number?
    (a) 17 (b) 23
    (c) 16 (d) 13
    (e) None of these

16. If $\sqrt{21025} = 145$, then value of $\sqrt{210.25} + \sqrt{2.1025} + \sqrt{0.021025} + \sqrt{0.000021025}$
    (a) 18.0215 (b) 17.0675
    (c) 13.0795 (d) 12.1875
    (e) 16.1095

17. What should come in place of both the question marks in the equation $\dfrac{?}{\sqrt{128}} \quad \dfrac{\sqrt{162}}{?}$
    (a) 12 (b) 23
    (c) 16 (d) 13
    (e) None of these

18. $\sqrt{(x-2)(y\ \ 3)}$ 9 , x and y being positive whole numbers, then the values of x and y respectively are
    (a) 11, 6 (b) 12, 7
    (c) 11, 8 (d) 9, 11
    (e) None of these

19. Find the smallest number by which 9408 must be divided so that the quotient is a perfect square. Find the square root of the quotient.
    (a) 64 (b) 56
    (c) 54 (d) 48
    (e) None of these

20. There are 2401 students in school. P.T. teacher wants them to stand in row and columns such that the number of rows is equal to the number of columns. Find the number of row?
    (a) 47 (b) 39
    (c) 51 (d) 49
    (e) None of these

RESPONSE GRID	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
	20. ⓐⓑⓒⓓⓔ				

PERCENTAGE -1

Max. Marks : 25   **No. of Qs. 25**   **Time : 20 min.**   **Date : ..../......../................**

DIRECTIONS (Qs. 1-10): What should come in place of the question mark (?) in the following questions?

1. 125% of $12850 + 85\%$ of $45200 + 850 = 350\%$ of ? $+ 175\%$ of 1450
    - (a) 15085
    - (b) 23450
    - (c) 15545
    - (d) 14580
    - (e) 18420

2. 125.5% of $8500 - 85.95\%$ of $5200 + 1850 = 35\%$ of $4520 + 17.5\%$ of $450 + ?$
    - (a) 6235
    - (b) 5855
    - (c) 6385
    - (d) 6450
    - (e) 6345

3. $\dfrac{-}{3}$ of $36750 + 145\%$ of $2850 + 15\%$ of ? $= 48650$
    - (a) 215100
    - (b) 215460
    - (c) 215400
    - (d) 235100
    - (e) 213400

4. $5\dfrac{1}{3} \times 15\dfrac{1}{5} \times 15\dfrac{1}{2} \times 35\dfrac{1}{3} - ? = 25.25\%$ of 14500
    - (a) 40965
    - (b) 38760
    - (c) 40450
    - (d) 42340
    - (e) 40740

5. $(115\%$ of $3450 + 12.5\%$ of $1450) - (85\%$ of $1250 + 12.5\%$ of $450) = 2150 + ?$
    - (a) 860
    - (b) 965
    - (c) 880
    - (d) 920
    - (e) 1235

6. 13.50% of $234500 + 35\%$ of $12500 - 5.25\%$ of $3400 = ? + 1125$
    - (a) 34529
    - (b) 35684
    - (c) 32598
    - (d) 34729
    - (e) 35739

7. $129.5 \times 14.99 + 25\%$ of $840 = ? \div 34.85$.
    - (a) 60845
    - (b) 70925
    - (c) 72585
    - (d) 75014
    - (e) 75325

8. $(13.5)^2 + 19.25 + ? = 27.5\%$ of $1250 + 545$
    - (a) 615.25
    - (b) 587.5
    - (c) 730.75
    - (d) 687.25
    - (e) 715.25

9. 85% of $225 + 34.91 \times 15.01 = ?$
    - (a) 740.85
    - (b) 655.5
    - (c) 675.25
    - (d) 716.25
    - (e) 570.75

10. $(25.96)^2 + 75\%$ of $1285 + 125 = ?$
    - (a) 1635.25
    - (b) 1885
    - (c) 1740.85
    - (d) 1820.25
    - (e) 1764.75

11. Of the adult population in a certain city, 45% of men and 25% of women are married. Assuming that no man marries more than one woman, and vice versa, the percentage of total population of adults who are married, is:
    - (a) 31.1
    - (b) 30
    - (c) 33.33
    - (d) 32.14
    - (e) None of these

12. In an examination paper of five questions, 5% of the conditions answered all of them and 5% answered none. Of the rest, 25% candidates answered only one question and 20% answered 4 questions. If 396 candidates answered either 2 questions or 3 questions, the number of candidates that appeared for the examination was:
    - (a) 850
    - (b) 900
    - (c) 800
    - (d) 1,000
    - (e) None of these

13. In a class of 65 students and 4 teachers, each student got sweets that are 20% of the total number of students and each teacher got sweets that are 40% of the total number of students. How many sweets were there?
    - (a) 845
    - (b) 897
    - (c) 949
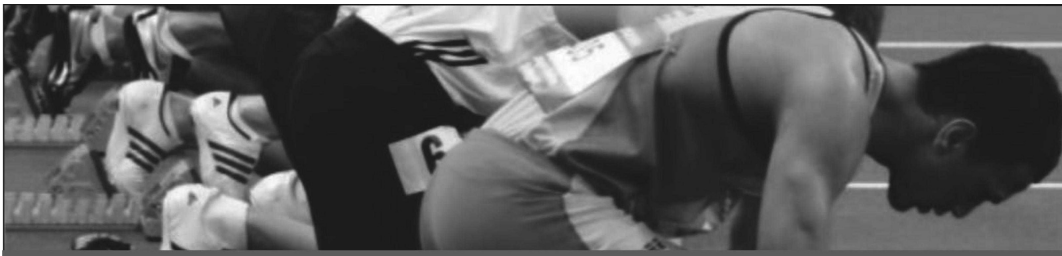   - (d) 104
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ		

14. The price of sugar is increased by 28%. Therefore a family reduces its consumption so that the increment in the expenditure of sugar is only 20%. If the consumption of sugar is 15 kg before the increment, what is the consumption now?

(a) $15\dfrac{1}{16}$ kg

(b) $14\dfrac{1}{16}$ kg

(c) $14\dfrac{3}{10}$ kg

(d) $14\dfrac{1}{18}$ kg

(e) $15\dfrac{1}{8}$ kg

15. In a class, 25% of the students were absent for an exam. 30% failed by 20 marks and 10% just passed because of grace marks of 5. Find the average score of the class if the remaining students scored an average of 60 marks and the pass marks are 33 (counting the final scores of the candidates.)

(a) 37.266
(b) 37.6
(c) 37.8
(d) 36.93
(e) 37.5

16. In the recent, climate conference in New York, out of 700 men, 500 women, 800 children present inside the building premises, 20% of the men, 40% of the women and 10% of the children were Indians. Find the percentage of people who were not Indian?

(a) 73%
(b) 77%
(c) 79%
(d) 83%
(e) None of these

17. Pradeep invested 20% more than Mohit. Mohit invested 10% less than Raghu. If the total sum of their investment is ₹ 17880, how much amount did Raghu invest ?

(a) ₹ 6000
(b) ₹ 8000
(c) ₹ 7000
(d) ₹ 5000
(e) None of these

18. In a college, 2000 students are there in which 36% are girls. Each boy's monthly fees is ₹ 480 and each girl paid 25% less monthly fees in comparison to boy. What is the total monthly fees amount paid by boys and girls ?

(a) ₹ 873400
(b) ₹ 867300
(c) ₹ 876300
(d) ₹ 873600
(e) None of these

19. Twenty per cent of Anuj's annual salary is equal to seventy five per cent of Raj's annual salary. Raj's monthly salary is 60% of Ravi's monthly salary. If Ravi's annual salary is ₹ 1.44 lakh. What is Anuj's monthly salary ?

(a) ₹ 270000
(b) ₹ 27000
(c) ₹ 324000
(d) ₹ 5400
(e) None of these

20. In a college 12% of total students are interested in sports. $\dfrac{3}{4}$ th of total students are interested in dance. 10% of total students are interested in singing and remaining 15 students are not interested in any activity. How many students are there in the college ?

(a) 450
(b) 500
(c) 600
(d) Cannot be determined
(e) None of these

21. Aman's expense is 30% more than Vimal's expense and Vimal's expense is 10% less than Raman's expense. If the sum of their expenses is ₹ 6447, then what would be the Aman's expense ?

(a) ₹ 2200
(b) ₹ 2457
(c) ₹ 1890
(d) ₹ 2100
(e) None of these

22. A candidate appearing for an examination has to secure 35% marks to pass. But he secured only 40 marks and failed by 30 marks. What would be the maximum marks of test ?

(a) 280
(b) 180
(c) 200
(d) 150
(e) 210

23. Natasha decided to spend 45% of her salary on shopping. On completion of her shopping, she realised that she had spent only ₹ 11475, which was 60% of what she had decided to spent. How much is Natasha's salary ?

(a) ₹ 29600
(b) ₹ 38800
(c) ₹ 42500
(d) Cannot be determined
(e) None of these

24. The income of A is 150% of the income of B and the income of C is 120% of the income of A. If the total income of A, B and C together is ₹ 86000, what is C's income ?

(a) ₹ 30000
(b) ₹ 32000
(c) ₹ 20000
(d) ₹ 36000
(e) None of these

25. In a mixture of milk and water the proportion of water by weight was 75%. If in the 60 gm mixture, 15 gm water was added, what would be the percentage of water ?

(a) 75%
(b) 88%
(c) 90%
(d) 100%
(e) None of these

RESPONSE GRID	14. ⓐ ⓑ ⓒ ⓓ ⓔ	15. ⓐ ⓑ ⓒ ⓓ ⓔ	16. ⓐ ⓑ ⓒ ⓓ ⓔ	17. ⓐ ⓑ ⓒ ⓓ ⓔ	18. ⓐ ⓑ ⓒ ⓓ ⓔ
	19. ⓐ ⓑ ⓒ ⓓ ⓔ	20. ⓐ ⓑ ⓒ ⓓ ⓔ	21. ⓐ ⓑ ⓒ ⓓ ⓔ	22. ⓐ ⓑ ⓒ ⓓ ⓔ	23. ⓐ ⓑ ⓒ ⓓ ⓔ
	24. ⓐ ⓑ ⓒ ⓓ ⓔ	25. ⓐ ⓑ ⓒ ⓓ ⓔ			

PERCENTAGE -2

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../......../...............**

1. The digit at unit place of a two-digit number is increased by 100% and the digit at ten place of the same number is increased by 50%. The new number thus formed is 19 more than the original number. What is the original number ?
   (a) 22   (b) 63
   (c) 24   (d) 25
   (e) None of these

2. In a co-education school there are 15 more girls than boys. If the number of girls is increased by 10% and the number of boys is also increased by 16%, there would be nine more girls than boys. What is the number of students in the school?
   (a) 240   (b) 225
   (c) 265   (d) 245
   (e) None of these

3. In a factory, producing parts of an automobile, the parts manufactured on the shop floor are required to go through quality checks, each conducted after a specific part of the processing on the raw material is completed. Only parts that are not rejected at one stage are put through subsequent stages of production and testing. If average rejection rates at these three testing stages during a month are 10%, 5% and 2% respectively, then what is the effective rejection rate for the whole plant ?
   (a) 17%   (b) 15.20%
   (c) 84.80%   (d) 16.21%
   (e) None of these

4. The owner of a boutique decides to calculate the per centage of customers who purchase hats. If 40 per cent of the store's customers decide to purchase items, and of those customers 15 percent purchase hats, then what per cent of the store's customers purchase hats ?
   (a) 4 %   (b) 6 %
   (c) 15 %   (d) 24 %
   (e) None of these

5. There were two candidates in an election. 10% of the voters did not vote. 60 votes were declared invalid. The elected candidate got 308 votes more than his opponent. If the elected candidate got 47% of the total votes, how many votes did each candidate get?
   (a) 2316 and 2012   (b) 2629 and 2324
   (c) 2871 and 2575   (d) 2914 and 2606
   (e) None of these

6. A student scored 30% marks in the first paper of Physics out of 180 marks. He has to get an overall score of at least 50% in two papers. The second paper is carrying 150 marks. The percentage of marks he should score in the second paper to get the overall average score is:
   (a) 80%   (b) 76%
   (c) 74%   (d) 70%
   (e) None of these

7. The total tractor population in a state is 2,94,00 out of which 1,50,00 are made by Mahindra & Mahindra. Out of every 100 Mahindra tractors, 98 are red in colour, but only 53% of the total tractor population is red. Find the percentage of non-Mahindra tractors that are red.
   (a) 5.025%   (b) 5.130%
   (c) 6.125%   (d) 6.140%
   (e) 7.145%

8. In an examination, Mohit obtained 20% more than Sushant but 10% less than Rajesh. If the marks obtained by Sushant are 1080, find percentage marks obtained by Rajesh if the full marks are 2000.
   (a) 72%   (b) 86.66%
   (c) 78.33%   (d) 79.33%
   (e) 81%

9. The population of a village is 10,000. If the population increases by 10% in the first year, by 20% in the second year and due to mass exodus, it decreases by 5 % in the third year, what will be its population after 3 years?
   (a) 13,860   (b) 11,540
   (c) 12,860   (d) 12,540
   (e) 13,550

10. In a medical certificate, by mistake a candidate gave his height as 25 % more than actual. In the interview panel, he clarified that his height was 5 feet 5 inches. Find the percentage correction made by the candidate from his stated height to his actual height.
    (a) 28.56   (b) 20
    (c) 25   (d) 30
    (e) 35

11. There are two candidates Bhiku and Mhatre for an election. Bhiku gets 65 % of the total valid votes. If the total votes were 6,000, what is the number of valid votes that the other candidate Mhatre gets if 25 % of the total votes were declared invalid?
    (a) 1575   (b) 1625
   (c) 1675   (d) 1525
    (e) 1700

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

12. The population of a variety of tiny bush in an experimental field increases by 10% in the first year, increases by 8% in the second year but decreases by 10% in the third year. If the present number of bushes in the experimental field is 26730, then the number of variety of bushes in the beginning was:
    - (a) 35,000
    - (b) 30,000
    - (c) 25,000
    - (d) 45,000
    - (e) None of these

13. Lucknow Shatabdi Express has a capacity of 500 seats of which 10% are in the Executive class and the rest are chair cars. During one journey, the train was booked to 85% of its capacity. If Executive class was booked to 96% of its capacity, then how many chair car seats were empty during that journey?
    - (a) 78
    - (b) 73
    - (c) 72
    - (d) 76
    - (d) None of these

14. p% of a number P is q% more than r% of the number R. If the difference between P and R is r% of R and if the sum of P and R is 210, then which of the following statements is always true ?
    - (a) P = 110, R = 100
    - (b) P = 270, R = 180
    - (c) P = 3000, R = 3200
    - (d) All of these
    - (e) None of these

15. 'A' wants to secure an annual income of ₹ 1500 by investing in 15% debentures of face value ₹ 100 each and available for ₹ 104 each. If the brokerage is 1%, then the sum of money he should invest is :
    - (a) ₹ 19640
    - (b) ₹ 10782
    - (c) ₹ 10504
    - (d) ₹ 15500
    - (e) None of these

16. In a shipment of 120 machine parts, 5 per cent were defective. In an another shipment of 80 machine parts, 10 per cent were also defective. For the two shipments combined, what per cent of the machine parts were defective?
    - (a) 6.5 %
    - (b) 7.0%
    - (c) 7.5%
    - (d) 8.0%
    - (e) None of these

17. Anthony got 30% of the maximum marks in an examination and failed by 10 marks. However, Amar who took the same examination, got 40% of the total marks and got 15 more than the passing marks in the examination. What were the passing marks in the examination ?
    - (a) 35
    - (b) 250
    - (c) 75
    - (d) 85
    - (e) None of these

18. Mr. Yadav spends 60% of his monthly salary on consumable items and 50% of the remaining on clothes and transport. He saves the remaining amount. If his savings at the end of the year were ₹ 48,456, how much amount per month would he have spent on clothes and transport ?
    - (a) ₹ 8,076
    - (b) ₹ 4,038
    - (c) ₹ 9691.20
    - (d) ₹ 4845.60
    - (e) None of these

19. Nilam's Mathematics Test had 75 problems i.e., 10 arithmetic, 30 algebra and 35 geometry problems. Although she answered 70% of the arithmetic, 40% of the algebra and 60% of the geometry problems correctly, she did not pass the test because she got less than 60% of the problems right. How many more questions would she have needed to answer correctly to earn 60% passing grade?
    - (a) 3
    - (b) 5
    - (c) 7
    - (d) 10
    - (e) None of these

20. Hari had three not books X, Y, Z. Of these, X had 120 pages, Y had 10% more pages and Z had 10% pages less. If he tore roughly 5%, 10% and 15% of pages in X, Y and Z respectively, then what per cent of pages did he tear out ?
    - (a) 8%
    - (b) 10%
    - (c) 7%
    - (d) 13%
    - (e) None of these

RESPONSE GRID	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ
	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	
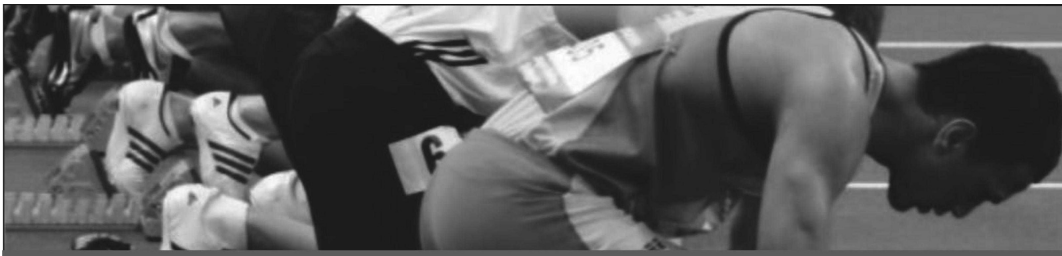
SIMPLIFICATION-1

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-30): What approximate value should come in place of the question mark (?) in the following questions? (Note : you are not expected to calculate the exact value.)

1. $12959.998 \div 18.010 + 124.95 \times 34.925 = ?$
   - (a) 5840
   - (b) 5990
   - (c) 5095
   - (d) 5680
   - (e) 5120

2. 60.005% of $1439.998 + ?\%$ of $1655.011 = 1448.5$
   - (a) 38
   - (b) 47
   - (c) 42
   - (d) 40
   - (e) 35

3. $6494.986 + 5425.005 + 680.020 - (2625 \div \sqrt{224}) = ?$
   - (a) 12170
   - (b) 13545
   - (c) 12425
   - (d) 12565
   - (e) 12520

4. $131.999 \times 15.001 \times 17.5001 + 124.955 + 250.015 = ?$
   - (a) 34600
   - (b) 35720
   - (c) 34640
   - (d) 34035
   - (e) 36270

5. $(10.998)^3 + (124.95)^2 - 158.95 + 12.125 = ?$
   - (a) 24405
   - (b) 17308
   - (c) 16809
   - (d) 16406
   - (e) 18016

6. $\sqrt{624.85} + (10.998)^3 + (24.95)^2 - 250.155 + 124.925 = ?$
   - (a) 1940
   - (b) 1856
   - (c) 1830
   - (d) 1740
   - (e) 1896

7. $[(1119.998 + 124.95) - \sqrt{3010}] + (9.915)^3 + (121.125)^2 = ?$
   - (a) 16831
   - (b) 17301
   - (c) 16833
   - (d) 16410
   - (e) 16272

8. $[(3101.198 + 1399.95) \div \sqrt{8090}] + (19.975)^2 - (14.925)^2 = ?$
   - (a) 245
   - (b) 225
   - (c) 215
   - (d) 230
   - (e) 245

9. $[(\{14.95^2\} + \{35.125^2\} \div 4.95) + 110] = ?$
   - (a) 520
   - (b) 350
   - (c) 440
   - (d) 400
   - (e) 370

10. $123.001 \times 19.999 \times 14.025 + 1959.85 \div \sqrt{195.999}$
    - (a) 35225
    - (b) 34850
    - (c) 34580
    - (d) 34005
    - (e) 37235

11. $3371 \div 6 + (43 \times 14.35) = ?$
    - (a) 1580
    - (b) 1180
    - (c) 1600
    - (d) 1570
    - (e) 1250

12. $\sqrt{6760}$ $\sqrt{2600}$?
    - (a) 156
    - (b) 133
    - (c) 143
    - (d) 254
    - (e) 155

13. $(14.989)^2 + (121.012)^3 + 2090 = ?$
    - (a) 1239219
    - (b) 1119391
    - (c) 1669319
    - (d) 1773876
    - (e) 177382

14. $17020 \div 14.99 \times \dfrac{23}{49} = ?$
    - (a) 840
    - (b) 720
    - (c) 570
    - (d) 950
    - (e) 520

15. 1124.99% of $1501 - 1265.01\%$ of $399 = ?$
    - (a) 13840
    - (b) 13200
    - (c) 12500
    - (d) 12800
    - (e) 12200

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. $(14.5)^2 + (15.5)^2 + (2432 + 1587 + 1415) \div 1275 = ?$
    - (a) 528
    - (b) 510
    - (c) 458
    - (d) 454
    - (e) 412

17. $1740.75 + 1535.25 \times 16.91 + (2587 + 415) \div 275 = ?$
    - (a) 22763
    - (b) 21986
    - (c) 27845
    - (d) 32158
    - (e) 24165

18. $1525 \times 1375 \div 12.5 + 1740.75 + 1535 = ?$
    - (a) 171025
    - (b) 164468
    - (c) 193780
    - (d) 167615
    - (e) 187610

19. $1125 \times 1375 \div 12.5 \text{ of } 450 + 12250$
    - (a) 15705
    - (b) 13905
    - (c) 12525
    - (d) 12775
    - (e) 13505

20. $85250 \div 1750 \div 125 + 2560 + 3525 = ?$
    - (a) 6025
    - (b) 4850
    - (c) 8025
    - (d) 5925
    - (e) 6085

21. $3225.095 \times 134.98 \div 15.002 + 49.98 = ?$
    - (a) 29075
    - (b) 21326
    - (c) 29440
    - (d) 28343
    - (e) 29380

22. $79.009\% \text{ of } 799.995 + 26.99\% \text{ of } 499.999 = ?$
    - (a) 950
    - (b) 870
    - (c) 775
    - (d) 985
    - (e) 817

23. $(45399 + 12549 - 3506) + 2498 \div 19.75$
    - (a) 58213
    - (b) 54307
    - (c) 56094
    - (d) 54566
    - (e) 54896

24. $(19.99\% \text{ of } 8599 + 35.06\% \text{ of } 9005) = ?$
    - (a) 4800
    - (b) 4870
    - (c) 5800
    - (d) 4700
    - (e) 5370

25. $(14.98\% \text{ of } 1251.25 + \sqrt[3]{728.25}) = ?$
    - (a) 180.5
    - (b) 196.5
    - (c) 150.5
    - (d) 146.5
    - (e) 230

26. $125\% \text{ of } 3560 - 85\% \text{ of } ? = 425$
    - (a) 4735
    - (b) 4940
    - (c) 4620
    - (d) 4815
    - (e) None of these

27. $14565 \div 1125 \times 125.5 = ?$
    - (a) 1685
    - (b) 1625
    - (c) 1825
    - (d) 1480
    - (e) 1580

28. $13894 \div (12.6 \times 16.9) = ?$
    - (a) 52
    - (b) 77
    - (c) 65
    - (d) 82
    - (e) 93

29. $74\% \text{ of } 1366 + 12.6\% \text{ of } 2317 = ?$
    - (a) 1323
    - (b) 1280
    - (c) 1350
    - (d) 1303
    - (e) 1330

30. $62.5 \% \text{ of } 18920 + ? \% \text{ of } 5325 = 16827$
    - (a) 86
    - (b) 102
    - (c) 77
    - (d) 82
    - (e) 94

RESPONSE GRID	16. (a)(b)(c)(d)(e)	17. (a)(b)(c)(d)(e)	18. (a)(b)(c)(d)(e)	19. (a)(b)(c)(d)(e)	20. (a)(b)(c)(d)(e)
	21. (a)(b)(c)(d)(e)	22. (a)(b)(c)(d)(e)	23. (a)(b)(c)(d)(e)	24. (a)(b)(c)(d)(e)	25. (a)(b)(c)(d)(e)
	26. (a)(b)(c)(d)(e)	27. (a)(b)(c)(d)(e)	28. (a)(b)(c)(d)(e)	29. (a)(b)(c)(d)(e)	30. (a)(b)(c)(d)(e)
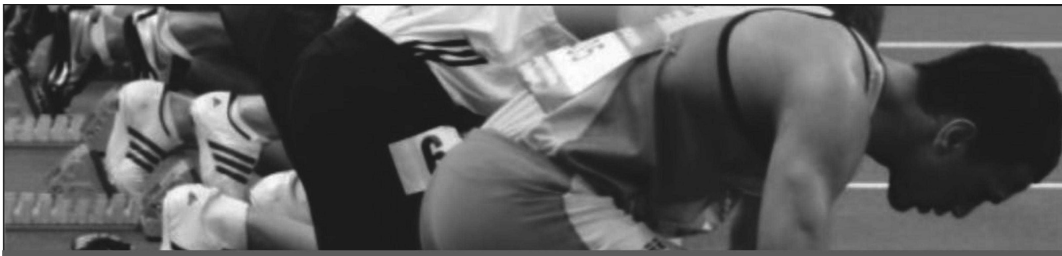
SIMPLIFICATION-2

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (1-30): What will come in place of the question marks (?) in the following questions?

1. 16% of $1350 + 12\%$ of $1750 = ?\%$ of 3400
   - (a) 12.5
   - (b) 22.5
   - (c) 22
   - (d) 14
   - (e) None of these

2. $1637.28 - 1781.47 + 1257.25 = ?$
   - (a) 4113
   - (b) 4676
   - (c) 5212
   - (d) 4233
   - (e) None of these

3. 14% of $1850 + ?\%$ of $1380 = 463$
   - (a) 16.55
   - (b) 12.25
   - (c) 14.78
   - (d) 18.25
   - (e) None of these

4. $(165)^2 + (145)^2 - (155)^2 = ? \div 25$
   - (a) 601993
   - (b) 562159
   - (c) 621123
   - (d) 605625
   - (e) None of these

5. $270 \times 29 + 512 = (105)^2 - ?$
   - (a) 3445
   - (b) 2555
   - (c) 2683
   - (d) 2891
   - (e) None of these

6. 112% of $1250 + 2.4\%$ of $1320 \times 2560 - 350 = ?$
   - (a) 82150.8
   - (b) 84557.5
   - (c) 78614.5
   - (d) 82725.5
   - (e) None of these

7. $(39260 + 27980 + 22050) + 96048 \div 48 = ?$
   - (a) 91177
   - (b) 91291
   - (c) 81324
   - (d) 71262
   - (e) None of these

8. $(81\%$ of $1950) + (9560 + 7280 + 2850) \div 15 = ?$
   - (a) 2987.75
   - (b) 2572.25
   - (c) 2892.16
   - (d) 2862.75
   - (e) None of these

9. $(24.35)^2 + (34.25)^2 + (?) = 1832.29 + (15.25)^2$
   - (a) 230.27
   - (b) 241.87
   - (c) 239.37
   - (d) 298.87
   - (e) None of these

10. $(1537 - 526 - 266) \div (972 - 528 - 312) + (20.25)^2 + (30.25)^2 = ?$
    - (a) 1835
    - (b) 2124
    - (c) 1635
    - (d) 1290
    - (e) 1330

11. 85% of $485.60 = 50\%$ of ?
    - (a) 675.52
    - (b) 915.5
    - (c) 825.52
    - (d) 735.5
    - (e) None of these

12. $2\frac{4}{5}$ $5\frac{3}{5}$ $3\frac{3}{15} - 12\frac{2}{5}$ $7\frac{4}{5}$
    - (a) $12\frac{4}{5}$
    - (b) $13\frac{2}{5}$
    - (c) $13\frac{4}{5}$
    - (d) $15\frac{4}{5}$
    - (e) None of these

13. $\sqrt[3]{?} = (35\%$ of $120 + 125 - 55)$
    - (a) 1484736
    - (b) 2154734
    - (c) 1514736
    - (d) 1404928
    - (e) None of these

14. $(84 \times 458) \div (9261)^{1/3} = ?$
    - (a) 452
    - (b) 1250
    - (c) 1832
    - (d) 1416
    - (e) 2315

15. $\dfrac{(55)^2 \times (35)^2 \times (15)^2}{(125)^2 - (115)^2}$?
    - (a) 345931
    - (b) 347402
    - (c) 355932
    - (d) 358320
    - (e) 345115

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. $167.69 + 122.33 = ? + 148.38$
   (a) 141.64   (b) 190.28
   (c) 145.90   (d) 143.64
   (e) 140.19

17. $(7256 + 1286) - 1234 + 189 = ?$
   (a) 6397   (b) 7345
   (c) 8219   (d) 7497
   (e) 7323

18. $1256 + 1321 - ? + 163 = 551$
   (a) 1538   (b) 2654
   (c) 2189   (d) 2154
   (e) 2589

19. $? \times 1246 \div 89 = 2240$
   (a) 210   (b) 170
   (c) 120   (d) 160
   (e) 150

20. $129 \times ? + 1783 = 3306$
   (a) 11.80   (b) 19.25
   (c) 15.25   (d) 17.25
   (e) 12.80

21. $212.5 \times 42.5 - 128.5 \times 33.2 = ?$
   (a) 4765.05   (b) 4618.4
   (c) 4369.2   (d) 4816.8
   (e) None of these

22. $35\% \text{ of } 1430 + 45\% \text{ of } 1360 = 276.5 + ?$
   (a) 836   (b) 925
   (c) 845   (d) 915
   (e) None of these

23. $13\frac{3}{4} \times 42\frac{5}{6} - ? \quad 53\frac{3}{4}$
   (a) $535\frac{5}{24}$ (b) $534\frac{1}{2}$
   (c) $525\frac{3}{25}$ (d) $536\frac{5}{24}$
   (e) None of these

24. $\dfrac{34 \times 4 - 12 \times 8}{6^2 \quad \sqrt{196} \quad 11^2} \quad ?$
   (a) $\dfrac{40}{171}$ (b) $\dfrac{36}{171}$
   (c) $\dfrac{14}{171}$ (d) $\dfrac{22}{171}$
   (e) None of these

25. $7935 - 3245 + 4485 = ? + 2570$
   (a) 6605   (b) 5580
   (c) 7040   (d) 6400
   (e) None of these

26. $218.5 \times 215.4 \times ? = 62550.22$
   (a) 1.32   (b) 1.62
   (c) 2.4   (d) 2.12
   (e) 1.92

27. $1235 + 21.5 \times 78 \div 2.5 = ?$
   (a) 1238.46   (b) 1934.6
   (c) 1905.8   (d) 2216.2
   (e) None of these

28. $1302.46 + 1395.72 - 1123.47 = ?$
   (a) 1576.77   (b) 1547.17
   (c) 1547.77   (d) 1574.71
   (e) None of these

29. $3409 + 1101 + 1340 = 325 \times ?$
   (a) 16   (b) 28
   (c) 24   (d) 18
   (e) None of these

30. $?\% \text{ of } 1600 = 884 - 44\% \text{ of } 1500$
   (a) 14   (b) 18
   (c) 12   (d) 16
   (e) None of these

RESPONSE GRID					
16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ
21. ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ
26. ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ

AVERAGE

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

1. The average age of 80 boys in a class is 15. The average age of a group of 15 boys in the class is 16 and the average age of another 25 boys in the class is 14. What is the average age of the remaining boys in the class ?
   - (a) 15.25
   - (b) 14
   - (c) 14.75
   - (d) Cannot be determined
   - (e) None of these

2. In a class, the average height of 35 girls was measured 160 cm. Later on, it was discovered that the height of one of the girl was misread as 144 cm, while her actual height was 104 cm. What was the actual average height of girls in the class ? (rounded off to two digits after decimal)
   - (a) 159.86 cm
   - (b) 158.54 cm
   - (c) 159.56 cm
   - (d) 158.74 cm
   - (e) None of these

3. The average age of the family of five members is 24. If the present age of youngest member is 8 yr, then what was the average age of the family at the time of the birth of the youngest member ?
   - (a) 20 yr
   - (b) 16 yr
   - (c) 12 yr
   - (d) 18 yr
   - (e) 21 yr

4. In a class, there are 32 boys and 28 girls. The average age of the boys in the class is 14 yr and the average age of the girls in the class is 13 yr. What is the average age of the whole class ? (Rounded off to two digits after decimal)
   - (a) 13.50
   - (b) 13.53
   - (c) 12.51
   - (d) 13.42
   - (e) None of these

5. The average marks of 65 students in a class was calculated as 150. It was later realised that the marks of one of the students was calculated as 142, whereas his actual marks were 152. What is the actual average marks of the group of 65 students ? (Rounded off to two digits after decimal)
   - (a) 151.25
   - (b) 150.15
   - (c) 151.10
   - (d) 150.19
   - (e) None of these

6. The total ages of a class of 75 girls is 1050, the average age of 25 of them is 12 yrs and that of another 25 is 16 yr. Find the average age of the remaining girls.
   - (a) 12 yr
   - (b) 13 yr
   - (c) 14 yr
   - (d) 15 yr
   - (e) None of these

7. Average score of Rahul, Manish and Suresh is 63. Rahul's score is 15 less than Ajay and 10 more than Manish. If Ajay scored 30 marks more than the average scores of Rahul, Manish and Suresh, what is the sum of Manish's and Suresh's scores ?
   - (a) 120
   - (b) 111
   - (c) 117
   - (d) Cannot be determined
   - (e) None of these

8. The average weight of 45 students in a class was calculated as 36 kg. It was later found that the weight of two students in the class was wrongly calculated. The actual weight of one of the boys in the class was 32 kg. but it was calculated as 34 kg, and the weight of another boy in the class was 45 kg. whereas it was calculated as 40 kg. What is the actual average weight of the 45 students in the class ? (Rounded off to two-digits after decimal)
   - (a) 36.07 kg
   - (b) 36.16 kg
   - (c) 35.84 kg
   - (d) Cannot be determined
   - (e) None of these

9. The respective ratio between the speeds of a car, a train and a bus is 5 : 9 : 4. The average speed of the car, the bus and the train is 72 km/h together. What is the average speed of the car and the train together ?
   - (a) 82 km/h
   - (b) 78 km/h
   - (c) 84 km/h
   - (d) Cannot be determined
   - (e) None of these

10. The total marks obtained by a student in physics, Chemistry and Mathematics together is 120 more than the marks obtained by him in Chemistry. What are the average marks obtained by him in Physics and Mathematics together ?
    - (a) 60
    - (b) 120
    - (c) 40
    - (d) Cannot be determined
    - (e) None of these

11. The average marks in Science subject of a class of 20 students is 68. If the marks of two students were misread as 48 and 65 of the actual marks 72 and 61 respectively, then what would be the correct average ?
    - (a) 68.5
    - (b) 69
    - (c) 69.5
    - (d) 70
    - (e) 66

12. The average age of seven boys sitting in a row facing North is 26 yr. If the average age of first three boys is 19 yr and the average age of last three boys is 32 yr. What is the age of the boy who is sitting in middle of the row ?
    - (a) 28 yr
    - (b) 29 yr
    - (c) 24 yr
    - (d) 31 yr
    - (e) None of these

13. The average age of a group of 10 students is 15 yrs. When 5 more students joined the group the average age rose by 1 yr. The average age (in years) of the new students is
    - (a) 18 yrs
    - (b) 17 yrs
    - (c) 16 yrs
    - (d) 12 yrs
    - (e) None of these

14. The average weight of 8 persons is increased by 2.5 kg when one of them who weighs 56 kg is replaced by a new man. The weight of the new man is
    - (a) 73 kg
    - (b) 72 kg
    - (c) 75 kg
    - (d) 80 kg
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. The average weight of A, B and C is 84 kg. If D joins the group, the average weight of the group becomes 80 kg. If another man E who weighs 3 kg more than D replaces A, then the average of B, C, D and E becomes 79 kg. What is the weight of A?
    (a) 64 kg   (b) 72 kg   (c) 75 kg
    (d) 80 kg   (e) None of these

16. The average salary of all the workers in a workshop is ₹ 8,000. The average salary of 7 technicians is ₹12,000 and the average salary of the rest is ₹ 6,000. The total number of workers in the workshop is :
    (a) 21   (b) 20   (c) 23
    (d) 22   (e) None of these

17. The mean monthly salary paid to 75 workers in a factory is ₹5,680. The mean salary of 25 of them is ₹ 5,400 and that of 30 others is ₹5,700. The mean salary of the remaining workers is
    (a) ₹ 5,000   (b) ₹ 7,000   (c) ₹ 6,000
    (d) ₹ 8,000   (e) None of these

18. The average monthly expenditure of a family was ₹2200 during the first 3 months; ₹2250 during the next 4 months and ₹3120 during the last 5 months of a year. If the total saving during the year were ₹1260, then the average monthly income was
    (a) ₹ 2605   (b) ₹ 2805   (c) ₹ 2705
    (d) ₹ 2905   (e) None of these

19. The batting average of 40 innings of a cricket player is 50 runs. His highest score exceeds his lowest score by 172 runs. If these two innings are excluded, the average of the remaining 38 innings is 48. His highest score was :
    (a) 172   (b) 173   (c) 174
    (d) 176   (e) None of these

20. The average score of boys in an examination of a school is 71 and that of the girls is 73. The average score of the whole school in that examination is 71.8. Find the ratio of the number of boys to the number of girls that appeared in the examination.
    (a) 4 : 5   (b) 3 : 2   (c) 3 : 5
    (d) 5 : 2   (e) None of these

21. The average monthly salary of employees, consisting of officers and workers, of an organisation is ₹ 3000. The average salary of an officer is ₹ 10000 while that of a worker is ₹ 2000 per month. If there are a total 400 employees in the organisation, find the number of officers.
    (a) 50   (b) 60   (c) 80
    (d) 40   (e) None of these

22. The average marks of a student in 8 subjects is 87. Of these, the highest marks are 2 more than the one next in value. If these two subjects are eliminated, the average marks of the remaining subjects is 85. What is the highest score?
    (a) 91   (b) 94   (c) 89
    (d) 96   (e) None of these

23. In a famous hotel, the rooms are numbered from 101 to 130 on the first floor, 201 to 220 on the second floor and 301 to 330 on the third floor. In the month of September, the room occupancy was 50% on the first floor, 80% on the second floor and 40% on the third floor. If it is also known that the room charges are ₹ 200, ₹ 250 and ₹ 300 on each of the floors respectively, then find the average income per room in the hotel for the month of September?
    (a) ₹ 123.75   (b) ₹ 132.50   (c) ₹ 128.50
    (d) ₹ 143.50   (e) ₹ 223.75

24. There were 46 students in a Boys hostel. Due to the admission of eight new students the expenses of the hostel mess were increased by Rs.42 per day while the average expenditure per head diminished by Rs 1. What was the original expenditure of the hostel mess?
    (a) ₹ 562   (b) ₹ 542   (c) ₹ 532
    (d) ₹ 452   (e) ₹ 552

25. In Kiran's opinion, his weight is greater than 65 kg but less than 72 kg. His brother does not agree with Kiran and he thinks that Kiran's weight is greater than 60 kg but less than 70 kg. His mother's view is that his weight cannot be greater than 68 kg. If all are them are correct in their estimation, what is the average of different probable weights of Kiran?
    (a) 70 kg   (b) 69 kg   (c) 61 kg
    (d) 67 kg   (e) None of these

26. The average weight of the students in four sections A, B, C and D is 60 kg. The average weight of the students of A,B, C and D individually are 45kg, 50kg, 72 kg and 80 kg, respectively. If the average weight of the students of section A and B together is 48 kg and that of B and C together is 60kg, what is the ratio of the number of students in section A and D?
    (a) 3:4   (b) 3:5   (c) 4:3
    (d) 5:7   (e) None of these

27. The average temperature of the town in the first four days of a month was 58 degrees. The average for the second, third, fourth and fifth days was 60 degrees. If the temperatures of the first and fifth days were in the ratio 7 : 8, then what is the temperature on the fifth day ?
    (a) 62 degrees   (b) 64 degrees
    (c) 65 degrees   (d) 66 degrees
    (e) None of these

28. The average price of 10 books is ₹ 12 while the average price of 8 of these books is ₹ 11.75. Of the remaining two books, if the price of one book is 60% more than the price of the other, what is the price of each of these two books ?
    (a) 16,12   (b) 10,16   (c) 23,9
    (d) 8,7   (e) None of these

29. The average age of a group of persons going for picnic is 16 years. Twenty new persons with an average age of 15 years join the group on the spot due to which their average age becomes 15.5 years. The number of persons initially going for picnic is :
    (a) 15   (b) 20   (c) 23
    (d) 24   (e) None of these

30. 16 children are to be divided into two groups A and B of 10 and 6 children. The average percent marks obtained by the children of group A is 75 and the average percent marks of all the 16 children is 76. What is the average percent marks of children of group B?
    (a) 233/3   (b) 243/4   (c) 254/5
    (d) 345/7   (e) None of these

RESPONSE GRID

15. (a)(b)(c)(d)(e)   16. (a)(b)(c)(d)(e)   17. (a)(b)(c)(d)(e)   18. (a)(b)(c)(d)(e)   19. (a)(b)(c)(d)(e)
20. (a)(b)(c)(d)(e)   21. (a)(b)(c)(d)(e)   22. (a)(b)(c)(d)(e)   23. (a)(b)(c)(d)(e)   24. (a)(b)(c)(d)(e)
25. (a)(b)(c)(d)(e)   26. (a)(b)(c)(d)   27. (a)(b)(c)(d)(e)   28. (a)(b)(c)(d)(e)   29. (a)(b)(c)(d)(e)
30. (a)(b)(c)(d)(e)

RATIO & PROPORTION - 1

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. The total number of students in a school is 819. If the number of girls in the school is 364, then what is the respective ratio of the total number of boys to the total number of girls in the school ?
   (a) 26 : 25   (b) 21 : 17   (c) 18 : 13
   (d) 5 : 4   (e) None of these

2. If a dividend of ₹ 57,834 is to be divided among Meena, Urmila and Vaishali in the proportion of 3:2:1, find Urmila's share.
   (a) ₹19,281   (b) ₹17,350   (c) ₹23,133
   (d) ₹19,278   (e) None of these

3. A sum of money is to be divided among Z, X, Y in the respective proportion of 4:5:6 and another sum to be divided between A and B equally. If Z got ₹ 2000 less than A, how much did X get?
   (a) ₹ 10,000   (b) ₹ 5,000
   (c) ₹ 4,000   (d) Cannot be determined
   (e) None of these

4. The total number of boys in a school are 16% more than the total number of girls in the school. What is the ratio of the total number of boys to the total number of girls in the school ?
   (a) 25:21   (b) 29:35
   (c) 25:29   (d) Cannot be determined
   (e) None of these

5. Ratio of the earning of A and B is 4:7 respectively. If the earnings of A increase by 50% and the earnings of B decrease by 25% the new ratio of their earnings becomes 8:7 respectively. What are A's earnings?
   (a) ₹26,000   (b) ₹28,000   (c) ₹21,000
   (d) Data inadequate   (e) None of these

6. Rinku and Pooja started a business initially with ₹ 5,100 and ₹ 6,600 respectively. If the total profit is ₹ 2,730 what is Rinku's share in the profit ?
   (a) ₹1,530   (b) ₹1,540   (c) ₹1,200
   (d) ₹1,180   (e) None of these

7. The total number of boys in a school is 15% more than the total number of girls in the school. What is the ratio of the total number of boys to the total number of girls in the school?
   (a) 17 : 23   (b) 24 : 11   (c) 23 : 20
   (d) 11 : 24   (e) None of these

8. A and B started a business by investing ₹ 35,000 and ₹ 20,000 respectively. B left the business after 5 months and C joined the business with a sum of ₹ 15,000. The profit earned at the end of the year is ₹ 84,125. What is B's share of profit?
   (a) ₹14133   (b) ₹15,000
   (c) ₹13,460   (d) Cannot be determined
   (e) None of these

9. Ninad, Vikas and Manav enter into a partnership. Ninad invests some amount at the beginning. Vikas invests double the amount after 6 months and Manav invests thrice the amount invested by Ninad after 8 months. They earn a profit of ₹45, 000 at the end of the year. What is Manav's share in the profit?
   (a) ₹25,000   (b) ₹15,000   (c) ₹12,000
   (d) ₹9,000   (e) None of these

10. In a college the students in Arts and Commerce faculties were in the ratio of 4 : 5 respectively. When 65 more students joined Commerce faculty the ratio became 8 : 11. How many students are there in Arts faculty?
    (a) 520   (b) 650
    (c) 715   (d) Cannot be determined
    (e) None of these

11. Sarita started a boutique investing an amount of ₹ 50,000. Six months later Neeta joined her with an amount of ₹ 80,000. At the end of one year they earned a profit of ₹ 18, 000. What is Sarita's share in the profit?
    (a) ₹ 9,000   (b) ₹ 8,000   (c) ₹ 12,000
    (d) ₹ 10,000   (e) None of these

12. If $\frac{1}{2}$ of Sumit's salary is equal to $\frac{2}{5}$ of Rajan's salary and their total salary is ₹ 36,000, find Rajan's salary.
    (a) ₹16,000   (b) ₹20,000   (c) ₹22,000
    (d) ₹14,000   (e) None of these

13. A contractor employed 25 labourers on a job. He was paid ₹ 275 for the work. After retaining 20% of this sum, he distributed the remaining amount amongst the labourers. If the number of male to female labourers was in the ratio 2 : 3 and their wages in the ratio 5 : 4, what wages did a female labourer get ?
    (a) ₹ 15   (b) ₹ 8
    (c) ₹ 14   (d) ₹ 10
    (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. The largest and the second largest angles of a triangle are in the ratio of 13 : 12. The smallest angle is 20% of the sum of the largest and the second largest angles. What is the sum of the smallest and the second largest angles ?
    (a) 120° (b) 108° (c) 100°
    (d) 102° (e) None of these

15. Mr. Pandit owned 950 gold coins all of which he distributed amongst his three daughters Lalita, Amita and Neeta. Lalita gave 25 gold coins to her husband, Amita donated 15 gold coins and Neeta made jewellery out of 30 gold coins. The new respective ratio of the coins left with them was 20 : 73 : 83. How many gold coins did Amita receive from Mr. Pandit?
    (a) 380 (b) 415 (c) 400
    (d) 350 (e) None of these

16. The ratio of the money with Rita an Sita is 7 : 15 and that with Sita and Kavita is 7 : 16. If Rita has ₹ 490, how much money does Kavita have?
    (a) 1050 (b) 2200 (c) 2400
    (d) 2800 (e) None of these

17. If A : B = 3 : 4, B : C = 8 : 10 and C : D = 15 : 17
    Then find A : B : C : D.
    (a) 9 : 12 : 13 : 11 (b) 4 : 5 : 6 : 7 (c) 7:6:11:19
    (d) 9 : 12 : 15 : 17 (e) None of these

18. A hound pursues a hare and takes 5 leaps for every 6 leaps of the hare, but 4 leaps of the hound are equal to 5 leaps of the hare. Compare the rates of the hound and the hare.
    (a) 5 : 6 (b) 4 : 5 (c) 25 : 24
    (d) 24 : 25 (e) None of these

19. If a carton containing a dozen mirrors is dropped, which of the following cannot be the ratio of broken mirrors to unbroken mirrors?
    (a) 2 : 1 (b) 3 : 1 (c) 3 : 2
    (d) 1 : 1 (e) 7 : 5

20. If (a + b) : (b + c) : (c + a) = 6 : 7 : 8 and a + b + c = 14, then find a : b : c and the value of a, b and c.
    (a) 1 : 2 : 3 (b) 6 : 7 : 9 (c) 3 : 4 : 8
    (d) 7 : 5 : 9 (e) None of these

21. Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50%, and 75% respectively. What will be the ratio of increased seats?
    (a) 2 : 3 : 4 (b) 6 : 7 : 8 (c) 6 : 8 : 9
    (e) 3 : 4 : 2 (d) None of these

22. The ratio of the number of boys and girls in a college is 7 : 8. If the precentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?
    (a) 8 : 9 (b) 17 : 18
    (c) 21 : 22 (d) Cannot be determined
    (e) None of these

23. A sum of money is be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets ₹ 1000 more than D, what is B's share?

24. (a) ₹ 500 (b) ₹ 1500 (c) ₹ 2000
    (e) None of these

24. The electricity bill of a certain estabilshment is partly fixed and partly vories as the number of units of electricity consumed. When in a certain month 540 units are consumed, the bill is ₹ 1800. In another month 620 units are consumed and the bill is ₹ 2040. In yet another month 500 units are consumed. The bill for that month would be:
    (a) ₹ 1560 (b) ₹ 1680 (c) ₹ 1840
    (d) ₹ 4400 (e) None of these

25. What is the ratio whose terms differ by 40 and the measure of which is $\frac{2}{7}$?
    (a) 16 : 56 (b) 14 : 56 (c) 15 : 56
    (d) 16 : 72 (e) None of these

26. Railway fares of 1st, 2nd and 3rd classes between two stations were in the ratio of 8 : 6 : 3. The fares of 1st and 2nd class were subsequently reduced by 1/6 and 1/12, respectively. If during a year the ratio between the passengers of 1st, 2nd and 3rd classes was 9 : 12 : 26 and total amount collected by the sale of tickets was Rs 1088, then find the collection from the passengers of 1st, class.
    (a) ₹ 260 (b) ₹ 280 (c) ₹ 300
    (d) ₹ 320 (e) None of these

27. In two alloys, the ratio of iron and copper is 4 : 3 and 6 : 1, respectively. If 14 kg of the first alloy and 42 kg of the second alloy is mixed together to form a new alloy, then what will be the ratio of iron to copper in the new alloy ?
    (a) 11 : 3 (b) 11 : 8 (c) 8 : 1
    (d) 1 : 11 (e) None of these

28. The ratio of the amount for two years under CI annually and for one year under SI is 6 : 5. When the ratio of interest is same, then the value of the rate of interest is :
    (a) 12.5% (b) 18% (c) 20%
    (d) 16.66% (e) None of these

29. In an engineering college the average salary of all engineering graduates from Mechanical trade is ₹ 2.45 lacs per annum and that of the engineering graduates from Electronics trade is ₹ 3.56 lacs per annum. The average salary of all Mechanical and Electronics graduates is ₹ 3.12 lacs per annum. Find the least number of Electronics graduates passing out from this institute.
    (a) 43 (b) 59 (c) 67
    (d) 60 (e) Cannot be determined

30. Fresh grapes contain 80 per cent water while dry grapes contain 10 per cent water. If the weight of dry grapes is 250 kg then what was its total weight when it was fresh ?
    (a) 1000 kg (b) 1125 kg (c) 1225 kg
    (d) 1100 kg (e) None of these

RATIO & PROPORTION - 2

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

1. The incomes of A and B are in the ratio 3 : 2 and their expenditures are in the ratio 5 : 3. If each savs ₹ 2000, what is their income?
   - (a) 10000, 6000
   - (b) 12000, 8000
   - (c) 15000, 10000
   - (d) 18000, 12000
   - (e) None of these

2. When a bus started from the first stop, the number of male passengers to the number of female passengers was 3 : 1. At the stop 16 passengers get down and 6 more female passengers get into. Now the ratio of the male to female passengers becomes 2 : 1. What was the total number of passengers in the bus when it started from the first stop?
   - (a) 64
   - (b) 48
   - (c) 54
   - (d) 72
   - (e) None of these

3. An exployer reduces the number of his employees in the ratio 9 : 8 and increases their wates in the ratio 14 : 15. State whether his bill of total wages increases or decreases, and in what ratio.
   - (a) 21 : 20
   - (b) 31 : 20
   - (c) 22 : 31
   - (d) 31 : 22
   - (e) None of these

4. ₹ 50 is divided among 6 men, 12 women and 17 boys so that 2 men get as much as 5 boys and 2 women as much as 3 boys. Find the share of a boy.
   - (a) ₹ 1
   - (b) ₹ 10
   - (c) ₹ 5
   - (d) ₹ 11
   - (e) None of these

5. A, B and C enter into partnership. A advances one-fourth of the capital for one-fourth of the time. B contributes one-fifth of the capital for half of the time. C contributes the remaining capital for the whole time. How should they divide a profit of ₹ 1140?
   - (a) 100, 160, 880
   - (b) 160, 100, 280
   - (c) 200, 260, 680
   - (d) 160, 200, 780
   - (e) None of these

6. Three containers A, B and C are having mixtures of milk and water in the ratio 1 : 5, 3 : 5 and 5 : 7, respectively. If the capacities of the containers are in the ratio 5 : 4 : 5, then find the ratio of the milk to the water if the mixtures of all the three containers are mixed together.
   - (a) 51 : 115
   - (b) 52 : 115
   - (c) 53 : 115
   - (d) 54 : 115
   - (e) None of these

7. A and B rent a pasture for 10 months. A puts in 100 cows for 8 months. How many cows can B put in for the remaining 2 months, if he pays half as much as A?
   - (a) 300
   - (b) 600
   - (c) 800
   - (d) 1000
   - (e) None of these

8. A, B and C are partners. A receives $\frac{2}{5}$ of the profit and B and C share the remaining profit equally. A's income is increased by ₹ 220 when the profit rises from 8% to 10%. Find the capitals invested by A, B and C.
   - (a) 8000, 7250, 7250
   - (b) 9000, 7250, 7250
   - (c) 10000, 8250, 8250
   - (d) 11000, 8250, 8250
   - (e) None of these

9. Shri Ramlal distributed his savings among his wife, two sons and one daughter in such a way that wife gets double of what each son gets and each son gets double of what the daughter gets. If the amount received by each son is Rs. 48,000, what was the total amount distributed by Shri Ramlal?
   - (a) ₹ 92,000
   - (b) ₹ 2,20,000
   - (c) ₹ 1,80,000
   - (d) ₹ 2,12,000
   - (e) None of these

10. Two vessels contain mixtures of milk and water in the ratio of 8 : 1 and 1 : 5 respectively. The contents of both of these are mixed in a specific ratio into a third vessel. How much mixture must be drawn from the second vessel to fill the third vessel (capacity 26 gallons) completely in order that the resulting mixture may be half milk and half water ?
    - (a) 12 gallons
    - (b) 14 gallons
    - (c) 10 gallons
    - (d) 13 gallons
    - (e) None of these

11. The ratio of the number of boys to the number of girls studying in a school is 25 : 29. The total number of students studying in the school is 270. If 15 boys and 15 girls take admission in the school, what will be the new ratio of the boys and girls studying in the school?
    - (a) 6 : 7
    - (b) 8 : 9
    - (c) 7 : 8
    - (d) 7 : 9
    - (e) None of these

12. There are two numbers such that the sum of twice the first number and thrice the second number is 141 and the sum of thrice the first number and twice the second number is 174. Which is the larger number?
    - (a) 52
    - (b) 36
    - (c) 48
    - (d) 24
    - (e) None of these

13. Mr. Shrimat inherits 2505 gold coins and divides them amongst his 3 sons – Bharat, Parat and Marat – in a certain ratio. Out of the total coins received by each of them, Bharat sells 30 coins, Parat donates his 30 coins and Marat loses 25 coins. Now the ratio of gold coins with them is 46 : 41 : 34 respectively. How many coins did Parat receive from his father?
    - (a) 705
    - (b) 950
    - (c) 800
    - (d) 850
    - (e) None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. The cost of 11 kgs of Sugar is ₹ 264. The cost of 14 kgs of tea is ₹ 252 and the cost of 17 litres of milk is ₹ 544. What is the total cost of 24 kgs of sugar, 21 kgs of tea and 25 litres of milk?
    (a) ₹1,745   (b) ₹1,800   (c) ₹ 1,825
    (d) ₹1,764   (e) None of these

15. Populations of two villages X and Y are in the ratio of 5 : 7 respectively. If the population of village Y increases by 25000 and the population of village X remains unchanged the respective ratio of their populations becomes 25 : 36. What is the population of village X?
    (a) 6,25,000   (b) 6,75,000   (c) 8,75,000
    (d) 9,00,000   (e) None of these

16. Number of students studying in colleges A and B are in the ratio of 3 : 4 respectively. If 50 more students join college. A and there is no change in the number of students in College B, the respective ratio becomes 5 : 6. What is the number of students in College B?
    (a) 450   (b) 500   (c) 400
    (d) 600   (e) None of these

17. Three friends Anita, Bindu and Champa divide ₹ 1,105 amongst them in such a way that if ₹ 10, ₹ 20 and ₹ 15 are removed from the sums that Anita, Bindu and Champa received respectively, then the share of the sums that they got will be in the ratio of 11 : 18 : 24. How much did Champa receive ?
    (a) ₹495   (b) ₹510
    (c) ₹480   (d) ₹375
    (e) None of these

18. Two casks of 48 L and 42 L are filled with mixtures of wine and water, the proportions in the two casks being respectively 13 : 7 and 18 : 17. If the contents of the two casks be mixed and 20 L of water is added to the whole, what will be the proportion of wine to water in the resultant solution?
    (a) 21 : 31   (b) 12 : 13
    (c) 13 : 12   (d) None of these
    (e) None of these

19. Kiran starts a business with an investment of ₹ 40,000. Anil joins her after three months with a capital of ₹ 30,000. If Kiran withdraws 4 months before the end of the year. Find the ratio in which they share the profits at the end of the year.
    (a) 27 : 32   (b) 32 : 19
    (c) 32 : 27   (d) 25 : 31
    (e) None of these

20. If A : B : C = 2 : 3 : 4, then $\dfrac{A}{B} : \dfrac{B}{C} : \dfrac{C}{A}$ is equal to
    (a) 4 : 9 : 16   (b) 8 : 9 : 12   (c) 8 : 9 : 16
    (d) 8 : 9 : 24   (e) None of these

21. A sum of ₹ 1300 is divided amongst P, Q, R and S such that $\dfrac{\text{P's share}}{\text{Q's share}} = \dfrac{\text{Q's share}}{\text{R's share}} = \dfrac{\text{R's share}}{\text{S's share}} = \dfrac{2}{3}$.
    Then, P's share is:
    (a) ₹140   (b) ₹160   (c) ₹240
    (d) ₹ 320   (e) None of these

22. 20 litres of a mixture contains milk and water in the ratio 5 : 3. If 4 litres of this mixture be replaced by 4 litres of milk, the ratio of milk to water in the new mixture would be:
    (a) 2 : 1   (b) 7 : 3   (c) 8 : 3
    (d) 4 : 3   (e) None of these

23. Three containers have their volumes in the ratio 3 : 4 : 5. They are full of mixture of milk and water. The mixtures contain milk and water in the ratio of (4 : 1), (3 : 1) and (5 : 2) respectively. The contents of all these three containers are poured into a fourth container. The ratio of milk and water in the fourth container is
    (a) 4 : 1   (b) 151 : 48   (c) 157 : 53
    (d) 5 : 2   (e) None of these

24. The ratio of third proportional to 12 and 30 and the mean proportional between 9 and 25 is
    (a) 2 : 1   (b) 5 : 1   (c) 7 : 15
    (d) 9 : 14   (e) None of these

25. The sides of a triangle are in the ratio $\dfrac{1}{2} : \dfrac{1}{3} : \dfrac{1}{4}$ and its perimeter is 104 cm. The length of the longest side is:
    (a) 52 cm   (b) 48 cm   (c) 32 cm
    (d) 26 cm   (e) None of these

26. The ratio of three numbers A, B and C is 6 : 8 : 15. If A, B and C are increased by 300%, 275% and 100% respectively, what will be the new ratio of A, B and C?
    (a) 5 : 4 : 5   (b) 4 : 5 : 5   (c) 5 : 4 : 4
    (d) 3 : 4 : 5   (e) 3 : 4 : 15

27. X started a business by investing ₹120000. 1.5 years later, Y joined the business by investing ₹150000, and 3.5 years later, a third person Z joined the business by investing ₹280000. At the end of 6.5 years, they earned a profit of ₹108941. What is the difference between Z's share and X's share in the profit?
    (a) ₹1379   (b) ₹2758   (c) ₹4137
    (d) ₹5516   (e) ₹6895

28. The ratio of two numbers is 4 : 7. If each of these numbers increases by 30, their ratio will become 5 : 8 . What is the average of these two numbers?
    (a) 135   (b) 145   (c) 155
    (d) 165   (e) 175

29. Shalini and Nalini invested ₹ 80,000 each and started a business. After one year Shalini invests an additional amount of ₹ 20,000 and Nalini withdraws ₹ 30,000. At the end of two years they earn a profit of ₹ 93,000. What will be Nalini's hare in the profit?
    (a) ₹39,000   (b) ₹54,000   (c) ₹52,000
    (d) ₹36,000   (e) None of these

30. Salary of Mr. X is 80% of the salary of Mr. Y, and the salary of Mr. Z is 120% of the salary of Mr X. What is the ratio between the salaries of X, Y and Z respectively?
    (a) 4 : 6 : 5   (b) 4 : 5 : 6   (c) 16 : 24 : 25
    (d) 16 : 25 : 24   (e) None of these

RESPONSE GRID	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ
	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ
	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ			

ALLIGATION AND MIXTURE

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

1. A mixture of certain quantity of milk with 16 litres of water is worth 90 P per litre. If pure milk be worth ₹ 1.08 per litre, how much milk is there in the mixture?
   - (a) 60
   - (b) 70
   - (c) 80
   - (d) 90
   - (e) None of these

2. How many kg of salt at 42 P per kg must a man mix with 25 kg of salt at 24 P per kg so that he may, on selling the mixture at 40 P per kg gain 25% on the outlay?
   - (a) 15
   - (b) 20
   - (c) 25
   - (d) 30
   - (e) None of these

3. 300 gm of sugar solution has 40% sugar in it. How much sugar should be added to make it 50% in the solution?
   - (a) 40 gm
   - (b) 50 gm
   - (c) 60 gm
   - (d) 70 gm
   - (e) None of these

4. There are 65 students in a class. 39 rupees are distributed among them so that each boy gets 80 P and each girl gets 30 P. Find the number of boys and girls in that class.
   - (a) 45, 20
   - (b) 40, 25
   - (c) 39, 26
   - (d) 29, 36
   - (e) None of these

5. A person has a chemical of ₹ 25 per litre. In what ratio should water be mixed in that chemical so that after selling the mixture at ₹ 20/litre he may get a profit of 25%?
   - (a) 14 : 6
   - (b) 15 : 10
   - (c) 16 : 9
   - (d) 17 : 8
   - (e) None of these

6. In what ratio should milk and water be mixed so that after selling the mixture at the cost price a profit of $16\frac{2}{3}\%$ is made?
   - (a) 1 : 2
   - (b) 1 : 6
   - (c) 2 : 3
   - (d) 2 : 5
   - (e) None of these

7. A trader has 50 kg of rice, a part of which he sells at 14% profit and the rest at 6% loss. On the whole his loss is 4%. What is the quantity sold at 14% profit and that at 6% loss?
   - (a) 2, 48
   - (b) 4, 46
   - (c) 5, 45
   - (d) 7, 43
   - (e) None of these

8. A vessel of 80 litre is filled with milk and water. 70% of milk and 30% of water is taken out of the vessel. It is found that the vessel is vacated by 55%. Find the initial quantity of milk and water.
   - (a) 20, 60
   - (b) 30, 50
   - (c) 50, 30
   - (d) 60, 20
   - (e) None of these

9. A container contained 80 kg of milk. From this container, 8 kg of milk was taken out and replaced by water. This process was further repeated two times. How much milk is now contained by the container?
   - (a) 48 kg
   - (b) 56 kg
   - (c) 58.32 kg
   - (d) 59.46 kg
   - (e) None of these

10. Gold is 19 times as heavy as water and copper 9 times. In what ratio should these metals be mixed so that the mixture may be 15 times as heavy as water?
    - (a) 1 : 2
    - (b) 3 : 2
    - (c) 2 : 3
    - (d) 4 : 5
    - (e) None of these

11. An alloy contains copper and zinc in the ratio 5 : 3 and another alloy contains copper and tin in the ratio 8 : 5. If equal weights of both the alloys are melted together, then the weight of tin in the resulting alloy per unit will be:
    - (a) $\dfrac{26}{5}$
    - (b) $\dfrac{5}{26}$
    - (c) $\dfrac{7}{40}$
    - (d) $\dfrac{40}{7}$
    - (e) None of these

12. A dishonest milkman preofesses to sell his milk at cost price but he mixes it with water and thereby gains 25%. The percentage of water in the mixture is _____.
    - (a) 10%
    - (b) 15%
    - (c) 20%
    - (d) 25%
    - (e) None of these

13. A can contains a mixture of two liquids A and B in proportion 7 : 5. When 9 litres of mixture are drawn off and the can is filled with B, the proportion of A and B becomes 7 : 9. How many litres of liquid A was contained by the can initially?
    - (a) 20 *l*
    - (b) 21 *l*
    - (c) 30 *l*
    - (d) 36 *l*
    - (e) None of these

14. In a mixture of 60 litres, the ratio of milk to water is 2 : 1. If the ratio of milk to water is to be 1 : 2, then amount of water to be further added is _____.
    - (a) 20
    - (b) 40
    - (c) 60
    - (d) 80
    - (e) None of these

15. A vessel is fully filled with a special liquid. Four litres of liquid is drawn out from this vessel and is replaced with water. If the ratio from the special liquid to the water becomes 1: 2, then what is the capacity of the vessel ?
    - (a) 8 litres
    - (b) 10 litres
    - (c) 6 litres
    - (d) 14 litres
    - (e) None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ

16. In three vessels each of 10 litres capacity, mixture of milk and water is filled. The ratios of milk and water are 2 : 1, 3 : 1 and 3 : 2 in the three respective vessels. If all the three vessels are emptied into a single large vessel, find the proportion of milk and and water in the mixture.
    (a) 181 : 49   (b) 101 : 49   (c) 121 : 59
    (d) 131 : 69   (e) None of these

17. Milk and water are mixed in a vessel A in the proportion 5 : 2, and in vessel B in the proportion 8 : 5. In what proportion should quantities be taken from the two vessels so as to form a mixture in which milk and water will be in the proportion of 9 : 4?
    (a) 4 : 5   (b) 5 : 7   (c) 7 : 2
    (d) 7 : 9   (e) None of these

18. A butler stores wine from a butt of sherry which contained 30% of spirit and he replaced what he had stolen by wine containing only 12% of spirit. The butt was then 18% strong only. How much of the butt did he steal?

    (a) $\dfrac{1}{3}$ (b) $\dfrac{2}{5}$ (c) $\dfrac{2}{3}$

    (d) $\dfrac{4}{7}$ (e) None of these

19. Jayashree purchased 150 kg of wheat of the rate of ₹ 7 per kg. She sold 50 kg at a profit of 10%. At what rate per kg should she sell the remaining to get a profit of 20% on the total deal?
    (a) 6.50   (b) 8.75   (c) 7.50
    (d) 9.75   (e) None of these

20. A jar contains a mixture of two liquids A and B in the ratio 4 : 1. When 10 litres of the mixture is taken out and 10 litres of liquid B is poured into the jar, the ratio becomes 2 : 3. How many litres of liquid A was contained in the jar?
    (a) 12 *l*   (b) 14 *l*   (c) 16 *l*
    (d) 20 *l*   (e) None of these

21. In a mixture of milk and water the proportion of water by weight was 75%. If in 60 gm of mixture 15 gm water was added, what would be the percentage of water? (Weight in gm)
    (a) 75%   (b) 88%   (c) 90%
    (d) 100%   (e) None of these

22. Mixture of milk and water has been kept in two separate containers. Ratio of milk to water in one of the containers is 5 : 1 and that in the other container is 7 : 2. In what ratio should the mixtures of these two containers be added together so that the quantity of milk in the new mixture may become 80%?
    (a) 3 : 2   (b) 2 : 3
    (c) 4 : 5   (d) None of these
    (e) None of these

23. Three containers of capacity 20 L, 5 L and 9 L contain mixture of milk and water with milk concentrations 90%, 80% and 70% respectively. The contents of three containers are emptied into a large vessel. What is the approximate ratio of milk to water in the resultant mixture?
    (a) 3 : 1   (b) 4 : 1
    (c) 5 : 1   (d) 2 : 1
    (e) None of these

24. Two equal glasses filled with mixture of alcohol and water in the proportions of 2 : 1 and 1 : 1 respectively were emptied into a third glass. What is the ratio of alcohol and water in the third glass?
    (a) 5 : 6   (b) 7 : 5
    (c) 4 : 2   (d) 8 : 1
    (e) None of these

25. A merchant blends two varieties of tea, one costing ₹ 20 per kg and another costing ₹ 28 per kg, in the ratio 3 : 2 respectively. He sold the mixture at ₹ 24 per kg. What is his percentage of gain?
    (a) 3.4 %   (b) 5.2%
    (c) 6%   (d) None of these

26. In what ratio must a grocer mix two varieties of tea worth ₹ 60 a kg and ₹ 65 a kg so that by selling the mixture at ₹ 68.20 a kg he may gain 10%?
    (a) 3 : 2   (b) 3 : 4   (c) 3 : 5
    (d) 4 : 5   (e) None of these

27. A jar full of whisky contains 40% alcohol. A part of this whisky is replaced by another containing 19% alcohol and now the percentage of alcohol was found to be 26%. The quantity of whisky replaced is:

    (a) $\dfrac{1}{3}$ (b) $\dfrac{2}{3}$ (c) $\dfrac{2}{5}$

    (d) $\dfrac{3}{5}$ (e) None of these

28. Two vessels A and B contain spirit and water mixed in the ratio 5 : 2 and 7 : 6 respectively. Find the ratio in which these mixture be mixed to obtain a new mixture in vessel C containing spirit and water in the ratio 8 : 5 ?
    (a) 4 : 3   (b) 3 : 4   (c) 5 : 6
    (d) 7 : 9   (e) None of these

29. Two vessels A and B contain milk and water mixed in the ratio 8 : 5 and 5 : 2 respectively. The ratio in which these two mixtures be mixed to get a new mixture containing $69\dfrac{3}{13}$% milk, is :
    (a) 2 : 7   (b) 3 : 5   (c) 5 : 2
    (d) 5 : 7   (e) None of these

30. A can contains a mixture of two liquids A and B in the ratio 7 : 5. When 9 litres of mixture are drawn off and the can in filled with B, the ratio of A and B becomes 7 : 9. How many litres of liquid A was contained by the can initially?
    (a) 10   (b) 20   (c) 21
    (d) 25   (e) None of these

RESPONSE GRID	**16.** ⓐⓑⓒⓓⓔ **17.** ⓐⓑⓒⓓⓔ **18.** ⓐⓑⓒⓓⓔ **19.** ⓐⓑⓒⓓⓔ **20.** ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ **22.** ⓐⓑⓒⓓⓔ **23.** ⓐⓑⓒⓓⓔ **24.** ⓐⓑⓒⓓⓔ **25.** ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ **27.** ⓐⓑⓒⓓⓔ **28.** ⓐⓑⓒⓓⓔ **29.** ⓐⓑⓒⓓⓔ **30.** ⓐⓑⓒⓓⓔ

TIME AND WORK

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. A and B together can do a piece of work in 12 days and B and C finish the same work together in 16 days. After A has worked on it for 5 days and B for 7 days, C finishes it in 13 days. In how many days will C alone be able to finish the work ?
   - (a) 16
   - (b) 24
   - (c) 36
   - (d) 48
   - (e) 50

2. Ramesh is twice as good a workman as Sunil and finishes a piece of work in 3 hours less than Sunil. In how many hours they together could finish the same piece of work ?
   - (a) $2\frac{1}{3}$
   - (b) 2
   - (c) $1\frac{2}{3}$
   - (d) 4
   - (e) None of these

3. A mother and a daughter working together can complete a certain work in 4 days. But if the mother worked alone she could complete the work in 6 days. Both of them worked for one day and then the mother had to leave. How long will the daughter take to complete remaining work ?
   - (a) 7 days
   - (b) 8 days
   - (c) 6 days
   - (d) 9 days
   - (e) 10 days

4. If 15 women or 10 men can complete a project in 55 days, in how many days will 5 women and 4 men working together complete the same project ?
   - (a) 75
   - (b) 8
   - (c) 9
   - (d) 85
   - (e) 90

5. 24 men working 8 hours a day can finish a work in 10 days. Working at the rate of 10 hours a day, the number of men required to finish the same work in 6 days is :
   - (a) 30
   - (b) 32
   - (c) 34
   - (d) 36
   - (e) None of these

6. A can do a work in 18 days, B in 9 days and C in 6 days. A and B start working together and after 2 days C joins them. What is the total number of days taken to finish the work ?
   - (a) 4.33 day
   - (b) 4.0 day
   - (c) 4.66 day
   - (d) 5.33 day
   - (e) None of these

7. A worker is paid Rs 56 for 35 hour in a week. Up to 40 hours, he is paid at the normal rate and on overtime, 1.5 times the normal. How many hours did he work to get Rs 88 ?
   - (a) 48 hours
   - (b) 50 hours
   - (c) 58 hours
   - (d) 55 hours
   - (e) 60 hours

8. A and B can do the a piece of work in 6 days. A alone can do it in 10 days. What time will B require to do it alone ?
   - (a) 20 days
   - (b) 15 days
   - (c) 25 days
   - (d) 3 days
   - (e) 2 days

9. A and B weave a carpet in 10 days and 15 days, respectively. They begin to work together but B leaves after 2 days. In what time will A complete the remaining work ?
   - (a) $6\frac{1}{3}$ days
   - (b) $6\frac{2}{3}$ days
   - (c) 7 days
   - (d) 8 days
   - (e) None of these

10. A can do a piece of work in 25 days and B in 20 days. They work together for 5 days and then A goes away. In how many days will B finish the remaining work ?
   - (a) 17 days
   - (b) 11 days
   - (c) 10 days
   - (d) 12 days
   - (e) None of these

11. Two men and 7 children complete a certain piece of work in 4 days, while 4 men and 4 children complete the same work in only 3 days. The number of days required by 1 man to complete the work is :
   - (a) 60 days
   - (b) 15 days
   - (c) 6 days
   - (d) 51 days
   - (e) 52 days

12. A can do a work in 9 days. If B is 50% more efficient than A, then in how many days can B do the same work alone ?
   - (a) 13.5
   - (b) 4.5
   - (c) 6
   - (d) 3
   - (e) None of these

13. A can do a piece of work in 10 days, while B alone can do it in 15 days. They work together for 5 days and the rest of the work is done by C in 2 days. If they get Rs 450 for the whole work, how should they divide the money ?
   - (a) ₹225, ₹150, ₹75
   - (b) ₹250, ₹100, ₹100
   - (c) ₹200, ₹150, ₹100
   - (d) ₹175, ₹175, ₹100
   - (e) None of these

14. A can do 50% more work as B can do in the same time. B alone can do a piece of work in 20 hours. A, with help of B, can finish the same work in how many hours ?
   - (a) 12
   - (b) 8
   - (c) $13\frac{1}{3}$
   - (d) $5\frac{1}{2}$
   - (e) $47\frac{1}{2}$

15. If 15 men or 24 women or 36 boys can do a piece of work in 12 days, working 8 hours a day, how many men must be associated with 12 women and 6 boys to do another piece of work $2\frac{1}{4}$ times as great in 30 days working 6 hours a day?
    - (a) 4
    - (b) 8
    - (c) 6
    - (d) 10
    - (e) 12

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. A certain job was assigned to a group of men to do it in 20 days. But 12 men did not turn up for the job and the remaining men did the job in 32 days. The original number of men in the group was :
   (a) 32   (b) 34   (c) 36
   (d) 40   (e) None of these

17. A daily wage worker was paid ₹ 1700 during a period of 30 days. During this period he was absent for 4 days and was fined Rs 15 per day for absence. He was paid the full salary only for 18 days as he came late on the other days. Those who came late were given only half the salary for that day. What was the total salary paid per month to the worker who came on time every day and was never absent?
   (a) ₹ 2400   (b) ₹ 3000   (c) ₹ 2700
   (d) ₹ 2250   (e) None of these

18. Rohit, Harsha and Sanjeev are three typists who working simultaneously can type 216 pages in four hour. In one hours Sanjeev can type as many pages more than Harsha as Harsha can type more than Rohit. During a period of five hours Sanjeev can type as many pages as Rohit can during seven hours. How many pages does each of them type per hour?
   (a) 16, 18, 22   (b) 14, 17, 20   (c) 15, 17, 22
   (d) 5, 18, 21   (e) None of these

19. A contractor undertakes to built a walls in 50 days. He employs 50 peoples for the same. However after 25 days he finds that only 40% of the work is complete. How many more man need to be employed to complete the work in time?
   (a) 25   (b) 30   (c) 35
   (d) 20   (e) None of these

20. A and B can finish a work in 10 days while B and C can do it in 18 days. A started the job, worked for 5 days, then B worked for 10 days and the remaining work was finished by C in 15 days. In how many days could C alone have finished the whole work ?
   (a) 30 days   (b) 15 days   (c) 45 days
   (d) 24 days   (e) None of these

21. 4 men and 10 women were put on a work. They completed 1/3 of the work in 4 days. After this 2 men and 2 women were increased. They completed 2/9 more of the work in 2 days. If the remaining work is to be completed in 3 days, then how many more women must be increased ?
   (a) 32   (b) 8   (c) 50
   (d) 55   (e) None of these

22. C is twice efficient as A. B takes thrice as many days as C. A takes 12 days to finish the work alone. If they work in pairs (i.e., AB, BC, CA) starting with AB on the first day, BC on the second day and AC on the third day and so on, then how many days are required to finish the work ?
   (a) $6\frac{1}{5}$ days   (b) 4.5 days   (c) $5\frac{1}{9}$ days
   (d) 8 days   (e) None of these

23. The work done by a woman in 8 hours is equal to the work done by a man in 6 hours and by a boy in 12 hours. If working 6 hours per day 9 men can complete a work in 6 days, then in how many days can 12 men, 12 women and 12 boys together finish the same work, working 8 hours per day ?
   (a) $3\frac{2}{3}$ days   (b) $4\frac{1}{2}$ days
   (c) 3 days   (d) $1\frac{1}{2}$ days
   (e) None of these

24. A team of workers was employed by a contractor who undertook to finish 360 pieces of an article in a certain number of days. Making four more pieces per day than was planned, they could complete the job a day ahead of schedule. How many days did they take to complete the job ?
   (a) 10 days   (b) 8 days   (c) 9 days
   (d) 12 days   (e) None of these

25. Eight children and 12 men complete a certain piece of work in 9 days. If each child takes twice the time taken by a man to finish the work, in how many days will 12 men finish the same work?
   (a) 15   (b) 8   (c) 9
   (d) 12   (e) None of these

26. A, B and C working together completed a job in 10 days. However, C only worked for the first three days when $\frac{3}{100}$ of the job was done. Also, the work done by A in 5 days is equal to the work done by B in 4 days. How many days would be required by the fastest worker to complete the entire work?
   (a) 25 days   (b) 20 days   (c) 30days
   (d) 40days   (e) None of these

27. Two men undertake to do a piece of work for ₹600. One alone could do it in 6 days and the other in 8 days. With the assistance of a boy, they finished it in 3 days. Boy's share should be
   (a) ₹ 75   (b) ₹ 225   (c) ₹ 300
   (d) ₹ 100   (e) None of these

28. If 6 engines consume 15 metric tones of coal when each is running 9 hours a day, how much coal will be required for 8 engines, each running 12 hours a day, if being given that 3 engines of former type consume as much as 4 engines of latter type?
   (a) 20   (b) 18   (c) 27
   (d) 36   (e) None of these

29. A tank is filled in 5 hours by three pipes A, B and C. The pipe C s twice as fast as B and B is twice as fast as A. How much time will pipe A alone take to fill the tank?
   (a) 35 hr   (b) 30 hr   (c) 28 hr
   (d) 26 hr   (e) None of these

30. Kumar can do a work in 3 days while Dinesh can do same work in 2 days. Both of them finish the work together an get ₹150. What is the share of Kumar ?
   (a) 30   (b) 60   (c) 70
   (d) 75   (e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

13

PIPES AND CISTERNS

Max. Marks : 29   **No. of Qs. 29**   **Time : 20 min.**   **Date : ..../........./...............**

1. Pipes A and B can fill a tank in 5 and 6 hours, respectively. Pipe C can empty it in 12 hours. The tank is half full. All the three pipes are in operation simultaneously. After how much time, the tank will be full ?

    (a) $3\frac{9}{17}$ h   (b) 11 h   (c) $2\frac{8}{11}$ h

    (d) $1\frac{13}{17}$ h   (e) $2\frac{3}{17}$ h

2. A cistern has two taps (which fill it in 12 min and 15 min, respectively) and an exhaust tap. When all three taps are opened together, it takes 20 min to fill the empty cistern. How long will the exhaust tap take to empty it ?
    (a) 20 min   (b) 16 min   (c) 12 min
    (d) 10 min   (e) 7 min

3. A cistern is filled up in 5 hours and it takes 6 hours when there is a leak in its bottom. If the cistern is full, in what time shall the leak empty it ?
    (a) 6 h   (b) 5 h   (c) 30 h
    (d) 15 h   (e) 25 h

4. Pipe A and B running together can fill a cistern in 6 minutes. If B takes 5 minutes more than A to fill the cistern then the times in which A and B will fill the cistern separately will be, respectively:
    (a) 15 min, 20 min   (b) 15 min, 10 min
    (c) 10 min, 15 min   (d) 25 min, 20 min
    (e) None of these

5. Two pipes can fill a tank in 10 hours and 12 hours respectively, while the third can empty it in 20 hours . If all the pipes are opened together, the tank will be filled in :

    (a) $7\frac{1}{2}$ hours   (b) 10 hours   (c) 8 hours

    (d) $9\frac{1}{10}$ hours   (e) 6 hours

6. A pipe can fill a cistern in 6 hours. Due to a leak in its bottom, it is filled in 7 hours. When the cistern is full, in how much time will it be emptied by the leak?
    (a) 42 hours   (b) 40 hours   (c) 43 hours
    (d) 45 hours   (e) 48 hours

7. Three pipes A, B and C can fill a tank in 6 minuets, 8 minutes and 12 minutes, respectively. The pipe C is closed 6 minutes before the tank is filled. In what time will the tank be full ?
    (a) 4 min   (b) 6 min   (c) 5 min
    (d) Data inadequate   (e) None of these

8. There are two taps to fill a tank while a third to empty it. When the third tap is closed, they can fill the tank in 10 minutes and 12 minutes, respectively. If all the three taps be opened, the tank is filled in 15 minutes. If the first two taps are closed, in what time can the third tap empty the tank when it is full?
    (a) 8 min and 34 sec   (b) 9 min and 32 sec
    (c) 7 min   (d) 6 min
    (e) None of these

9. A cistern has two taps which fill it in 24 minutes and 30 minutes respectively. There is also a waste pipe in the cistern. When all the pipes are opened, the empty cistern is full in 40 minutes. How long will the waste pipe take to empty a full cistern?
    (a) 12 minutes   (b) 10 minutes   (c) 8 minutes
    (d) 16 minutes   (e) 20 minutes

10. Two taps can fill a tank in 20 minutes and 30 minutes respectively. There is an outlet tap at exactly half level of that rectangular tank which can pump out 50 litres of water per minute. If the outlet tap is open, then it takes 24 minutes to fill an empty tank. What is the volume of the tank?
    (a) 1800 litres   (b) 1500 litres   (c) 1200 litres
    (d) 2400 litres   (e) None of these

11. Two taps can separately fill a cistern in 10 minutes and 15 minutes, respectively and when the waste pipe is open, they can together fill it in 18 minutes. The waste pipe can empty the full cistern in :
    (a) 7 minutes   (b) 13 minutes   (c) 9 minutes
    (d) 23 minutes   (e) 25 minutes

12. Two pipes P and Q would fill a cistern in 24 and 32 minutes, respectively. Both pipes are kept open. When should the first pipe be turned off so that the cistern may be just filled in 16 minutes?
    (a) After 10 minutes   (b) After 12 minutes
    (c) After 14 minutes   (d) After 16 minutes
    (e) None of these

13. One tap can fill a cistern in 2 hours and another can empty the cistern in 3 hours. How long will they take to fill the cistern if both the taps are open?
    (a) 7 hours   (b) 6 hours   (c) 5 hours
    (d) 8 hours   (e) None of these

14. A cistern has a leak which would empty it in 8 hours. A tap is turned on which admits 6 litres a minute into the cistern and it is now emptied in 12 hours. The cistern can hold
    (a) 7860 litres   (b) 6840 litres   (c) 8640 litres
    (d) 8840 litres   (e) None of these

RESPONSE GRID	1. (a)(b)(c)(d)(e)	2. (a)(b)(c)(d)(e)	3. (a)(b)(c)(d)(e)	4. (a)(b)(c)(d)(e)	5. (a)(b)(c)(d)(e)
	6. (a)(b)(c)(d)(e)	7. (a)(b)(c)(d)(e)	8. (a)(b)(c)(d)(e)	9. (a)(b)(c)(d)(e)	10. (a)(b)(c)(d)(e)
	11. (a)(b)(c)(d)(e)	12. (a)(b)(c)(d)(e)	13. (a)(b)(c)(d)(e)	14. (a)(b)(c)(d)(e)	

15. A tap can fill a cistern in 8 hours and another tap can empty it in 16 hours. If both the taps are opened simultaneously, the time taken (in hours) to fill the cistern will be :
(a) 8   (b) 10
(c) 16   (d) 24
(e) None of these

16. A tap can fill a tank in 16 minutes and another can empty it in 8 minutes. If the tank is already 1/2 full and both the taps are opened together, will the tank be filled or emptied? How long will it take before the tank is either filled or emptied completely as the case may be ?
(a) Emptied; 16 min   (b) Filled; 8 min
(c) Emptied; 8 min   (d) Filled; 12 min
(e) None of these

17. A pipe can fill a tank in 15 minutes and another one in 10 minutes. A third pipe can empty the tank in 5 minutes. The first two pipes are kept open for 4 minutes in the beginning and then the third pipe is also opened. In what time will the tank be emptied ?
(a) 35 min   (b) 15 min
(c) 20 min   (d) Cannot be emptied
(e) None of these

18. Two taps can fill a tank in 60 and 48 min, respectively. A third tap can empty it in 80 min. If all the taps are opened at the same time, then in how much time will the tank be filled ?
(a) $18\frac{1}{2}$ min   (b) 40 min   (c) $41\frac{1}{3}$ min
(d) 44 min
(e) None of these

19. A bath tub can be filled by a cold water pipe in 20 minutes and by a hot water pipe in 30 minutes. A person leaves the bath-room after turning on both pipes simultaneously and returns at the moment when the bath tub should be full. Finding however, that the waste pipe has been open, he now closes it. In 3 minutes more the bath tub is full. In what time would the waste pipe empty it?
(a) 38 min   (b) 45 min   (c) 42 min
(d) 48 min   (e) None of these

20. Three pipes *A, B* and *C* can fill a tank in 20 min, 10 min and 30 min respectively. When the tank is empty, all the three pipes are opened. *A, B, C* discharge chemical solutions '*x*', '*y*', '*z*' respectively. The proportion of solution '*y*' in the liquid in the tank after 3 min is
(a) 6 / 11   (b) 7 / 11   (c) 8 / 11
(d) 5 / 11   (e) None of these

21. Three taps *A, B* and *C* can fill a tank in 12, 15 and 20 h respectively. If *A* is open all the time and *B* and *C* are open for one hour each alternately, the tank will be filled in
(a) 6 h   (b) 7 h   (c) 5 h
(d) 8 h   (e) None of these

22. A pump can be operated both for filling a tank and for emptying it. The capacity of tank is 2400 m³. The emptying capacity of the pump is 10 m³ per min higher than its filling capacity. Consequently, the pump needs 8 min less to empty the tank than to fill it. Find the filling capacity of the pump.
(a) 45 m³/min   (b) 30 m³/min   (c) 50 m³/min
(d) 55 m³/min   (e) None of these

23. Two pipes A and B can fill a cistern in 12 min and 15 min respectively, while a third pipe C can empty it in 6 min. Both A and B pipes are opened together for 5 min and then the third pipe C is opened. In what time will the cistern be emptied?
(a) 39 min   (b) 47 min   (c) 45 min
(d) 25 min   (e) None of these

24. A tank is fitted with 8 pipes, some of them that fill the tank and other pipes are meant to empty the tank. Each pipe that fills the tank can fill it in 8 h, while each of those that empty the tank can empty it in 6 h. All the pipes are kept open. When tank is full, it will take exactly 6 h for the tank to empty. How many pipes are filling the tank?
(a) 5   (b) 7   (c) 8
(d) 4   (e) None of these

146. A leak in the bottom of a tank can empty the full tank in 6 h. An inlet pipe fills water at the rate of 4 L per min. When the tank is full, the inlet is opened and due to the leak the tank is emptied in 8 h. The capacity of the tank is
(a) 9600 L   (b) 5760 L
(c) 2880 L   (d) 5240 L
(e) None of these

26. An electric pump can fill a tank in 3 hours. Because of a leak in the tank, it took $3\frac{1}{2}$ hours to fill the tank. the leak can drain out all the water of tank in
(a) $10\frac{1}{2}$ h   (b) 12 h   (c) 21 h
(d) 24 h   (e) None of these

27. In what time would a cistern be filled by three pipes running together, whose diameters are 1 cm, $1\frac{1}{3}$ cm, 2 cm, when the largest alone will fill it in 3660 seconds: the amount of water flowing in by each pipe being proportional to the square of its diameter?
(a) 40 mim   (b) 36 min   (c) 45 min
(d) 38 min   (e) None of these

28. A leak in the bottom of a tank can empty the full tank in 8 hours. An inlet pipe fills water in the tank at the rate of 4 litres per minute. When the tank is full, the inlet is opened and due to a leak, the tank is emptied in 12 hours. How many litres does the cistern hold?
(a) 6250 litres   (b) 5760 litres   (c) 5200 litres
(d) 4546 litres   (e) None of these

29. A cistern has three pipes, A, B and C. The pipes A and B can fill it in 4 and 5 hours respectively and pipe C can empty it in 2 hours. If the pipes are opened in an order at 1, 2 and 3 A.M., when will the cistern be empty?
(a) 3 P.M.   (b) 7 P.M.   (c) 4 P.M.
(d) 5 P.M.   (e) None of these

RESPONSE GRID

15. (a)(b)(c)(d)(e)   16. (a)(b)(c)(d)(e)   17. (a)(b)(c)(d)(e)   18. (a)(b)(c)(d)(e)   19. (a)(b)(c)(d)(e)
20. (a)(b)(c)(d)(e)   21. (a)(b)(c)(d)(e)   22. (a)(b)(c)(d)(e)   23. (a)(b)(c)(d)(e)   24. (a)(b)(c)(d)(e)
25. (a)(b)(c)(d)(e)   26. (a)(b)(c)(d)(e)   27. (a)(b)(c)(d)(e)   28. (a)(b)(c)(d)(e)   29. (a)(b)(c)(d)(e)

PROFIT, LOSS AND DISCOUNT

Max. Marks : 29   **No. of Qs. 29**   **Time : 20 min.**   **Date : ..../........./................**

1. A shopkeeper bought 30 kg of wheat at the rate of ₹ 45 per kg. He sold forty per cent of the total quantity at the rate of ₹ 50 per kg . Approximately, at what price per kg should he sell the remaining quantity to make 25 per cent overall profit?
   - (a) ₹ 54
   - (b) ₹ 52
   - (c) ₹ 50
   - (d) ₹ 60
   - (e) ₹ 56

2. A man buys a single apple for ₹ 25. If he were to buy a dozen apples, he would have to pay a total amount of ₹ 250. What would be the approximate per cent discount he would get on buying a dozen apples ?
   - (a) 32
   - (b) 20
   - (c) 12
   - (d) 8
   - (e) 17

3. Manoj sold an article for ₹ 15000. Had he offered a discount of 10% on the selling price, he would have earned a profit of 8%. What is the cost price ?
   - (a) ₹ 12500
   - (b) ₹ 13500
   - (c) ₹ 12250
   - (d) ₹ 13250
   - (e) None of these

4. Naresh purchased a TV set for ₹ 11250 after getting discount of 10% on the labelled price. He spent ₹ 150 on transport and ₹ 800 on installation. At what price should it be sold so that the profit earned would have been 15% if no discount was offered ?
   - (a) ₹ 12937.50
   - (b) ₹ 14030
   - (c) ₹ 13450
   - (d) ₹ 15467.50
   - (e) None of these

5. The profit earned after selling a wrist watch for ₹ 4080 is the same as loss incurred after selling the same wrist watch for ₹ 3650. What is the cost price of the wrist watch ?
   - (a) ₹ 3785
   - (b) ₹ 3800
   - (c) ₹ 3775
   - (d) ₹ 3865
   - (e) None of these

6. The profit earned after selling an article for ₹ 996 is the same as loss incurred after selling the article for ₹ 894. What is the cost price of the article ?
   - (a) ₹ 935
   - (b) ₹ 905
   - (c) ₹ 945
   - (d) ₹ 975
   - (e) None of these

7. A horse and a carriage together cost ₹ 8,000. If by selling the horse at a profit of 10%, and the carriage at a loss of 10%, a total profit of 2.5% is made, then what is the cost price of the horse?
   - (a) ₹ 3,000
   - (b) ₹ 3,500
   - (c) ₹ 6,000
   - (d) ₹ 5,000
   - (e) None of these

8. A cycle agent buys 30 bicycles, of which 8 are first grade and the rest are second grade for ₹ 3150. Find at what price he must sell the first grade bicycles so that if he sells the second grade bicycles at third quarter of the price, he may make a profit of 40% on both the types of transactions ?
   - (a) ₹ 200
   - (b) ₹ 240
   - (c) ₹ 180
   - (d) ₹ 210
   - (e) None of these

9. A screw driver and a hammer currently have the same price. If the price of a screw driver rises by 5% and the price of hammer goes up by 3%, then how much more will it cost to buy 3 screw drivers and 3 hammers ?
   - (a) 3%
   - (b) 4%
   - (c) 5%
   - (d) 8%
   - (e) None of these

10. A manufacturer sells a pair of glasses to a wholesale dealer at a profit of 18%. The wholesaler sells the same to a retailer at a profit of 20%. The retailer in turn sells them to a customer of 25%. If the cost price to the customer is ₹. 30.09, then the cost price of the manufacturer is
    - (a) ₹ 15
    - (b) ₹ 16
    - (c) ₹ 17
    - (d) ₹ 18
    - (e) None of these

11. A departmental store receives a shipment of 1,000 shirts, for which it pays ₹. 9,000. The store sells the shirts at a price 80 per cent above the cost for one month, after which it reduces the price of the shirts to 20 per cent above the cost. The store sells 750 shirts for one month and 50 per cent of the remaining shirts afterwards. How much gross income did the sales of the shirts generate ?
    - (a) ₹ 10,000
    - (b) ₹ 10,800
    - (c) ₹ 12,150
    - (d) ₹ 13,500
    - (e) None of these

12. A company bought a total of 60 computers and 20 printers to modernise billing operations. If the price of each computer was three times the price of each printer then what per cent of the total cost of the purchase was the total cost of the printers ?
    - (a) 10 %
    - (b) 11 %
    - (c) 15 %
    - (d) 20 %
    - (e) None of these

13. A company blends two varieties of tea from two different tea gardens, one variety costing ₹ 20 per kg and other ₹ 25 per kg, in the ratio 5 : 4. He sells the blended tea at ₹ 23 per kg. Find his profit per cent :
    - (a) 5% profit
    - (b) 3.5% loss
    - (c) 3.5% profit
    - (d) No profit, no loss
    - (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. A shopkeeper sells a pair of sunglasses at a profit of 25%. If he has bought it at 25% less and sold it for ₹ 10 less, then he would have gained 40%. Determine the cost price of the pair of sunglasses.
   (a) ₹ 50   (b) ₹ 25   (c) ₹ 75
   (d) ₹ 60   (e) None of these

15. An article is listed at ₹ 65. A customer bought this article for ₹ 56.16 and got two successive discounts of which the first one is 10%. The other rate of discount of this scheme that was allowed by the shopkeeper was :
   (a) 3%   (b) 4%   (c) 6%
   (d) 2%   (e) None of these

16. A milkman buys some milk contained in 10 vessels of equal size. If he sells his milk at ₹ 5 a litre, he loses ₹ 200; while selling it at ₹ 6 a litre, he would gain ₹ 150 on the whole. Find the number of litres contained in each cask.
   (a) 30   (b) 35   (c) 40
   (d) 45   (e) 50

17. The cost price of two motor cycles is the same. One is sold at a profit of 15% and the other for ₹ 4800 more than the first. If the net profit is 20% then the cost price of each motor cycle is
   (a) ₹ 48,000   (b) ₹ 52000   (c) ₹ 36,000
   (d) ₹ 42,500   (e) None of these

18. Hari buys a horse at a discount of 25%. At what percentage above the cost price should he sell to make a profit of 25% over the original list price?
   (a) 25   (b) 30   (c) 40
   (d) 66.67   (e) None of these

19. A trader has 50 kg of rice, a part of which he sells at 10% profit and the rest at 5% loss. He gains 7% on the whole. How much was sold at 10% gain and how much was sold at 5% loss?
   (a) 40 kg, 15 kg   (b) 30 kg, 10 kg
   (c) 35 kg, 40 kg   (d) 40 kg, 10 kg
   (e) None of these

20. A man wants to sell his scooter. There are two offers, one at ₹ 12,000 cash and the other at a credit or ₹ 12,880 to be paid after 8 months, at 18% rate per annum money being at annum. Which is the better offer ?
   (a) ₹ 12,000 in cash   (b) ₹ 12,880 at credit
   (c) ₹ 12,600 in cash   (d) Both are equal
   (e) None of these

21. Even after reducing the marked price of a transistor by ₹ 32, a shopkeeper makes a profit of 15%. If the cost price be ₹ 320, what percentage of profit would he have made if he had sold the transistor at the marked price?
   (a) 25%   (b) 20%   (c) 10%
   (d) None of these   (e) 30%

22. A man bought two packets of toffees, the same number in each. The first, he bought at 5 paise each, but the second at 3 for 13 paise. He then mixed them all together and sold them at 70 paise a dozen. His gain is

23. Goods are sold so that when 4 per cent is taken off the list price, a profit of 20% is made. How much per cent is the list price more than the cost price ?
   (a) 25%   (b) 50%   (c) 75%
   (d) 100%   (e) 150%

24. A profit of 20% is made on goods when a discount of 10% is given on the marked price. What profit per cent will be made when a discount of 20% is given on the marked price?
   (a) $6\frac{2}{3}\%$ (b) $7\frac{2}{3}\%$ (c) $3\frac{1}{4}\%$
   (d) $7\frac{4}{5}\%$ (e) $9\frac{1}{4}\%$

25. A dealer sells a table for ₹ 400, making a profit of 25%. He sells another table at a loss of 10%, and on the whole he makes neither profit nor loss. What did the second table cost him ?
   (a) 700   (b) 800   (c) 900
   (d) 950   (e) 1000

26. Each of the two horses is sold for ₹ 720. The first one is sold at 25% profit and the other one at 25% loss. What is the % loss or gain in this deal ?
   (a) 7.25%   (b) 6.25%   (c) 8.5%
   (d) 9.25%   (e) 10.25%

27. Each of the two cars is sold at the same price. A profit of 10% is made on the first and a loss of 7% is made on the second. What is the combined loss or gain ?
   (a) $\frac{150}{203}\%$ (b) $\frac{160}{203}\%$ (c) $\frac{180}{205}\%$
   (d) $\frac{170}{205}\%$ (e) None of these

28. Profit earned by an organisation is distributed among officers and clerks in the ratio of 5 : 3. If the number of officers is 45 and the number of clerks is 80 and the amount received by each officer is ₹25,000, what was the total amount of profit earned?
   (a) ₹22 lakh   (b) ₹18.25 lakh
   (c) ₹18 lakh   (d) ₹23.25 lakh
   (e) None of these

29. A shopkeeper labelled the price of his articles so as to earn a profit of 30% on the cost price. He,then sold the articles by offering a discount of 10% on the labelled price. What is the actual per cent profit earned in the deal?
   (a) 18%   (b) 15%
   (c) 20%   (d) Cannot be determined
   (e) None of these

RESPONSE GRID					
14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ
24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ
29. ⓐⓑⓒⓓⓔ				

TIME, SPEED AND DISTANCE

Max. Marks : 31   **No. of Qs. 31**   **Time : 20 min.**   **Date : ..../........../................**

1. The average speed of a car is $1\frac{4}{5}$ times the average speed of a bus. A tractor covers 575 km in 23 hours. How much distance will the car cover in 4 hours if the speed of the bus is twice speed of the tractor ?
   (a) 340 km   (b) 480 km   (c) 360 km
   (d) 450 km   (e) None of these

2. A bike covers a certain distance at the speed of 64 km/h in 8 hours. If the bike was to cover the same distance in approximately 6 hours, at what approximate speed should the bike travel ?
   (a) 80 km/h   (b) 85 km/h   (c) 90 km/h
   (d) 75 km/h   (e) 70 km/h

3. A train running between two stations A and B arrives at its destination 10 minutes late when its speed is 50 km/h and 50 minutes late when its speed is 30 km/h. What is the distance between the stations A and B ?
   (a) 40 km   (b) 50 km
   (c) 60 km   (d) 70 km
   (e) None of these

4. The ratio between the speed of a train and a car is 16 : 15 respectively. Also, a bus covered a distance of 480 km in 8 h. The speed of the bus is three-fourth the speed of the train. How much distance will the car cover in 6 h?
   (a) 450 km   (b) 480 km
   (c) 360 km   (d) Cannot be determined
   (e) None of these

5. Car A runs at the speed of 65 km/h and reaches its destination in 8h. Car B runs at the speed of 70 km/h and reaches its destination in 4h. What is the respective ratio of distances covered by Car A and Car B ?
   (a) 11 : 7   (b) 7 : 13   (c) 13 : 7
   (d) 7 : 11   (e) None of these

6. A bus started its journey from Ramgarh and reached Devgarh in 44 min with its average speed of 50 km/hr. If the average speed of the bus is increased by 5 km/hr, how much time will it take to cover the same distance ?
   (a) 40 min   (b) 38 min   (c) 36 min
   (d) 31 min   (e) 49 min

7. It takes eight hours for a 600 km journey, if 120 km is done by train and the rest by car. It takes 20 minutes more, if 200 km is done by train and the rest by car. The ratio of the speed of the train to that of the speed of the car is :
   (a) 4 : 3   (b) 3 : 4
   (c) 3 : 2   (d) 2 : 3
   (e) None of these

8. Points A and B are 70 km apart on a highway. One car starts from A and the another one from B at the same time. If they travel in the same direction, they meet in 7 hours. But if they travel towards each other, they meet in one hour. The speeds of the two cars are, respectively.
   (a) 45 and 25 km/h   (b) 70 and 10 km/h
   (c) 40 and 30 km/h   (d) 60 and 40 km/h
   (e) None of these

9. A Train which travels at the uniform rate of 10 m a second leaves Madras for Arconum at 7 a.m. At what distance from Madras will it meet a train which leaves Arconum for Madras at 7.20 a.m., and travels one-third faster than the former does, the distance from Madras to Arconum being 68 km?
   (a) 40   (b) 38   (c) 36
   (d) 34   (e) None of these

10. A, B and C can walk at the rates of 3, 4 and 5 km an hour respectively. They start from Poona at 1, 2, 3 o'clock respectively. When B catches A, B sends him back with a message to C. When will C get the message?
   (a) 5.15   (b) 5.20   (c) 5.30
   (d) 6.00   (e) None of these

11. Two men start together to walk a certain distance, one at $3\frac{3}{4}$ km an hour and the other at 3 km an hour. The former arrives half an hour before the latter. Find the distance.
   (a) 7 km   (b) 7.5 km   (c) 8 km
   (d) 8.5 km   (e) None of these

12. A journey of 192 km between two cities takes two hours less by a fast train than by a slow train. If the average speed of the slow train is 16 km/h less than that of the fast train, then the average speed of the fast train is :
   (a) 36 km/h   (b) 64 km/h   (c) 32 km/h
   (d) 48 km/h   (e) None of these

13. A person going from Pondicherry to Ootacamond travels 120 km by steamer, 450 km by train and 60 km by horse transit. The journey occupies 13 hours 30 minutes, and the rate of the train is three times that of the horse transit and $1\frac{1}{2}$ times that of the steamer. Find the rate of the train.
   (a) 30 km/hr   (b) 60 km/hr   (c) 80 km/hr
   (d) 90 km/hr   (e) None of these

14. How many seconds will a train 60 m in length, travelling at the rate of 42 km an hour, rate to pass another train 84 m long, proceeding in the same direction at the rate of 30 km an hour?
   (a) 42   (b) 43.2   (c) 45
   (d) 50   (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	

15. A train 75 metres long overtook a person who was walking at the rate of 6 km an hour, and passed him in $7\frac{1}{2}$ seconds. Subsequently it overtook a second person, and passed him in $6\frac{3}{4}$ seconds. At what rate was the second person travelling?
(a) 2 km/hr (b) 3 km/hr (c) 5 km/hr
(d) 6 km/hr (e) None of these

16. X and Y start from the same point and run around a circular stadium, whose circumference is 4200 m, at the rate of 500 m and 700 m per minute, respectively in the opposite directions. They will meet each other in :
(a) 3.5 min (b) 6.0 min (c) 8.4 min
(d) 21 min (e) None of these

17. A train is running at the rate of 40 kmph. A man is also going in the same direction parallel to the train at the speed of 25 kmph. If the train crosses the man in 48 seconds, the length of the train is _____ metres.
(a) 100 (b) 150 (c) 200
(d) 250 (e) None of these

18. Train A running at 60 km/h leaves Mumbai for Delhi at 6 p.m. Train B running at 90 km/h also leaves for Delhi at 9 p.m. Train C leaves Delhi for Mumbai at 9 p.m. If all the three trains meet at the same time between Mumbai and Delhi, then what is the speed of train C, if distance between Delhi and Mumbai is 1260 km ?
(a) 60 km/h (b) 90 km/h (c) 120 km/h
(d) 135 km/h (e) None of these

19. A train overtakes two persons who are walking in the same direction in which the train is going, at the rate of 2 kmph and 4 kmph respectively and passes them completely in 9 and 10 seconds respectively. The length of the train is _____ metres.
(a) 72 metres (b) 54 metres (c) 50 metres
(d) 45 metres (e) None of these

20. A boat, while going downstream in a river covered a distance of 50 mile at an average speed of 60 miles per hour. While returning, because of the water resistance, it took one hour fifteen minutes to cover the same distance . What was the average speed of the boat during the whole journey?
(a) 40 mph (b) 48 mph (c) 50 mph
(d) 55 mph (e) None of these

21. A boat travels upstream from B to A and downstream from A to B in 3 hours. If the speed of the boat in still water is 9 km/hr and the speed of the current is 3 km/hr the distance between A and B is _____ km.
(a) 12 (b) 15 (c) 18
(d) 21 (e) None of these

22. A train leaves station X at 5 a.m. and reaches station Y at 9 a.m. Another train leaves station Y at 7 a.m. and reaches station X at 10: 30 a.m. At what time do the two trains cross each other ?
(a) 7 : 36 am (b) 7 : 56 am (c) 8 : 36 am
(d) 8 : 56 am (e) None of these

23. The speed of a boat in still water is 6 km/hr and the speed of the stream is 1.5 km/hr. A man rows to a place at a distance of 22.5 km and comes back to the starting point. Find the total time taken by him.
(a) 8 hr (b) 9 hr (c) 10 hr
(d) 11 hr (e) None of these

24. A train covered a certain distance at a uniform speed. If the train had been 6 km/h faster, then it would have taken 4 hours less than the scheduled time. And, if the train were slower by 6 km/h, then the train would have taken 6 hours more than the scheduled time. The length of the journey is
(a) 700 km (b) 740 km (c) 720 km
(d) 760 km (e) None of these

25. A train starts from Delhi at 6 : 00 AM and reaches Ambala Cantt at 10 AM. The other train starts from Ambala Cantt at 8 AM and reaches Delhi at 11:30 PM. If the distance between Delhi and Ambala Cantt. is 200 km, then at what time did the two trains meet each other ?
(a) 8 : 56 AM (b) 8 : 46 AM (c) 7 : 56 AM
(d) 8 : 30 AM (e) None of these

26. A can row a certain distance down a stream in 6 hours and return the same distance in 9 hours. If the stream flows at the rate of $2\frac{1}{4}$ km per hour, find how far he can row in an hour in still water.
(a) $11\frac{1}{4}$ km/h (b) $12\frac{1}{3}$ km/h (c) $13\frac{1}{3}$ km/h
(d) $14\frac{1}{3}$ km/h (e) None of these

27. The current of a stream runs at the rate of 4 km an hour. A boat goes 6 km back to the starting point in 2 hours. The speed of the boat in still water is _____ km/hr.
(a) 10 (b) 12 (c) 8
(d) 6 (e) None of these

28. A man walked at a speed of 4 km/hr from point A to B and came back from point B to A at the speed of 6 km/hr. What would be the ratio of the time taken by the main in walking from point A to B that from point B to A?
(a) 5 : 3 (b) 2 : 3 (c) 2 : 1
(d) 4 : 3 (e) 3 :2

29. A car travels a distance of 560 km in 9.5 hours partly at a speed of 40 kmh^{-1} and partly at 160 kmh^{-1}. What is the distance it travels at the speed of 160 kmh^{-1}?
(a) 120 km (b) 240 km (c) 320 km
(d) 360 km (e) 420 km

30. A train after travelling 150 km meets with an accident and then proceeds at 3/5 of its former speed and arrives at its destination 8 hours late. Had the accident occurred 360 km further, it would have reached the destination 4 hours late. What is the total distance travelled by the train ?
(a) 960 km (b) 870 km
(c) 840 km (d) 1100 km
(e) None of these

31. Two trains, 130 m and 110 m long, are going in the same direction. The faster train takes one minute to pass the other completely. If they are moving in opposite directions, they pass each other completely in 3 seconds. Find the speed of each train.
(a) 38 m/sec, 36 m/sec (b) 42 m/sec, 38 m/sec
(c) 36 m/sec, 42 m/sec (d) 34 m/sec, 44 m/sec
(e) None of these

RESPONSE GRID

15. (a)(b)(c)(d)(e) 16. (a)(b)(c)(d)(e) 17. (a)(b)(c)(d)(e) 18. (a)(b)(c)(d)(e) 19. (a)(b)(c)(d)(e)
20. (a)(b)(c)(d)(e) 21. (a)(b)(c)(d)(e) 22. (a)(b)(c)(d)(e) 23. (a)(b)(c)(d)(e) 24. (a)(b)(c)(d)(e)
25. (a)(b)(c)(d)(e) 26. (a)(b)(c)(d)(e) 27. (a)(b)(c)(d)(e) 28. (a)(b)(c)(d)(e) 29. (a)(b)(c)(d)(e)
30. (a)(b)(c)(d)(e) 31. (a)(b)(c)(d)(e)

SIMPLE INTEREST/COMPOUND INTEREST

Max. Marks : 35   **No. of Qs. 35**   **Time : 25 min.**   Date : ..../........./................

1. The simple interest accrued on a sum of certain principal is ₹ 2000 in five years at the rate of 4% per annum. What would be the compound interest accrued on same principal at same rate in two years ?
   (a) ₹716   (b) ₹724   (c) ₹824
   (d) ₹816   (e) None of these

2. What total amount would Mithilesh get at the end of three years if he invests an amount of ₹ 11200 in a scheme, which offers simple interest 8.5% per annum for three years ?
   (a) ₹14056   (b) ₹14348   (c) ₹13852
   (d) ₹15064   (e) None of these

3. Arun invested a sum of money at a certain rate of simple interest for a period of for a period of four years. Had he invested the same sum for a period of six years the total interest earned by him would have been fifty per cent more than the earlier interest amount. What was the rate of interest per cent per annum?
   (a) 4   (b) 8
   (c) 5   (d) Cannot be determined
   (e) None of these

4. Rohit invested some amount at the rate of 6 pcpa and at the end of 3 yr he got ₹ 8730 simple interest. How much compound interest he will get on same amount and same rate of interest after 2 yr.
   (a) ₹5820   (b) ₹5949.60   (c) ₹5900
   (d) ₹5994.60   (e) None of these

5. What amount a man would have received on a principal of ₹ 4000 after two yr compound interest @ 5% per annum ?
   (a) ₹4161   (b) ₹5200   (c) ₹4410
   (d) ₹4100   (e) ₹4190

6. The simple interest accrued on an amount of ₹ 27500 at the end of three years is ₹ 10230. What would be the approximate compound interest accrued on the same amount at the same rate in the same period ?
   (a) ₹11550   (b) ₹12620   (c) ₹10950
   (d) ₹11900   (e) ₹13500

7. The simple interest accrued on an amount of ₹ 84000 at the end of 3 yr is ₹30240. What would be the compound interest accrued on the same amount at the same rate in the same period ?
   (a) ₹30013.95   (b) ₹31013.95   (c) ₹32013.95
   (d) ₹33013.95   (e) ₹34013.95

8. Kruti took a loan at a simple interest rate of 6% in the first year with an increase of 0.5% in each subsequent year. She paid interest of ₹ 3375 after four years. How much loan did she take ?
   (a) ₹12500   (b) ₹33140
   (c) ₹15800   (d) Cannot be determined
   (e) None of these

9. The simple interest accrued on an amount of ₹ 40000 at the end of three years ₹ 12000. What would be the compound interest accrued on the same amount at the same rate in the same period ?
   (a) ₹18765   (b) ₹15350   (c) ₹21555
   (d) ₹13240   (e) None of these

10. Vishwas borrowed a total amount of ₹ 30000, part of it on simple interest rate of 12% per annum and remaining on simple interest rate of 10% per annum. If at the end of 2 yr he paid in all ₹ 36480 to settle the loan amount, what was the amount borrowed at 12% pre annum ?
    (a) ₹16000   (b) ₹18000   (c) ₹17500
    (d) ₹12000   (e) None of these

11. The simple interest accrued on an amount of ₹ 17000 at the end of four years is ₹ 6800. What would be the compound interest accrued on the same amount at the same rate in the same period ?
    (a) ₹7889.7   (b) ₹8324
    (c) ₹6990.5   (d) Cannot be determined
    (e) None of these

12. A sum of ₹ 2600 is lent out in two parts in such a way that the interest on one part at 10% for 5 years is equal to that on the other part at 9% for 6 years. The sum lent out at 10% is ___ .
    (a) 1250   (b) 1350   (c) 1450
    (d) 1550   (e) 1650

13. The simple interest on a sum of money is $\frac{1}{16}$ th of the principal and the number of years is equal to the rate per cent per annum. The rate per cent annum is _____ .
    (a) $6\frac{1}{4}\%$ (b) $6\frac{1}{3}\%$ (c) $6\frac{1}{5}\%$
    (d) $4\frac{1}{5}\%$ (e) $7\frac{1}{7}\%$

14. Rahul borrowed a certain sum from Dhawan at a certain rate of simple interest for 2 years. He lent this sum to Ramesh at the same rate of interest compounded annually for the same period. At the end of two years, he received ₹ 4200 as compound interest but paid ₹ 4000 only as simple interest. Find the rate of interest.
    (a) 12%   (b) 25%   (c) 35%
    (d) 10%   (e) None of these

15. Rajesh gave ₹ 1200 on loan. Some amount he gave at 4% per annum on simple interest and remaining at 5% per annum on simple interest. After two years, he got ₹ 110 as interest. Then the amounts given at 4% and 5% per annum on simple interest are, respectively :
    (a) ₹500, ₹700   (b) ₹400, ₹800
    (c) ₹900, ₹300   (d) ₹1100, ₹1100
    (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ

16. The difference between the interest received from two different banks on ₹ 500 for 2 years is ₹ 2.50. The difference between their rates is _____ .
(a) 1%   (b) 2%   (c) 0.5%
(d) 0.25%   (e) 1.5%

17. Some amount out of ₹ 7000 was lent at 6% per annum and the remaining at 4% per annum. If the total simple interest from both the fractions in 5 yrs. was ₹ 1600, find the sum lent at 6% per annum.
(a) 1500   (b) 2000   (c) 2500
(d) 3000   (e) 5000

18. A finance company declares that, at a certain compound interest rate, a sum of money deposited by anyone will become 8 times in three years. If the same amount is deposited at the same compound rate of interest, then in how many year will it become 16 times ?
(a) 5 years   (b) 4 years   (c) 6 years
(d) 7 years   (e) None of these

19. Arun and Ramu are friends. Arun borrowed a sum of ₹ 400 at 5% per annum simple interest from Ramu. He returns the amount with interest after 2 years. Ramu returns to Arun 2% of the total amount returned. How much did Arun receive ?
(a) 9   (b) 8.80   (c) 7.5
(d) 7   (e) 10.5

20. A person lent at certain sum of money at 4% simple interest; and in 8 years the interest amounted to ₹ 340 less than the sum lent. Find the sum lent.
(a) 500   (b) 600   (c) 1000
(d) 1500   (e) 1700

21. Sonika invested an amount of ₹ 5800 for 2 years. At what rate of compound interest will she get an amount of ₹ 594.5 at the end of two years ?
(a) 5 p.c.p.a.   (b) 4 p.c.p.a.   (c) 6 p.c.p.a.
(d) 8 p.c.p.a.   (e) None of these

22. The compound interest earned by Suresh on a certain amount at the end of two years at the rate of 8 p.c.p.a. was ₹ 1414.4. What was the total amount that Suresh got back at the end of two years in the form of principal plus interest earned ?
(a) ₹9414.4   (b) ₹9914.4   (c) ₹9014.4
(d) ₹8914.4   (e) None of these

23. What would be the compound interest accrued on an amount of ₹ 7400 @ 13.5 p.c.p.a. at the end of two years ? (Rounded off to two digits after decimal)
(a) ₹2136.87   (b) ₹2306.81   (c) ₹2032.18
(d) ₹2132.87   (e) None of these

24. If the compound interest accrued on an amount of ₹ 14500 in two years is 4676.25, what is the rate of interest p.c.p.a ?
(a) 11   (b) 9   (c) 15
(d) 18   (e) None of these

25. What would be the compound interest accrued on a amount of ₹ 8000 at the rate of 15% per annum in three years ?
(a) ₹4283   (b) ₹4051   (c) ₹4167
(d) ₹4325   (e) None of these

26. Two friends A and B jointly lent out ₹ 81,600 at 4% per annum compound interest. After 2 years A gets the same amount as B gets after 3 years. The investment made by B was

(a) ₹40,000   (b) ₹30,000   (c) ₹45,000
(d) ₹38,000   (e) None of these

27. ₹ 5,887 is divided between Shyam and Ram, such that Shyam's share at the end of 9 years is equal to Ram's share at the end of 11 years, compounded annually at the rate of 5%. The share of Shyam is
(a) ₹2,088   (b) ₹2,000   (c) ₹3,087
(e) ₹2,880   (e) None of the above

28. What will be the difference between the simple interest and compound interest earned on a sum of ₹ 985.00 at the rate of 14% per annum at the end of two years ?
(a) ₹16.408   (b) ₹14.214   (c) ₹19.218
(d) ₹17.405   (e) None of these

29. The simple interest on a certain sum of money for 4 years at 4 per cent per annum exceeds the compound interest on the same sum for 3 years at 5 per cent annum by ₹ 57. Find the sum.
(a) 24000   (b) 25000   (c) 26000
(d) 3000   (e) 40000

30. A sum of money at compound interest amounts in two years to ₹ 2809, and in three years to ₹ 2977.54. Find the rate of interest and the original sum.
(a) 2000   (b) 2100   (c) 2200
(d) 2500   (e) 3000

31. A sum is invested at compound interest payable annually. The interest in two successive years was ₹ 225 and ₹ 236.25. Find the rate of interest.
(a) 2%   (b) 3%   (c) 5%
(d) 9%   (e) 11%

32. A merchant commences with a certain capital and gains annually at the rate of 25 p.c. At the end of 3 years he has ₹ 10,000. What was his original capital ?
(a) 5120   (b) 5353   (c) 5456
(d) 5657   (e) 5757

33. Sharma invested one-half of his savings in a bond that paid simple interest for 2 yr and received ₹ 550 as interest. He invested the remaining in a bond that paid compound interest, interest being compounded annually, for the same 2 yr at the same rate of interest and received ₹ 605 as interest. What was the value of his total savings before investing in these two bonds?
(a) ₹22000   (b) ₹11000
(c) ₹5500   (d) ₹2750
(e) None of these

34. What sum of money at compound interest will amount to ₹ 2249.52 in 3 years if the rate of interest is 3% for the first year, 4% for the second year, and 5% for the third year?
(a) 2000   (b) 2050   (c) 2080
(d) 1850   (e) 1975

35. The rate of interest on a sum of money for the first two years is 6% p.a., for the next two years it is 7% p.a. and 8% p.a. for the period exceeding three years; all at simple interest. If a person earns an interest of ₹ 7,536 by the end of the seven years, what is the amount at the end of the period of investment?
(a) ₹15,072   (b) ₹11,304
(c) ₹22,608   (d) ₹21,308
(e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ

PROBLEMS ON AGES

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./...............

1. The respective ratio between the present age of Manisha and Deepali is 5 : X. Manisha is 9 years younger than Parineeta. Parineeta's age after 9 years will be 33 years. The difference between Deepali's and Manisha's age is same as the present age of Parineeta. What will come in place of X?
   (a) 23
   (b) 39
   (c) 15
   (d) Cannot be determined
   (e) None of these

2. The sum of the ages of 4 members of a family 5 years ago was 94 years. Today, when the daughter has been married off and replaced by a daughter-in-law, the sum of their ages is 92. Assuming that there has been no other change in the family structure and all the people are alive, what is the difference in the age of the daughter and the daughter-in-law ?
   (a) 22 years
   (b) 11 years
   (c) 25 years
   (d) 19 years
   (e) 15 years

3. Present age of Sudha and Neeta are in the ratio of 6 : 7 respectively. Five years ago their ages were in the ratio of 5 : 6 respectively. What is Sudha's present age?
   (a) 30 years
   (b) 35 years
   (c) 40 years
   (d) Cannot be determined
   (e) None of these

4. Average age of 36 children of the class is 15 years. 12 more children joined whose average age is 16 years. What is the average age of all the 48 children together?
   (a) 15.25 years
   (b) 15.5 years
   (c) 15.3 years
   (d) 15.4 years
   (e) None of these

5. Two years ago the ratio of the ages of Swati and Khyati was 5 : 7 respectively. Two years hence the ratio of their ages will be 7 : 9 respectively. What is the present age of Khyati?
   (a) 16 years
   (b) 14.5 years
   (c) 12 years
   (d) Cannot be determined
   (e) None of these

6. The age of a man is 4 times that of his son. 5 yrs ago, the man was nine times as old as his son was at that time. What is the present age of the man?
   (a) 28 yrs
   (b) 32 yrs
   (c) 40 yrs
   (d) 42 yrs
   (e) None of these

7. After 5 yrs, the age of a father will be thrice the age of his son, whereas five years ago, he was 7 times as old as his son was. What are their present ages?
   (a) 30 yrs
   (b) 40 yrs
   (c) 50 yrs
   (d) 60 yrs
   (e) None of these

8. 10 Yrs ago, Sita's mother was 4 times older than her daughter. After 10 yrs, the mother will be two times older than the daughter. What is the present age of Sita?
   (a) 10 yrs
   (b) 30 yrs
   (c) 20 yrs
   (d) 40 yrs
   (e) None of these

9. Samir's age is one–fourth of his father's age and two–third of his sister Reema's age. What is the ratio of the ages of Samir, Reema and their father respectively ?
   (a) 3 : 2 : 8
   (b) 3 : 4 : 8
   (c) 2 : 3 : 8
   (d) 4 : 3 : 8
   (e) None of these

10. The sum of the ages of a mother and her daughter is 50 yrs. Also 5 yrs ago, the mother's age was 7 times the age of the daughter. What are the present ages of the mother and the daughter?
    (a) 35, 5
    (b) 40, 10
    (c) 30, 20
    (d) 25, 15
    (e) None of these

11. The ratio of the father's age to the son's age is 4 : 1. The product of their ages is 196. What will be the ratio of their ages after 5 years?
    (a) 7 : 3
    (b) 14 : 9
    (c) 11 : 4
    (d) 17 : 3
    (e) None of these

12. The present ages of Trisha and Shalini are in the ratio of 7 : 6 respectively. After 8 years the ratio of their ages will be 9 : 8. What is the difference in their ages ?
    (a) 4 years
    (b) 8 years
    (c) 10 years
    (d) 12 years
    (e) None of these

13. A man's age is 125% of what it was 10 years ago, but $83\frac{1}{3}\%$ of what it will be after 10 years. What is his present age?
    (a) 30 yrs
    (b) 40 yrs
    (c) 50 yrs
    (d) 60 yrs
    (e) None of these

14. The age of a man is three times the sum of the ages of his two sons. Five years hence, his age will be double of the sum of the ages of his sons. The father's present age is
    (a) 40 years
    (b) 45 years
    (c) 50 years
    (d) 55 years
    (e) 65 years

15. The ratio between the present ages of P and Q is 3 : 4 respectively. Four years hence Q will be 5 years older than P. What is P's present age?
    (a) 15 years
    (b) 20 years
    (c) 25 years
    (d) Cannot be determined
    (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ

16. Present ages of Rama and Shyama are in the ratio of 4 : 5 respectively. Five years hence the ratio of their ages becomes 5 : 6 respectively. What is Rama's present age?
   (a) 25 years   (b) 22 years
   (c) 20 years   (d) 30 years
   (e) None of these

17. In a family, a couple has a son and daughter. The age of the father is three times that of his daughter and the age of the son is half of his mother. The wife is nine years younger to her husband and the brother is seven years older than his sister. What is the age of the mother?
   (a) 40 years   (b) 45 years   (c) 50 years
   (d) 60 years   (e) 65 years

18. Ram's present age is three times his son's present age and two-fifth of his father's present age. The average of the present ages of all of them is 46 years. What is the difference between the Ram's son's present age and Ram's father's present age?
   (a) 68 years   (b) 88 years
   (c) 58 years   (d) Cannot be determined
   (e) None of these

19. Abhay's age after six years will be three-seventh of his father's age. Ten years ago, the ratio of their ages was 1 : 5. What is Abhay's father's age at present?
   (a) 30 yrs.   (b) 40 yrs.   (c) 50 yrs.
   (d) 60 yrs.   (e) 70 years

20. The present ages of three persons are in proportions 4 : 7 : 9. Eight years ago, the sum of their ages was 56. Find their present ages (in years).
   (a) 8, 20, 28   (b) 16, 28, 36
   (c) 20, 35, 45   (d) 25, 30, 40
   (e) None of these

21. Tanya's grandfather was 8 times older to her 16 years ago. He would be 3 times of her age 8 years from now. Eight years ago, what was the ratio of Tanya's age to that of her grandfather?
   (a) 1 : 2   (b) 1 : 5   (c) 3 : 8
   (d) 11 : 53   (e) None of these

22. Q is as much younger than R as he is older than T. If the sum of the ages of R and T is 50 years, what is definitely the difference between R and Q's age?
   (a) 1 year   (b) 2 years
   (c) 25 years   (d) Data inadequate
   (e) None of these

23. The ratio of the present ages of Mahesh and Ajay is respectively 3 : 2. After 8 years, ratio of their ages will be 11 : 8. What will be the present age of Mahesh's son if his age is half of the present age of Ajay ?
   (a) 12 years   (b) 24 years
   (c) 18 years   (d) 9 years
   (e) None of these

24. At present Geeta is eight times her daughter's age. Eight years from now, the ratio of the ages of Geeta and her daughter will be 10 : 3 respectively. What is Geeta's present age ?
   (a) 32 years   (b) 40 years
   (c) 36 years   (d) Can't say
   (e) None of these

25. If 6 years are subtracted from the present age of Gagan and the remainder is divided by 18, then the present age of his grandson Anup is obtained. If Anup is 2 years younger to Madan whose age is 5 years, then what is Gagan's present age?
   (a) 48 years   (b) 60 years   (c) 84 years
   (d) 96 years   (e) 100 years

26. The ratio between the school ages of Neelam and Shaan is 5 : 6 respectively. If the ratio between the one-third age of Neelam and half of Shaan's age is 5 : 9, then what is the school age of Shaan?
   (a) 25 years
   (b) 30 years
   (c) Cannot be determined
   (d) 35 years
   (e) None of these

27. The ages of Samir and Tanuj are in the ratio of 8 : 15 years respectively. After 9 years the ratio of their ages will be 11 : 18. What is the difference in years between their ages ?
   (a) 24 years   (b) 20 years
   (c) 33 years   (d) 21 years
   (e) None of these

28. Eighteen years ago, a father was three times as old as his son. Now the father is only twice as old as his son. Then the sum of the present ages of the son and the father is:
   (a) 54   (b) 72   (c) 105
   (d) 108   (e) 116

29. One year ago, Preeti was four times as old as her daughter Sonal. Six years hence, Preeti's age will exceed her daughter's age by 9 years. The ratio of the present ages of Preeti and her daughter is :
   (a) 9 : 2   (b) 11 : 3   (c) 12 : 5
   (d) 13 : 4   (e) 17 : 7

30. The present age of the father and the son are in the ratio of 8:3. After 12 years the ratio of their ages will be 2:1. What is the sum of the present age of the father and the son?
   (a) 66yrs   (b) 70yrs
   (c) 74yrs   (d) 78yrs
   (e) 80yrs.

QUADRATIC EQUATIONS

Max. Marks : 30　　　**No. of Qs. 30**　　　**Time : 20 min.**　　　**Date : ..../........./...............**

DIRECTIONS (Q. 1-3): In each of these questions, two equations numbered I and II are given. You have to solve both the equations and –

Give answer (a) if $x < y$

Give answer (b) if $x \leq y$

Give answer (c) if $x > y$

Give answer (d) if $x \geq y$

Give answer (e) if $x = y$ or the relationship cannot be established.

1. **I.** $x^2 + 15x + 56 = 0$

　　II. $y^2 - 23y + 132 = 0$

2. **I.** $x^2 - 22x + 120 = 0$

　　II. $y^2 - 26y + 168 = 0$

3. **I.** $x^2 + 12x + 32 = 0$

　　II. $y^2 + 17y + 72 = 0$

DIRECTIONS (Q. 4-6): In the following questions, two equations numbered I and II are given. You have to solve both the equations and –

Give answer (a) If $x > y$

Give answer (b) If $x \geq y$

Give answer (c) If $x < y$

Give answer (d) If $x \leq y$

Give answer (e) If x = y or the relationship cannot be established.

4. **I.** $x^2 - 32 = 112$

　　II. $y - \sqrt{169} = 0$

5. **I.** $x - \sqrt{121} = 0$

　　II. $y^2 - 121 = 0$

6. **I.** $\dfrac{3}{\sqrt{x}} \quad \dfrac{4}{\sqrt{x}} \quad \sqrt{x}$

　　II. $y^2 \quad \dfrac{7\frac{5}{2}}{\sqrt{y}} \quad 0$

DIRECTIONS (Q. 7 - 10): In each of these questions, two are given. You have to solve these equations and find out the values of x and y and–

Give answer

(a)　If $x < y$　　　　(b)　If $x > y$

(c)　If $x \leq y$　　　　(d)　If $x \geq y$

(e)　If $x = y$

7. **I.** $16x^2 + 20x + 6 = 0$

　　II. $10y^2 + 38y + 24 = 0$

8. **I.** $18x^2 + 18x + 4 = 0$

　　II. $12y^2 + 29y + 14 = 0$

9. **I.** $8x^2 + 6x = 5$

　　II. $12y^2 - 22y + 8 = 0$

10. **I.** $17x^2 + 48x = 9$

　　II. $13y^2 - 32y - 12 = 0$

DIRECTIONS (Q. 11-13): In each of these questions, two equations numbered I and II are given. You have to solve both the equations and –

Give answer

(a)　If $x > y$　　　　(b)　If $x \geq y$

(c)　If $x < y$　　　　(d)　If $x \leq y$

(e)　If $x = y$ or the relationship cannot be established.

11. **I.** $\sqrt{25x^2} - 125 \quad 0$

　　II. $\sqrt{361}y \quad 95 \quad 0$

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

12. **I.** $\dfrac{5}{7} - \dfrac{5}{21}$ $\dfrac{\sqrt{x}}{42}$

   II. $\dfrac{\sqrt{y}}{4}$ $\dfrac{\sqrt{y}}{16}$ $\dfrac{250}{\sqrt{y}}$

13. **I.** $5x^2 - 18x + 9 = 0$
   II. $3y^2 + 5y - 2 = 0$

DIRECTIONS (Qs. 14-18) : In the following questions, two equations numbered I and II are given. You have to solve both the equations and give answers.

(a) if x > y
(b) if x ≥ y
(c) if x < y
(d) if x ≤ y
(e) if x = y or the relationship cannot be established

14. I. $12x^2 + 11x + 12 = 10x^2 + 22x$
   II. $13y^2 - 18y + 3 = 9y^2 - 10y$

15. I. $\dfrac{18}{x^2} + \dfrac{6}{x} - \dfrac{12}{x^2}$ $\dfrac{8}{x^2}$
   II. $y^3 + 9.68 + 5.64 = 16.95$

16. I. $\sqrt{1225x}$ $\sqrt{4900}$ 0
   II. $(81)^{1/4}\, y + (343)^{1/3} = 0$

17. I.   I. $\dfrac{(2)^5\,(11)^3}{6}$ x^3
   II. $4y^3 = -(589 \div 4) + 5y^3$

18. I. $(x^{7/5} \div 9) = 169 \div x^{3/5}$
   II. $y^{1/4} \times y^{1/4} \times 7 = 273 \div y^{1/2}$

DIRECTIONS (Qs.19–22): In each of the following questions two equations are given. You have to solve them and give answer accordingly.

(a) If $x > y$
(b) If $x < y$
(c) If $x = y$, or the relationship cannot be established
(d) If $x \ge y$
(e) If $x \le y$

19. I. $\dfrac{x^2}{2} + x - \dfrac{1}{2} = 1$
   II. $3y^2 - 10y + 8 = y^2 + 2y - 10$

20. I. $4x^2 - 20x + 19 = 4x - 1$
   II. $2y^2 = 26y - 84$
21. I. $y^2 + y - 1 = 4 - 2y - y^2$
   II. $\dfrac{x^2}{2} - \dfrac{3}{2}x = x - 3$
22. I. $6x^2 + 13x = 12 - x$
   II. $1 + 2y^2 = 2y + \dfrac{5y}{6}$

DIRECTIONS (Qs. 23 - 26): In each of the following questions equation I and equation II have been given. You have to solve both of these equations and

Given answer	If
(a)	x < y
(b)	x > y
(c)	x ≤ y
(d)	x ≥ y
(e)	x = y or no relation between two can be established.

23. I. $4x^2 - 32x + 63 = 0$ II. $2y^2 - 11y + 15 = 0$
24. I. $x^3 = \sqrt[3]{216}^{\,3}$ II. $6y^2 = 150$
25. I. $12x^2 + 17x + 6 = 0$ II. $6y^2 + 5y + 1 = 0$
26. I. $20x^2 + 9x + 1 = 0$ II. $30y^2 + 11y + 1 = 0$

DIRECTIONS (Qs. 27-30): In the following questions two equations numbered I and II are given. You have to solve both the equations and Give Answer if

(a) $x > y$ (b) $x \ge y$
(c) $x < y$ (d) $x \le y$
(e) $x = y$ or the relationship cannot be established.

27. I. $20x^2 - x - 12 = 0$
   II. $20y^2 + 27y + 9 = 0$
28. I. $x^2 - 218 = 106$
   II. $y^2 - 37y + 342 = 0$

29. I. $\dfrac{7}{\sqrt{x}}$ $\dfrac{5}{\sqrt{x}}$ $\sqrt{x}$

   II. $y^2 - \dfrac{12^{\,5/2}}{\sqrt{y}}$ 0

30. I. $\sqrt{361}x$ $\sqrt{16}$ 0
   II. $\sqrt{441}y$ 4   0

RESPONSE	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ
GRID	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	

PROBABILITY

Max. Marks : 25　　**No. of Qs. 25**　　**Time : 20 min.**　　**Date : ..../........./................**

DIRECTIONS (Q. 1-3): Study the given information carefully and answer the questions that follow.

A basket contains 4 red, 5 blue and 3 green marbles.

1. If two marbles are drawn at random, what is the probability that both are red ?

   (a) $\dfrac{3}{7}$　　　(b) $\dfrac{1}{2}$　　　(c) $\dfrac{2}{11}$

   (d) $\dfrac{1}{6}$　　　(e) None of these

2. If three marbles are picked at random, what is the probability that at least one is blue ?

   (a) $\dfrac{7}{12}$　　　(b) $\dfrac{37}{44}$　　　(c) $\dfrac{5}{12}$

   (d) $\dfrac{7}{44}$　　　(e) None of these

3. If three marbles are picked at random, what is the probability that either all are green or all are red ?

   (a) $\dfrac{7}{44}$　　　(b) $\dfrac{7}{12}$　　　(c) $\dfrac{5}{12}$

   (d) $\dfrac{1}{44}$　　　(e) None of these

4. A basket contains three blue and four red balls. If three balls are drawn at random from the basket, what is the probability that all the three are either blue or red ?

   (a) 1　　　(b) $\dfrac{1}{7}$　　　(c) $\dfrac{3}{14}$

   (d) $\dfrac{3}{28}$　　　(e) None of these

5. A bag has 4 red and 5 black balls. A second bag has 3 red and 7 black balls. One ball is drawn from the first bag and two from the second. The probability that there are two black balls and a red ball is :

   (a) $\dfrac{14}{45}$　　　(b) $\dfrac{11}{45}$　　　(c) $\dfrac{7}{15}$

   (d) $\dfrac{9}{54}$　　　(e) None of these

6. Atul can hit a target 3 times in 6 shots, Bhola can hit the target 2 times in 6 shots and Chandra can hit the 4 times in 4 shots. What is the probability that at least 2 shots (out of 1 shot taken by each one of them) hit the target ?

   (a) $\dfrac{1}{2}$　　　(b) $\dfrac{2}{3}$　　　(c) $\dfrac{1}{3}$

   (d) $\dfrac{5}{6}$　　　(e) None of these

7. A bag contains 5 white, 7 red and 8 black balls. If 4 balls are drawn one by one with replacement, what is the probability that all are white ?

   (a) $\dfrac{1}{256}$　　　(b) $\dfrac{1}{16}$　　　(c) $\dfrac{4}{20}$

   (d) $\dfrac{4}{8}$　　　(e) None of these

8. There are 6 positive and 8 negative numbers. Four numbers are chosen at random and multiplied. The probability that the product is a positive number is:

   (a) $\dfrac{500}{1001}$　　　(b) $\dfrac{503}{1001}$　　　(c) $\dfrac{505}{1001}$

   (d) $\dfrac{101}{1001}$　　　(e) None of these

9. A bag contains 3 white balls and 2 black balls. Another bag contains 2 white balls and 4 black balls. A bag is taken and a ball is picked at random from it. The probability that the ball will be white is:

   (a) $\dfrac{7}{11}$　　　(b) $\dfrac{7}{30}$　　　(c) $\dfrac{5}{11}$

   (d) $\dfrac{7}{15}$　　　(e) None of these

10. An urn contains 3 red and 4 green marbles. If three marbles are picked at random, what is the probability that two green and one is red ?

   (a) $\dfrac{3}{7}$　　　(b) $\dfrac{18}{35}$　　　(c) $\dfrac{5}{14}$
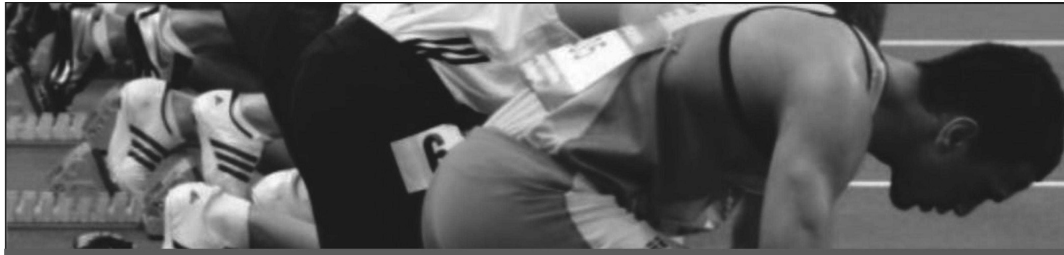
   (d) $\dfrac{4}{21}$　　　(e) None of these

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |
| | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | **8.** ⓐⓑⓒⓓⓔ | **9.** ⓐⓑⓒⓓⓔ | **10.** ⓐⓑⓒⓓⓔ |

11. Two packs of cards are thoroughly mixed and shuffled and two cards are drawn at random, one after the other. What is the probability that both of them are jacks?
(a) 1/13   (b) 2/13   (c) 7/1339
(d) 1/169   (e) $\dfrac{1}{179}$

12. A student has 60% chance of passing in English and 54% chance of passing in both English and Mathematics. What is the percentage probability that he will fail in Mathematics?
(a) 12   (b) 36   (c) 4
(d) 10   (e) 14

13. When three coins are tossed together, the probability that all coins have the same face up, is
(a) $\dfrac{1}{3}$ (b) $\dfrac{1}{6}$ (c) $\dfrac{1}{8}$
(d) $\dfrac{1}{12}$ (e) $\dfrac{1}{17}$

14. Three students are picked at random from a school having a total of 1000 students. The probability that these three students will have identical date and month of their birth, is
(a) $\dfrac{3}{1000}$ (b) $\dfrac{3}{365}$ (c) $\dfrac{1}{(365)^2}$
(d) $\dfrac{2}{365}$ (e) None of these

15. Ten identical particles are moving randomly inside a closed box. What is the probability that at any given point of time all the ten particles will be lying in the same half of the box?
(a) $\dfrac{1}{2^2}$ (b) $\dfrac{1}{2^5}$ (c) $\dfrac{2}{2^9}$
(d) $\dfrac{2}{2^{11}}$ (e) $\dfrac{9}{42}$

16. 3 digits are chosen at random from 1,2,3,4,5,6,7,8 and 9 without repeating any digit. What is the probability that their product is odd?
(a) 2/3   (b) 5/108   (c) 5/42
(d) 8/42   (e) 9/42

17. Each of the 3 persons is to be given some identical items such that product of the numbers of items received by each of the three persons is equal to 30. In how many maximum different ways can this distribution be done?
(a) 21   (b) 24   (c) 27
(d) 33   (e) 35

18. Suppose six coins are tossed simultaneously. Then the probability of getting at least one tail is :
(a) $\dfrac{71}{72}$ (b) $\dfrac{53}{54}$ (c) $\dfrac{63}{64}$
(d) $\dfrac{1}{12}$ (e) None of these

19. A box contains 6 white balls and 7 black balls. Two balls are drawn at random. What is the probability that both are of the same colour ?
(a) $\dfrac{5}{13}$ (b) $\dfrac{6}{13}$ (c) $\dfrac{7}{13}$
(d) $\dfrac{6}{7}$ (e) None of these

20. A committee of 4 is to be formed from among 4 girls and 5 boys. What is the probability that the committee will have number of boys less than number of girls?
(a) $\dfrac{1}{4}$ (b) $\dfrac{1}{5}$ (c) $\dfrac{1}{6}$
(d) $\dfrac{1}{7}$ (e) None of these

21. A box contains 4 black balls, 3 red balls and 5 green balls. 2 balls are drawn from the box at random. What is the probability that both the balls are of the same colour?
(a) $\dfrac{47}{68}$ (b) $\dfrac{1}{6}$ (c) $\dfrac{19}{66}$
(d) $\dfrac{2}{11}$ (e) None of these

22. In a box carrying one dozen of oranges, one-third have become bad. If 3 oranges are taken out from the box at random, what is the probability that at least one orange out of the three oranges picked up is good?
(a) $\dfrac{1}{55}$ (b) $\dfrac{54}{55}$ (c) $\dfrac{45}{55}$
(d) $\dfrac{3}{55}$ (e) None of these

23. A box contains 5 green, 4 yellow and 3 white marbles. 3 marbles are drawn at random. What is the probability that they are not of the same colour?
(a) $\dfrac{13}{44}$ (b) $\dfrac{41}{44}$ (c) $\dfrac{13}{55}$
(d) $\dfrac{152}{55}$ (e) None of these

24. Out of 15 students studying in a class, 7 are from Maharashtra, 5 from Karnataka and 3 from Goa. Four students are to be selected at random. What are the chances that at least one is from Karnataka?
(a) $\dfrac{12}{13}$ (b) $\dfrac{11}{13}$ (c) $\dfrac{100}{15}$
(d) $\dfrac{51}{15}$ (e) None of these

25. Four boys and three girls stand in queue for an interview. The probability that they will stand in alternate positions is:
(a) 1/34   (b) 1/35   (c) 1/17
(d) 1/68   (e) None of these

RESPONSE GRID

11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ

PERMUTATION & COMBINATIONS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../......../................

1. From amongst 36 teachers in a school, one principal and one vice-principal are to be appointed. In how many ways can this be done ?
   - (a) 1260
   - (b) 1250
   - (c) 1240
   - (d) 1800
   - (e) None of these

2. A boy has 3 library cards and 8 books of his interest in the library. Of these 8, he does not want to borrow chemistry part II unless Chemistry part I is also borrowed. In how many ways can he choose the three books to be borrowed ?
   - (a) 56
   - (b) 27
   - (c) 26
   - (d) 41
   - (e) None of these

3. In how many ways can six different rings be worn on four fingers of one hand ?
   - (a) 10
   - (b) 12
   - (c) 15
   - (d) 16
   - (e) None of these

4. In how many ways can 7 persons be seated at a round table if 2 particular persons must not sit next to each other ?
   - (a) 5040
   - (b) 240
   - (c) 480
   - (d) 720
   - (e) None of these

5. In how many different ways can the letters of the word 'MATHEMATICS' be arranged so that the vowels always come together ?
   - (a) 10080
   - (b) 4989600
   - (c) 120960
   - (d) 12960
   - (e) None of these

6. In an examination paper there are two sections each containing 4 questions. A candidate is required to attempt 5 questions but not more than 3 questions from any particular section. In how many ways can 5 questions be selected ?
   - (a) 24
   - (b) 48
   - (c) 96
   - (d) None of these
   - (e) 108

7. There are 4 candidates for the post of a lecturer in Mathematics and one is to be selected by votes of 5 men. The number of ways in which the votes can be given is
   - (a) 24
   - (b) 36
   - (c) 40
   - (d) 48
   - (e) None of these

8. The number of ways in which 6 men and 5 women can dine at a round table if no two women are to sit together is given by
   - (a) $6! \times 5!$
   - (b) $5! \times 4!$
   - (c) 30
   - (d) $7! \times 5!$
   - (e) None of these

9. A student is to answer 10 out of 13 questions in an examination such that he must choose at least 4 from the first five questions. The number of choices available to him is
   - (a) 140
   - (b) 280
   - (c) 196
   - (d) 346
   - (e) None of these

10. There are 100 students in a college class of which 36 are boys studying statistics and 13 girls not studying statistics. If there are 55 girls in all, then the probability that a boy picked up at random is not studying statistics, is
    - (a) 3/5
    - (b) 2/5
    - (c) 1/5
    - (d) 4/5
    - (e) None of these

11. The number of ways in which 6 men and 5 women can dine at a round table if no two women are to sit together is given by :
    - (a) $6! \times 5!$
    - (b) 30
    - (c) $5! \times 4!$
    - (d) $7! \times 5!$
    - (e) None of these

12. The number of ways in which a team of eleven players can be selected from 22 players including 2 of them and excluding 4 of them is:
    - (a) $^{16}C_{11}$
    - (b) $^{16}C_5$
    - (c) $^{16}C_9$
    - (d) $^{20}C_9$
    - (e) None of these

13. In how many different ways can the letters of the word 'PRETTY' be arranged?
    - (a) 120
    - (b) 36
    - (c) 360
    - (d) 720
    - (e) None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. Three boys and three girls are to be seated around a table in a circle. Among them the boy X does not want any girl neighbour and the girl Y does not want any boy neighbour. How many such arrangements are possible ?
    (a) 5   (b) 6
    (c) 4   (d) 2
    (e) None of these

DIRECTIONS (Qs. 15-18): Answer these questions on the basis of the information given below :

From a group of 6 men and 4 women a Committee of 4 persons is to be formed.

15. In how many different ways can it be done so that the committee has at least one woman?
    (a) 210   (b) 225
    (c) 195   (d) 185
    (e) None of these

16. In how many different ways can it be done, so that the committee has at least 2 men?
    (a) 210   (b) 225
    (c) 195   (d) 185
    (e) None of these

17. In how many ways can 5 persons be chosen from 6 boys and 4 girls so as to include exactly one girl?
    (a) 252   (b) 210
    (c) 126   (d) 90
    (e) 60

18. In how many different ways can the letters of the word CORPORATION be arranged?
    (a) 3326400   (b) 1663200
    (c) 831600   (d) 415800
    (e) 207900

19. In how many different ways can the letters of the word "COUNTRY" be arranged in such a way that the vowels always come together?
    (a) 720   (b) 1440
    (c) 2880   (d) 5040
    (e) None of these

20. In how many different ways can the letters of the word 'PROBLEM' be arranged ?
    (a) 5060   (b) 720
    (c) 5040   (d) 980
    (e) None of these

21. Out of eight crew members three particular members can sit only on the left side. Another two particular members can sit only on the right side. Find the number of ways in which the crew can be arranged so that four men can sit on each side.
    (a) 864   (b) 865
    (c) 863   (d) 1728
    (e) None of these

22. In how many different ways can the letters of the word 'OFFICES' be arranged?

    (a) 2520   (b) 5040
    (c) 1850   (d) 1680
    (e) None of these

23. In how many different ways can the letters of the word 'ARMOUR' be arranged?
    (a) 720   (b) 300
    (c) 640   (d) 350
    (e) None of these

24. There are six teachers. Out of them, two are primary teachers and two are secondary teachers. They are to stand in a row, so as the primary teachers, middle teachers and secondary teachers are always in a set. The number of ways in which they can do so, is
    (a) 52   (b) 48
    (c) 34   (d) 37
    (e) None of these

25. In how many different ways can 4 boys and 3 girls be arranged in a row such that all boys stand together and all the girls stand together?
    (a) 75   (b) 576
    (c) 288   (d) 24
    (e) None of these

26. In how many ways can a committee of 4 people be chosen out of 8 people ?
    (a) 110   (b) 32
    (c) 70   (d) 126
    (e) None of these

27. From a group of 7 men and 6 women, five persons are to be selected to form a committee so that at least 3 men are there on the committee. In how many ways can it be done?
    (a) 564   (b) 645
    (c) 735   (d) 756
    (e) None of these

28. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?
    (a) 360   (b) 480
    (c) 720   (d) 5040
    (e) None of these

29. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9, which are divisible by 5 and none of the digits is repeated?
    (a) 5   (b) 10
    (c) 15   (d) 20
    (e) None of these

30. How many ways can 4 prizes be given away to 3 boys, if each boy is eligible for all the prizes?
    (a) 256   (b) 12
    (c) 81   (d) 89
    (e) None of these

RESPONSE GRID	**14.** (a)(b)(c)(d)(e)	**15.** (a)(b)(c)(d)(e)	**16.** (a)(b)(c)(d)(e)	**17.** (a)(b)(c)(d)(e)	**18.** (a)(b)(c)(d)(e)
	19. (a)(b)(c)(d)(e)	**20.** (a)(b)(c)(d)(e)	**21.** (a)(b)(c)(d)(e)	**22.** (a)(b)(c)(d)(e)	**23.** (a)(b)(c)(d)(e)
	24. (a)(b)(c)(d)(e)	**25.** (a)(b)(c)(d)(e)	**26.** (a)(b)(c)(d)(e)	**27.** (a)(b)(c)(d)(e)	**28.** (a)(b)(c)(d)(e)
	29. (a)(b)(c)(d)(e)	**30.** (a)(b)(c)(d)(e)			

CLOCK AND CALENDAR

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../......../...............**

1. The number of times in a day the Hour-hand and the Minute-hand of a clock are at right angles, is
   (a) 44   (b) 48   (c) 24
   (d) 12   (e) None of these

2. An accurate clock shows the time as 3.00. After hour hand has moved 135°, the time would be
   (a) 7.30   (b) 6.30   (c) 8.00
   (d) 9.30   (e) None of these

3. An accurate clock shows 8 O' clock in the morning. Throughout how many degrees will the hour hand rotate, when the clock shows 2 O' clock in the afternoon?
   (a) 150°   (b) 144°   (c) 168°
   (d) 180°   (e) None of these

4. March 1, 2008 was Saturday. Which day was it on March 1, 2002?
   (a) Thursday   (b) Friday   (c) Saturday
   (d) Sunday   (e) None of these

5. How many times are an hour hand and a minute hand of a clock at right angles during their motion from 1.00 p.m. to 10.00 p.m.?
   (a) 9   (b) 10   (c) 18
   (d) 20   (e) None of these

6. At what approximate time between 4 and 5 am will the hands of a clock be at right angle?
   (a) 4 : 40 am   (b) 4 : 38 am   (c) 4 : 35 am
   (d) 4 : 39 am   (e) None of these

7. At what time between 3 and 4 o'clock, the hands of a clock coincide?
   (a) $16\frac{4}{11}$ minutes past 3
   (b) $15\frac{5}{61}$ minutes past 3
   (c) $15\frac{5}{60}$ minutes to 2
   (d) $16\frac{4}{11}$ minutes to 4
   (e) None of these

8. At what time between 5.30 and 6 will the hands of a clock be at right angles?
   (a) $43\frac{5}{11}$ min. past 5   (b) $43\frac{7}{11}$ min. past 5
   (c) 40 min. past 5   (d) 45 min. past 5
   (e) None of these

9. At what time between 4 and 5 o'clock will the hands of a watch point in opposite directions?
   (a) 45 min. past 4   (b) 40 min. past 4
   (c) $50\frac{4}{11}$ min. past 4   (d) $54\frac{6}{11}$ min. past 4
   (e) None of these

10. How much does a watch lose per day, if its hands coincide every 64 minutes?
    (a) $32\frac{8}{11}$ min.   (b) $36\frac{5}{11}$ min.   (c) 90 min.
    (d) 96 min.   (e) None of these

11. The last day of a century cannot be
    (a) Monday   (b) Wednesday   (c) Tuesday
    (d) Friday   (e) None of these

12. Which of the following is not a leap year?
    (a) 700   (b) 800   (c) 1200
    (d) 2000   (e) None of these

13. How many days are there in x weeks x days?
    (a) $7x^2$ (b) 8x   (c) 14x
    (d) 7   (e) None of these

14. It was Sunday on Jan 1, 2006. What was the day of the week on Jan 1, 2010?
    (a) Sunday   (b) Saturday   (c) Friday
    (d) Wednesday   (e) None of these

15. On 8th Feb, 2005 it was Tuesday. What was the day of the week on 8th Feb, 2004?
    (a) Tuesday   (b) Monday   (c) Sunday
    (d) Wednesday   (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. The calendar for the year 2007 will be the same for the year.
    (a) 2014 (b) 2016 (c) 2017
    (d) 2018 (e) None of these

17. Today is Monday. After 61 days, it will be
    (a) Wednesday (b) Saturday (c) Tuesday
    (d) Thursday (e) None of these

18. What was the day of the week on 17th June, 1998?
    (a) Monday (b) Tuesday
    (c) Wednesday (d) Thursday
    (e) None of these

19. If 21st July, 1999 is a wednesday, what would have been the day of the week on 21st July, 1947 ?
    (a) Monday (b) Sunday (c) Thursday
    (d) Saturday (e) None of these

20. At an enquiry office at a railway station, a passenger was told that a train for New Delhi has left 15 minutes ago, but after every 45 minutes a train leaves for New Delhi. The next train will leave at 8.30 p.m. At what time was this information given to the passanger ?
    (a) 7.45 pm (b) 8.00 pm (c) 8.15 pm
    (d) 8.05 pm (e) None of these

21. A watch is a minute slow at 1 p.m. on Tuesday and 2 minutes fast at 1 p.m. on Thursday. When did it show the correct time ?
    (a) 1:00 a.m. on Wednesday
    (b) 5:00 a.m. on Wednesday
    (c) 1:00 p.m. on Wednesday
    (d) 5:00 p.m. on Wednesday
    (e) None of these

22. An application was received by inward clerk in the afternoon of a week day. Next day he forwarded it to the table of the senior clerk. Who was on leave that day. The senior clerk put up the application to the desk officer next day in the evening. The desk officer studied the application and disposed off the matter on the same day i.e., Friday. Which day was the application received by the inward clerk ?
    (a) Monday
    (b) Wednesday
    (c) Tuesday
    (d) Previous week's Saturday
    (e) None of these

23. Ashish leaves his house at 20 minutes to seven in the morning reaches Kunal's house in 25 minutes. They finish their breakfast in another 15 minutes and leave for their office which takes another 35 minutes. At what time do they leave Kunal's house to reach their office?
    (a) 7.40 a.m. (b) 7.20 a.m. (c) 7.45 a.m.
    (d) 8.15 a.m. (e) None of these

24. Reaching the place of meeting on Tuesday 15 minutes before 8.30 hours, Anuj found himself half an hour earlier than the man who was 40 minutes late. What was the scheduled time of the meeting?
    (a) 8.00 hrs (b) 8.05 hrs (c) 8.15 hrs
    (d) 8.45 hrs (e) None of these

25. A clock gaining 2 min every hour was synchronised at midnight with a clock losing 1 min every hour. How many minutes behind will its minute hand be at eleven the following morning ?
    (a) 23 (b) 27 (c) 22
    (d) None of these (e) None of these

26. Rama remembers that she met her brother on Saturday, which was after the 20th day of a particular month. If the 1st day of that month was Tuesday, then on which date did Rama meet her brother ?
    (a) 24th (b) 23rd (c) 25th
    (d) None of these

27. In $2\frac{1}{2}$ hours the hour hand of a clock rotates through an angle of
    (a) 90° (b) 140° (c) 120°
    (d) 75° (e) None of these

28. On 27 March, 1995 was a Monday. Then what days of the week was 1 November, 1994?
    (a) Monday (b) Sunday
    (c) Tuesday (d) Wednesday

29. 16 January 1997 was a Thursday. What day of the week was 4 January 2000?
    (a) Tuesday (b) Wednesday (c) Thursday
    (d) Friday (e) None of these

30. In a year 28th February is Tuesday; if the leap year is excluded, then 28th March will be a
    (a) Sunday (b) Tuesday (c) Monday
    (d) Saturday (e) None of these

RESPONSE GRID					
	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

MENSURATION

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. The circumference of two circles is 88 m and 220 m respectively. What is the difference between the area of the larger circle and the smaller circle ?
   (a) 3422 sq m   (b) 3242 sq m   (c) 3244 sq m
   (d) 3424 sq m   (e) None of these

2. The length of a rectangle is twice the diameter of a circle. The circumference of the circle is equal to the area of a square of side 22 cm. What is the breadth of the rectangle if its perimeter is 668 cm ?
   (a) 24 cm   (b) 26 cm
   (c) 52 cm   (d) Cannot be determined
   (e) None of these

3. The area of a square is 196 sq. cm. whose side is half the radius of a circle. The circumference of the circle is equal to breadth of a rectangle, if perimeter of the rectangle is 712 cm. What is the length of the rectangle ?
   (a) 196 cm   (b) 186 cm   (c) 180 cm
   (d) 190 cm   (e) None of these

4. A tank 30 m long, 20 m wide and 12 m deep is dug in a field 500 m long and 30 m wide. By how much will the level of the field rise, if the earth dug out of the tank is evenly spread over the field?
   (a) 0.33 m   (b) 0.5 m
   (c) 0.25 m   (d) 0.4 m
   (e) None of these

5. The circumference of two circles is 132 m, and 176 m respectively. What is the difference between the area of the larger circle and the smaller circle ?
   (a) 1048 sq m   (b) 1076 sq m   (e) 1078 sq m
   (d) 1090 sq m   (e) None of these

6. If the length of a certain rectangle is decreased by 4 cm and the width is increased by 3 cm, a square with the same area as the original rectangle would result. The perimeter of the original rectangle (in centimetres) is :
   (a) 44   (b) 46
   (c) 48   (d) 50
   (e) None of these

7. What will be the area (in square metre) of 1.5 m wide garden developed around all the four sides of a rectangular field having area equal to 300 sq. m and breadth equal to three-fourth of the length ?
   (a) 96   (b) 105
   (c) 114   (d) Cannot be determined
   (e) None of these

8. A cylinder is circumscribed about a hemisphere and a cone is inscribed in the cylinder so as to have its vertex at the centre of one end, and the other end as its base. The volume of the cylinder, hemisphere and the cone are, respectively in the ratio :
   (a) 2 : 3 : 2   (b) 3 : 2 : 1
   (c) 3 : 1 : 2   (d) 1 : 2 : 3
   (e) None of these

9. Three cubes of a metal are of edges 3 cm, 4 cm and 5 cm. These are melted together and from the melted material, another cube is formed. The edge of this cube is :
   (a) 8 cm   (b) 10 cm
   (c) 9 cm   (d) 6 cm
   (e) None of these

10. A solid cylinder and a solid cone have equal base and equal height. If the radius and the height be in the ratio of 4 : 3, the total surface area of the cylinder to that of the cone are in the ratio of :
    (a) 10 : 9   (b) 11 : 9
    (c) 12 : 9   (d) 14 : 9
    (e) None of these

11. The length, breadth and height of a cuboid are in the ratio 1 : 2 : 3. The length, breadth and height of the cuboid are increased by 100%, 200% and 200%, respectively. Then, the increase in the volume of the cuboid will be :
    (a) 5 times   (b) 6 times
    (c) 12 times   (d) 17 times
    (e) None of these

12. A sphere of radius 3 cm is dropped into a cylindrical vessel partly filled with water. The radius of the vessel is 6 cm. If the sphere is submerged completely, then the surface of the water is raised by :
    (a) $\dfrac{1}{4}$ cm   (b) $\dfrac{1}{2}$
    (c) 1 cm   (d) 2 cm
    (e) None of these

13. Four equal circles are described about the four corners of a square so that each touches two of the others. If a side of the square is 14 cm, then the area enclosed between the circumferences of the circles is :
    (a) 24 cm^2 (b) 42 cm^2
    (c) 154 cm^2 (d) 196 cm^2
    (e) None of these

14. The largest triangle is inscribed in a semi-circle of radius 14 cm. Find the area inside the semi-circle which is not occupied by the triangle.
    (a) 100 cm^2 (b) 112 cm^2 (c) 115 cm^2
    (d) 113 cm^2 (e) None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	

15. In a quadrilateral, the length of one of its diagonal is 23 cm and the perpendiculars drawn on this diagonal from other two vertices measure 17 cm and 7 cm respectively. Find the area of the quadrilateral.
 (a) 250 cm^2 (b) 276 cm^2 (c) 300 cm^2
 (d) 325 cm^2 (e) None of these

16. A cube of maximum volume (each corner touching the surface from inside) is cut from a sphere. Find the ratio of the volumes of the cube and the sphere.
 (a) $2 : \sqrt{3}\pi$ (b) $3 : 2\pi$ (c) $5 : 4\pi$
 (d) $3 : \sqrt{2}\pi$ (e) None of these

17. A large cube is formed from the material obtained by melting three smaller cubes of dimensions 3, 4 and 5 cm. What is the ratio of the total surface areas of the smaller cubes and the large cube ?
 (a) $2 : 1$ (b) $3 : 2$
 (c) $27 : 20$ (d) $25 : 18$
 (e) None of these

18. A circular wire of radius 42 cm is cut and bent in the form of a rectangle whose sides are in the ratio of 6 : 5. Find the smaller side of the rectangle.
 (a) 50 cm   (b) 60 cm   (c) 70 cm
 (d) 80 cm   (e) None of these

19. A right circular cone is exactly fitted inside a cube in such a way that the edges of the base of the cone are touching the edges of one of the faces of the cube and the vertex is on the opposite face of the cube. If the volume of the cube is 343 cc, what, approximately, is the volume of the cone?
 (a) 80 cc   (b) 90 cc   (c) 110 cc
 (d) 105 cc   (e) None of these

20. Find the number of coins, 1.5 cm in diameter and 0.2 cm thick, to be melted to form a right circular cylinder of height 10 cm and diameter 4.5 cm :
 (a) 430   (b) 440
 (c) 450   (d) 460
 (e) None of these

21. A rectangular lawn 80 metres by 60 metres has two roads each 10 metres wide running in the middle of it, one parallel to the length and the other parallel to the breadth. Find the cost of gravelling them at ₹ 30 per square metre :
 (a) ₹ 39,000   (b) ₹ 3,900
 (c) ₹ 3,600   (d) ₹ 36,000
 (e) None of these

22. A hemispherical bowl is filled to the brim with a beverage. The contents of the bowl are transferred into a cylindrical vessel whose radius is 50% more than its height. If the diameter is same for both bowl and cylinder, then the volume of the beverage in the cylindrical vessel will be
 (a) $66\frac{2}{3}\%$
 (b) 78.5%
 (c) 100%
 (d) More than 100% (that is, some liquid will still be left in the bowl)
 (e) None of these

23. If the angle of triangle are in the ratio of 4 : 3 : 2, then the triangle
 (a) is obtuse angled triangle
 (b) has one angle greater than 80°
 (c) is a right triangle
 (d) is acute angled triangle
 (e) None of these

24. The length of a room is double its breadth. The cost of colouring the ceiling at Rs 25 per sq. m is Rs 5,000 and the cost of painting the four walls at Rs 240 per sq. m is Rs 64,800. Find the height of the room.
 (a) 4.5 m   (b) 4 m
 (c) 3.5 m   (d) 5 m
 (e) None of these

25. A rectangular piece of iron sheet measuring 50 cm by 100 cm is rolled into cylinder of height 50 cm. If the cost of painting the cylinder is ₹ 50 per square metre, then what will be the cost of painting the outer surface of the cylinder?
 (a) ₹ 25.00   (b) ₹ 37.50   (c) ₹ 75.00
 (d) ₹ 87.50   (e) None of these

26. A metal cube of edge 12 cm is melted and formed into three smaller cubes. If the edges of two smaller cubes are 6 cm and 8 cm, then find the edge of the third smaller cube.
 (a) 10 cm   (b) 14 cm
 (c) 12 cm   (d) 16 cm
 (e) None of these

27. Four horses are tied on the four corners of a square field of 14 m length so that each horse can just touch the other two horses. They were able to graze in the area accessible to them for 11 days. For how many days is the ungrazed area sufficient for them ?
 (a) 3 days   (b) 4 days
 (c) 5 days   (d) 2 days
 (e) None of these

28. The radius of a cylindrical cistern is 10 metres and its height is 15 metres. Initially the cistern is empty, we start filling the cistern with water through a pipe whose diameter is 50 cm, water is coming out of the pipe with a velocity of 5 m/s. How many minutes will it take in filling the cistern with water?
 (a) 20   (b) 40
 (c) 60   (d) 80
 (e) None of these

29. A garden is 24 m long and 14 m wide. There is a path 1 m wide outside the garden along its sides. If the path is to be constructed with square marble tiles 20 cm × 20 cm, the number of tiles required to cover the path is
 (a) 1800   (b) 200
 (c) 2000   (d) 2150
 (e) None of these

30. An order was placed for supply of carpet of breadth 3 metres. The length of carpet was 1.44 times of breadth. Subsequently the breadth and length were increased by 25 and 40 percent respectively. At the rate of Rs. 45 per square metre, what would be the increase in the cost of the carpet?
 (a) 1020.6   (b) 398.8
 (c) 437.4   (d) 583.2
 (e) None of these

RESPONSE GRID					
15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ
30. ⓐⓑⓒⓓⓔ				

SERIES

Max. Marks : 40   **No. of Qs. 40**   **Time : 30 min.**   Date : ..../........./...............

DIRECTIONS(Qs 1-15): In this type of questions, one term in the number series is wrong. Find out the wrong term.

1. 93, 309, 434, 498, 521, 533
    (a) 309   (b) 434
    (c) 498   (d) 521
    (e) None of these

2. 46080, 3840, 384, 48, 24, 2, 1
    (a) 384   (b) 48
    (c) 24   (d) 2
    (e) None of these

3. 5, 27, 61, 122, 213, 340, 509
    (a) 27   (b) 61
    (c) 122   (d) 509
    (e) None of these

4. 11, 5, 20, 12, 40, 26, 74, 54
    (a) 5   (b) 20
    (c) 40   (d) 26
    (e) None of these

5. 1, 3, 10, 21, 64, 129, 356, 777
    (a) 21   (b) 129
    (b) 10   (d) 356
    (e) None of these

6. 1   2   8   21   88   445
    (a) 2   (b) 88
    (c) 21   (d) 445
    (e) None of these

7. 6   7   18   63   265   1365
    (a) 18   (b) 7
    (c) 63   (d) 1365
    (e) None of these

8. 7   23   58   127   269   555
    (a) 269   (b) 58
    (c) 23   (d) 555
    (e) None of these

9. 5   4   8   9   20   19
    (a) 4   (b) 19
    (c) 20   (d) 8
    (e) None of these

10. 2   7   28   146   877   6140
    (a) 877   (b) 146
    (c) 7   (d) 28
    (e) None of these

11. 2   6   15   30   45   43.5 22.5
    (a) 6   (b) 30
    (c) 45   (d) 15
    (e) 43.5

12. 950 661 436 269 146 65 16
    (a) 436   (b) 65
    (c) 269   (d) 661
    (e) 146

13. 6.5 11.8 22.4 38.3 59.5 87.3 117.8
    (a) 22.4   (b) 59.5
    (c) 11.8   (d) 38.3
    (e) 87.3

14. 1   2   4   9   23   69   186
    (a) 2   (b) 9
    (c) 23   (d) 4
    (e) 6 9

15. 250 239 216 181 136 75 4
    (a) 239   (b) 181
    (c) 75   (d) 216
    (e) 136

DIRECTIONS (Qs. 16-40): Which is the next number in the following number series?

16. 780, 681, 592, 513, 444, 385,?
    (a) 320   (b) 324   (c) 332
    (d) 336   (e) 340

17. 6, 17, 55, 196, 825,?
    (a) 4176   (b) 4212   (c) 4232
    (d) 4256   (e) 4281

18. 72, 193, 293, 374, 438, 487,?
    (a) 521   (b) 523   (c) 525
    (d) 527   (e) 529

19. 4,45,368,2583,15504,?
    (a) 77521   (b) 77522   (c) 77523
    (d) 77524   (e) 77525

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	

20. 180, 271, 352, 423, 484, 535, ?
    (a) 576   (b) 577   (c) 578
    (d) 579   (e) 580

21. 6, 7, 16, 51, 208, ?
    (a) 1036   (b) 1045
    (c) 1048   (d) 1056
    (e) None of these

22. 18, 48, 100, 180, 294, 448, ?
    (a) 979   (b) 586
    (c) 732   (d) 648
    (e) None of these

23. 289, 361, 529, 841, 961, ?
    (a) 2209   (b) 2136
    (c) 1849   (d) 1681
    (e) 1369

24. 8, 31, 122, 485, 1936, 7739, ?
    (a) 30460   (b) 30720
    (c) 30840   (d) 30950
    (e) None of these

25. 8484, 4248, 2112, 1074, 513, 286.5, ?
    (a) 136.25   (b) 161.25
    (c) 107.25   (d) 112.25
    (e) None of these

26. 13, 14, 30, 93, 376, 1885 ?
    (a) 10818   (b) 10316
    (c) 11316   (d) 11318
    (e) None of these

27. 46, 9, 13, 5, 20, 25, 30, 375?
    (a) 40.25   (b) 45.5625
    (c) 42.7525   (d) 48.5625
    (e) None of these

28. 400, 240, 144, 86.4, 51.84, 31.104 ?
    (a) 19.2466   (b) 17.2244
    (c) 16.8824   (d) 18.6624
    (e) None of these

29. 9, 4.5, 4.5, 6.75, 13.5, 33.75?
    (a) 101.25   (b) 103.75
    (c) 99.75   (d) 105.50
    (e) None of these

30. 705, 728, 774, 843, 935, 1050 ?
    (a) 1190   (b) 1180
    (c) 1185   (d) 1187
    (e) None of these

DIRECTIONS (Qs. 31-35) : In these questions, a number series is given. Find out the missing number.

31. 20 39 74 ? 262 499
    (a) 146   (b) 169
    (c) 166   (d) 139
    (e) 129

32. 14 8 6 6 7 ?
    (a) 6.5   (b) 7.5
    (c) 8.5   (d) 9.5
    (e) None of these

33. 6 13 20 65 256 ?
    (a) 1283   (b) 1756
    (c) 2786   (d) 2686
    (e) None of these

34. 14 6 4 4 8 ?
    (a) 26   (b) 32
    (c) 46   (d) 27
    (e) None of these

35. 6 16 45 184 917 ? ·
    (a) 5506   (b) 4756
    (c) 5786   (d) 5686
    (e) None of these

36. 35 118 280 600 ? 2504 5036
    (a) 1364   (b) 1236
    (c) 1362   (d) 1361
    (e) None of these

37. 5 7 10 36 136 ?
    (a) 789   (b) 890
    (c) 690   (d) 698
    (e) None of these

38. 156, 173, 131, 206, 50, ?
    (a) 321   (b) 89
    (c) 171   (d) 215
    (e) None of these

39. 25, 35, 20, 45, ?
    (a) 32   (b) 21
    (c) 10   (d) 20
    (e) None of these

40. 24, 10, 13, ?, 36
    (a) 8   (b) 10.5
    (c) 12   (e) 14.5
    (e) 16

RESPONSE GRID

20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ
30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ
35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ
40. ⓐⓑⓒⓓⓔ				

DI LINE GRAPH

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-5) : Study the following line graphs which show the production (in, 0000 units) and percentage export of scooters, motorbikes and cars respectively over the years.

Production (in '0000 units)

% Export

1. In which of the following years was the production of cars more than 50% of the total production?
(a) 2000   (b) 2001
(c) 1998   (d) 1996
(e) None of these

2. Find the total number of automobiles exported in the year 1999 :
(a) 2,27,600   (b) 2,07,600
(c) 2,17,600   (d) 2,20,000
(e) None of these

3. Find the ratio of cars, scooters and motorbikes exported in 1996 :
(a) 25 : 16 : 19   (b) 16 : 25 : 19
(c) 19 : 16 : 25   (d) 6 : 5 : 1
(e) None of these

4. If the ratio of export prices of a car, scooter and motorbike was 2 : 1 : 1.5 in 1998, what was the proportion of their export earning ?
(a) 4 : 2 :3   (b) 6 : 1 : 21
(c) 30 : 16 : 21   (d) Cannot be determined
(e) None of these

5. In which of the following years was the production of motorbikes exactly 40% of the total production of automobiles in that year?
(a) 1997   (b) 2000
(c) 1999   (d) 1996
(e) None of these

DIRECTION (Q. 6-10): Study the graph carefully to answer the questions that follow:

Percent Profit Made by two Companies over the Years

$$\text{Percent profit} = \frac{\text{Income} - \text{Expenditure}}{\text{Expenditure}} \times 100$$

RESPONSE GRID	**1** ⓐⓑⓒⓓⓔ **2** ⓐⓑⓒⓓⓔ **3** ⓐⓑⓒⓓⓔ **4** ⓐⓑⓒⓓⓔ **5.** ⓐⓑⓒⓓⓔ	

6. If the amount of profit earned by Company A in the year 2007 was ₹ 1.5 lakh, what was its expenditure in that year ?

(a) ₹ 1.96 lakh (b) ₹ 2.64 lakh (c) ₹ 1.27 lakh (d) ₹ 3.75 lakh (e) None of these

7. What is the respective ratio of the amount of profit earned by Company A and B in the year 2009 ?

(a) 2 : 3 (b) 4 : 7

(c) 11 : 15 (d) Cannot be determined

(e) None of these

8. If in the year 2004 the expenditure incurred by Company A and B was the same, what was respective ratio of the Income of Company A and B in that year ?

(a) 27 : 28 (b) 14 : 23

(c) 13 : 19 (d) Cannot be determined

(e) None of these

9. What is the average percent profit earned by Company B over all the years together ?

(a) $19\frac{1}{3}$ (b) $24\frac{1}{6}$ (c) $12\frac{1}{3}$

(d) $37\frac{1}{6}$ (e) None of these

10. If in the year 2008, the income of both the companies A and B was the same, what was the respective ratio of expenditure of Company A to the expenditure of Company B in that year?

(a) 21 : 25 (b) 7 : 9

(c) 5 : 6 (d) Cannot be determined

(e) None of these

DIRECTIONS (Q. 11 - 15): Study the following graph carefully to answer the questions that follow.

Number of Students (in Thousands) in three Schools over the Year

11. What was the average number of students in all the Schools together in the year 2006 ?

(a) 30000 (b) 9000 (c) 3000

(d) 6000 (e) None of these

12. How many times the total number of students in all the three Schools A, B and C together was exactly equal among the given years ?

(a) 2 (b) 5 (c) 4

(d) 3 (e) None of these

13. Total number of students in School B and School C together in the year 2004 was **approximately** what percentage of the total number of students in School B and School C together in the year 2007 ?

(a) 85 (b) 80 (c) 75

(d) 184 (e) 131

14. What was the difference between the total number of students in all the schools together in the year 2003 and number of students in School B in the year 2005 ?

(a) 2000 (b) 3000 (c) 3500

(d) 2500 (e) None of these

15. What was the **approximate** average number of students in School A over all the years together ?

(a) 1990 (b) 2090 (c) 2300

(d) 1800 (e) 2700

DIRECTIONS (Qs. 16 – 20) : Study the graphs to answer these questions.

A farmer has been growing three different crops A, B and C. Details of yields of these crops per hectare from 2004 to 2009 are depicted in the graph. Margin of profit of these crops in ₹ per tonne are given in the table.

Yield per hectare in tonne
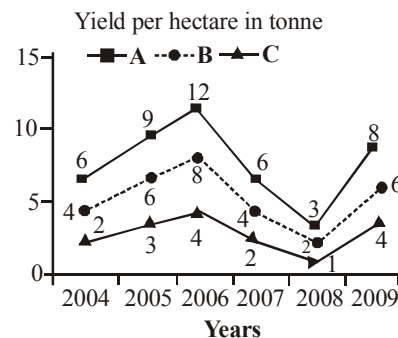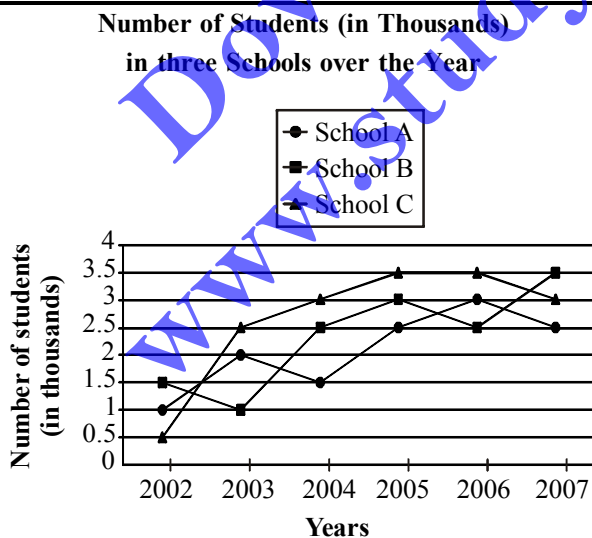
Margin of Profit in ₹ per tonne						
Crop	2004	2005	2006	2007	2008	2009
A	200	300	400	500	1000	800
B	300	400	500	600	1500	1000
C	500	600	700	800	2000	1500

16. Which crop has given maximum % increase in profit from 2004 to 2009?

(a) C　　　　　　　(b) B

(c) A　　　　　　　(d) A and B equal

(e) None of these

17. What is the ratio of profit of A for 2007 and 2008 to that of B for 2004 and 2005?

(a) 5 : 3　　　　　　(b) 3 : 5

(c) 1 : 2　　　　　　(d) 2 : 1

(e) None of these

18. During 2005-2007, which crop yielded minimum average profit?

(a) C　　　　　　　(b) B

(c) A　　　　　　　(d) A and B equal

(e) None of these

19. What was the total profit per hectare of all crops during 2008?

(a) ₹7000　　　　　(b) ₹6000

(c) ₹5000　　　　　(d) ₹8000

(e) None of these

20. What is the percentage increase in total profit per hectare of all crops during 2009 compared to 2006?

(a) 59　　　　　　　(b) 49

(c) 39　　　　　　　(d) 69

(e) None of these

Directions (Q.21-25) : Study the graph carefully to answer the questions that follow :

Profit (in lakhs) made by three companies over the years

Profit = Income – Expenditure
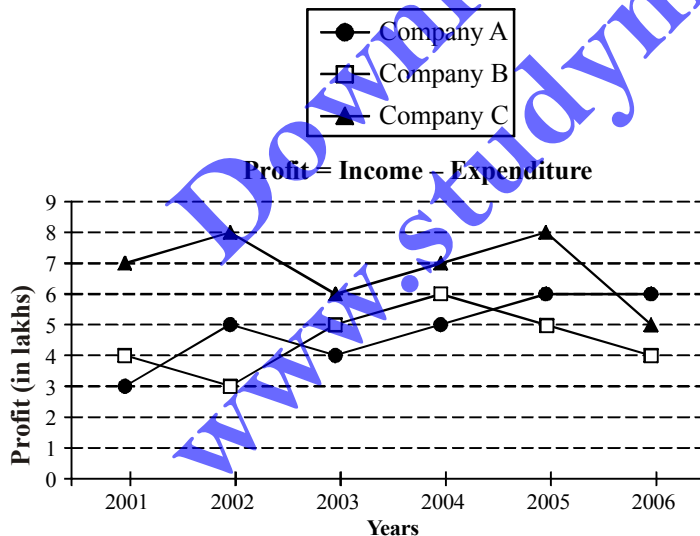
21. If the Income of Company A in the year 2005 was ₹ 1354300, what was its expenditure in that year ?

(a) ₹921600　　　(b) ₹833500　　　(c) ₹648200

(d) ₹754300　　　(e) None of these

22. If the expenditure of Company B in the year 2006 was ₹ 2211430, what was its income in that year ?

(a) ₹ 2912260　　(b) ₹ 2814680　　(c) ₹ 3209670　　(d) ₹ 2711430　　(e) None of these

23. What is the **approximate** average profit made by Company A in all the years together ?

(a) ₹ 398000　　(b) ₹ 382000　　(c) ₹ 483000

(d) ₹ 512000　　(e) ₹ 405000

24. Profit made by Company A in the year 2002 was what per cent of the total profit made by all the three companies in that year ?

(a) 31.25　　　　(b) 28.24　　　　(c) 21.43

(d) 36.25　　　　(e) None of these

25. What is the per cent increase in profit of Company C in the year 2002 from the previous year ? (rounded off to the nearest integer)

(a) 7　　　　　　(b) 14　　　　　(c) 21

(d) 28　　　　　(e) None of these

DIRECTIONS (Qs. 26 – 30) : Answer these questions based on the following information.

The following graph indicates sectorwise Corporate Support for the Rural Development (in percentage) in 2008,2009 and 2010. The total expenditure by the six corporate sectors was ₹ 480 crore in 2008, ₹ 520 crore in 2009 and ₹ 630 crore in 2010.
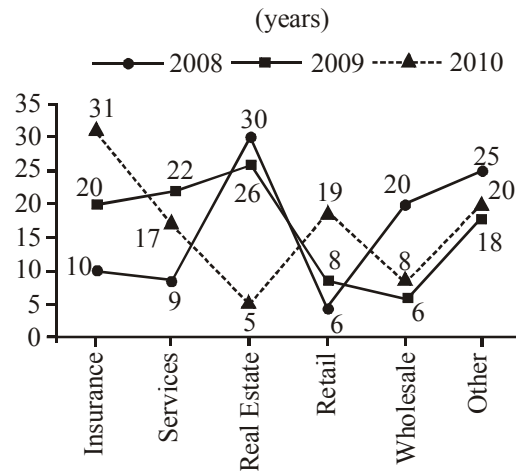
26. How many of the six corporate sectors listed contributed more than ₹ 60 crore each to rural development in both 2009 and 2010?

(a) Four　　　　　(b) Two

(c) One　　　　　(d) Three

(e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ		
	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ		

27. What is the total contribution (in ₹ crore) by the corporate sectors that increased their support continuously every year for the rural development from 2008 to 2010?

(a) 315   (b) 150

(c) 168   (d) 215

(e) None of these

28. Approximately how many Rupees (crore) more did the real estate sector contribute to rural development in 2008 than in 2010?

(a) 108.2   (b) 112.5

(c) 44.5   (d) 32.6

(e) None of these

29. From 2008 to 2010, which corporate sector decreased its support for the rural development by the greatest Rupee amount?

(a) Wholesale   (b) Retail

(c) Real Estate   (d) Others

(e) None of these

30. Of the wholesale sector's 2008 contribution to the rural development, 1/3 went to village road improvement and 3/4 of the remainder went to canal laying. How much more (in ₹ crores) was spent on canal laying compared to village road improvement?

(a) 22   (b) 18

(c) 1   (d) 16

(e) None of these

RESPONSE GRID

27. ⓐⓑⓒⓓⓔ   **28.** ⓐⓑⓒⓓⓔ   **29.** ⓐⓑⓒⓓⓔ   **30.** ⓐⓑⓒⓓⓔ

DI BAR GRAPH

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-5) : Study the following graph carefully to answer the questions that follow:
Number of Students (in Hundreds) from two Different Schools who Qualified in an Exam in six Different Years
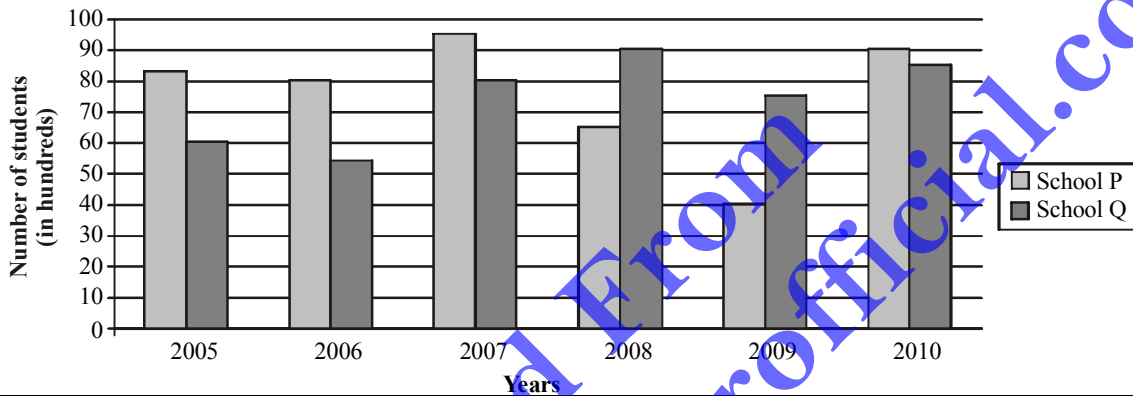
1. What was the approximate per cent increase in the number of students who qualified in the exam from School-Q in the year 2007 as compared to the previous year ?

   (a) 30   (b) 36   (c) 45
   (d) 49   (e) 26

2. What was the respective ratio between the number of students who qualified in the exam from School-P in the year 2005 and the number of students who qualified in the exam from School-Q in the year 2008 ?

   (a) 13 : 18   (b) 17 : 18   (c) 17 : 19
   (d) 13 : 19   (e) None of these

3. What was the difference between the total number of students who qualified in the exam in the year 2005 from both the schools together and the total number of students from School-Q who qualified in the exam over all the years together ?

   (a) 30000   (b) 30500   (c) 29000
   (d) 29500   (e) None of these

4. Total number of students who qualified in the exam from School-P over all the years together was approximately what percentage of total number of students who qualified in the exam from both the schools together in the year 2006 and 2007 together ?

   (a) 143   (b) 159   (c) 155
   (d) 165   (e) 147

5. If 40 per cent of the total students who qualified in the exam from both the schools together over all the years are females, then what was the total number of males who qualified in the exams over all the years from both the schools together ?

   (a) 51000   (b) 54000   (c) 56000
   (d) 52000   (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ **2.** ⓐⓑⓒⓓⓔ **3.** ⓐⓑⓒⓓⓔ **4.** ⓐⓑⓒⓓⓔ **5.** ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs.6-10): Study the given graph carefully to answer the questions that follow:

Number of people (in thousands) using three different types of mobile services over the years
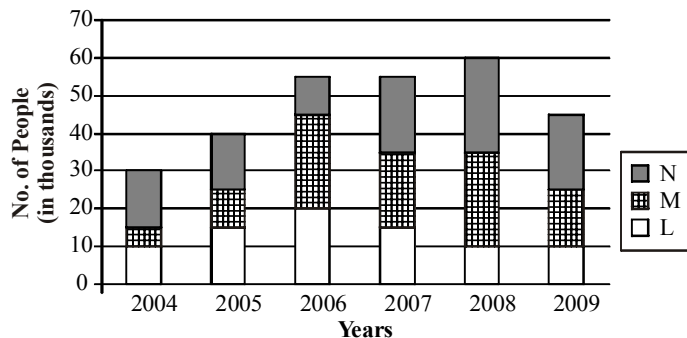
6. What is the total number of people using mobile service M in the years 2008 and 2009 together ?
   (a) 35,000   (b) 30,000   (c) 45,000
   (d) 25,000   (e) None of these

7. Number of people using mobile service N in the year 2006 forms approximately what percent of the total number of people using all the three mobile services in that year ?
   (a) 18   (b) 26   (c) 11
   (d) 23   (e) 29

8. What is the respective ratio of number of people using mobile service L in the year 2005 to those using the same service in the year 2004 ?
   (a) 8 : 7   (b) 3 : 2   (c) 19 : 13
   (d) 15 : 11   (e) None of these

9. The total number of people using all the three mobile services in the year 2007 is what percent of the total number of people using all the three mobile services in the year 2008 ? (rounded off to two digits after decimal)
   (a) 89.72   (b) 93.46   (c) 88.18
   (d) 91.67   (e) None of these

10. What is the average number of people using mobile service M for all the years together ?

   (a) $16\frac{2}{3}$ (b) $14444\frac{1}{6}$ (c) $16666\frac{2}{3}$

   (d) $14\frac{1}{6}$ (e) None of these

DIRECTIONS (Qs. 11 – 15) : Study the following bar graph to answer these questions.

Birth Rates & Death Rates (per 1000 persons) in the year 2008
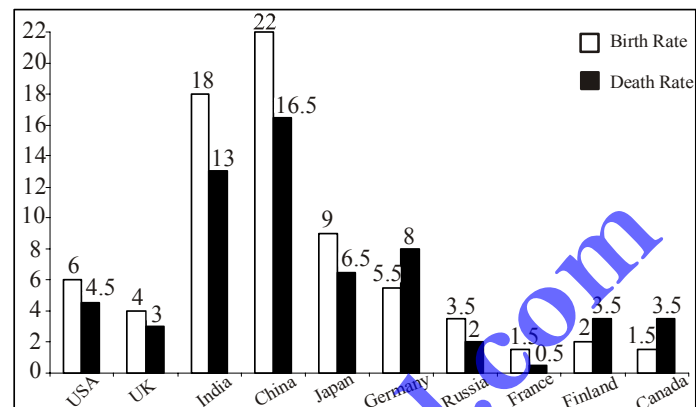
Note : Rate of growth of population = Birth rate – Death rate

11. If the rate of growth of population is expressed in percentage terms instead of number per 1000 persons, then among the countries with a positive growth rate, the rate of growth for the country whose population is growing by the fastest rate is how many percentage points more than that of the country whose population is growing by the slowest rate?
    (a) 0.45   (b) 4.5   (c) 0.045
    (d) 0.55   (e) None of these

12. If the total population of USA in the year 2008 was 250 million and that of Russia 150 million, then by what percent is the total births in USA more than total deaths in Russia?
    (a) 200%   (b) 80%   (c) 300%
    (d) 400%   (e) None of these

13. The infant mortality rate is defined as number of deaths of new born babies for every 1000 births. If the total population of Japan in the year 2008 is 150 million and its infant mortality rate is 3, then what is the number of infants dying at birth expressed as a percentage of the total number of deaths in Japan?
    (a) 4%   (b) 0.4%   (c) 40%
    (d) 400%   (e) None of these

14. If the given rates remain constant for the next ten years, then what will be the approximate percentage increase in the population of India after two years from the year 2008?
    (a) 1%   (b) 0.5%   (c) 2.5%
    (d) Cannot be determined
    (e) None of these

| **RESPONSE GRID** | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | **8.** ⓐⓑⓒⓓⓔ | **9.** ⓐⓑⓒⓓⓔ | **10.** ⓐⓑⓒⓓⓔ |
| | **11.** ⓐⓑⓒⓓⓔ | **12.** ⓐⓑⓒⓓⓔ | **13.** ⓐⓑⓒⓓⓔ | **14.** ⓐⓑⓒⓓⓔ | |

15. For how many of the given countries is the rate of growth of population, when expressed in percentage terms, greater than 0.25%?
(a) 3   (b) 4
(c) 2   (d) 6
(e) None of these

DIRECTIONS (Qs. 16-20): Study the following graph and pie-chart carefully to answer the questions that follow.

Percentage Breakup of Males and Females in the Five Organizations.
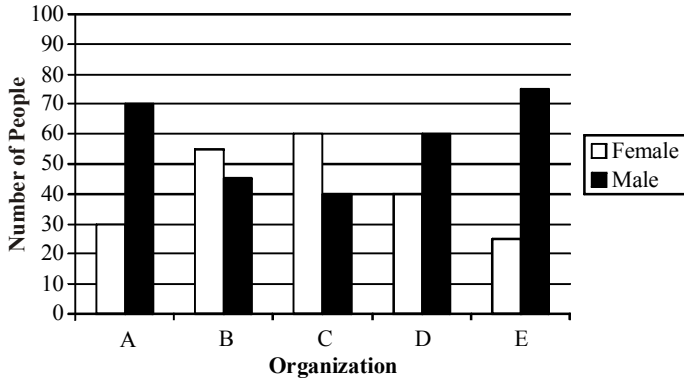
Percentage Breakup of Employees in Five Different Organizations
[Total number (N) = 35000]
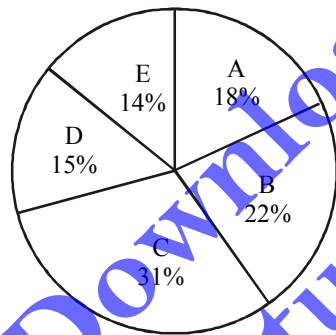
16. Total number of employees in Organization C is **approximately** what per cent of total number of employees in Organization D ?
(a) 147   (b) 279   (c) 312
(d) 207   (e) 183

17. What is the total number of females in all the Organizations together ?
(a) 13350   (b) 14700   (c) 15960
(d) 16280   (e) None of these

18. What is the total number of females in Organization A and C together ?
(a) 6125   (b) 8400   (c) 8025
(d) 7400   (e) None of these

19. What is the difference between the number of males in Organization B and the number of males in Organization E?
(a) 210   (b) 350   (c) 170
(d) 300   (e) None of these

20. What is the number of females in Organization D?
(a) 3855   (b) 3250   (c) 3300
(d) 3675   (e) None of these

DIRECTIONS (Q. 21-25) : Study the graphs to answer these questions. The graphs are related to M/s PAL, a reputed automobile company in Asia. Graph A indicates the average price per car in Rs lacs. Graph B represents the production in units of thousands. Graph C depicts the growth rate of the entire car industry on volume basis.

A

B

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ

Percentage Growth of Car Industry

C

21. What is the average annual growth rate of PAL car production for the period 2001 to 2004 ?
   (a) 100 %
   (b) 20 %
   (c) 50 %
   (d) 33.3 %
   (e) None of these

22. The maximum percentage change with respect to previous year in the average price per car of PAL is
   (a) 42.2 %
   (b) 40 %
   (c) 37.5 %
   (d) 25.5 %
   (e) None of these

23. What is the percentage share of PAL in 2002, if the total production of car industry is 3 lacs in that year ?
   (a) 16.7%
   (b) 25%
   (c) 50%
   (d) 33.3%
   (e) None of these

24. If only 80% of PAL cars produced in 2001 were sold in that year and the rest were sold in the next year, what is the revenue of the company in 2001 assuming that the inventory at the beginning of 2001 is zero ?
   (a) ₹ 750 Cr
   (b) ₹ 1080 Cr
   (c) ₹ 7500 Cr
   (d) Cannot be determined
   (e) None of these

25. If there is rejection of 10% of the production in 2000 due to quality control issues, what is the turnover of PAL, assuming sales = production - rejection ?
   (a) ₹ 720 Cr
   (b) ₹ 986 Cr
   (c) ₹ 1080 Cr
   (d) ₹ 850 Cr
   (e) None of these

DIRECTIONS (Qs. 26-30) : Study the following graph and table carefully and answer the questions given below :

TIME TAKEN TO TRAVEL (IN HOURS) BY SIX VEHICLES ON TWO DIFFERENT DAYS

DISTANCE COVERED (IN KILOMETERS) BY SIX VEHICLES ON EACH DAY

Vehicle	Day 1	Day 2
A	832	864
B	516	774
C	693	810
D	552	765
E	935	546
F	703	636

26. Which of the following vehicles travelled at the same speed on both the days ?
   (a) Vehicle A
   (b) Vehicle C
   (c) Vehicle F
   (d) Vehicle B
   (e) None of these

27. What was the difference between the speed of vehicle A on day 1 and the speed of vehicle C on the same day ?
   (a) 7 km/hr.
   (b) 12 km/hr.
   (c) 11 km/hr.
   (d) 8 km/hr.
   (e) None of these

28. What was the speed of vehicle C on day 2 in terms of meters per second ?
   (a) 15.3
   (b) 12.8
   (c) 11.5
   (d) 13.8
   (e) None of these

29. The distance travelled by vehicle F on day 2 was approximately what percent of the distance travelled by it on day 1 ?
   (a) 80
   (b) 65
   (c) 85
   (d) 95
   (e) 90

30. What is the respective ratio between the speeds of vehicle D and vehicle E on day 2 ?
   (a) 15:13
   (b) 17:13
   (c) 13:11
   (d) 17:14
   (e) None of these

DI PIE CHART

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1 – 5) : Seven companies A, B, C, D, E, F and G are engaged in production of two items I and II. The comparative data about production of these items by the seven companies is given in the following Graph and Table. Study them carefully to answer the questions that follow.

PERCENTAGE OF THE TOTAL PRODUCTION PRODUCED BY THE SEVEN COMPANIES

G 12%   A 15%   F 5%   B 11%   E 27%   C 22%   D 8%
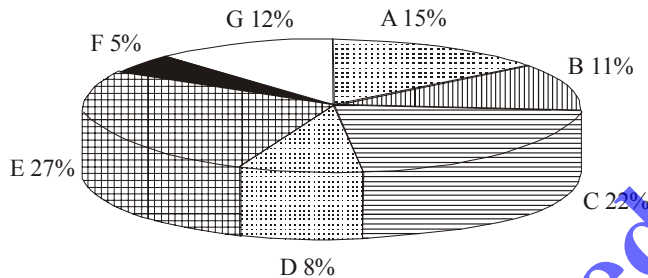
Cost of the total production (both items together) by seven companies = Rs.25 crores

RATIO OF PRODUCTION BETWEEN ITEMS I AND II AND THE PERCENT PROFIT EARNED FOR THE TWO ITEMS

Company	Ratio of Production		Percent Profit Earned	
	Item I	Item II	Item I	Item II
A	2	3	25	20
B	3	2	32	35
C	4	1	20	22
D	3	5	15	25
E	5	3	28	30
F	1	4	35	25
G	1	2	30	24

1. Cost of production of item I by company F is what percent of the cost of production of item II by company D?
   (a) 16%   (b) 33.33%   (c) 66.67%
   (d) 20%   (e) None of these

2. What is the total profit earned by company G for items I and II together?
   (a) ₹ 78 lakh   (b) ₹ 1.62 crore   (c) ₹ 7.8 crore
   (d) ₹ 16.2 lakh   (e) None of these

3. What is the ratio of the cost of production of item I by company A to the cost of production of item I by company D?
   (a) 3 : 5   (b) 1 : 2   (c) 2 : 1
   (d) 2 : 3   (e) None of these

4. The cost of production of both items together by company E is equal to the total cost of production of both items together by which of the two companies?
   (a) C and D   (b) B and G   (c) A and D
   (d) C and F   (e) None of these

5. What is the total of the cost of production of item I by company A and the cost of production of item II by company B?
   (a) ₹ 2.6 crore   (b) ₹ 26 lakh   (c) ₹ 3.35 crore
   (d) ₹ 33.65 lakh   (e) None of these

DIRECTIONS (Qs. 6 – 10) Study the graphs to answer these questions.

The pie chart shows the percentage of graduate employees in various departments of M/S PQR Ltd. The bar graph shows the number of employees in various departments of M / PQR Ltd. Other than graduate employees are those employees who are either post-graduates or undergraduates.

Number of graduate employees = 3000

Marketing 20%   Production 40%   Design 25%   Administration 10 %   Finance 5%
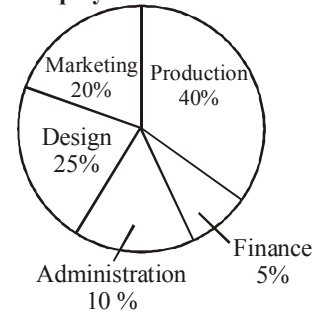
M/s PQR Ltd.–Number of employees = 18000

Production 5000, Marketing 4000, Administration 2000, Design 4000, Finance 2000, other 1000
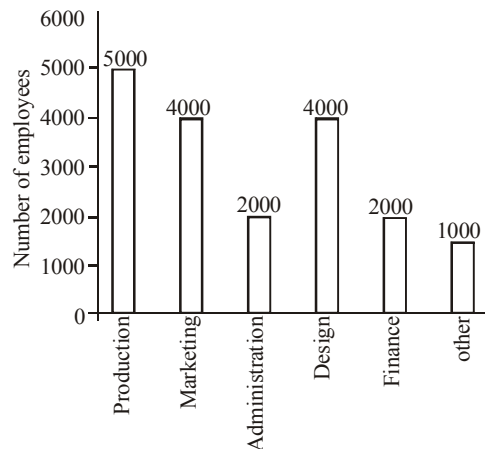
RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ **2.** ⓐⓑⓒⓓⓔ **3.** ⓐⓑⓒⓓⓔ **4.** ⓐⓑⓒⓓⓔ **5.** ⓐⓑⓒⓓⓔ

6. What percentage of other than graduate employees are there in Marketing and Design departments together?
   (a) 57.5%   (b) 75.5%   (c) 77.5%
   (d) 67.5%   (e) None of these

7. The number of graduate employees in Administration and Production together is how many times other than graduate employees in Marketing and Finance together?
   (a) 0.355   (b) 0.285   (c) 0.445
   (d) 0.215   (e) None of these

8. Number of other than graduate employees in Finance and Design departments together is what per cent greater than number of graduate employees in Administration department?
   (a) 933%   (b) 666%   (c) 533%
   (d) 833%   (e) None of these

9. What is the approximate ratio of number of other than graduate employees in Finance to graduate employees in Administration department?
   (a) 1 : 6   (b) 1 : 7   (c) 7 : 1
   (d) 6 : 1   (e) None of these

10. What is the median of number of graduate employees in Production, Marketing, Design and Finance departments?
    (a) 800   (b) 675   (c) 1100
    (d) 685   (e) None of these

DIRECTIONS (Qs. 11 - 15): Study the following Pie-chart carefully to answer the questions that follow.

Percentagewise Distribution of Players Who Play Five Different Sports. Two players are 4200 out of which Female Players are Equal to 2000

Total player = 4200
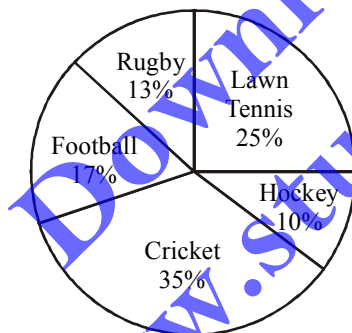
Percentage of players who play different sports
Female player = 2000

Percentage of females players who play different sports

11. What is the average number of players (both male and female) who play football and rugby together ?
    (a) 620   (b) 357   (c) 230
    (d) 630   (e) None of these

12. What is the difference between the number of the female players who play lawn tennis and the number of male players who play rugby ?
    (a) 94   (b) 84   (c) 220
    (d) 240   (e) None of these

13. What is the respective ratio of the number of female players who play cricket and number of male players who play hockey?
    (a) 20 : 7   (b) 4 : 21   (c) 20 : 3
    (d) 3 : 20   (e) None of these

14. What is the total number of male players who play football, cricket and lawn tennis together ?
    (a) 1724   (b) 1734   (c) 1824
    (d) 1964   (e) None of these

15. Number of male players who play rugby is approximately what percentage of the total number of players who play lawn tennis ?
    (a) 33   (b) 39   (c) 26
    (d) 21   (e) 43

DIRECTIONS (Qs.16-20): Study the given Pie-charts carefully to answer the questions that follow.

Break up of Number of Employees Working in Different Departments of an Organisation, the Number of Males and the number of Employees who Recently got Promoted in each Department
Break up of Employees working in Different Departments :
Total Number of Employees = 3600
Employees working in Different Departments

RESPONSE GRID					
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
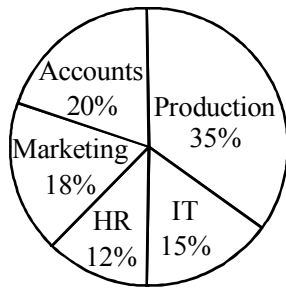
Break up of Number of Males in each Department
Total Number of Males in the Organisation = 2040
Break up of Number of Males Working in each Department
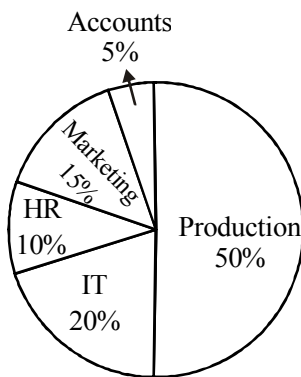
Break up of Number of Employees who Recently got Promoted in each Department
Total Number of Employees who got promoted = 1200
Number of Employees who Recently got Promoted from each Department
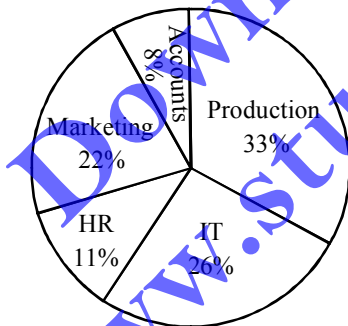
16. The number of employees who got promoted from the HR department was what per cent of the total number of employees working in that department ? (rounded off to two digits after decimal)

(a) 36.18   (b) 30.56   (c) 47.22
(d) 28.16   (e) None of these

17. The total number of employees who got promoted from all the departments together was what per cent of the total number of employees working in all the departments together? (Rounded off to the nearest integer)

(a) 56   (b) 21   (c) 45
(d) 33   (e) 51

18. What is the total number of females working in the Production and Marketing departments together ?

(a) 468   (b) 812   (c) 582
(d) 972   (e) None of these

19. If half of the number of employees who got promoted from the IT department were males, what was the approximate percentage of number of employees from the IT department?

(a) 61   (b) 29   (c) 54
(d) 42   (e) 38

20. How many females work in the Accounts department ?

(a) 618   (b) 592   (c) 566
(d) 624   (e) None of these

DIRECTIONS (Qs. 21-25) : Study the following Pie-charts carefully and answer the questions given below.

Disciplinewise Break up of Number of candidates appeared in Interview and Disciplinewise Break up and Number of candidates selected by an organization

Disciplinewise Break up of Number of candidates appeared by the organization

Total Number of Candidates Appeared in the interview = 25780
Percentage
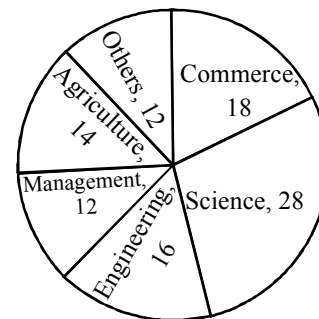
Disciplinewise Break up of Number of candidates selected after interview by the organization

Total Number of Candidates Selected after the interview = 7390

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ

Percentage:
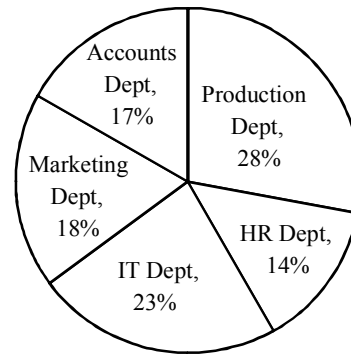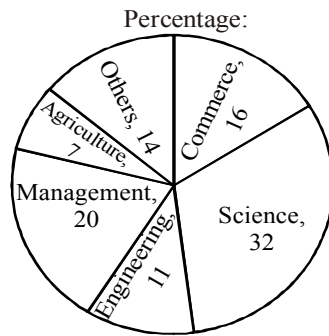
Ratio of Men to Women

Department	Men	Women
Production	11	1
HR	1	3
IT	5	4
Marketing	7	5
Accounts	2	7

21. Approximately what was the difference between the number of candidates selected from Agriculture discipline and number of candidates selected from Engineering discipline?

    (a) 517   (b) 665   (c) 346
    (d) 813   (e) 296

22. For which discipline was the difference in number of candidates selected to number of candidates appeared in interview the maximum ?

    (a) Management (b) Engineering (c) Science
    (d) Agriculture   (e) None of these

23. The total number of candidates appeared in interview from Management and other discipline was what percentage of number of candidates appeared from Engineering discipline?

    (a) 50   (b) 150
    (c) 200   (d) Cannot be determined
    (e) None of these

24. Approximately what was the total number of candidates selected from Commerce and Agricultural discipline together?

    (a) 1700   (b) 1800   (c) 2217
    (d) 1996   (e) 1550

25. What was the ratio between the number of candidates appeared in interview from other discipline and number of candidates selected from Engineering discipline respectively (rounded off to the nearest integer) ?

    (a) 3609 : 813   (b) 3094 : 813   (c) 3094 : 1035
    (d) 4125 : 1035   (e) 3981 : 767

DIRECTIONS (Qs. 26-30): Study the following pie chart and table carefully to answer the questions that follow.

Percentage break up of employees working in various departments of an organization and the ratio of men to women in them

Percentage Break up of Employees

Total Number of Employees = 1800

26. What is the number of men working in the Marketing department ?

    (a) 132   (b) 174   (c) 126
    (d) 189   (e) None of these

27. The number of men working in the production department of the organization forms what per cent of the total number of employees working in that department ?
    (rounded off to two digits after decimal)

    (a) 89.76   (b) 91.67   (c) 88.56
    (d) 94.29   (e) None of these

28. What is the respective ratio of the number of men working in the Accounts department of the total number of employees working in that department ?

    (a) 9 : 2   (b) 7 : 6   (c) 2 : 9
    (d) 6 : 7   (e) None of these

29. What is the respective ratio of the number of Women working in the HR department of the Organization and the total number of employees in that department ?

    (a) 3 : 4   (b) 2 : 5   (c) 2 : 9
    (d) 3 : 7   (e) None of these

30. The number of women working in the IT department of the Organization forms approximately what per cent of the total number of employees in the Organization from all departments together ?

    (a) 7   (b) 5   (c) 19
    (d) 15   (e) 10

DI TABLE CHART

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-5) : *S*tudy the given table carefully to answer the following questions.

Field Name	Shape	Side (in m)	Base (in m)	Height (in m)	Radius (in m)	Cost of flooring (in Rs. per sq. metre)	Cost of fencing (in Rs. per m)
A	Triangle		16	12		50	20
B	Rectangle	10×20				30	15
C	Square	15				40	18
D	Parallelogram		20	12		60	25
E	Circle				10	45	22

1. What is the cost of flooring of A?

(a) ₹4000   (b) ₹4600

(c) ₹4800   (d) ₹5000

(e) ₹4400

2. What is the difference between the cost of fencing of C and that of B?

(a) ₹180   (b) ₹120

(c) ₹240   (d) ₹360

(e) ₹480

3. What is the ratio of the cost of flooring to that of fencing of field D?

(a) 4 : 1   (b) 6 : 1

(c) 8 : 1   (d) 9 : 1

(e) 5 : 1

4. The cost of fencing of field E is approximately what percent of the cost of flooring of field C?

(a) 10.5%   (b) 19.46%

(c) 18.71%   (d) 15.36%

(e) 13.82%

5. The cost of fencing of field C is what percent of the cost of fencing of field D?

(a) 87.54%   (b) 67.5%

(c) 72.13%   (d) 54.36%

(e) 46.5%

DIRECTIONS(Q. 6-10): Study the following table carefully to answer the questions that follow.

Number of Soldiers (in thousands) retired during six different years

Years	Academies				
	Air	Army	Navy	Coast Guard	BSF
2004	2.5	5.2	1.6	0.6	4.2
2005	3.7	6.1	1.9	1.8	5.1
2006	2.9	6.9	2.4	1.2	3.7
2007	5.4	7.2	2.8	2.7	5.2
2008	4.2	6.4	1.5	5.4	4.4
2009	5.6	8.4	3.5	3.6	6.3

6. What is the difference between the total number of Soldiers retired from Air Force in the year 2006, 2007 and 2008 and the number of Soldiers retired from Army in the year 2009 ?

(a) 4700   (b) 4100   (c) 3600
(d) 36000   (e) None of these

7. Total number of Soldiers retired from BSF in the years 2005 and 2006 together was approximately what per cent of the total number of Soldiers retired from Navy over all the years together ?

(a) 70   (b) 54   (c) 64
(d) 75   (e) 80

8. What was the average number of Soldiers retired together in the year 2007 ?

(a) 4660   (b) 46600   (c) 23300
(d) 2330   (e) None of these

9. In which force the number of the soldiers retired continuously increased from the year 2004 to 2009 ?

(a) Air Force   (b) Army and BSF only
(c) Coast Guard   (d) Navy only
(e) None of these

RESPONSE GRID	1. ⓐ ⓑ ⓒ ⓓ ⓔ	2. ⓐ ⓑ ⓒ ⓓ ⓔ	3. ⓐ ⓑ ⓒ ⓓ ⓔ	4. ⓐ ⓑ ⓒ ⓓ ⓔ	5. ⓐ ⓑ ⓒ ⓓ ⓔ
	6. ⓐ ⓑ ⓒ ⓓ ⓔ	7. ⓐ ⓑ ⓒ ⓓ ⓔ	8. ⓐ ⓑ ⓒ ⓓ ⓔ	9. ⓐ ⓑ ⓒ ⓓ ⓔ	

10. What was the respective ratio between the number of Soldiers retired from Army in the year 2004 and number of soldiers retired from Coast Guard in the year 2006 ?
  (a) 13 : 4   (b) 13 : 6   (c) 3 : 26
  (d) 13 : 3   (e) None of these

DIRECTIONS (Qs. 11-15) : Study the following table carefully to answer the questions.

Rate of Interest (P.C.P.A) of Fered by Five companies on Deposits Under Different Schemes

Company Scheme	A	B	C	D	E
I	8.5	9.0	8.0	8.5	9.0
II	9.5	8.5	9.0	9.0	8.5
III	8.0	8.0	7.5	8.5	8.5
IV	10.0	9.5	10.5	9.5	10.0
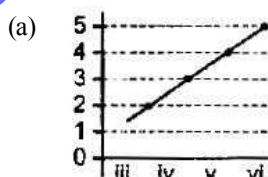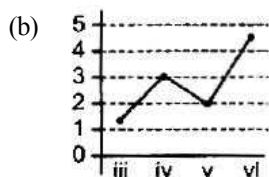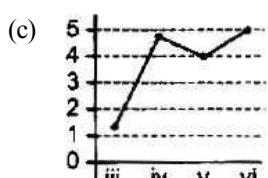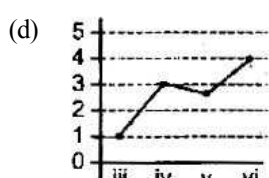
11. Mr. X deposited an amount in Scheme II with Company C for two years. After that he withdrew the amount and reinvested only the principal amount in Scheme IV of Company B for two years. Total amount of simple interest accrued from the two schemes is ₹ 14, 800. What was the principal amount?
  (a) ₹48,000   (b) ₹42,000
  (c) ₹40,000   (d) Cannot be determined
  (e) None of these

12. Company E offers compound interest under Scheme I and
Company A offers simple interest under Scheme IV. What will be the difference between the interest earned under the Scheme I of Company E and Scheme IV of Company A respectively in two years on an amount of ₹ 1.2 lakhs?
  (a) ₹1,428   (b) ₹1,328
  (c) ₹1,528   (d) ₹1,548
  (e) None of these

13. Company D offers compound interest under Scheme II and simple interest under Scheme IV. Abhijit invested ₹ 25,000 with this company under Scheme IV and after one year switched over to Scheme II along with the interest for one more year. What is the total amount he will get at the end of two years?
  (a) ₹28,939.25   (b) ₹29,838.75
  (c) ₹31,748.25   (d) ₹31,738.75
  (e) None of these

14. Abhishek invested an amount of ₹ 45,000 for two years with Company B under Scheme III which offers compound interest and Jeevan invested equal amount for two years with Company C under Scheme IV which offers simple interest. Who earned more interest and how much?
  (a) Abhishek, ₹1,875   (b) Jeevan, ₹1,875
  (c) Abhishek, ₹1,962   (d) Jeevan, ₹1,962
  (e) None of these

15. Mr. Lal investesd ₹ 30,000 in Company A under Scheme II which offers simple interest and ₹ 48,000 in Company D under Scheme II which offers compound interest. What will be the total amount of interest earned by Mr. Lal in two years?
  (a) ₹14728.80   (b) ₹17428.50
  (c) ₹14,827.70   (d) ₹16,728.20
  (e) None of these

DIRECTIONS (Qs. 16-20) : Study the following table to answer these questions.

Plan of Public Sector Under Various Plans Sector-wise Expenditure out of that total expenditure (in million)

Plan	I	II	III	IV	V	VI
Public sector plan expenditure	19600	46720	85770	157240	394260	97500
Social service	4180	7440	12960	24620	63720	14035
Education	1530	2730	5890	7860	13360	25240
Health	980	2140	2260	3370	7610	18210
Family Planning	-	20	250	2780	4920	10100
Housing and urban services	330	800	1280	2470	11500	24880
Water supply and sanitation	-	-	1060	4740	10920	39220
Social welfare and related area	1340	1750	2220	3400	15410	22700

16. In various plans in the ratio of expenditure on public sector, which of the following graphs explain best the expenditure on water supply and sanitation?

  (e) None of these
17. The ratio of public sector expenditure to the expenditure on social services was highest in which plan?
  (a) I   (b) VI
  (c) V   (d) II
  (e) None of these
18. In the successive plans in the ratio of public sector expenditure there was a continuous decrease in which sector?

RESPONSE GRID	9. ⓐⓑⓒⓓⓔ 10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ 12. ⓐⓑⓒⓓⓔ 13. ⓐⓑⓒⓓⓔ
	14. ⓐⓑⓒⓓⓔ 15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ 17. ⓐⓑⓒⓓⓔ 18. ⓐⓑⓒⓓⓔ

(a)   In no sector   (b)   Health
(c)   Education   (d)   Social services
(e)   Social welfare and related areas

19. For plan VI out of public sector expenditure, what per cent of expenditure is on Housing and Urban services?

(a)   362%   (b)   412%
(c)   385%   (d)   392%
(e)   289%

20. For all the given plans, what was the difference in expenditure on education and health?

(a)   ₹ 220400000   (b)   ₹ 224000000
(c)   ₹ 22040000000   (d)   ₹ 220400000000
(e)   None of these

DIRECTIONS (Q. 21-25) : Study the following table carefully and answer the questions given below it.

Percentage of Marks Obtained by Various Students in Various Subjects in an Examination

Students	Marks					
	English (out of 100)	Hindi (out of 100)	Science (out of 150)	History (out of 60)	Maths (out of 150)	Geography(out of 40)
A	68	75	82	60	96	55
B	88	73	85	65	88	65
C	75	56	72	75	75	80
D	70	66	80	80	72	62
E	72	60	68	74	68	75
F	85	70	90	70	74	70

21. What is approximate overall percentage obtained by C in the examination ?

(a)   78   (b)   69   (c)   75
(d)   71   (e)   65

22. What is the difference in the marks obtained by B in English and Maths together and the marks obtained by F in the same subjects ?

(a)   24   (b)   17   (c)   15
(d)   28   (e)   None of these

23. The marks obtained by E in Geography are what per cent of the marks obtained by E in Hindi ?

(a)   45   (b)   55   (c)   50
(d)   60   (e)   None of these

24. What is the overall percentage of marks obtained by D in History and Geography together ?

(a)   73.40   (b)   72.80   (c)   70.50
(d)   68.80   (e)   None of these

25. What is the average marks obtained by all the students together in Science ?

(a)   77.16   (b)   120.50   (c)   118
(d)   121   (e)   None of these

DIRECTIONS (Q. 26-30): Study the following table carefully to answer the questions that follow.

Number (N) of six type of Electronic Products sold by Six different stores in a month and the price per product (P) (price in ₹ '000) charged by each Store

Store	A		B		C		D		E		F	
Product	N	P	N	P	N	P	N	P	N	P	N	P
L	54	135	48	112	60	104	61	124	40	136	48	126
M	71	4.5	53	3.8	57	5.6	49	4.9	57	5.5	45	4.7
N	48	12	47	18	52	15	54	11.5	62	10.5	56	11
O	52	53	55	48	48	50	54	49	59	47	58	51
P	60	75	61	68	56	92	44	84	46	76	59	78
Q	43	16	44	15	45	14.5	48	15.6	55	18.2	55	14.9

RESPONSE GRID	19. ⓐⓑⓒⓓⓔ 20. ⓐⓑⓒⓓⓔ 21. ⓐⓑⓒⓓⓔ 22. ⓐⓑⓒⓓⓔ 23. ⓐⓑⓒⓓⓔ
	24. ⓐⓑⓒⓓ 25. ⓐⓑⓒⓓ

26. What is the total amount earned by Store C through the sale of M and O type products together ?

(a) ₹ 2719.2 lakh   (b) ₹ 271.92 lakh

(c) ₹ 2.7192 lakh   (d) ₹ 27.192 lakh

(e) None of these

27. Number of L type product sold by Store F is what percent of the number same type of products sold by Store E ?

(a) 76.33   (b) 124   (c) 83.33

(d) 115   (e) None of these

28. What is the difference in the amount earned by Store A through the sale of P type products and that earned by Store B through the sale of Q type products ?

(a) ₹ 38.4 lakh   (b) ₹ 0.384 lakh   (c) ₹ 3.84 lakh

(d) ₹ 384 lakh   (e) None of these

29. What is the respective ratio of total number of N and L type products together sold by Store D and the same products sold by Store A ?

(a) 119 : 104   (b) 102 : 115   (c) 104 : 115

(d) 117 : 103   (e) None of these

30. What is the average price per product charged by all the Stores together for Product Q ?

(a) ₹ 14700   (b) ₹ 15700   (c) ₹ 15200

(d) ₹ 14800   (e) None of these

RESPONSE GRID

26. ⓐⓑⓒⓓⓔ   **27.** ⓐⓑⓒⓓⓔ   **28.** ⓐⓑⓒⓓⓔ   **29.** ⓐⓑⓒⓓⓔ   **30.** ⓐⓑⓒⓓⓔ

DATE INTERPRETATION-CASELETS

Max. Marks : 30 **No. of Qs. 30** **Time : 20 min.** **Date : ..../........./................**

DIRECTIONS (Qs. 1-5) : Study the following information carefully to answer the questions that follow.

There are two trains A and B. Both trains have four different types of coaches viz. General coaches, sleeper coaches, first class coaches and AC coaches. In train A, there are total 700 passengers. Train B has 30% more passengers than train A. 20% of the passengers of train A are in general coaches. One-fourth of the total number of passengers of train A are in AC coaches. 23% of the passengers of train A are in sleeper class coaches. Remaining passengers of train A are in first class coaches. Total number of passengers in AC coaches in both the trains together is 480. 30% of the number of passengers of train B is in sleeper class coaches, 10% of the total passengers of train B are in first class coaches. Remaining passengers of train B are in general class coaches.

1. What is the ratio of the number of passengers in first class coaches of train A to the number of passengers in sleeper class coaches of train B?
   - (a) 13 : 7
   - (b) 7 : 13
   - (c) 32 : 39
   - (d) Data inadequate
   - (e) None of these
2. What is the total number of passengers in the general coaches of train A and the AC coaches of train B together?
   - (a) 449
   - (b) 459
   - (c) 435
   - (d) 445
   - (e) None of these
3. What is the difference between the number of passengers in the AC coaches of train A and total number of passengers in sleeper class coaches and first class coaches together of train B?
   - (a) 199
   - (b) 178
   - (c) 187
   - (d) 179
   - (e) None of these
4. Total number of passengers in general class coaches in both the trains together is approximately. What percentage of total number of passengers in train B?
   - (a) 35
   - (b) 42
   - (c) 45
   - (d) 38
   - (e) 31
5. If cost of per ticket of first class coach ticket is ₹ 450, what total amount will be generated from first class coaches of train A?
   - (a) ₹ 100080
   - (b) ₹ 108000
   - (c) ₹ 100800
   - (d) ₹ 10800
   - (e) None of these

DIRECTIONS (Qs. 6-10) : Study the following information carefully and answer the questions.

For a room, the rate of painting is ₹ 3200 per square metre. The rate of carpeting per square metre is 120% of that of tiling. The cost of decorating the room is 14 times to that of carpeting on the floor. The cost of electrification is 75% of that of carpeting the floor. The rate of tiling on the floor is 125% of that of painting. The dimensions of the room are 6m × 6m × 5m.

6. What is the ratio of the cost of painting the four walls of the room and that of decoration?
   - (a) 10 : 63
   - (b) 10 : 61
   - (c) 10 : 21
   - (d) 21 : 10
   - (e) None of these
7. What will be the total cost of decorating the room and tiling the floor when the four walls have also been tiled to a height of 0.25 metre?
   - (a) ₹ 5287200
   - (b) ₹ 2587200
   - (c) ₹ 2588200
   - (d) ₹ 2577200
   - (e) None of these
8. What will be the total cost of painting, carpeting, decoration and electrification of the room if the dimensions of the room be 21 m × 42 m × 27m ?
   - (a) ₹ 30888000
   - (b) ₹ 8388000
   - (c) ₹ 80388000
   - (d) ₹ 40888000
   - (e) None of these
9. What will be the cost of tiling the floor of the room if the rate of tiling be increased by 75% and the dimensions of the room be 51m × 59m × 84m ?
   - (a) ₹ 21163000
   - (b) ₹ 1263000
   - (c) ₹ 2163000
   - (d) ₹ 21063000
   - (e) None of these
10. If the length of the room be increased by 20%, breadth by 32% and height by 12%, then what will be the total cost of painting of the four walls of the room and tiling the floor?
   - (a) ₹ 769996.8
   - (b) ₹ 67996.80
   - (c) ₹ 67796.80
   - (d) ₹ 76796.80
   - (e) None of these

DIRECTIONS (Qs. 1-15) : Study the following information carefully and answer the questions given below it.

Out of the 15,000 candidates eligible for an Officer's post in a Public Sector Bank, 450 candidates have prior experience of working in Public Sector banks in rural area only. 25% of the total number of candidates have prior experience of working in Public Sector Banks in urban areas only. 12% of the total number of candidates have prior experience of working in Private Sector Banks in urban areas only. 2% of the total number of candidates have prior experience of working in Private Sector banks in rural areas only. 3,600 candidates have worked in Public sector banks in both urban and rural areas. 600 candidates have worked in both Public and Private Sector Banks in rural areas only. 15% condidates have worked in both public & private sector banks in Urban area. The remaining candidates have no prior experience of working in the Banking industry.

11. How many candidates have prior experience of working in rural areas (both Public Sector and Private Sector Banks together)?
   - (a) 4,350
   - (b) 4,950
   - (c) 4,800
   - (d) 4,900
   - (e) 4,850

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

12. How many candidates have prior experience of working in Public Sector Banks (Urban and Rural areas together)?
   (a) 12,450   (b) 8,400   (c) 10,050
   (d) 10,650   (e) None of these

13. What is the ratio of the candidates who have a prior experience of working in Public Sector Banks in rural areas only to the candidates who have a prior experience of working in Private Sector Banks in rural areas only?
   (a) 4 : 3   (b) 3 : 2   (c) 2 : 3
   (d) 3 : 4   (e) None of these

14. What is the total number of candidates who have worked in Private Sector Banks in urban areas?
   (a) 1,800   (b) 2,250   (c) 4,050
   (d) 3,600   (e) None of these

15. The candidates who have no prior experience of working in the banking industry are what per cent of the candidates who have worked in Public Sector Banks in both urban and rural areas together?
   (a) 60.5   (b) 63.5   (c) 62
   (d) 64   (e) None of these

DIRECTIONS (Qs. 16-20): Study the following information carefully to answer the questions given below it.

A survey conducted on 1800 villages shows that 25% of the total villages have only adequate water supply. 15% of the total number have proper supply of electricity only. 7% of the total number of villages have only proper education facilities. 12% of the total number of villages have tele-communication services only. 16% of the total number of villages have proper health care services only. 6% of the total number of villages have adequate water as well as supply of electricity. 8% of the total number of villages have adequate supply of water, electricity as well as health care services. 5% of the total number of villages have proper supply of electricity, tele-communication services as well as health care services and 6% of the total number of villages have all the facilities.

16. How many villages in all have adequate water supply ?
   (a) 702   (b) 450   (c) 594
   (d) 810   (e) None of these

17. How many villages in all have adequate supply of water as well as electricity?
   (a) 360   (b) 108   (c) 720
   (d) 972   (e) None of these

18. How many villages in all do not have proper supply of electricity?
   (a) 720   (b) 850   (c) 920
   (d) 1080   (e) None of these

19. How many villages have only proper education facilities?
   (a) 108   (b) 126   (c) 234
   (d) 216   (e) None of these

20. How many villages have all the facilities?
   (a) 90   (b) 126   (c) 144
   (d) 106   (e) None of these

DIRECTIONS (Qs. 21-25): Study the following information carefully to answer these questions :

For an examination consisting of three subjects-Maths, Physics and Chemistry, 280 students appeared. When the results were declared, 185 students had passed in Maths, 210 had passed in Physics and 222 had passed in Chemistry.
All those except 5 students who passed in Maths, passed in Physics.

All those except 10 students who passed in Maths, passed in Chemistry.
47 students failed in all the three subjects.
200 students who passed in Physics also passed in Chemistry.

21. How many students passed in Chemistry only ?
   (a) 18   (b) 21   (c) 25
   (d) 29   (e) None of these

22. How many students passed in all the three subjects ?
   (a) 185   (b) 175   (c) 170
   (d) 171   (e) Cannot be determined

23. How many students failed in Physics and Maths ?
   (a) 65   (b) 18   (c) 58
   (d) 47   (e) Cannot be determined

24. How many students passed in Maths but failed in both Physics and Chemistry ?
   (a) 5   (b) 10   (c) 15
   (d) 1   (e) Cannot be determined

25. A student has to pass in at least two subjects to get promoted. How many students get promoted ?
   (a) 180   (b) 213
   (c) 200   (d) 185
   (e) Cannot be determined

DIRECTIONS (Qs. 26-30): Study the information carefully to answer the following questions.

There are 7200 students in an engineering college. The ratio of boys of girls is 7:5, respectively. All the students are enrolled in six different specialization viz., B.Tech. (electronics), B.Tech. (Computer science), B.Tech. (Mechanical), B. Tech. (Aerospace), B.Tech. (nano technology), B.Tech. (civil). 22% of the total students are in B. Tech. (nano technology). 16% of the girls are in B.Tech. (computer science). 18% of boys are in B.Tech. (Mechanical). Girls in B.Tech. (civil) are 30% of the girls in B. Tech. (computer science). 15% of boys are in B. Tech. (electronics). Boys in B. Teach (Computer Science) are 50% of the girls in the same 15% of girls are in B. Tech. (aerospace). The ratio of boys to girls in B.Tech. (civil) is 3:1 respectively. 24% of the total numbers of students are in B. Tech. (electronics). The ratio of boys to girls in B.Tech. (aerospace) is 12:5, respectively.

26. What is the total number of students enrolled in B.Tech. (mechanical)?
   (a) 1062   (b) 1530   (c) 1584
   (d) 1728   (e) 1800

27. Number of girls enrolled in B.Tech. (electronics) forms approximately. What per cent of total number of students in the college?
   (a) 7%   (b) 13%   (c) 15%
   (d) 22%   (e) 24%

28. What is the total number of girls enrolled in B.Tech. (nano technology)?
   (a) 144   (b) 306   (c) 365
   (d) 480   (e) 522

29. Number of boys enrolled in B. Tech. (aerospace) forms, what per cent of the total number of girls enrolled in B.Tech. (computer science)?
   (a) 187.5%   (b) 200%   (c) 212.5%
   (d) 225%   (e) 232.5%

30. What is the total number of boys enrolled in B. Tech. (civil)?
   (a) 240   (b) 432   (c) 630
   (d) 756   (e) 810

RESPONSE GRID	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ
	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ
	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ
	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	

DATA SUFFICIENCY TYPE

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1 - 5) : In the following 15 questions there is a question followed by two statements I and II. Use the data given in statements I and II together with other facts of common knowledge to decide whether the statements are sufficient to answer the given question. Then choose the answer as

(a) if you can get the answer to the given question from statement I alone but not from II alone;

(b) if you can get the answer to the question from the statement II alone but not from I alone;

(c) if both I and II together are required to answer the given question and

(d) If more data is needed;

(e) If the data in statement-I alone or in statement II alone are needed.

1. How long will it take to travel from A and B ? It takes 4 hours to travel from A to B and back to A.
   I. It takes 25% more time to travel from A to B than it does to travel from B to A
   II. C is midway between A and B and it takes 2 hours to travel from A and C and back to A.

2. A large corporation has 7000 employees. What is the average yearly wage of an employee in the corporation?
   I. 4,000 of the employees are executives.
   II. The total wage bill for the company each year is ₹77,000,000.

3. What was Ram Gopal's income in 1990 ?
   I. His total income for 1988, 1989 and 1990 was Rs 3,00,000.
   II. He earned 20% more in 1989 than what he did in 1988.

4. Is a number divisible by 9 ?
   I. The number is divisible by 3.
   II. The number is divisible by 27.

5. Is a quadrilateral ABCD a square ?
   I. A pair of adjacent sides are equal.
   II. The angle enclosed by these equal adjacent sides is 90°

DIRECTIONS (Qs. 6 - 13) : Each of these questions is followed by two statements, labelled I and II, in which certain data are given. In these questions you do not actually have to compute an answer, but rather you have to decide whether the data given in the statements are sufficient for answering the given questions. Using the data given in the statements plus your knowledge of Mathematics and everyday facts (such as the number of days in a month) you are to choose your answer as :

(a) if the statement I alone is sufficient but statement II alone is not sufficient to answer the question asked;

(b) if the statement II alone is sufficient but statement I alone is not sufficient to answer the question asked;

(c) if both the statements I and II together are sufficient to answer the question asked but neither of the statements alone is sufficiented.

(d) if the statements I and II together are not sufficient to answer the question asked and additional data specific to the problem are needed.

(e) If the statement-I alone or in statement-II alone are sufficient to answer.

6. How much time will a computer need to solve 150 problems?
   I. The computer needs 50 seconds to solve the first problem.
   II. A man needs 6 hours to solve 150 problems.

7. What is the average profit per cow ?
   I. The farmer had bought 6 cows for ₹15,000.
   II. The farmer sold 6 cows for ₹24,000.

8. If the river is flowing downstream @ 3 kilometres per hour, how long will it take Harish to row 10 kilometres upstream ?
   I. He starts upstream at 10 a.m.
   II. He rows @ 5 km/h.

9. How many students in 12th class received over 80 marks in the Maths test ?
   I. The sum of all the marks of the class was 2400.
   II. The class average in the test was 80 marks.

10. Can Usha buy the radio with ₹300 ?
    I. The radio now costs 5/6 of its former price.
    II. After cutting the price of the radio, the store's profit has decreased by 1/2.

11. Ramesh worked 42 hours this week. How much did he earn?
    I. Ramesh works 35 hours a week @ ₹30 per hour.
    II. Ramesh gets ₹40 per hour for overtime work.

12. A gold ring weighs 1 gram. The ring is not of pure gold but is mixed with copper. What is the value of the metal in the ring.
    I. Gold is worth ₹350 per gram.
    II. 50% of the ring is due to copper.

13. What is the cost of two kg of apples ?
    I. Ten apples weigh 2.1 kg on the average.
    II. Ten kg of apples cost ₹300.

14. How many tonnes of cement will be needed for the foundation of an apartment building ?
    I. The entire building will require 5000 tonnes of cement.
    II. The volume of the cement needed for the foundation is 1000 cubic yards.

15. On a certain auto race track, a car's average speed is 160 mph. What is the length of the track ?
    I. On straight sections, cars can go @ 100 mph
    II. Average lap time (once around the track) is 1 minute 4 seconds.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 16 - 20) : Each of the questions below is followed by two statements labelled I and II, in which certain data is given. You have to decide whether the data given in the statements are sufficient to answer the question. Using the data given, together with your everyday knowledge, choose.

(a) if statement I alone is sufficient but statement II alone is not sufficient to answer the question;
(b) if statement II alone is sufficient but statement I alone is not sufficient to answer the questions;
(c) if both the statements I and II together are sufficient to answer the question but neither statement by alone is sufficient to answer the question and
(d) if I and II together are not sufficient to answer the question and additional information is required
(e) if the statement-I alone or statement-II alone are sufficient to answer.

16. What was the combined average attendance per game at the Jawaharlal Nehru Stadium for the months of June and July ?
   I. The total attendance of the month of June was 23,100 and the total attendance for the month of July was 25,200.
   II. There were 20 games played in June and 22 games played in July ?
17. Did Jayalalitha receive more than 40% of the 30,000 votes cast in an election ?
   I. Mamata received 45% of the votes
   II. Jayalalitha received exactly 11,000 votes
18. A certain bookshop sold 92 copies of Bill Gates' book "Business at the Speed of Thought" during the first day. What per cent of his book did sell on that day ?
   I. The total number of books with this title on stock is 230.
   II. There are a total of 1000 books in the store
19. How much weight did Sheela lose within the first one week of her dieting ?
   I. She lost 300 g per day during the first month.
   II. She lost 250 g per day during the second month.
20. What marks have been obtained by Akshay ?
   I. Akshay's marks are the average of marks of Namita and Mona.
   II. Namita obtained 80 marks and this is 33% more than the marks obtained by Mona.

DIRECTIONS (Qs. 21 - 25) : Each of the question below has two statements, I and II. Mark your answer as :

(a) if statement I is True, but not the other one;
(b) if the statement II is True, but not the other one;
(c) if both the statements are True and
(d) if neither of the statements is True.
(e) if the statement-I or statement-II are true.

21. In a certain Management Institute if 50 per cent of persons who inquire about admission policies actually submit applications for admission, then what per cent of those who submit applications for admission enrol in the MBA course?
   I. 15 per cent of those who submit applications for admission are accepted for admission.
   II. 80 per cent of those who are accepted, deposit fees for joining the course.
22. If n is an integer between 2 and 100 and if n is also the square of an integer, then what is the value of n?
   I. n is the cube of an integer.
   II. n is even.

23. Was 70 the average grade in a class test ?
   I. In the test half of the class had grades below 70 and half of the class had grades above 70.
   II. The lowest grade in the test was 45 and the highest grade in the test was 95.
24. Each students in a class of 40 students voted for exactly one of the 3 candidates A, B or C for the post of the class representative. Did candidate A receive the most votes from the 40 votes cast?
   I. Candidate A received 11 of the votes.
   II. Candidate C received 14 of the votes.
25. A rectangular floor that is 4 metres wide is to be completely covered with square tiles each with side of length 0.25 metres with no portion of such tiles that will be required ?
   I. The length of the floor is three times its width.
   II. The area of the floor is 48 square metres.

DIRECTIONS (Qs. 26 - 30) : Each of the item below has a question followed by two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and mark answer as

(a) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(b) if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question;
(c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.and
(d) if the data given in both the statements I and II together are not sufficient to answer the question.
(e) if both the statement-I and statement-II together are sufficient to answer.

26. How much minimum marks will be required to pass an examination ?
   I. Student A secured 32% marks in that examination and he failed by 1 mark. Student B secured 36% marks in the same examination and his marks were 1 more than the minimum pass marks
   II. Student A secured 30% of full marks in the examination and he failed by 2 marks. If he had secured 5 more marks his percentage of marks would have been 40%.
27. X, Y and Z are integers. Is X an odd number ?
   I. An odd number is obtained when X is divided by 5.
   II. (X + Y) is an odd number.
28. What selling price should be marked on an article?
   I. Discount of 5% is to be given and profit percentage should be double the discount. Purchase cost is in the range of ₹300 – ₹400.
   II. 10% discount is to be allowed and 15% profit is to be obtained on the purchase cost of ₹200 of the article.
29. What is the height of a right-angled triangle ?
   I. The area of the right-angled triangle is equal to the area of a rectangle whose breadth is 12 cm.
   II. The length of the rectangle is 18 cm.
30. A, B and C are integers. Is B an even number ?
   I. (A + B) is an odd number.
   II. (C + B) is an odd number.

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

QUANTITATIVE APTITUDE SECTION TEST

Max. Marks : 50   **No. of Qs. 50**   **Time : 40 min.**   Date : ..../........./.................

DIRECTIONS (Qs. 1 - 5) : In the following bar diagram, the number of passengers carried to different cities in first quarter of a year by four airlines A, B, C and D has been given. Study the following diagram carefully and answer the questions.
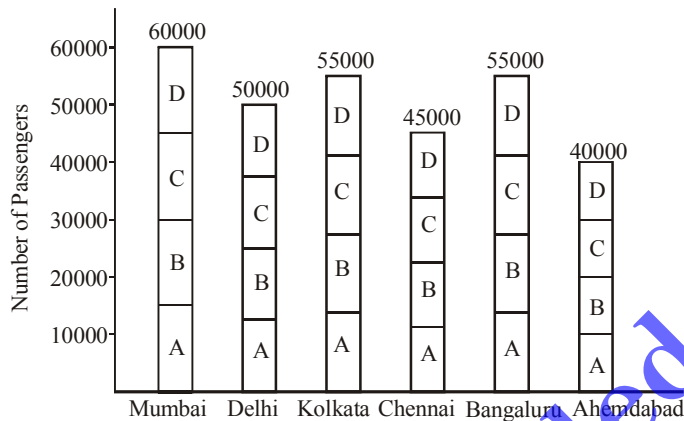
1. What is the difference between the number of passengers travelling to all cities by the airlines A and C ?
   (a) 5000   (b) 6000   (c) 5500
   (d) 6500   (e) 15000

2. The number of passengers travelling to Delhi and Kolkata by airline C is what per cent of the number of all passengers travelling by the same airline?
   (a) 32   (b) 35   (c) 38
   (d) 42   (e) 44

3. What is the respective ratio of the number of passengers who travelled to Chennai and Bangaluru by airline B and that to Mumbai and Ahmedabad by airline D ?
   (a) 6 : 7   (b) 3 : 4   (c) 1 : 1
   (d) 7 : 6   (e) None of these

4. The number of passengers travelling to Chennai by airline A in second quarter is 150% of that in first quarter by the same airline. The number of passengers in the second quarter by the same airline is 120% of that in the third quarter.
   What is the percentage increase in the number of passengers in third quarter from that in first quarter ?
   (a) 15%   (b) 18%   (c) 20%
   (d) 25%   (e) 30%

5. The number of passengers going to Bangaluru and Kolkata in first quarter by airline B is what per cent of the number of passengers going to the same cities in second quarter if there be an increase of 30% in the number of passengers going to Bangaluru from first quarter to second quarter and in that going to Kolkata shows a 40% increase from first to second quarter ?

(a) 68   (b) 60   (c) 65
(d) 70   (e) 74

DIRECTIONS (Qs. 6-10) : What approximate value will come in place of question mark (?) in the following questions (You are not expected to calculate the exact value).

6. $9228.789 - 5021.832 + 1496.989 = ?$
   (a) 6500   (b) 6000   (c) 6300
   (d) 5700   (e) 5100

7. $1002 \div 49 \times 99 - 1299 = ?$
   (a) 700   (b) 600   (c) 900
   (d) 250   (e) 400

8. 29.8% of $260 + 60.01\%$ of $510 - 103.57 = ?$
   (a) 450   (b) 320   (c) 210
   (d) 280   (e) 350

9. $(21.98)^2 - (25.02)^2 + (13.03)^2 = ?$
   (a) 25   (b) 120   (c) 10
   (d) 65   (e) 140

10. $\sqrt{24.98} \times \sqrt{625} \times \sqrt{99} = ?$
    (a) 110   (b) 90   (c) 200
    (d) 160   (e) 125

DIRECTIONS (Qs. 11-15) : In these questions, a question is given followed by information in three statements. You have to consider the information in all the three statements and decide the information in which of the statement(s) is not necessarily required to answer the question and therefore can be dispensed with. Indicate your answer accordingly.

11. How many students from Institute 'A' got placement?
    I.   Number of students studying in Institutes A & B are in the ratio of 3 : 4 respectively.
    II. Number of students who got placement from Institute B is 120% of the number of students who got placement from Institute A.
    III. 80% of the students studying in Institute B got placement.
    (a) None of the statements can be dispensed with
    (b) Only I
    (c) Only II
    (d) Anyone of the three
    (e) Question cannot be answered even with the information in all three statements

12. What is the monthly income of Mr. X?
    I.   Mr. X spends 85% of his income on various items and remaining amount is saved.
    II. Monthly saving of Mr. X are ₹ 4,500/.
    III. Out of the total money spent by Mr. X in a month, one-fifth is spent on food and remaining amount of ₹ 20, 400 on other items.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

(a) Only II   (b) Only III
(c) Only either II or III
(d) Question cannot be answered even with the information in all three statements
(e) None of these

13. What is Suchitra's present age?
I. Suchitra's present age is double the age of her son.
II. Ratio between present ages of Suchitra and her mother is 2 : 3 respectively.
III. Four years hence the ratio between Suchitra's age and her son's age will be 13 : 24 respectively.
(a) Only II   (b) Only III
(c) Either I or II only   (d) Either II or III only
(e) None of these

14. What is Neeta's share in the profit earned at the end of 2 years in a joint business run by Neeta, Seeta and Geeta?
I. Neeta invested ₹ 85,000/ to start the business.
II. Seeta and Geeta joined Neeta's business after six months investing amounts in the ratio of 3 : 5 respectively.
III. Total amount invested by Seeta and Geeta is ₹ 2.5 lakhs
(a) Only II   (b) Only III
(c) Only either II or III
(d) Information in all three statements is required for answering the question.
(e) Question cannot be answered even with the information in all three statements.

15. What is the labelled price of the article?
I. Cost price of the article is ₹ 500/.
II. Selling price after offering 5% discount on the labelled price is ₹ 608/.
III. Profit earned would have been 28% if no discount was offered.
(a) Only I   (b) Only III
(c) Only II & III   (d) Only I and III
(e) Only I and II

DIRECTIONS (Qs.16-20): In the following graph the number of laptops manufactured by six different companies in the years 2013 and 2014 has been given. Read the graph carefully and answer the questions.

Number of laptops (in thousands) manufactured by 6 different companies

◇ 2014   ■ 2013
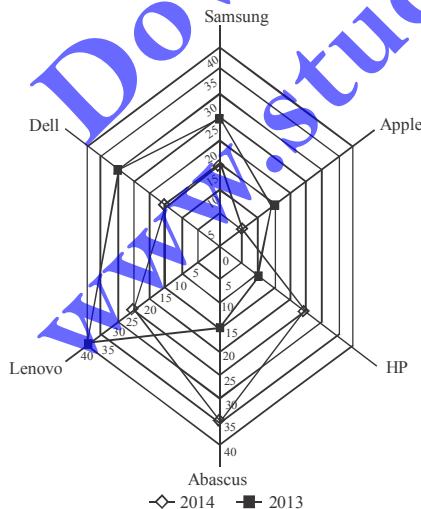
16. The respective ratio between the number of laptops manufactured by Lenovo in 2013 and that by Abascus in 2014 is
(a) 8 : 7   (b) 7 : 8   (c) 3 : 5
(d) 5 : 3   (e) None of these

17. What is the average number of laptops (in thousands) manufactured by all companies taken together in 2013 ?
(a) 22   (b) 22.5   (c) 32.5
(d) 23.5   (e) 27.5

18. What is the percentage increase in production of laptops by HP in 2014 in comparison to that in 2013 ?
(a) 125   (b) 100   (c) 150
(d) 250   (e) None of these

19. The difference between the number of laptops manufactured by Apple, Lenovo and Samsung in 2013 and that by Dell, HP and Abascus in 2014 is
(a) 5500   (b) 4550   (c) 3550
(d) 4500   (e) 5000

20. In 2014, which company manufactured the maximum number of laptops?
(a) Abascus   (b) Lenovo   (c) Dell
(d) Samsung   (e) HP

DIRECTIONS (Qs. 21-25): Answer the questions based on the following two graphs, assuming that there is not fixed cost component and all the units produced are sold in the same year.

Unit Price
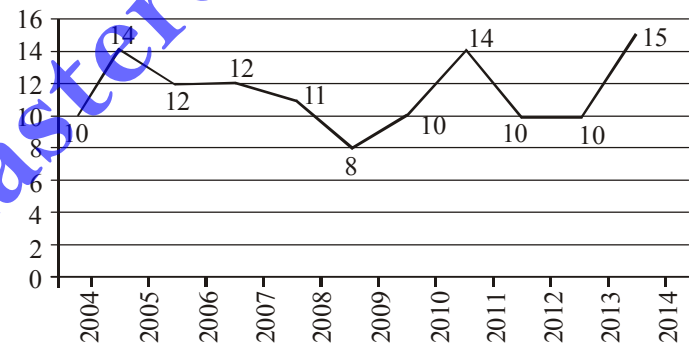
Revenue — Profit
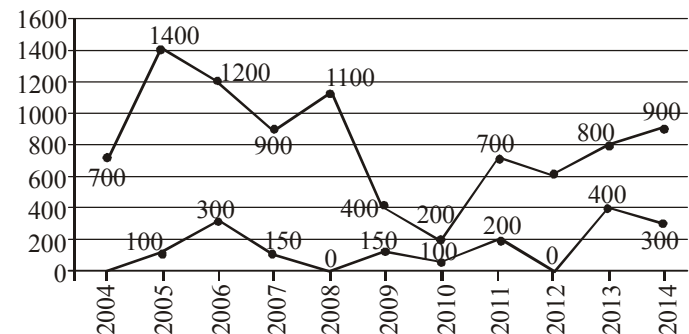
21. In which year per unit cost in highest?
(a) 2006   (b) 2005   (c) 2009
(d) 2011   (e) 2012

| **RESPONSE GRID** | **13.** ⓐⓑⓒⓓⓔ | **14.** ⓐⓑⓒⓓⓔ | **15.** ⓐⓑⓒⓓⓔ | **16.** ⓐⓑⓒⓓⓔ | **17.** ⓐⓑⓒⓓⓔ |
| | **18.** ⓐⓑⓒⓓⓔ | **19.** ⓐⓑⓒⓓⓔ | **20.** ⓐⓑⓒⓓⓔ | **21.** ⓐⓑⓒⓓⓔ | |

22. What is the approximate average quantity sold during the period 2004-2014?
    (a) 64 units
    (b) 70 units
    (c) 77 units
    (d) 81 units
    (e) 87 units

23. If volatility of a variable during 2004-2014 is defined as
    $$\frac{\text{Maximum value} - \text{Minimum value}}{\text{Average value}},$$ then which of the following is true?
    (a) Price per unit has highest volatility
    (b) Cost per unit has highest volatility
    (c) Total profit has highest volatility
    (d) Revenue has highest volatility
    (e) None of the above

24. If the price per unit decrease by 20% during 2004-2008 and cost per unit increase by 20% during 2009-2014, then during how many number of years there is loss?
    (a) 3 yr
    (b) 4 yr
    (c) 5 yr
    (d) 7 yr
    (e) None of these

25. If the price per unit decrease by 20% during 2004-2008 and cost per unit increase by 20% during 2009-2014, then the cumulative profit for the entire period 2004-2014 decrease by
    (a) ₹1650
    (b) ₹1550
    (c) ₹1300
    (d) ₹1250
    (e) Data inadequate

DIRECTIONS (Qs. 26-30): *In the following questions three equations numbered I, II and III are given. You have to solve all the equations either together or separately, or two together and one separately, or by any other method and—*

Give answer If
(a) $x < y = z$
(b) $x \leq y < z$
(c) $x < y > z$
(d) $x = y > z$
(e) $x = y = z$ or if none of the above relationship is established

26. I. $7x + 6y + 4z = 122$
    II. $4x + 5y + 3z = 88$
    III. $9x + 2y + z = 78$

27. I. $7x + 6y = 110$
    II. $4x + 3y = 59$
    III. $x + z = 15$

28. I. $x = \sqrt{(36)^{1/2} \times (1296)^{1/4}}$
    II. $2y + 3z = 33$
    III. $6y + 5z = 71$

29. I. $8x + 7y = 135$
    II. $5x + 6y = 99$
    III. $9y + 8z = 121$

30. I. $(x + y)^3 = 1331$
    II. $x - y + z = 0$
    III. $xy = 28$

31. Shashi had a sum of money. Two-third of the total money he invested in scheme A for 6 years and rest of the money he invested in scheme B for 2 years. Scheme A offers simple interest at a rate of 12% per annum and scheme B offers compound interest (compounded annually) at a rate of 10% per annum. If the total sum obtained from both the schemes is ₹ 2805, what was the total amount invested by him in scheme A and scheme B together?
    (a) ₹1500
    (b) ₹5100
    (c) ₹1000
    (d) ₹2000
    (e) ₹1464

32. Ashok left from place A (towards place B) at 8 am and Rahul left from place B (towards place A) at 10 am. The distance between place A and place B is 637 km. If Ashok and Rahul are travelling at a uniform speed of 39 km/h and 47 km/h respectively, at what time will they meet?
    (a) 5 : 30 pm
    (b) 4 : 30 pm
    (c) 5 : 00 pm
    (d) 4 : 00 pm
    (e) 3 : 30 pm

DIRECTIONS (Qs. 33-37): *Refer to the pie-chart and the table and answer the given questions.*

Distribution of Total Number of Cellular Phones (Both Nokia and Samsung) **Sold by Six Stores in October**
Total number = 11200 of cellular phones
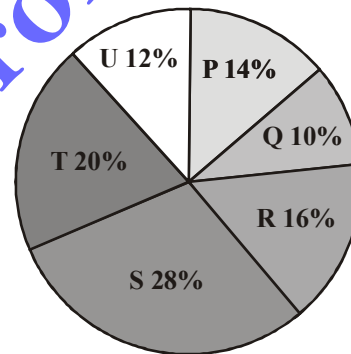
Store	Respective Ratio of Number of Nokia Cellular Phone Sold to the Number of Samsung Cellular Phones Sold
P	4 : 3
Q	3 : 1
R	5 : 4
S	7 : 6
T	1 : 4
U	11 : 10

33. What is the average number of Nokia cellular phones sold by stores P, R, S and T together?
    (a) 977
    (b) 1048
    (c) 3908
    (d) 1006
    (e) 996

RESPONSE GRID
22. ⓐⓑⓒⓓⓔ 23. ⓐⓑⓒⓓⓔ 24. ⓐⓑⓒⓓⓔ 25. ⓐⓑⓒⓓⓔ 26. ⓐⓑⓒⓓⓔ
27. ⓐⓑⓒⓓⓔ 28. ⓐⓑⓒⓓⓔ 29. ⓐⓑⓒⓓⓔ 30. ⓐⓑⓒⓓⓔ 32. ⓐⓑⓒⓓⓔ
33. ⓐⓑⓒⓓⓔ

34. Number of Nokia cellular phones sold by store R is what percent more than the total number of Samsung cellular phones sold by stores P and Q together?

(a) $23\frac{1}{17}\%$ (b) $19\frac{5}{17}\%$ (c) $20\frac{3}{17}\%$

(d) $17\frac{11}{17}\%$ (e) $4\frac{74}{119}\%$

35. What is the central angle corresponding to total number of cellular phones (both Nokia and Samsung) sold by store S?
(a) 99.2°   (b) 93.6°   (c) 100.8°
(d) 97.4°   (e) 101.2°

36. What is the respective ratio between number of Nokia cellular phones sold by store S and total number of Samsung cellular phones sold by stores T and U together?
(a) 43 : 72   (b) 49 : 76   (c) 43 : 76
(d) 49 : 72   (e) None of these

37. Total number of cellular phones (both Nokia and Samsung) sold by stores Q increased by 15% from October to November and total number of cellular phones (both Nokia and Samsung) sold by store T increased by 5% from October to November. What was the total number of cellular phones sold by stores Q and T together in November?
(a) 3540   (b) 3720   (c) 3640
(d) 3420   (e) 3880

DIRECTIONS (Qs. 38-42) : What will come at the place of question mark (?) in the following number series?

38. 3 17 31 ? 3243 3459 3523
(a) 2371   (b) 2731   (c) 3731
(d) 3127   (e) None of these

39. 10 18 34 ? 130 258
(a) 32   (b) 60   (c) 66
(d) 68   (e) None of these

40. 4 10 33 136 ? 4116
(a) 822   (b) 534   (c) 685
(d) 745   (e) 548

41. 4000 800 ? 80 40 8
(a) 140   (b) 100   (c) 400
(d) 160   (e) 200

42. 3 4 16 75 364 ?
(a) 783   (b) 828   (c) 1293
(d) 1945   (e) None of these

43. 16 persons are participated in a party. In how many different ways can they host the seat in a circular table, if the 2 particular persons are to be seated on either side of the host?
(a) $16! \times 2$ (b) $14! \times 2$ (c) $18! \times 2$
(d) $14!$ (e) $14! \times 3$

44. Three pipes A, B, and C can fill the tank in 10 hours, 20 hours and 40 hours respectively. In the beginning all of them are opened simultaneously. After 2 hours, tap C is closed and A and B are kept running. After the 4th hour, tap B is also closed. The remaining work is done by tap A alone. What is the percentage of the work done by tap A alone?
(a) 30%   (b) 35%   (c) 45%
(d) 50%   (e) None of these

DIRECTIONS (Qs. 45-46) : Read the following information and answer the question that follow.

An urn contain 6 orange, 4 green, 3 pink and 4 black balls. If 3 balls are picked at random,

45. What is the probability that all are pink ?

(a) $\frac{2}{650}$ (b) $\frac{1}{680}$ (c) $\frac{4}{630}$

(d) $\frac{3}{680}$ (e) $\frac{4}{680}$

46. If 5 balls are picked at random, what is the probability that none are orange ?

(a) $\frac{33}{442}$ (b) $\frac{442}{33}$ (c) $\frac{15}{167}$

(d) $\frac{23}{235}$ (e) $\frac{35}{235}$

47. Two trains A and B start from two places P and Q towards Q and P respectively. After passing each other they take 4 hours 48 minutes and 3 hours and 20 minutes to reach Q and P respectively. If the train from P is moving at 45 km/h then find the speed of other train.
(a) 69 km/h   (b) 74 km/h   (c) 54 km/h
(d) 64 km/h   (e) 72 Km/h

48. The average age of the group having 3 members is 84. One more person joins the group and now the average becomes 80. Now a fifth person comes whose age is 3 years more than that of fourth person replaces the first person. After this the average age of the group becomes 79. What is the weight of the first person?
(a) 75   (b) 65   (c) 68
(d) 82   (e) 85

49. 35 kg of a type of sandal powder (type A) which costs ₹ 614 per kg was mixed with certain amount of another type of sandal powder (type B), which costs ₹ 695 per kg. Then the mixture was sold at ₹ 767 per kg and 18% profit was gained. What was the amount of type B sandal powder in the mixture?
(a) 24 kg   (b) 28 kg   (c) 32 kg
(d) 36 kg   (e) 20 kg

50. The price of petrol is increased by 25%. How much per cent must a car owner reduce his consumption of petrol so as not to increase his expenditue on petrol?
(a) 18%   (b) 24%   (c) 25%
(d) 20%   (e) None of these

RESPONSE GRID	**34.** ⓐⓑⓒⓓⓔ	**35.** ⓐⓑⓒⓓⓔ	**36.** ⓐⓑⓒⓓⓔ	**37.** ⓐⓑⓒⓓⓔ	**38.** ⓐⓑⓒⓓⓔ
	39. ⓐⓑⓒⓓⓔ	**40.** ⓐⓑⓒⓓⓔ	**41.** ⓐⓑⓒⓓⓔ	**42.** ⓐⓑⓒⓓⓔ	**43.** ⓐⓑⓒⓓⓔ
	44. ⓐⓑⓒⓓⓔ	**45.** ⓐⓑⓒⓓⓔ	**46.** ⓐⓑⓒⓓⓔ	**47.** ⓐⓑⓒⓓⓔ	**48.** ⓐⓑⓒⓓⓔ
	49. ⓐⓑⓒⓓⓔ	**50.** ⓐⓑⓒⓓⓔ			

ALPHABET AND NUMBERS ARRANGEMENT-1

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-5) : Answers the questions given below referring to the following arrangement:

J * R 3 P L 2 # I N 7 O C @ K 5 D = M $ 6 B < A Q 4

1. Four of the following five are alike in a certain way as regards their position in the above arrangement and so form a group. Which is the one that does not belong to that group?
   (a) 2 3 #   (b) O I C   (c) K O 5
   (d) # P I   (e) B $ <

2. What will come in the place of the question mark (?) in the following series based on the above arrangement?
   P R J # L 3 7 1 2 @ O N ?
   (a) D K C   (b) 5 @ O   (c) D K @
   (d) = 5 @   (e) None of these

3. It the above series is re-arranged in the reverse order, which will be the eleventh element to the left to the sixteenth element from the left end?
   (a) J   (b) 6   (c) B
   (d) <   (e) None of these

4. How many such numbers are there in the above arrangement each of which is immediately preceded by a consonant and not immediately followed by a symbol?
   (a) None   (b) Two   (c) Four
   (d) Three   (e) None of these

5. How many such symbols are there in the above arrangement each of which is immediately preceded by a number and immediately followed a consonant?
   (a) One   (b) Two   (c) Three
   (d) More than three   (e) None

6. If it is possible to make a meaningful word with the third, the fifth, the seventh and the tenth letters of the word 'OUTRAGEOUS', which of the following will be the second letter of that word? It more than one such word can be formed, give 'X' as the answer and if no such word can be formed, give 'Y' as the answer.
   (a) E   (b) A   (c) S
   (d) Y   (e) X

7. The positions of the first and the second digits in the number 7986032451 are interchanged. Similarly the positions of the third and fourth digits are interchanged and so on. Which of the following will be the fifth digit from the right end after the rearrangement?
   (a) 3   (b) 6   (c) 4
   (d) 0   (e) None of these

8. If the letters of the word 'PRINCE' are rearranged as they appear in the English alphabet, the position of how many letters will remain unchanged after the rearrangement?
   (a) Four   (b) One   (c) Two
   (d) Three   (e) None of these

9. How many such pairs of letters are there in the word 'CHILDREN' each of which has as many letters between them in the word as there are between them in the English alphabet?
   (a) 3   (b) 5   (c) 4
   (d) 2   (e) None of these

10. How many such digits are there in the number 764528 each of which is as far away from the beginning of the number as when the digits are arranged in descending order within the number?
    (a) None   (b) One   (c) Two
    (d) Three   (e) More than three

11. The letters in the word DANGEROUS are changed in such a way that the consonants are replaced by the previous letter in the English alphabet and the vowels are replaced by the next letter in the English alphabet. Which of the following will be the third letter from the left end of the new set of letters?
    (a) B   (b) M   (c) O
    (d) L   (e) None of these

12. Each vowel of the word ADJECTIVE is substituted with the next letter of the English alphabetical series, and each consonant is substituted with the letter preceding it. How many vowels are present in the new arrangement?
    (a) Four   (b) One   (c) Two
    (d) Three   (e) None of these

DIRECTIONS (Qs.13- 17) : Study the sets of numbers given below and answer the question, which follow:

489 541 654 953 783

13. If in each number, all the three digits are arranged in ascending order, which of the following will be the lowest number?
    (a) 489   (b) 541   (c) 654
    (d) 953   (e) 783

14. If five is subtracted from each of the numbers which of the following numbers will be the difference between the second digit of second highest number and the second digit of the highest number?
    (a) Zero   (b) 3   (c) 1
    (d) 4   (e) 2

15. If in each number the first and the second digits are interchanged, which will be the third highest number?
    (a) 489   (b) 541   (c) 654
    (d) 953   (e) 783

RESPONSE GRID

1. (a)(b)(c)(d)(e) 2. (a)(b)(c)(d)(e) 3. (a)(b)(c)(d)(e) 4. (a)(b)(c)(d)(e) 5. (a)(b)(c)(d)(e)
6. (a)(b)(c)(d)(e) 7. (a)(b)(c)(d)(e) 8. (a)(b)(c)(d)(e) 9. (a)(b)(c)(d)(e) 10. (a)(b)(c)(d)(e)
11. (a)(b)(c)(d)(e) 12. (a)(b)(c)(d)(e) 13. (a)(b)(c)(d)(e) 14. (a)(b)(c)(d)(e) 15. (a)(b)(c)(d)(e)

16. Which of the following numbers will be obtained if the first digit of lowest number is subtracted from the second digit of highest number after adding one to each of the numbers?
(a) 1　　　　(b) 2　　　　(c) 3
(d) 4　　　　(e) 5

17. If in each number, the first and the last digits are interchanged, which of the following will be the second highest number?
(a) 489　　　(b) 541　　　(c) 654
(d) 953　　　(e) 783

DIRECTIONS (Qs. 18-20) : The following questions are based upon the alphabetical series given below:

S L U A Y J V E I O N Q G Z B D R H

18. The positions of the first and the sixth letters in the word CONTAGIOUS are interchanged. Similarly, the positions of the second and the seventh letters are interchanged, and so on. Which letter will be the second to the right of the fifth letter from the right end?
(a) O　　　　(b) N　　　　(c) I
(d) T　　　　(e) None of these

19. Each odd digit in the number 5263187 is substituted by the next higher digit and each even digit is substituted by the previous lower digit and the digit so obtained are rearranged in ascending order, which of the following will be the third digit from the left end after the rearrangement?
(a) 2　　　　(b) 4　　　　(c) 5
(d) 6　　　　(e) None of these

20. If it is possible to form only one such number with the third, the sixth and the seventh digits of the number 7394261 which is the perfect square of a two-digit odd number, which of the following will be the first digit of that two-digit odd number?
(a) 9　　　　(b) 3
(c) 5
(d) No such number can be formed
(e) More than one such number can be formed

DIRECTIONS (Qs. 21-25) : Answer the following questions based on the arrangement given below :-

586　425　632　364　218　813

21. What will be the resultant number if the second digit of the second lowest number is divided by the third digit of the highest number?
(a) 2　　　　(b) 3
(c) 5　　　　(d) 10
(e) None of these

22. If the position of the first and second digits are interchanged then what is the difference between the highest and second lowest number?
(a) 420　　　(b) 582
(c) 673　　　(d) 545
(e) None of these

23. If all the digits in each of the numbers are arranged in ascending order within the number, what will be the difference between the second highest and second lowest

number?
(a) 218　　　(b) 220
(c) 208　　　(d) 225
(e) None of these

24. If 1 is added to the first digit and 2 is subtracted from the last digit of each of the numbers and then the digits in each of the numbers are arranged in descending order within the number, then what will be the difference between the second digit of the second highest number and the third digit of the lowest number?
(a) 2　　　　(b) 4
(c) 6　　　　(d) 8
(e) 10

25. If 1 is added to the last digit of each of the numbers then how many numbers thus formed will be divisible by three?

(a) One　　　(b) Two
(c) Three　　(d) Four
(e) More than four
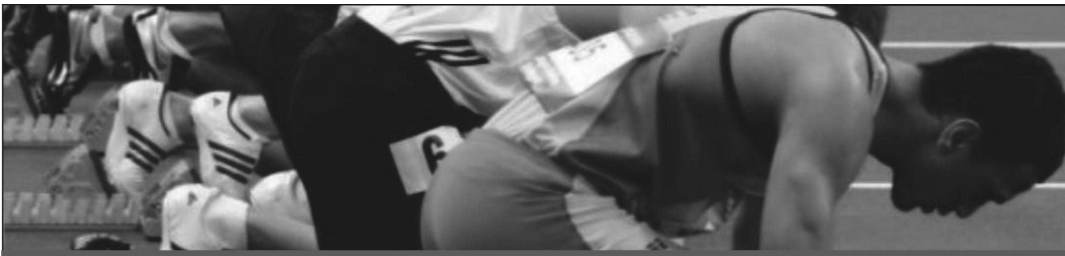
DIRECTIONS (Qs. 26-30) : Study the following numbers and answer the following questions:-

738　429　273　894　841　325

26. If first and last number of the above numbers are interchanged then which among the following is the highest number?
(a) 924　　　(b) 738
(c) 429　　　(d) 325
(e) None of these

27. Which of the following will be the second digit of the fourth number from the top when they are arranged in descending order, after the first digit is changed to its next higher digit.
(a) 3　　　　(b) 9
(c) 2　　　　(d) 5
(e) None of these

28. What is the difference between the first digit of the highest number and lowest number after the positions of first two digit in each number is reversed.
(a) 3　　　　(b) 4
(c) 5　　　　(d) 7
(e) None of these

29. Which of the following will be the last digit of the second lowest number after the positions of digit is reversed in each number?
(a) 3　　　　(b) 4
(c) 2　　　　(d) 5
(e) None of these

30. Which of the following number retains the same position as earlier when all the numbers are arranged in descending order after the position of the digit is reversed?
(a) 738　　　(b) 429
(c) 894　　　(d) 325
(e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

Max. Marks : 30　　　**No. of Qs. 30**　　　**Time : 20 min.**　　　Date : ..../........./................

1. How many pairs of letters are there in the word COMMUNICATION which have as many letters between them as in the English alphabet ?
   (a) Four　　　(b) Five　　　(c) Six
   (d) Seven　　　(e) None of these

2. If it is possible to make a meaningful word from the fifth, seventh, eighth, ninth and thirteenth letters of the word 'EXTRAORDINARY' using each letter only once, write the second letter of that word as your answer. If no such word can be formed write 'X' as your answer and it more than one such word can be formed, write 'N' as your answer.
   (a) R　　　(b) A　　　(c) X
   (d) N　　　(e) None of these

3. How many such pairs of letters are there in the word OVERSEE each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series ?
   (a) Three　　　(b) One　　　(c) Four
   (d) None　　　(e) None of these

DIRECTIONS (Qs. 4-8) : These questions are based on five words given below.

　　URN　DEN　MAT　FOR　SKI
(The new words formed after performing the mentioned operations below may or may not necessarily be meaningful English word ?)

4. If the positions of the first and the second alphabet in each word is interchanged, which of the following will form a meaningful English word ?
   (a) Both SKI and MAT　(b) Only URN
   (c) Only DEN　　　(d) Only FOR
   (e) None of these

5. If the letters of given words and then those words themselves are arranged in the order as they would appear in dictionary from left to right, which of the following will be second from the right end ?
   (a) SKI　　　(b) FOR
   (c) DEN　　　(d) MAT
   (d) None of these

6. If in each of the given words, each of the consonants is changed to previous letter and each vowel is changed to next letter according to the English alphabetical series, in how many words thus formed will an alphabet appear twice ?
   (a) Three　　　(b) None
   (d) More than three　(d) One
   (e) None of these

7. How many letters are there in the English alphabetical series between the first letter of the word which is second from the right end and first letter of the word which is second from the left end of the given word series ?
   (a) Three　　　(b) One
   (c) None　　　(d) Two
   (d) None of these

8. If the second alphabet in each of the words is changed to next alphabet according to the English alphabetical order, how many words will be formed with no vowel ?
   (a) Four　　　(b) Two
   (c) Three　　　(d) One
   (e) None of these

9. How many such pairs of letters are there in the word AVAILABLE each of which have as many letters between them in the word, as they have in the English alphabet?
   (a) None　　　(b) One　　　(c) Two
   (d) Three　　　(e) More than three

10. How many meaningful English words can be formed with the letters EGUL using each letter only once in each word?
    (a) None　　　(b) One　　　(c) Two
    (d) Three　　　(e) More than three

11. If it is possible to make only one meaningful word from the fourth, sixth, ninth and eleventh letters of the word CONTAMINATE, then the second letter from the left is your answer. If no such word can be formed then your answer is X and if more than one such word can be formed your answer is Y.
    (a) X　　　(b) T　　　(c) M
    (d) A　　　(e) Y

12. '2' is subtracted from each odd digit and '1' is added to each even digit in the number 7652348. Which of the following will be the sum of the second digit from the right and the third digit from the left of the new number thus formed?
    (a) 10　　　(b) 8　　　(c) 4
    (d) 6　　　(e) 9

13. How many such pairs of letters are there in the word PRODUCTION, each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series?
    (a) None　　　(b) One　　　(c) Two
    (d) Three　　　(e) Four

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. How many meaningful English words can be formed with the letters ABKC using each letter only once in each word? (All the four letters are to be used in the word.)
   (a) None   (b) One   (c) Two
   (d) Three   (e) More than three

15. If each alternate letter in the word 'MENTION' starting with M is changed to the next letter in the English alphabetical series and each of the remaining letter is changed to the previous letter in the English alphabetical series then how many letters will appear more than once in the new arrangement?
   (a) None   (b) One   (c) Two
   (d) Three   (e) Four

DIRECTIONS (Qs. 16-20): Answer the following questions based on the arrangement given below.

235 762 198 438 623 911

16. If the position of the first and second digits are interchanged then what is the difference between the highest and second lowest number?
   (a) 555   (b) 655
   (c) 455   (d) 755
   (e) None of these

17. If all the digit in the numbers are written in reverse order then which number is the third largest number?
   (a) 762   (b) 135
   (c) 235   (d) 623
   (e) None of these

18. If all the numbers are arranged in ascending order, then then position of how many numbers remains unchanged?
   (a) none   (b) one
   (c) two   (d) three
   (e) None of these

19. If the digits of all numbers are added then which number is the largest among them?
   (a) 235   (b) 762
   (c) 198   (d) 911
   (e) None of these

20. If 100 is subtracted from all the numbers and then the number obtained are written in reverse order, then the lowest number is-
   (a) 235   (b) 198
   (c) 911   (d) 623
   (e) None of these

DIRECTIONS (Qs. 21-25): Study the following pattern and answer the questions below.

1   W E 3 $ R T % M 9 4 L S C & F J 2 @ U P 7 D 5 * 0 Z C ?

21. How many such numbers are there which are immediately followed by letter and immediately preceded by symbol?
   (a) more than three   (b) one
   (c) two   (d) three
   (e) None of these

22. How many such symbols are there which are immediately followed by number and immediately preceded by letter?
   (a) none   (b) one
   (c) two   (d) three
   (e) more than three

23. If all the numbers and vowels are dropped in the above pattern then which is 9th form the left end?
   (a) C   (b) L
   (c) S   (d) &
   (e) None of these

24. Which among the following is third to the right of ninth from the right end?
   (a) *   (b) D
   (c) 5   (d) 0
   (e) None of these

25. Four of the following are alike in some manner, find the odd one?
   (a) 1EW   (b) 50*
   (c) M49   (d) SCF
   (e) PD7

DIRECTIONS (Qs. 26-30) : Study the following arrangement and answer questions given:

813   479   564   385   792   673

26. If the positions of first and second digits are changed in each number, which is the lowest number?
   (a) 564   (b) 813
   (c) 673   (d) 385
   (e) None of these

27. If in each number 1 is added to first digit and then first and third are interchanged, then which is the largest number?
   (a) 385   (b) 813
   (c) 564   (d) 479
   (e) None of these

28. In all numbers are arranged in ascending order, then what is the difference between the numbers which is second from the left and third from the right?
   (a) 136   (b) 194
   (c) 234   (d) 265
   (e) None of these

29. If one is subtracted from all even digits in the numbers, then in how many numbers, a digit appear twice within a number?
   (a) None   (b) One
   (c) Two   (d) Three
   (e) More than three

30. What is the resultant if first digit of highest number is divided by the second digit of the lowest number?
   (a) 0.79   (b) 0.33
   (c) 0.25   (d) 1
   (e) Data inadequate
   813 and 385 - 8/8 = 1

RESPONSE GRID	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ
	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ
	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ			
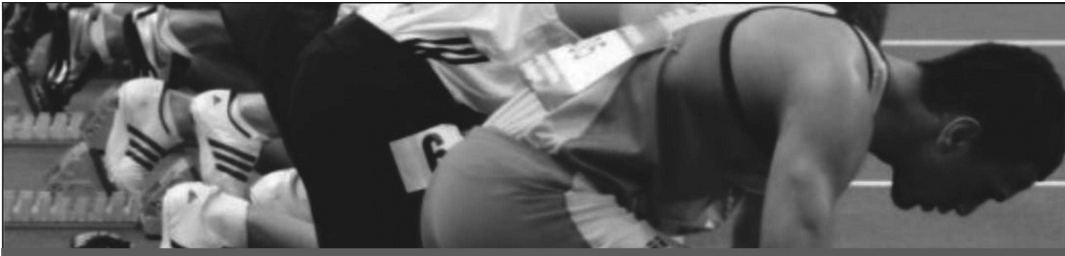
ANALOGY & CLASSIFICATION

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. Four of the following five are alike in a certain way on the basis of their positions in English alphabet and so form a group. Which is the one that does not belong to that group.
   - (a) HJG
   - (b) PQN
   - (c) DEB
   - (d) TUR
   - (e) KLI

2. Four of the following five pairs of alphas and numerals have same relationship between their elements as in the case of the pair PROBLEM : 2948375 and hence form a group. Which one does not belong to the group?
   - (a) BORE : 8497
   - (b) MOEP : 5972
   - (c) LBOR : 3849
   - (d) OMEP : 4572
   - (e) EROL : 7943

3. Four of the following five pairs are alike in a certain way and hence form a group. Which one does not belong to that group?
   - (a) DONE : NOED
   - (b) WANT : NATW
   - (c) WITH : TIHW
   - (d) JUST : SUTJ
   - (e) HAVE : AVEH

4. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) 50
   - (b) 65
   - (c) 170
   - (d) 255
   - (e) 290

5. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) Garlic
   - (b) Ginger
   - (c) Carrot
   - (d) Radish
   - (e) Brinjal

6. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) 196
   - (b) 256
   - (c) 529
   - (d) 576
   - (e) 324

7. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) RPN
   - (b) WSU
   - (c) HDF
   - (d) LHJ
   - (e) QMO

8. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) 169
   - (b) 441
   - (c) 361
   - (d) 529
   - (e) 289

9. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   - (a) PM
   - (b) EB
   - (c) TQ
   - (d) IF
   - (e) VY

10. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
    - (a) 115
    - (b) 161
    - (c) 253
    - (d) 391
    - (e) 345

11. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
    - (a) OMQ
    - (b) HFJ
    - (c) TPR
    - (d) TRV
    - (e) VTX

12. Four of the following five are alike in a certain way based on the English alphabetical series and so form a group. Which is the one that does not belong to that group?
    - (a) MLJ
    - (b) WVT
    - (c) OMK
    - (d) JIG
    - (e) TSQ

13. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
    - (a) Fair
    - (b) Impartial
    - (c) Indifferent
    - (d) Unbiased
    - (e) Just

14. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
    - (a) JLNK
    - (b) TVXU
    - (c) ACEB
    - (d) PRTQ
    - (e) GJKH

15. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
    - (a) GIJF
    - (b) OQRN
    - (c) KMNL
    - (d) UWXT
    - (e) CEFB

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ	
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ	
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ	

DIRECTIONS (Q. 16) : Study the following information carefully and answer the given questions. Four of the following five are alike in a certain way and hence form a group. Which is the one that does not belong to the group?

16. (a) Break   (b) Change   (c) Split
   (d) Divide   (e) Separate

DIRECTIONS (Qs. 17-18): Study the following information and answer the given questions. In a certain way, 'PROJECT' is related to 'CEOPRT', 'PLANE' is related to 'ELNP' and 'WIN' is related to 'NW'.

17. Following the same pattern, 'ORGANISED' will be related to
   (a) ADEGOIRS   (b) ADEGIOSR
   (c) ADEGIORS   (d) ADEGBORS
   (e) Cannot be determined

18. Following the same pattern, 'DISTANCE' will be related to
   (a) ACDEINST   (b) ACDEINS
   (c) ACDINST   (d) ACDNSTI
   (e) Cannot be determined

19. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?
   (a) Think   (b) Reflect   (c) Speak
   (d) Consider   (e) Ponder

20. In the following question, select the related word from the given alternatives.
     ? : Dolphin :: Herd : Cow
   (a) Ocean   (b) Pod   (c) Porpoise
   (d) Leap   (e) None of these

21. In the following question, select the related number from the given alternatives.
     66 : 36 :: 18 : ?
   (a) 3   (b) 6   (c) 8   (d) 9   (e) 10

22. Four of the following five are alike in a certain way (based on the English alphabetical series) and hence form a group. Which is the one that does not belong to that group if the English alphabetical series is broken into two equal halves, i.e the first 13 alphabets are clubbed together and the last 13 alphabets are clubbed separately?
   (a) FH   (b) SU   (c) MA
   (d) CK   (e) LB

23. In the following question, select the related letter from the given alternatives.
     COMPUTER : FQPRXVHT :: LANGUAGE : ?
   (a) OXPIXDIG   (b) OCQICYIG
   (c) OCQIXCJG   (d) OCQIXCIG
   (e) None of these

24. In the following question, select the related word from the given alternatives.
     Chat : Talk :: Flutter : ?
   (a) Dance   (b) Wobble
   (c) Sing   (d) Flap
   (e) None of these

25. 'ERID' is related to 'DIRE' in the same way as 'RIPE' is related to
   (a) EPIR   (b) PERI
   (c) EPRI   (d) PEIR
   (e) IPRE

26. In the following question, select the related letter from the given alternatives.
     ? : QEHMDF :: WIDELY : HVCDXK
   (a) FRINGE   (b) STRING   (c) FRANCE   (d) DEMAND   (e) None of these

27. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
   (a) India   (b) Asia
   (c) Anarctica   (d) Australia
   (e) Europe

28. In the following question, select the related word from the given alternatives.
     ? : College :: Mechanic : Garage
   (a) Book   (b) Learning   (c) Professor
   (d) Engine   (e) None of these

29. In the following question, select the related word from the given alternatives.
     Doze : Sleep :: Tiptoe : ?
   (a) Walk   (b) Flat   (c) Shelf
   (d) Swim   (e) None of these

30. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to the group?
   (a) Iron   (b) Copper   (c) Ceramic
   (d) Silver   (e) Zinc

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

CODING & DECODING

Max. Marks : 30　　　**No. of Qs. 30**　　　**Time : 20 min.**　　　Date : ..../........./................

1. In a certain code ENGLISH is written as FMHKJRI. How is OCTOBER written in that code?
   - (a) PBUNCDS
   - (b) PBUCNSD
   - (c) BPUNCSD
   - (d) PBUCNDS
   - (e) None of these

2. If a 'truck' is called 'train', 'train' is called 'tractor', 'tractor' is called 'ship', 'ship' is called 'aeroplane', 'aeroplane' is called 'bulldozer' and bulldozer' is called 'scooter' which of the following can fly?
   - (a) Ship
   - (b) Aeroplane
   - (c) Bulldozer
   - (d) Tractor
   - (e) None of these

3. In a certain code language 'te da ka ni' means 'intelligence is in genes', 'se po lo ni' means, 'genes are not responsible' and 'ba da fu te' means 'intelligence is through experience'. What does 'ka' stand for in that code language?
   - (a) genes
   - (b) through
   - (c) intelligence
   - (d) in
   - (e) responsible

DIRECTIONS (Qs. 4-8) : In each of these questions a group of letters is given followed by four combinations of number/symbol numbered (a), (b), (c) & (d). Letters are to be coded as per the scheme and conditions given below. You have to find out the serial number of the combination, which represents the letter group. Serial number of that combinations is your answer. If none of the combinations is correct, your answer is (e) i.e. 'None of these'.

Letters	D	K	M	B	I	N	P	R	J	A	L	S	E	Q	G
Number/ Symbol Code	%	3	7	*	4	@	$	1	8	5	#	9	2	£	6

Conditions
(i) If the first letter is a consonant and the last a vowel, both are to be coded as the code of the vowel.
(ii) If the first letter is a vowel and the last a consonant, the codes for the first and the last are to be interchanged.
(iii) If no vowel is present in the group of letters, the second and the fifth letters are to be coded as ©.

4. KQAPJE
   - (a) 3£5$82
   - (b) 3£58$2
   - (c) 2£5$82
   - (d) 2£5$83
   - (e) None of these

5. EMANRB
   - (a) *75@12
   - (b) 275@1*
   - (c) ©75@2©
   - (d) *75@1*
   - (e) None of these

6. JAQDKP
   - (a) 85£%38
   - (b) $5£%3$
   - (c) $5£%38
   - (d) $5£3%8
   - (e) None of these

7. QDBGRM
   - (a) £%*617
   - (b) $©*6©7
   - (c) £%*167
   - (d) %£*61©
   - (e) None of these

8. IKQLMS
   - (a) 43£#74
   - (b) ©3£#7©
   - (c) 4£3#74
   - (d) 93£#74
   - (e) None of these

9. In a certain code MODE is written as #8%6 and DEAF is written as %67$. How is FOAM written in that code?
   - (a) $87#
   - (b) $#7%
   - (c) #87%
   - (d) $87%
   - (e) None of these

10. In a certain code BRIGHT is written as JSCSGF. How is JOINED written in that code?
    - (a) HNIEFO
    - (b) JPKEFO
    - (c) JPKMDC
    - (d) KPJCDM
    - (e) None of these

11. In a certain code BOARD is written as 51324 and SIDE is written as 9647. How is BASE written in that code?
    - (a) 5397
    - (b) 5937
    - (c) 5697
    - (d) 5297
    - (e) None of these

12. In a certain code language JOURNEY is written as TNISZFO. How is BONDING written in that code language?
    - (a) ANMEHOJ
    - (b) MNAEHOJ
    - (c) MNAEJOHJ
    - (d) OPCEFMH
    - (e) None of these

13. In a certain code language 'TERMINAL' is written as 'NSFUMBOJ' and 'TOWERS' is written as 'XPUTSF'. How is 'MATE' written in that code?
    - (a) FUBN
    - (b) UFNB
    - (c) BNFU
    - (d) BNDS
    - (e) None of these

14. In a certain code language, 'how can you go' is written as 'ja da ka pa', 'can you come here' is written as 'na ka sa ja' and 'come and go' is written as 'ra pa sa'. How is 'here' is written in that code language?
    - (a) ja
    - (b) na
    - (c) pa
    - (d) Data inadequate
    - (e) None of these

15. In a certain code THRIVES is written as SIUHRDU. How is SOULFUL written in that code?
    - (a) VPTKKTE
    - (b) VPTKETK
    - (c) TPVKKTE
    - (d) TNRKMVG
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 16-20) : Study the following information and answer the questions given.

In a certain code language "la na pa pu" means 'we provide study material',

"fa pa ma ju" means 'we score maximum selection',

"ma fa na ju " means "study score the selection"

and "ju bu sa fu" means "selection of the material". Then

16. What is the code of "score " in this code language?
   - (a) ju
   - (b) ma
   - (c) fa
   - (d) pa
   - (e) Cannot be determined

17. What is the code of "provide " in this code language?
   - (a) pu
   - (b) bu
   - (c) pa
   - (d) na
   - (e) Cannot be determined

18. What is the code of " provide of maximum"?
   - (a) sa pu fu
   - (b) fa pu sa
   - (c) fu bu sa
   - (d) pu fa ma
   - (e) Cannot be determined

19. What is the code of "we the" in this code language?
   - (a) pa fu
   - (b) sa pu
   - (c) pa sa
   - (d) hu fu
   - (e) Cannot be determined

20. What is the code of "material" in this code language?
   - (a) hu
   - (b) bu
   - (c) sa
   - (d) pa
   - (e) Cannot be determined

DIRECTIONS (Qs. 21-25) : Study the following information to answer the given questions:

In a certain code, 'za la ka ga' is code for 'must obey traffic rules' ,

'za fa sa na ' is code for 'we obey the elders' ,

' na la da sa' is a code for ' we must be elders'

and 'wa sa za da' is code for 'be elders obey younger'.

21. Which of the following is the code for 'must'?
   - (a) sa
   - (b) da
   - (c) la
   - (d) na
   - (e) None of these

22. What does the code 'za' stand for ?
   - (a) traffic
   - (b) must
   - (c) be
   - (d) younger
   - (e) obey

23. Which of the following is the code for 'elders'?
   - (a) sa
   - (b) wa
   - (c) za
   - (d) la
   - (e) fa

24. How does 'rules of younger' coded in the code language?
   - (a) ka da fa
   - (b) wa ka sa
   - (c) ja da wa
   - (d) ka wa ya
   - (e) Cannot be determined

25. Which of the following is the code for 'The'?
   - (a) fa
   - (b) wa
   - (c) za
   - (d) la
   - (e) sa

DIRECTIONS (Qs. 26-30) : Study the following information to answer the given questions:

In a certain code language,

'Enjoy the beautiful Life' is written as '11<=51 41>>11 5<<25 25>!11'

'Butterfly is so beautiful' is written as ' 5<=51 19<>39 39>!31 5<<25'

'Jani Enjoy the game' is written as ' 21><19 11<=51 41>>11 15><11'

'Life is twisted One' is written as '25>!11 19<>39 41>!9 31>=11'

26. What is the code for the word ' twisted' ?
   - (a) 41>!9
   - (b) 25>!11
   - (c) 31>=11
   - (d) 19<>39
   - (e) None of these

27. The code word '21><19' represents which of the following word ?
   - (a) Enjoy
   - (b) Game
   - (c) Jani
   - (d) The
   - (e) None of these

28. Find the code word for 'Beautiful Butterfly' ?
   - (a) 5<=51 and 5<<25
   - (b) 11<=51 and 5<=51
   - (c) 41>>11 and 5<<25
   - (d) 5<<25 and 5<=51
   - (e) None of these

29. What does 'So' Stands for ?
   - (a) 5<<25
   - (b) 5<=51
   - (c) 39>!31
   - (d) 19<>39
   - (e) None of these

30. What is the code word for 'Can You Join' ?
   - (a) 9><20 5>=42 21<!29
   - (b) 7<<29, 51>!43, 21<!29
   - (c) 8<>29 51>>43 21<=29
   - (d) 6<!25 11>!43 21<!29
   - (e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

DIRECTION & DISTANCE

Max. Marks : 26   **No. of Qs. 26**   **Time : 20 min.**   **Date : ..../........./................**

1. Starting from Point X, Joy walked 15 metres towards West. He turned left and walked 20 metres. He again turned left and walked 15 metres. After which he turned right and walked for another 12 metres. How far is Joy from point X if he is facing North at present?
   (a) 27 m   (b) 35 m   (c) 32 m
   (d) 42 m   (e) None of these

2. Town D is 12 km towards the North of town A. Town C is 15 km towards the West of town D. Town B is 15 km towards the West of town A. How far and in which direction is town B from town C?
   (a) 15 km towards North (b) 12 km towards North
   (c) 3 km towards South (d) 12 km towards South
   (e) cannot be determined

3. Rahul started from point A and travelled 8 km towards the North to point B, he then turned right and travelled 7 km to point C, from point C he took the first right and drove 5 km to point D, he took another right and travelled 7 km to point E and finally turned right and travelled for another 3 km to point F. What is the distance between point F and B?
   (a) 1 km   (b) 2 km   (c) 3 km
   (d) 4 km   (e) None of these

4. Meghna drives 10 km towards South, takes a right turn and drives 6 km. She then takes another right turn, drives 10 km and stops. How far is she from the starting point?
   (a) 16 km   (b) 6 km   (c) 4 km
   (d) 12 km   (e) None of these

5. Vikas walked 10 metres towards North, took a left turn and walked 15 metres, and again took a left turn and walked 10 metres and stopped walking. Towards which direction was he facing when he stopped walking?
   (a) South   (b) South-West
   (c) South-East   (d) Cannot be determined
   (e) None of these

DIRECTIONS (Qs. 6-7) : Study the following information carefully to answer these questions.

A vehicle starts from point P and runs 10 km towards North. It takes a right turn and runs 15 km. It now runs 6 km after taking a left turn. It finally takes a left turn, runs 15 km and stops at point Q.

6. How far is point Q with respect to point P?
   (a) 16 km   (b) 25 km   (c) 4 km
   (d) 0 km   (e) None of these

7. Towards which direction was the vehicle moving before it stopped at point Q?
   (a) North   (b) East   (c) South
   (d) West   (e) North-East

8. Raman starts from point P and walks towards South and stops at point Q. He now takes a right turn followed by a left turn and stops at point R. He finally takes a left turn and stops at point S. If he walks 5 km before taking each turn, towards which direction will Raman have to walk from point S to reach point Q?
   (a) North   (b) South   (c) West
   (d) East   (e) North-West

9. Town D is to the West of town M. Town R is to the South of town D. Town K is to the East of town R. Town K is towards which direction of town D?
   (a) South   (b) East
   (c) North-East   (d) South-East
   (e) None of these

10. Mohan walked 30 metres towards South, took a left turn and walked 15 metres. He then took a right turn and walked 20 metres. He again took a right turn and walked 15 metres. How far is he from the starting point?
    (a) 95 metres   (b) 50 metres
    (c) 70 metres   (d) Cannot be determined
    (e) None of these

11. W walked 40 metres towards West, took a left turn and walked 30 metres. He then took a right turn and walked 20 metres, He again took a right turn and walked 30 metres. How far was he from the starting point?
    (a) 70 metres   (b) 60 metres
    (c) 90 metres   (d) Cannot be determined
    (e) None of these

12. Town D is 13 km towards the East of town A. A bus starts from town A, travels 8 km towards West and takes a right turn. After taking the right turn, it travels 5 km and reaches town B. From town B the bus takes a right turn again, travels 21 km and stops. How far and towards which direction must the bus travel to reach town D?
    (a) 13 km towards South (b) 5 km towards West
    (c) 21 km towards South (d) 5 km towards South
    (e) None of these

DIRECTIONS (Qs. 13-14) : Study the following information carefully to answer these questions.

Point P is 9 m towards the East of point Q. Point R is 5 m towards the South of point P. Point S is 3 m towards the West of point R. Point T is 5 m towards the North of point S. Point V is 7 m towards the South of point S.

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ			

13. If a person walks in a straight line for 8 m towards West from point R, which of the following points would he cross the first?
   (a) V   (b) Q   (c) T
   (d) S   (e) Cannot be determined
14. Which of the following points are in a straight line?
   (a) P, R, V   (b) S, T, Q   (c) P, T, V
   (d) V, T, R   (e) S, V, T
15. P, Q, R, S and T are sitting in a straight line facing North. P sits next to S but not to T. Q is sitting next to R who sits on the extreme left corner. Who sits to the left of S if T does not sit next to Q?
   (a) P   (b) Q   (c) R
   (d) T   (e) Cannot be determined
16. A person travels 12 km due North, then 15 km due East, after that 15 km due West and then 18 km due South. How far is he from the starting point?
   (a) 6 km   (b) 12 km   (c) 33 km
   (d) 60 km   (e) 65 km
17. In a meeting, the map of a village was placed in such a manner that south-east becomes north, north-east becomes west and so on. What will south become?
   (a) North   (b) North-east   (c) North-west
   (d) West   (e) South
18. A school bus driver starts from the school, drives 2 km towards North, takes a left turn and drives for 5 km. He then takes a left turn and drives for 8 km before taking a left turn again and driving for further 5 km. The driver finally takes a left turn and drives 1 km before stopping. How far and towards which direction should the driver drive to reach the school again?
   (a) 3 km towards North (b) 7 km towards East
   (c) 6 km towards South (d) 6 km towards West
   (e) 5 km towards North
19. The houses of A and B face each other on a road going north-south, A's being on the western side. A comes out of his house, turns left, travels 5 km, turns right, travels 5 km to the front of D's house. B does exactly the same and reaches the front of C's house. In this context, which one of the following statements is correct ?
   (a) C and D live on the same street.
   (b) C's house faces south.
   (c) The houses of C and D are less than 20 km apart.
   (d) C's houses faces west.
   (e) None of the above
20. Roma walked 25 metre towards south, took a right turn and walked 15 metre. She then took a left turn and walked 25 meter. Which direction is she now from her starting point?
   (a) South-east   (b) South   (c) South-west
   (d) North-west   (e) None of these
21. Anu starts from her home, walks 5 km towards South, takes a left turn and walks 3 km. She then takes a right turn and walks 2 km before taking a right turn again and walking 3 km. She then takes a left turn and walks 4 km before taking a left turn and walking 3 km before stopping.

How far and in which direction is she now from her home?
   (a) 9 km towards South
   (b) $\sqrt{130}$ km towards South-East.
   (c) $\sqrt{130}$ km towards South-West.
   (d) 11 km towards North-West.
   (e) None of these
22. A person starts walking from his office towards a party hall. He walks for 30m towards East. He takes a 90° right turn and walks for 15m. He again takes a 90° right turn and walks for another 20m. He then walks for 25m after taking a 90° left turn Turning 90° towards his right he walks for 10m to reach the party hall. How far and in which direction is the party hall from his office?
   (a) 40m towards West
   (b) 40m towards South
   (c) 45m towards South
   (d) 45m towards North
   (e) 40m towards North
23. There are four students which are two girls and two boys are playing chess and are seated at North, East, South and West of a table. No girl is facing East. Students sitting opposite each other are not of the same gender. One boy is facing South. Which directions are the girls facing?
   (a) South and East   (b) North and East
   (c) North and West   (d) East and West
   (e) Data inadequate
24. A Policeman his left his police post and proceeded South 4km on hearing a loud sound from point A. On reaching the place, he heard another sound and proceeded 4km to his left to the point B. From B he proceeded left to reach another place C 4km away. In which direction, he has to go reach his police post?
   (a) North   (b) South   (c) East
   (d) West   (e) None of these
25. Ranjan walks 60 m towards South, took a left turn and walked 30 m. He then took a right turn and walked 40m . He again took a right turn and walked 30 m . How far is he from the starting point .
   (a) 120m   (b) 100m
   (c) 110m   (d) Cannot be determined
   (e) None of these
26. Amitabh walks 20 kms, towards West. From there, he walks 12 kms. towards East. Then, he walks 6 Kms. towards North. How far and in which direction is he with reference to his starting point?
   (a) 10 Kms North-West
   (b) 10 Kms West
   (c) 14 Kms West
   (d) 14 Kms North-East
   (e) None of these

RESPONSE GRID					
13. ⓐⓑ©ⓓⓔ	**14.** ⓐⓑ©ⓓⓔ	**15.** ⓐⓑ©ⓓⓔ	**16.** ⓐⓑ©ⓓⓔ	**17.** ⓐⓑ©ⓓⓔ
18. ⓐⓑ©ⓓⓔ	**19.** ⓐⓑ©ⓓⓔ	**20.** ⓐⓑ©ⓓⓔ	**21.** ⓐⓑ©ⓓⓔ	**22.** ⓐⓑ©ⓓⓔ
23. ⓐⓑ©ⓓⓔ	**24.** ⓐⓑ©ⓓⓔ	**25.** ⓐⓑ©ⓓⓔ	**26.** ⓐⓑ©ⓓⓔ	

BLOOD RELATION

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. Pointing to a boy, Urmila said, "He is the son of my grandfather's only daughter." How is Urmila related to the boy?
    (a) Mother   (b) Maternal Aunt
    (c) Paternal Aunt   (d) Data inadequate
    (e) None of these

DIRECTIONS (Q. 2 - 3) : Study the following information carefully to answer the questions given below:

(i) 'P ÷ Q' means 'P is sister of Q'.
(ii) 'P × Q' means 'P is brother of Q'.
(iii) 'P – Q' means 'P is mother of Q'.
(iv) 'P + Q' means 'P is father of Q'.

2. Which of the following means 'M is maternal uncle of T'?
    (a) M ÷ K + T   (b) M × K + T   (c) M × K – T
    (d) M ÷ K – T   (e) None of these
3. Which of the following means 'H is paternal grandfather of T'?
    (a) H + J + T   (b) T × K + H   (c) H + J × T
    (d) H – J + T   (e) None of these

DIRECTIONS (Q. 4-6) : These questions are based on the following information. Study it carefully and answer the questions.

(i) 'A × B' means 'A is father of B'.
(ii) 'A ÷ B' means 'A is daughter of B'.
(iii) 'A + B' means 'A is sister of B'.
(iv) 'A – B' means 'A is husband of B'.

4. In F ÷ R × H – L, how is H related to F?
    (a) Father   (b) Brother
    (c) Sister   (d) Cannot be determined
    (e) None of these
5. Which of the following indicates 'N is mother of K'?
    (a) K + L ÷ N × F   (b) K + L ÷ N – M
    (c) H × K ÷ N   (d) N × F + K
    (e) None of these
6. In F – R + H ÷ T, how is F related to T?
    (a) Son-in-law   (b) Daughter-in-law
    (c) Son   (d) Daughter
    (e) None of these

DIRECTIONS (Q.7-10) : Read the following information carefully and answer the questions which follow:

(i) 'P ÷ Q' means 'P is son of Q'.
(ii) 'P × Q' means 'P is sister of Q'.
(iii) 'P + Q' means 'P is brother of Q'.
(iv) 'P – Q' means 'P is mother of Q'.

7. How is T related to S in the expression 'T × R + V ÷ S'?
    (a) Sister   (b) Mother   (c) Aunt
    (d) Uncle   (e) None of these
8. How is T related to S in the expression 'T × R ÷ V – S'?
    (a) Father   (b) Sister
    (c) Daughter   (d) Aunt
    (e) None of these
9. Which of the following means that 'S is the husband of T'?
    (a) T × R – V + S   (b) T – R ÷ V × S   (c) T–R+V÷S
    (d) T ÷ R × V + S   (e) None of these
10. How is V related to T in the expression 'T ÷ R + V × S'?
    (a) Aunt   (b) Nephew   (c) Niece
    (d) Uncle   (e) None of these
11. Pointing to a photograph, Rasika said "He is the grandson of my grandmother's only son". How is the boy in photograph related to Rasika?
    (a) Son   (b) Nephew
    (c) Brother   (d) Cannot be determined
    (e) None of these

DIRECTIONS (Q.12-16) : Read the following information carefully and answer the questions which follows :

'A × B' means 'A is brother of B'.
'A – B' means 'A is daughter of B'.
'A ÷ B' means 'A is wife of B'.
'A + B' means 'A is son of B'.

12. How is T related to P in the expression 'P + Q – R ÷ T'?
    (a) Maternal grandmother
    (b) Maternal grandfather
    (c) Paternal grandmother
    (d) Grandson
    (e) None of these
13. Which of the following means 'P is sister of S'?
    (a) P + Q ÷ R – S   (b) P + Q ÷ R × S
    (c) P × Q – R ÷ S   (d) P ÷ Q + R × S
    (e) None of these
14. How is P related to S in the expression 'S × R + Q ÷ P'?
    (a) Father   (b) Grandson   (c) Son
    (d) Grandfather   (e) None of these
15. How is R related to P in the expression 'P + Q × R – T'?
    (a) Niece   (b) Paternal Uncle
    (c) Paternal Aunt   (d) Either (b) or (c)
    (e) None of these
16. How is S related to P in the expression 'P – Q ÷ R × S'?
    (a) Nephew   (b) Uncle   (c) Aunt
    (d) Either (b) or (c)   (e) None of these

RESPONSE GRID					
	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ				

17. A, B, C, D, E, F and G are members of a family consisting of 4 adults and 3 children, two of whom, F and G are girls. A and D are brothers and A is a doctor. E is an engineer married to one of the brothers and has two children. B is married to D and G is their child. Who is C ?
   (a) G's brother   (b) F's father   (c) E's father
   (d) A's son   (e) None of these

18. Examine the following relationships among members of a family of six persons *A, B, C, D, E* and *F*.
   1. The number of males equals that of females
   2. A and *E* are sons of *F*.
   3. *D* is the mother of two, one boy and one girl
   4. *B* is the son of *A*
   5. There is only one married couple in the family at present
   Which one of the following inferences can be drawn from the above?
   (a) *A, B* and *C* are all females
   (b) *A* is the husband of *D*
   (c) *E* and *F* are children of *D*
   (d) *D* is the grand daughter of *F*
   (e) None of these

19. There is a family of 6 persons A, B, C, D, E and F. There are two married couples in the family. The family members are lawyer, teacher, salesman, engineer, accountant and doctor. D, the salesman is married to the lady teacher. The doctor is married to the lawyer. F, the accountant is the son of B and brother of E. C, the lawyer is the daughter-in-law of A. E is the unmarried engineer. A is the grandmother of F. How is E related to F?
   (a) Brother
   (b) Sister
   (c) Father
   (d) Cannot be established (cannot be determined)
   (e) None of these

DIRECTIONS (Q.20- 23) : Study the following information carefully to answer the given questions.

J, P, Q, R, S, T, U and V are 4 married couples sitting in a circle facing the centre. The profession of the males within the group are Lecturer, Lawyer, Doctor and Scientist. Among the males only R (the Lawyer) and V (the Scientist) are sitting together. Each man is seated besides his wife. U, the wife of the Lecturer is seated second to the right of V. T is seated between U and V. P is the wife of the Doctor. Q is not the Doctor. S is a male.

20. Which of the following is P's position with respect to S?
   (a) Second to the right   (b) Second to the left
   (c) Immediate right   (d) Immediate left
   (e) Third to the left

21. Which of the following is **not true** regarding the couples?
   (a) P is the wife of S
   (b) T is the wife of Q
   (c) R is the husband of J
   (d) J and S are seated adjacent to each other
   (e) All are true

22. The wives of which two husbands are immediate neighbours?
   (a) UT   (b) SR   (c) VQ
   (d) RV   (e) None of these

23. Four of the following are alike in a certain way based on their seating position in the above arrangement and so form a group. Which is the one that **does not** belong to the group?

   (a) RSJ   (b) TRV   (c) VTV
   (d) SGP   (e) UPQ

DIRECTIONS (24-26): Study the following information and answer the given questions.

F and G are brothers of H. G is son of C and D. C is daughter of A. B is father-in-law of D. E is son of A.

24. If J is brother of A, then how is J related to E?
   (a) Uncle
   (b) Nephew
   (c) Cannot be determined
   (d) Brother-in-law
   (e) Son-in-law

25. How is G related to B?
   (a) Nephew   (b) Father
   (c) Brother-in-law   (d) Grandson
   (e) Brother

26. How is H related to E?
   (a) Cannot be determined
   (b) Niece
   (c) Daughter
   (d) Nephew
   (e) Son-in-law

DIRECTIONS (27-28) : Study the following information to answer the given question.

A@B means 'A is the mother of B
A $ B means 'A is the husband of B
A#B means 'A is the sister of B
A * B means 'A is the son of B

27. If F#J*R@L, then which of the following is definitely true?
   (a) L is the mother of F
   (b) F is the sister of L
   (c) F is the brother of J
   (d) L is the brother of J
   (e) None of these

28. Which of the following represents "R is the daughter of T"?
   (a) R#F*B@T   (b) R#F*B$T
   (c) T@B#R*F   (d) T@B#F*R
   (e) None of these

29. If 'B × C' means 'B is the daughter of C', 'B + C' means 'B is the husband of C' and 'B - C' means 'B is the sister of C', then what does 'M + N - P × Q' mean?
   (a) M is the brother-in-law of Q.
   (b) M is the uncle of Q.
   (c) M is the son-in-law of Q.
   (d) Q is the mother-in-law of M.
   (e) None of these

30. Read the following information carefully and answer the question which follows:
   'A × B' means 'A is the father of B'.
   'A + B' means 'A is the daughter of B'.
   'A ÷ B' means 'A is the son of B'.
   'A - B' means 'A is the sister of B'.
   What will come in place of question mark to establish that P is the son-in-law of S in the following expression?
   P × Q + R - T ? S
   (a) +   (b) ×   (c) –
   (d) ÷   (e) Either + or ÷

RESPONSE GRID	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ
	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ
	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	
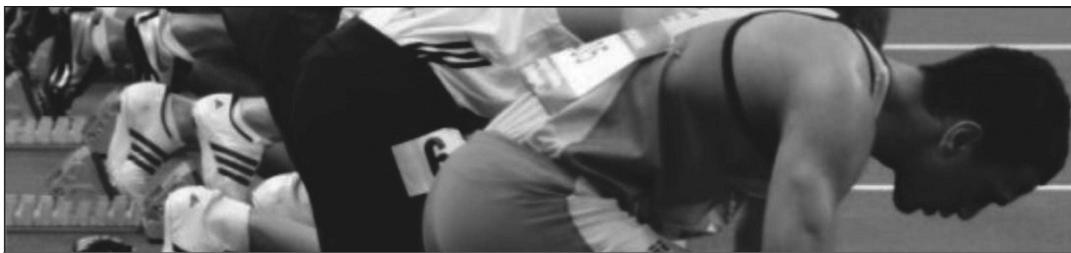
ORDER AND RANKING TEST

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Q. 1-5) : Study the following arrangement carefully and answer the questions given below:

4 2 6 1 3 8 9 5 8 1 6 5 1 5 8 5 3 9 4 9 2 3 2 1 5 7 2 6 2 4 2 7 4

1. If all the even digits are deleted from the above arrangement, which of the following will be seventh from the right end of the arrangement?
    (a) 3   (b) 5   (c) 1
    (d) 9   (e) 7

2. How many such 2s are there in the above arrangement each of which is immediately preceded by an odd digit and also immediately followed by an odd digit?
    (a) None   (b) One   (c) Two
    (d) Three   (e) More than three

3. How many such 1s are there in the above arrangement, each of which is immediately preceded by a perfect square?
    (a) None   (b) One   (c) Two
    (d) Three   (e) More than three

4. If one is added to each of the even digits and two is added to each of the odd digits given in BOLD in the above arrangement, how many digits will appear twice in the new number thus formed?
    (a) None   (b) One   (c) Two
    (d) Three   (e) More than three

5. Which of the following is seventh to the right of the nineteenth digit from the right end of the above arrangement?
    (a) 3   (b) 5   (c) 1
    (d) 7   (e) None of these

6. Pratap correctly remembers that his mother's birthday is before twentythird April but after nineteenth April, whereas his sister correctly remembers that their mother's birthday is not on or after twentysecond April. On which day in April is definitely their mother's birthday?
    (a) Twentieth   (b) Twentyfirst
    (c) Twentieth or Twentyfirst
    (d) Cannot be determined
    (e) None of these

7. In a row of forty children, R is eleventh from the right end and there are fifteen children between R and M. What is M's position from the left end of the row?
    (a) Fourteenth   (b) Fifteenth
    (c) Thirteenth   (d) Cannot be determined
    (e) None of these

8. Mohit correctly remembers that his father's birthday is not after eighteenth of April. His sister correctly remembers that their father's birthday is before twentieth but after seventeenth of April. On which day in April was definitely their father's birthday?

    (a) Seventeenth   (b) Nineteenth
    (c) Eighteenth
    (d) Seventeenth or Eighteenth
    (e) None of these

9. If it is possible to form only one such number with the third, the sixth and the seventh digits of the number 7394261 which is the perfect square of a two-digit odd number, which of the following will be the first digit of that two-digit odd number?
    (a) 9   (b) 3
    (c) 5
    (d) No such number can be formed
    (e) More than one such number can be formed

10. In a row of twenty-five children facing North, W is fifth to the right of R, who is sixteenth from the right end of the row. What is W's position from the right end of the row?
    (a) Eleventh   (b) Tenth   (c) Twelfth
    (d) Data inadequate   (e) None of these

11. Meena correctly remembers that her father's birthday is after eighteenth May but before twentysecond May. Her brother correctly remembers that their father's birthday is before twenty-fourth May but after twentieth May. On which date in May was definitely their father's birthday?
    (a) Twentieth   (b) Nineteenth
    (c) Eighteenth   (d) Cannot be determined
    (e) None of these

12. Nitin correctly remembers that Nidhi's birthday is before Friday but after Tuesday. Derek correctly remembers that Nidhi's birthday is after Wednesday but before Saturday. On which of the following days does Nidhi's birthday definitely fall?
    (a) Monday   (b) Tuesday   (c) Wednesday
    (d) Thursday   (e) Cannot be determined

13. Smita correctly remembers that last year Diwali was celebrated before November but after May. Sanjay correctly remembers that last year he had Diwali holidays after July. Mohan correctly remembers that the month in which Diwali was celebrated had only 30 days. In which month of the year was Diwali definitely celebrated?
    (a) July   (b) August   (c) September
    (d) October   (e) November

14. In a row of children facing North, Ritesh is twelfth from the left end. Sudhir who is twenty-second from the right end is fourth to the right of Ritesh. Total how many children are there in the row?
    (a) 35   (b) 36   (c) 37
    (d) 34   (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. In a class, among the passed students Neeta is 22nd from the top and Kalyan, who is 5 ranks below Neeta is 34th from the bottom. All the students from the class have appeared for the exam. If the ratio of the students who passed in the exam to those who failed is 4 : 1 in that class, how many students are there in the class?
    (a) Data inadequate (b) 60 (c) 75
    (d) 90 (e) None of these

16. In a row of thirty-seven boys facing South, R is eighth. to the right of T who is fourteenth to the left of D. How many boys are there between D and R in the row?
    (a) 4 (b) 6 (c) 8
    (d) Data inadequate (e) None of these

17. If the digits on the dial of a clock are replaced by alternate English alphabet beginning with D such as D replaces 1, F replaces 2 and so on, then where will be the hour hand at 19.45 O' clock?
    (a) Between O and Q (b) Between N and P
    (c) Between P and R (d) Between M and O
    (e) None of these

18. In a row of girls, Ravina is 15th from the left and Mohini is 18th from the right. If they inter-change their places, Mohini becomes 15th from the left. How many girls are there in the row?
    (a) 33 (b) 48 (c) 47
    (d) Data inadequate (e) None of these

19. In a row of 40 boys Sameer was shifted 10 places to the right of Raman and Kailash was shifted 10 places to the left of Vikas. If Vikas was 26th from the left end and there were three boys between Kailash and Sameer after shifting, what was the position of Raman in the row?
    (a) Data inadequate
    (b) 10th from the left end
    (c) 10th from the right end
    (b) 39th from the right end
    (e) None of these

20. Pratap correctly remembers that his mother's birthday is before twenty-third April but after nineteenth April, whereas his sister correctly remembers that their mother's birthday is not on or after twenty-second April. On which day in April is definitely their mother's birthday?
    (a) Twentieth
    (b) Twenty-first
    (c) Twentieth or Twenty-first
    (d) Cannot be determined
    (e) None of these

DIRECTIONS (21-23) : Study the following information to answer the given question.

(I) In a class of boys and girls, Sanjay ranks is 12th and Suman's rank is 8th.
(II) Sanjay rank among the boys is 6th and Suman rank among girls is 3rd.
(III) In the class Suman rank is 52nd from the other end.
(IV) From the other end, Sanjay rank among the boys is 26th.

21. How many girls are there in between Suman and Sanjay?
    (a) 1 (b) 2 (c) 3
    (d) cannot be determined
    (e) None of these

22. How many boys are there in the class?
    (a) 31 (b) 28
    (c) 29 (d) cannot be determined
    (e) None of these

23. How many boys are there before Suman?
    (a) 6 (b) 5
    (c) 7 (d) cannot be determined
    (e) None of these

24. In a row of children facing North, Soni is fifteenth from the left and Jaya is third to the left of Soni. Raman who is seventh to the right of Jaya is fifth from the right end of the row. What is Soni's position from the right end?
    (a) 12th (b) 10th (c) 8th
    (d) 9th (e) None of these

25. In a class of 20 students, Mridul's rank is 12th from the top and Veena's rank is 17th from the bottom. If Rohan's rank is exactly between Mridul and Veena's rank, what is Rohan's rank from the top?
    (a) Ninth (b) Eighth (c) Tenth
    (d) Seventh (e) Cannot be determined

26. In a class of 40 children, Saurabh's rank is eighth from the top. Mamta is five ranks below Saurabh. What is Mamta's rank from the bottom?
    (a) 27th (b) 29th (c) 28th
    (d) 26th (e) Cannot be determined

27. Among M, N, P, R and T each one has secured different marks in an examination. R secured more marks than M and T. N secured less marks than P. Who among them secured third highest marks?
    (a) N (b) R
    (c) M (d) T
    (e) Data inadequate

28. Five men A, B, C, D and E read a newspaper. The one who reads first gives it to C. The one who reads last had taken it from A. E was not the first or the last to read. There were two readers between B and A. B passed the newspaper to whom?
    (a) A (b) C (c) D
    (d) E (e) None of these

29. In a row of girls, Rita and Monika occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, then Rita and Monika occupies eighteenth place from the left end. How many girls are there in the row?
    (a) 25 (b) 26 (c) 27
    (d) Data inadequate (e) None of these

30. In the Olympic Games, the flags of six nations were flown on the masts in the following way: The flag of America was to the left of the Indian tricolour and to the right of the flag of France. The flag of Australia was on the right of the Indian flag but was to the left of the flag of Japan, which was to the left of the flag of China. Find the two flags which are in the centre.
    (a) India and Australia
    (b) America and India
    (c) Japan and Australia
    (d) America and Australia
    (e) None of these

RESPONSE GRID					
15. (a)(b)(c)(d)(e)	16. (a)(b)(c)(d)(e)	17. (a)(b)(c)(d)(e)	18. (a)(b)(c)(d)(e)	19. (a)(b)(c)(d)(e)
20. (a)(b)(c)(d)(e)	21. (a)(b)(c)(d)(e)	22. (a)(b)(c)(d)(e)	23. (a)(b)(c)(d)(e)	24. (a)(b)(c)(d)(e)
25. (a)(b)(c)(d)(e)	26. (a)(b)(c)(d)(e)	27. (a)(b)(c)(d)(e)	28. (a)(b)(c)(d)(e)	29. (a)(b)(c)(d)(e)
30. (a)(b)(c)(d)(e)				

Max. Marks : 25   **No. of Qs. 25**   **Time : 30 min.**   **Date : ..../......../...............**

DIRECTIONS (Qs.1-4) : Study the following information carefully and answer the questions given below it:

(i)   Six boys $B_1, B_2, B_3, B_4, B_5, B_6$ and six girls C_1, C_2, C_3, C_4, C_5 and C_6 are standing in rows in such a way that each girl faces one boy, not necessarily in the same order.

(ii) C_1 is to the immediate right of the girl who is facing B_5 the boy at the extreme right. Only B_2 is between B_4 and B_5. B_6 is to the immediate left of B_1 and to the immediate right of B_3. C_3 is facing B_1 and is to the immediate left of C_2. C_6 is third to the left of C_4.

1.   Which of the following girls is facing B_4?
    (a) C_5 (b) C_4 (c) C_3
    (d) C_6 (e)   None of these
2.   Which of the following pairs of a boy and a girl is at one of the extreme ends?
    (a) C_1, B_5 (b) C_4, B_5 (c) C_5, B_2
    (d)   Data inadequate   (e)   None of these
3.   Which of the following boys is to the immediate left of B_4?
    (a) B_1 (b) B_2 (c) B_1 or B_2
    (d)   Data inadequate   (e)   None of these
4.   Who is facing C_2?
    (a) B_1 (b) B_6 (c) B_4
    (d)   Data inadequate   (e)   None of these

DIRECTIONS (Qs. 5-10) : Study the following information to answer the given questions.

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row 1, P, Q, R, S, T and V are seated and all of them are facing south. In row 2, A, B, C, D, E and F are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

A sits third to right of D. Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

5.   Who amongst the following sit at extreme ends of the rows?
    (a)   B, E   (b)   S, T   (c)   P, R
    (d)   B, F   (e)   None of these
6.   Who amongst the following faces A?
    (a)   R   (b)   T   (c)   P
    (d)   Q   (e)   S
7.   How many persons are seated between T and S?
    (a)   One   (b)   Two   (c)   Three
    (d)   Four   (e)   None
8.   P is related to V in the same way as C is related to F. Which of the following is E related to, following the same pattern?
    (a)   B   (b)   D   (c)   C
    (d)   A   (e)   None of these
9.   Which of the following is true regarding F?
    (a)   F sits second to right of C.
    (b)   F is not an immediate neighbour of A.
    (c)   F sits third to left of D.
    (d)   F sits at one of the extreme ends of the line.
    (e)   F faces V.
10.   Who amongst the following sits exactly between P and Q?
    (a)   R   (b)   V   (c)   S
    (d)   T   (e)   Cannot be determined

DIRECTIONS (Qs. 11-15) : Study the following information carefully and answer the given questions.

P, Q, R, S, T, V, W and X are captains of eight different cricket teams, namely Australia, New Zealand, India, Pakistan, Sri Lanka, England, West Indies and South Africa, but not necessarily in the same order. All of them are seated around a circular table and are facing the centre.

P sits third to the left of the Sri Lankan captain. Only two people sit between T and W. Neither T nor W is an immediate neighbour of P. Neither T nor W is the captain of Sri Lanka. The captain of South Africa sits second to the right of S. S is not an immediate neighbour of P. S is not the Sri Lankan captain and P is not the captain of South Africa. The Australian captain sits third to the left of V. The Australian and Sri Lankan captains are not immediate neighbours. Only one person sits between S and the Indian captain. Captains of Pakistan and New Zealand are immediate neighbours.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ

S is not the captain of New Zealand's team. Only one person sits between Q and the captain of England. The captain of England is an immediate neighbour of X. W and Q are not immediate neighbours.

11. How many people sit between T and the captain of England when counted in clockwise direction from T?
    (a) None   (b) One   (c) Two
    (d) Four   (e) Five

12. Who is the captain of the Australian team?
    (a) P   (b) V   (c) W
    (d) T   (e) Q

13. Which of the following would come in place of question mark based upon the given seating arrangement?
    VS XR TV RP?
    (a) SW   (b) WX   (c) QW
    (d) QX   (e) VR

14. Which of the following is **true** with respect to the given seating arrangement?
    (a) R is the captain of South Africa.
    (b) W is an immediate neighbour of V.
    (c) The captains of Australia and England are immediate neighbours.
    (d) Four people sit between W and Q.
    (e) X sits second to the left of S.

15. Who is the Indian captain?
    (a) Q   (b) V   (c) X
    (d) T   (e) Cannot be determined

DIRECTIONS (Qs. 16-20) : Study the following information carefully and answer the questions given below:

A, B, C, D, E, F, G and H are sitting around a circle facing the centre. B is third to the right of F and third to the left of H. C is fourth to the left of A, who is not an immediate neighbour of F or B. E is not an immediate neighbour of B. G is second to the right of D.

16. Who is to the immediate left of B?
    (a) D   (b) G   (c) D or G
    (d) Data inadequate   (e) None of these

17. Who is to the immediate right of H?
    (a) A   (b) E   (c) F
    (d) Data inadequate   (e) None of these

18. Which of the following pairs represents the immediate neighbours of F?
    (a) C H   (b) E D   (c) H D
    (d) CE   (e) None of these

19. In which of the following pairs is the first person sitting to the immediate right of the second person?
    (a) BG   (b) GA   (c) A H
    (d) HE   (e) CF

20. Who is third to the left of E?
    (a) A   (b) C   (c) G
    (d) Data inadequate   (e) None of these

DIRECTIONS (Qs. 21-25) : Study the following information carefully and answer the given questions:

Eight friends P, Q, R, S, T, V, W and Y are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the centre while those who sit in the middle of the sides face outside.

P, who faces the centre, sits third to the right of V. T, who faces the centre, is not an immediate neighbour of V. Only one person sits between V and W. S sits second to right of Q. Q faces the centre. R is not an immediate neighbour of P.

21. Who sits second to the left of Q?
    (a) V   (b) P   (c) T
    (d) Y   (e) Cannot be determined

22. What is the position of T with respect to V?
    (a) Fourth to the left   (b) Second to the left
    (c) Third to the left   (d) Third to the right
    (e) Second to the right

23. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
    (a) R   (b) W   (c) V
    (d) S   (e) Y

24. Which of the following will come in place of the question mark based upon the given seating arrangement?
    WP TR QW RS ?
    (a) YT   (b) VY   (c) VQ
    (d) PY   (e) QV

25. Which of the following is true regarding R?
    (a) R is an immediate neighbour of V.
    (b) R faces the centre.
    (c) R sits exactly between T and S.
    (d) Q sits third to left of R
    (e) None of these

RESPONSE GRID					
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ
21. ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ

SITTING ARRANGEMENT-2

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-5): Study the following information carefully and answer the given questions.

There are eight friends Sanjeet, Sumit, Suman, Suraj, Suresh, Saurabh, Shambhu and Shyam sitting around a circular table facing the centre and playing cards but not necessarily in the same order. All of them have a favourite card among these eight cards. Out of these eight cards, four are Kings and four are Queens of spade, club, diamond and heart.

Sanjeet likes the Queen of spade and is not an immediate neighbour of the one who likes the King of club. The one who likes the Queen of diamond sits on the immediate left of Sumit, who likes the Queen of club. Suman likes the King of club and sits third to the left of Suresh. The one who likes the King of spade and the one who likes the Queen of diamond are immediate neighbours of each other but both of them are the neighbours neither of Suresh nor of Suman. The one who likes the King of diamond and the one who likes the Queen of spade are immediate neighbours of each other. Neither Suresh nor Suraj likes the King of diamond. Only Saurabh sits between the one who likes the Queen of diamond and the one who likes the Queen of heart. Shambhu sits third to the left of the person who likes the King of diamond.

1. Who likes the King of spade?
   (a) Saurabh   (b) Shambhu   (c) Shyam
   (d) Can't be determined (e) None of these

2. Suresh likes which of the following cards?
   (a) Queen of spade   (b) King of heart
   (c) Queen of heart   (d) Can't be determined
   (e) None of these

3. The likes of which of the following sits exactly between Sumit and Shyam?
   (a) Queen of club   (b) King of diamond
   (c) King of club   (d) King of spade
   (e) None of these

4. How many persons sit between Suraj and the person who likes the King of club?
   (a) None   (b) One   (c) Two
   (d) Three   (e) None of these

5. Which of the following pairs are the immediate neighbor of that person who likes the King of diamond?
   (a) Sumit, Suman   (b) Sanjeet, Sumit
   (c) Suresh, Sanjeet (d) Suraj, Shambhu
   (e) None of these

DIRECTION (Qs. 6-10): Study the given information and answer the following questions:

Eight friends M, N, O, P, Q, R, S and T are sitting around circular table and belong to eight different states Goa, Tamilnadu, Telangana, Karnatka, Rajasthan, Jharjhand, West-Bengal and Madhyapradesh. They read three Newspapers in The Hindu, Times of India and Indian Express. At least two persons read one news paper not necessarily in the same order. Only P and Q read The Hindu Newspaper. P is third to right of Q. M is from West-Bengal reads The Times of India Newspaper and is sitting immediate right of Q. R is from Karnataka and reads Indian Express Newspaper. T reads the same Newspaper as S reads who is third to left of R and fourth to right of N. O is sitting exact opposite of P who belongs to Goa. Persons belongs to Madhyapradesh and Telangana read Time of India Newspaper. S is from Jharkhand while N is from Telangana reads Times of India Newspaper. T is from Rajashthan.

6. Who does not read Times of India Newspaper?
   (a) O   (b) N   (c) M
   (d) T   (e) None of these

7. From which state Q belongs?
   (a) Goa   (b) Tamilnadu
   (c) Madhyapradesh   (d) Telangana
   (e) None of these

8. Which of the following is not correct combination?
   (a) T-Rajasthan-Indian Express
   (b) Q-West-Bengal-The Hindu
   (c) O-Madhyapradesh-Times of India
   (d) P-Goa- The Hindu
   (e) All are correct combinations

9. Which two persons are sitting adjacently who read Indian Express Newspapers?
   (a) RT   (b) RN   (c) RS
   (d) TS   (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	

10. Select on the basis of above arrangement four of the following from a group which one is not related to the group?

    (a) OQ   (b) RN   (c) PT
    (d) MS   (e) MO

DIRECTIONS (Qs. 11-15): Read the following information carefully and answer the questions that follow:

Eight friends P, Q, R, S, T, U, V and W are sitting around a circular table for lunch. Each person has a different birthplace, viz Noida, Jaipur, Patna, Mumbai, Punjab, Delhi, Goa and Madurai, but not necessarily in the same order.

The person born in Jaipur sits third to the right of V.R is an immediate neighbour of V. The person born in Mumbai sits second to the right of R. Q sits third to the right of W. W's birthplace is neither Jaipur nor Mumbai. Only one person sits between R and the person whose birthplace is Patna. P and U are immediate neighbours of each other. Neither P's nor U's birthplace is Jaipur. The person born in Madurai sits second to the right of P. Two persons sit between S and the person born in Punjab. S is not from Jaipur. The person born in Noida is not an immediate neighbour of the person born in Jaipur. The person born in Delhi sits second to the left of P.

11. Who among the following is from Goa?

    (a) P   (b) W   (c) R
    (d) U   (e) S

12. What is the position of U with respect to the person whose birthplace is Jaipur?

    (a) Second to the left   (b) Second to the right
    (c) Immediate right   (d) Immediate left
    (e) None of these

13. Where is the birthplace of V?

    (a) Goa   (b) Noida   (c) Delhi
    (d) Patna   (e) Mumbai

14. Where is the birthplace of T?

    (a) Goa   (b) Mumbai   (c) Delhi
    (d) Jaipur   (e) Punjab

15. Who sits exactly between the persons whose birth places are Patna and Punjab?

    (a) R and W
    (b) R and Q
    (c) Only Madurai-born person
    (d) P and Q
    (e) None of these

DIRECTION (Qs. 16-20): Read the following information and then answer the questions below:

Ten students P, Q, R, S, T, U, V, W, X and Y are sitting in a row facing west.

(i) Q and U are not sitting on either of the edges
(ii) V is sitting second to the left of S and W is sitting to the right of Y.
(iii) There are four persons between T and P.
(iv) X is to the immediate north of Q and U is to the immediate south of S.
(v) Y is in between P and S and V is in between T and U.
(vi) There are two persons between W and R.

16. Who is sitting at the seventh place counting from the left?

    (a) W   (b) R   (c) Y
    (d) Either W or R   (e) None of these

17. Who among the following is definitely sitting at one of the ends?

    (a) R   (b) W
    (c) T   (d) Cannot be determined
    (e) None of these

18. Who are the immediate neighbours of X?

    (a) Q and R   (b) Q and W
    (c) P and W   (d) Q and P
    (e) Cannot be determined

19. Who is sitting second left of S?

    (a) V   (b) U   (c) T
    (d) Y   (e) Q

20. If V and P interchange their positions, then who become the immediate neighbours of T?

    (a) V and U   (b) U only   (c) P only
    (d) Y and W   (e) S only

RESPONSE GRID					
10. ⓐⓑⓒⓓⓔ	**11.** ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ
15. ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ
20. ⓐⓑⓒⓓⓔ				

PUZZLES-1

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-5): Study the following information carefully and answer the following questions given below:

Seven girls - Anjali, Booby, Cheri, Doly, Ekta, Fenny, and Geemy.- have different hobbies, viz Cooking, Jooging, Reading, Learning, Dancing, Riding, and Drawing. but not necessarily in the same order. Each of them belongs to a different city, viz Noida, Delhi, Patna, Ranchi, Chennai, Hedrabad, and Hisar, but not necessarily in the same order, Anjali belongs to Chennai. Doly likes drawing. The girl who likes dancing is from the city of Delhi. The girl who likes reading is from the city of Hedrabad. Fenny does not belong to Hedrabad, Delhi, Noida or Ranchi. Fenny does not like riding, jogging or learning. Bobby does not belong to Patna, Delhi, Noida or Ranchi. Bobby does not like learning, cooking, jogging, or riding. Cheri does not like dancing and she is not from Ranchi or Noida. Neither Doly nor Geemy belongs to Noida. Anjali does not like jogging. The girl from Patna likes riding.

1. Who among the following likes riding?
    (a) Anjali   (b) Cheri   (c) Ekta
    (d) Geemy   (e) Cannot be determined
2. Which of the following combination is true according to the given information?
    (a) Anjali - Cooking-Chennai
    (b) Cheri - Reading - Hedrabad
    (c) Ekta - Jogging - Hisar
    (d) Doly - Drawing - Ranchi
    (e) All are true
3. Who among the following belongs to the City of Hisar ?
    (a) Bobby   (b) Dolly   (c) Fenny
    (d) Ekta   (e) Cannot be determined
4. Which of the following combination is true about Geemy?
    (a) Dancing - Delhi
    (b) Drawing - Hisar
    (c) Reading - Hedrabad
    (d) Riding - Patna
    (e) Cooking - Hisar
5. The girl who belongs to Noida, likes?
    (a) Cooking   (b) Dancing   (c) Drawing
    (d) Jogging   (e) Learning

DIRECTIONS (Qs. 6-10): Study the following information carefully and answer the following questions given below:

Eight persons -Abhishek, Bhupendra, Chetan, Dipak, Pawan, Pushkar,Ganesh and Hemant. are working in different departments viz. Agriculture Officer, Finanace Manager and Credit Manager of a bank with at least two and not more three in any department. They are in three different scales viz. I, II and III with at least two in any one scale.

Both the employees in finance department are in scale II. Dipak works in Credit department and belongs to Scale I. Abhishek works in Agriculture department and does not belong to scale I. Two employees in Credit department belong to one scale. Pushkar works with only Hemant in one of the departments. Chetan works with Pawan in one of the departments. Bhupendra does not work with either Chetan or Abhishek in the same department. Ganesh does not belong to scale III. Pawan does not belong to scale I.

6. Ganesh belongs to which scale?
    (a) II   (b) III   (c) I
    (d) I or II   (e) None of these
7. Hemant belongs to which scale?
    (a) I   (b) II   (c) IIII
    (d) Data inadequate   (e) None of these
8. Which of the following combination is correct?
    (a) Finance - Pushkar -I
    (b) Finance - Hemant - III
    (c) Credit - Bhupendra - II
    (d) Agriculture - Pawan - III
    (e) All are correct
9. Chetan belongs to which scale ?
    (a) I   (b) II   (c) IIII
    (d) I or II   (e) None of these
10. Which of the following groups of employees work in credit department?
    (a) Dipak Bhupendra Pawan
    (b) Dipak Bhupendra Chetan
    (c) Dipak Bhupendra Ganesh
    (d) Data inadequate
    (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 11-15): Read the following information and answer the questions that follow:

There are five boys Alok, Bunty, Chetan, Dinesh and Kailash, two are good, one is poor and two are average in studies. Two of them study in postgraduate classes and three in undergraduate classes. One comes from a rich family, two from middle-class families and two from poor families. One of them is interested in playing, two in singing and one in reading. Of those studying in undergraduate classes, two are average and one is poor in studies. Of the two boys interested in singing, one is a postgraduate student. The one interested in playing comes from a middle-class family. Both the boys interested in singing are not industrious. The two boys coming from middle-class families are average in studies and one of them is interested in singing. The boy interested in reading comes from a poor family, while the one interested in playing is industrious. Kailash is industrious, good in studies, comes from a poor family and is not interested in singing, playing or reading. Chetan is poor in studies in spite of being industrious. Alok comes from a rich family and is not industrious but is good in studies. Bunty is industrious and comes from a middle-class family.

11. Name the boy interested in reading.
    (a) Alok   (b) Bunty   (c) Chetan
    (d) Dinesh   (e) None of these

12. Name the boy interested in playing.
    (a) Alok   (b) Bunty   (c) Chetan
    (d) Dinesh   (e) None of these

13. Name the middle-class family boy interested in singing.
    (A) Alok   (b) Bunty   (c) Chetan
    (d) Dinesh   (e) None of these

14. Name the boys studying in post-graduate classes.
    (a) Alok , Kailash   (b) Bunty , Chetan
    (c) Alok , Dinesh   (d) Dinesh , Kailash
    (e) None of these

15. Name the boy who is not industrious and is average in studies.
    (a) Alok   (b) Bunty   (c) Chetan
    (d) Dinesh   (e) None of these

DIRECTIONS (Qs. 16-20): Read the following information and answer the questions that follow:

Mr Mahesh has a Godrej. There are five levels L1, L2, L3, L4, and L5 in the Godrej. The order of the levels indicates the levels from bottom to top. L1 is the bottom level while L5 is the top level. There are 21 drawers in the Godrej. The drawers are designed in such a manner that only one book can be kept in a drawer. Any level consists of at least three drawers but not more than six drawers. Mr Mahesh has kept 16 books in the Godrej These books are of Economics (2). History (2), Geography (3), Civics (5) and Polity (4). No two books of any subject can be kept at the same level.

Books of History have been kept in levels at extreme ends only. Number of places for books in L5 is double the number for places of books in L1. Number of places for books in L4 is half the sum of the number of places for books in L5 and L2 together. L1 consists of neither a book of Polity nor a book of Geography. The books of Geography have been kept only in those levels where at least four books can be kept. Both the books of Economics have been kept in adjacent levels. Level L1 has no place to keep any more books.

16. How many drawers are there in level L1?
    (a) 3   (b) 4   (c) 5
    (d) 6   (e) None of these

17. In which level is the number of drawers maximum?
    (a) L1   (b) L2   (c) L3
    (d) L4   (e) None of these

18. How many drawers are empty in level L5?
    (a) Can't say   (b) 0   (c) 1
    (d) 2   (e) None of these

19. In which of the following levels, there is not any book of Polity?
    (a) Can't say   (b) L1   (c) L2
    (d) L3   (e) None of these

20. If all the books are collected from those levels of the Godrej which consist of, books of Economics the total then number of books will be
    (a) 6   (b) 7   (c) 8
    (d) Can't say   (e) None of these

RESPONSE GRID					
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../......../................**

DIRECTIONS (Qs. 1-5): Study the information and answer the given questions:

Seven people Johnny Depp, Al Pacino, Robert Niro, Kevin Spacey, Brad Pitt, Russell Crowe and Tom Hank live on separate floors of a 7-floor building. Ground floor is numbered 1, first floor is numbered 2 and so on until the topmost floor is numbered 7. Each one of these is travelling to a different city, viz Delhi, Manchester, Paris, Corsica, Kansas, Brussels and London but not necessarily in the same order. Only three people live above the floor on which Johnny Depp lives. Only one person lives between Johnny Depp and the one travelling to Brussels. Russell Crowne lives immediately below the one travelling to Manchester. The one travelling to Manchester lives on an even numbered floor. Only three people live between the ones travelling to Brussels and Paris. Brad Pitt lives immediately above Robert Niro. Brad Pitt is not travelling to Paris. Only two people live between Al Pacino and the one travelling to Kansas. The one travelling to Kansas lives below the floor on which Al Pacino lives. The one travelling to Delhi does not live immediately above or immediately below Al Pacino. Kevin Spacey does not live immediately above or immediately below Johnny Depp. Tom Hank does not travel to Corsica.

1. Which of the following is true with respect to Tom Hank as per the given information?
   (a) The one who lives immediately below Tom Hank is travelling to Manchester
   (b) Tom Hank lives one floor number 7.
   (c) Tom Hank lives immediately below Brad Pitt.
   (d) Tom Hank lives on the lowermost floor.
   (e) Tom Hank is travelling to Brussels.
2. Who among the following lives on floor number 3?
   (a) The one travelling to Corsica
   (b) The one travelling to Kansas
   (c) Robert Niro
   (d) Tom Hank
   (e) Brad Pitt
3. Who lives on the floor immediately above Brad Pitt?
   (a) Johnny Depp   (b) Al Pacino
   (c) Kevin Spacey   (d) Tom Hank
   (e) Russell Crowe
4. To which of the following cities is Kevin Spacey travelling?
   (a) Manchester   (b) Brussels   (c) Paris
   (d) Kansas   (e) Corsica

5. How many people live between the floors on which Kevin Spacey and the one travelling to Manchester live?
   (a) None   (b) Two   (c) One
   (d) More than three   (e) Three

DIRECTIONS (Qs. 6-10): Read the following information carefully and answers the questions given below.

Representatives of eight different banks, viz P, Q, R, S, T, U, V and W, are sitting around a circular table, facing the centre, but not necessarily in the same order. Each one of them is from a different bank, viz SBI Bank, Oriental Bank of Commerce, UBI Bank, Vijaya Bank, IOB Bank, Punjab National Bank, Bank of India and Indian Bank.
U sits second to the right of the representative of Vijaya Bank. The representative of Bank of India is an immediate neighbor of the representative of Vijaya Bank. Two persons sit between the representative of Bank of India and Q. R and T are immediate neighbours. Neither R nor T is an immediate neighbour of either Q or the representative of Vijaya Bank. The representative of UBI Bank sits second to the right of S. S is the representative of neigther Vijaya Bank nor Bank of India. V and the representative of SBI Bank are immediate neighbours. Q is not the representative of SBI Bank. Only one person sits between R and the representative of Oriental Bank of Commerce.
W sits third to the left of the representative of Indian Bank. The representative of Punjab National Bank sits second to the left of the representative of IOB Bank.

6. Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which is the one that does not belong to that group?
   (a) W - SBI Bank   (b) P - Vijaya Bank
   (c) S - UBI Bank   (d) T - IOB Bank
   (e) U - Punjab National Bank
7. Which of the following is true with respect to the given seating arrangement?
   (a) Q is the representative of UBI Bank.
   (b) R sits second to the right of W.
   (c) The representative of Indian Bank sits on 2nd the immediate left of the representative of SBI Bank.
   (d) P sits second to the right of the representative of Bank of India.
   (e) The representatives of UBI Bank and IOB Bank are immediate neighbours.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ			

8. Who among the following sit exactly between Q and the representative of Bank of India?
   (a) P and the representative of SBI Bank
   (b) U and V
   (c) W and the representative of UBI Bank
   (d) W and V
   (e) Representatives of IOB Bank of Oriental Bank of Commerce

9. Who among the following is the representative of Oriental Bank of Commerce?
   (a) P   (b) R   (c) W
   (d) V   (e) S

10. Who amongst the following sits second to the left of Q?
   (a) R
   (b) W
   (c) The representative of Vijaya Bank
   (d) The representative of Punjab National Bank
   (e) V

DIRECTIONS (Qs. 11-15): Read the following information and answer the questions that follow:

There are seven students - Sintu, Sanjeev, Saket, Sandeep, Sonu, Sahil and Shyam - in an institute. Each of them has a different favourite subject, viz Quantitative Aptitude, Reasoning Ability, Computer Science, English Language, General Awareness, Current Affairs and Banking Awareness. Each of the students secured different marks in his favourite subject. Saket has secured second highest marks and neither Quantitative Aptitude nor English Language is his favourite subject. Sonu secured the least marks and neither Current Affairs nor Reasoning Ability is his favourite subject. The favourite subject of Sandeep is Computer Science and he secured more marks than marks of Sanjeev and Shyam but less than the marks of Sintu. The favourite subject of Sanjeev is General Awareness and his marks is more than the marks of Sonu but less than the marks of Shyam.

The favourite subject of Sintu is Banking Awareness and he has not secured the highest marks. The student whose favourite subject is English Language. got the highest marks. The favourite subject of Saket is not Reasoning Ability.

11. Which is the favourite subject of Sonu?
   (a) Reasoning Ability
   (b) Quantitative Aptitude
   (c) General Awareness
   (d) Data inadequate
   (e) None of these

12. What is the favourite subject of Shyam?
   (a) Reasoning Ability
   (b) Current Affairs
   (c) Either Reasoning Ability or Current Affairs
   (d) Data inadequate
   (e) None of these

13. Who got the second lowest marks?
   (a) Shyam   (b) Sandeep   (c) Saket
   (d) Sintu   (e) None of these

14. English Language is the favourite subject of
   (a) Saket   (b) Sintu   (c) Shyam
   (d) Sahil   (e) None of these

15. When all the seven students are arranged according to their marks in their favourite subjects to descending order, what is the position of Sintu from the top?
   (a) Second   (b) Fourth   (c) Third
   (d) Data inadequate   (e) None of these

DIRECTIONS (QS. 16-20): Read the following information and answer the questions that follow:

A. Pinki, Pamela, Pampa, Panita, Pallavi, Padmini, Padma and Parnita are eight girls in a class. Three of them play basketball and badminton each and two of them play boxing. Each one of them has a different height.

B. The tallest does not play boxing and the shortest does not play basketball.

C. Padmini is taller than Pinki and Panita but shorter than Parnita and Pamela. Pallavi, who does not play basketball, is taller than Pamela and is second to the tallest. Padma is shorter than Panita but taller than Pinki.

D. Parnita, who is the fourth from the top, plays badminton with Panita.

E. Padma does not play either basketball or boxing. Pamela does not play boxing.

16. Who is the tallest?
   (a) Pamela   (b) Parnita   (c) Pampa
   (d) Data inadequate   (e) None of these

17. Who is the shortest?
   (a) Padma   (b) Panita   (c) Parnita
   (d) Pinki   (e) None of these

18. Which of the following pairs of girls plays boxing?
   (a) Padmini, Pallavi   (b) Pallavi, Parnita
   (c) Parnita, Padmini   (d) Pinki, Pampa
   (e) None of these

19. What is Padmini's position from the top when they are arranged in descending order of their heights?
   (a) Fourth   (b) Fifth   (c) Third
   (d) Data inadequate   (e) None of these

20. Which of the following groups of girls plays basketball?
   (a) Padmini, Pallavi and Pampa
   (b) Pallavi, Parnita and Pampa
   (c) Parnita, Padmini and Pampa
   (d) Pinki, Pampa and Parnita
   (e) None of these

RESPONSE GRID	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ
	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ		

Max. Marks : 30   **No. of Qs. 30**   **Time : 30 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-5) : Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Senior Manager-Credit in a bank. The candidate must

(i) be a graduate in any discipline with at least 60 percent marks.

(ii) have post-qualification work experience of at least ten years in the Advances Section of a bank.

(iii) be at least 30 years and not more than 40 years as on 1.4.2010.

(iv) have secured at least 40 percent marks in the Group Discussion.

(v) have secured at least 50 percent marks in the Interview.

In the case of a candidate who satisfies all the conditions:

EXCEPT

(A) at (i) above, but has secured at least 50 percent marks in graduation and at least 60 percent marks in post-graduation in any discipline, the case is to be referred to the General Manager-Advances.

(B) at (ii) above, but has total post-qualification work experience of at least seven years, out of which at least three years as Manager-Credit in a bank, the case is to be referred to the Executive Director.

In each question below details of one candidate are given. You have to take one of the following courses of action based on the information provided and the conditions and subconditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01-04-2010.

Give answer (a) if the case is to be referred to the Executive Director.

Give answer (b) if the case is to be referred to the General Manager -Advances

Give answer (c) if the data are inadequate to take a decision.

Give answer (d) if the candidate is not to be selected.

Give answer (e) if the candidate is to be selected.

1. Shobha Gupta has secured 50 percent marks in the Interview and 40 percent marks in the Group Discussion. She has been working for the past eight years, out of which four years as Manager-Credit in a bank, after completing her BA degree with 60 percent marks. She was born on 12th September 1978.

2. Rohan Maskare was born on 8th March 1974. He has been working in a bank for the past twelve years after completing his B Com degree with 70 percent marks. He has secured 50 percent marks in both the Group Discussion and the Interview.

3. Prakash Gokhale was born on 4th August 1977. He has secured 65 percent marks in postgraduation and 58 percent marks in graduation. He has been working for the past ten years in the Advances Department of a bank after completing his postgraduation. He has secured 45 percent marks in the Group Discussion and 50 percent marks in the Interview.

4. Sudha Mehrotra has been working in the Advances Department of a bank for the past twelve years after completing her B Com Degree with 60 percent marks. She has secured 50 percent marks in the Group Discussion and 40 percent marks in the Interview. She was born on 15th February 1972.

5. Amit Narayan was born on 28th May 1974. He has been working in the Advances department of a bank for the past eleven years after completing his B Sc Degree with 65 percent marks. He has secured 55 percent marks in the Group discussion and 50 percent marks in the Interview.

DIRECTIONS (Qs. 6-10) : Study the following information carefully and answer the questions given below:

Following are the conditions for selecting System Manager in an organization. The candidate must

(i) be a graduate engineer in IT, Computer Science or Electronics with at least 60 percent marks.

(ii) be at least 30 years and not more than 40 years as on 1.9.2009.

(iii) have secured at least 40 percent marks in the written examination

(iv) have secured at least 50 percent marks in the selection interview.

(v) have post-qualification work experience of at least 10 years in the systems department of an organisation.

In the case of a candidate who satisfies all the conditions:

EXCEPT

(A) at (i) above, but has secured at least 60 percent marks in ME-IT or Computer Science, the case is to be referred to DGM-Systems.

(B) at (v) above, but has post-qualification experience of at least five years as Deputy Systems Manager, the case is to be referred to the GM-Systems.

In each question below, details of one candidate are given. You have to take one of the following courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided for each candidate. All these cases are given to you as on 1-9-2009.

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ

Give answer (a) if the candidate is to be selected

Give answer (b) if the candidate is not to be selected

Give answer (c) if the case is to be referred to DGM-Systems.

Give answer (d) if the case is to be referred to GM-Systems.

Give answer (e) if the data provided are not adequate to take a decision.

6. Samir Ghosh was born on 25th May 1978. He secured 65 percent marks in BE-IT in the year 1999. Since then, he has been working in the systems department of an organisation. He has secured 50 percent marks in both written examination and selection interview.

7. Navin Prakash has secured 62 percent marks in BE-Computer Science. He has been working in the systems department of an organisation since July 1999 after completion of BE. He was born on 4th April 1974. He has secured 55 percent marks in selection interview and 45 percent marks in the written examination.

8. Neeta Pathak has been working as Deputy Systems Manager in an organisation for the past seven years after completing her BE in IT with 70 percent marks. She has secured 45 percent marks in selection interview and 55 percent marks in the written examination. She was born on 12th November 1978.

9. Ashok Malhotra was born on 19th March 1977. He has secured 56 percent marks in both selection interview and written examination. He has secured 58 percent marks in BE-IT and 72 percent marks in ME-IT. He has been working in the system department of an organisation for the past 11 years after completing ME-IT.

10. Gemma D' Souza was born on 15th December 1972. She has secured 60 percent marks in both written examination and selection interview. She has been working as Deputy System Manager for the last 6 years in an organisation after completing her BE-Electronics with 75 percent marks.

DIRECTIONS (Qs. 11-20) : Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Assistant General Manager - HR in an organization.

The candidate must

(i) be at least 40 years and not more than 50 years old as on 1.5.2010.

(ii) be postgraduate in Personnel Management/HR with at least 60 percent marks.

(iii) have post-qualification work experience of at least fifteen years out of which at least five years as Senior Manager-HR in an organisation.

(iv) have successfully implemented HR-System in his/her organisation some time during the past three years.

(v) have secured at least 45 percent marks in the selection process.

In the case of a candidate who satisfies all the conditions:

EXCEPT

(A) at (ii) above, but has secured at least 50 percent marks in postgraduation and at least 65 percent marks in the selection process, the case is to be referred to Executive Director.

(B) at (iii) above but has at least twelve years post-qualification work experience out of which at least eight years as Senior Manager-HR in an organisation, the case is to be referred to Chairman.

In each question below details of one candidate are given. You have to take one of the courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01-05-2010.

Give answer (a) if the candidate is to be selected

Give answer (b) if the candidate is not to be selected

Give answer (c) if the data provided are not adequate to take a decision.

Give answer (d) if the case is to be referred to Executive Director.

Give answer (e) if the case is to be referred to Chairman

11. Pranab Ghosh was born on 8th March 1968. He has been working for the past eighteen years in an organisation out of which last seven years as Senior Manager-HR after completing his postgraduation in HR with 68 percent marks. He had successfully implemented HR-System last year in his organisation. He has secured 50 percent marks in the selection process.

12. Sheetal Jha has been working in an organisation for the past twenty years out of which ten years as Senior Manager-HR after completing her postgraduation in Personnel Management with 70 percent marks. She was born on 2nd December 1965. She has secured 45 percent marks in the selection process.

13. Prabir Sengupta was born on 8th May 1963. He has secured 65 percent marks in the selection process. He has been working for the past fifteen years in an organisation, out of which twelve years as Senior Manager-HR, after completing his postgraduation in HR with 55 percent marks. He has successfully implemented HR-System in his organisation during the last two years.

14. Shailesh Kumar has been working in an organisation for the past thirteen years, out of which nine years as Senior Manager-HR after completing his postgraduation in HR with 68 percent marks. He was born on 15th September 1968. He has secured 48 percent marks in the selection process. He has successfully implemented HR-System in his organisation two years back.

RESPONSE GRID	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. Navin Chopra was born on 12th June 1967. He has been working for the past sixteen years, out of which seven years as Senior Manager-HR, after completing his postgraduation in Personnel Management with 75 percent marks. He has secured 44 percent marks in the selection process. He has successfully implemented HR-System in his organisation last year.

16. Meera Kulkarni has been working for the past seventeen years, out of which eight years as Senior Manager-HR, after completing her postgraduation in Personnel Management with 66 percent marks. She has successfully implemented HR-System in her organisation during the last two years . She has secured 49 percent marks in the selection process. She was born on 14th December 1971.

17. Akash Shastri was born on 12th April 1967. He has been working for the past sixteen years, out of which six years as Senior Manager-HR, in an organisation after completing his postgraduation in HR with 58 percent marks. He has successfully implemented HR-System in his organisation last year. He has secured 65 percent marks in the selection process.

18. Shekhar Jena has been working for the past fifteen years, out of which last seven years as Senior Manager-HR, in an organisation after completing his postgraduation in HR with 68 percent marks. He has secured 60 percent marks in the selection process. He was born on 16th August 1965. He has successfully implemented HR-System in his organisation in past three years.

19. Sunetra Govil was born on 5th April 1964. She has been working for the past seventeen years, out of which nine years as Senior Manager-HR, in an organisation. She has secured 48 percent marks in the selection process. She has also secured 69 percent marks in the post graduation in Personnel Management. She successfully implemented HR-System in her organisation last year.

20. Mohit Saxena was born on 27th July 1963. He has been working for the past thirteen years, out of which nine years as Senior Manager-HR, after completing his post graduation in HR with 67 percent marks. He has secured 49 percent marks in the selection process. He has successfully implemented HR-System in his organisation during the past three years.

DIRECTIONS (Qs. 21-25) : Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Senior Manager-General Banking in a bank.
The candidate must–
(i) have secured at least 60 percent marks in Std XII.
(ii) have secured at least 55 percent marks in Graduation in any discipline.

(iii) have secured at least 60 percent marks in Postgraduate degree/diploma in Management/Economics/Statistics.

(iv) be at least 25 years and not more than 35 years as on 01-03-2010.

(v) have post graduation work experience of at least 2 years as General Banking Officer in a bank,

(vi) have secured at least 50 percent marks in the written examination,

(vii) have secured at least 40 percent marks in the Personal interview.

In the case of a candidate who satisfies all the above conditions:
EXCEPT

(A) at (iii) above, but has secured at least 60 percent marks in CA or ICWA, the case is to be referred to VP-Recruitment.

(B) at (vii) above, but has secured at least 65 percent marks in the written examination and at least 35 percent marks in the personal interview, the case is to be referred to President-Recruitment.

In each question below are given details of one candidate. You have to take one of the following courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01-03-2010.

Give answer (a) if the data provided are inadequate to take a decision.

Give answer (b) if the case is to be referred to VP-Recruitment.

Give answer (c) if the case is to be referred to President-Recruitment.

Give answer (d) if the candidate is to be selected.

Give answer (e) if the candidate is not to be selected.

21. Kesav Vora was born on 8th November 1978. He has secured 65 percent marks in Std XII and 60 percent marks in Graduation. He has secured 58 percent marks in MA Economics and 60 percent marks in ICWA. He has been working in a bank as a generalist officer for the past two years after completing his education. He has also secured 50 percent marks in the written examination and 45 percent marks in the personal interview.

22. Arindam Ghosh has been working in a bank as a generalist officer for the past four years after completing his postgraduate diploma in management with 60 percent marks. He has secured 50 percent marks in the written examination and 40 percent marks in the personal interview. He has also secured 70 percent marks in Std XII. He was born on 25th February 1975.

RESPONSE GRID					
15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	
20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ			

23. Sohan Majhi has secured 65 percent marks in BSc and 70 percent marks in MSc Statistics. He has been working in a bank as a generalist officer for the past three years after completing his postgraduation. He has secured 55 percent marks in the written examination and 50 percent marks in the personal interview. He was born on 8th July 1982.

24. Neha Salve has been working in a bank as a generalist officer for the past four years after completing his postgraduate degree in Economics with 60 percent marks. She has secured 60 percent marks in both graduation and Std XII. She was born on 24th August 1979. She has secured 70 percent marks in the written examination and 38 percent marks in the personal interview.

25. Neeta Jaiswal was born on 2nd June 1980. She has been working in a bank as a generalist officer for the past three years after completing her postgraduate degree in Economics with 60 percent marks. She has secured 68 percent marks in HSC and 58 percent marks in BCom. She has also secured 50 percent marks in both the written examination and personal interview.

DIRECTIONS (Qs. 26-30): Study the following information carefully and answer the questions given below.

Following are the conditions for selecting Manager- HR in an organisation:

The candidate must

(i) be at least 30 years and not more than 35 years as on 1.3.2012.

(ii) have scored at least 60 per cent marks in graduation in any discipline.

(iii) have scored at least 65 per cent marks in the Postgraduate Degree/Diploma in Personnel Management/HR.

(iv) have post-qualification work experience of at least five years in the Personnel/HR Department of an organisation.

(v) have scored at least 50 per cent marks in the selection process.

In the case of a candidate who satisfies all the above conditions except

(a) (ii), but has scored at least 55 per cent marks in graduation in any discipline and at least 70 per cent marks in Postgraduate Degree/Diploma in Personnel Management/HR, the case is to be referred to GM - HR.

(b)(iv), but has post-qualification work experience of at least four years, out of which at least two years as Deputy Manager - HR, the case is to be referred to President - HR.

In each question below are given details of one candidate. You have to take one of the following courses of actions based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.3.2012.

Mark answer

(a) if the candidate is not to be selected.

(b) if the data provided are not adequate to take a decision.

(c) if the case is to be referred to President-HR.

(d) if the case is to be referred to GM-HR.

(e) if the candidate is to be selected.

26. Rita Bhatt was born on 25th July 1978. She has scored 62 per cent marks in graduation and 65 per cent marks in Postgraduate Diploma in Management. She has been working for the past six years in the Personnel Department of an organisation after completing her Postgraduation. She has scored 55 per cent marks in the selection process.

27. Ashok Pradhan was born on 8th August 1980. He has been working in the Personnel Department of an Organisation for the past four years after completing his Postgraduate Degree in Personnel Management with 67 per cent. Out of his entire experience, he has been working for the past two years as Deputy Manager-HR. He has scored 62 per cent marks in graduation and 58 per cent marks in the selection process.

28. Alok Verma was born on 4th March 1976. He has been working in the Personnel Department of an organization for the past six years after completing his Postgraduate Diploma in Personnel Management with 66 per cent marks. He has scored 57 per cent marks in the selection process and 63 per cent marks in graduation.

29. Swapan Ghosh has been working in the Personnel Department of an organisation for the past five years after completing his Postgraduate degree in HR with 72 per cent marks. He has scored 56 per cent marks in graduation. He was born on 12th May 1977. He has scored 58 per cent marks in the selection process.

30. Seema Behl has been working in the Personnel Department of an organisation for the past seven years after completing her Postgraduate Diploma in Personnel Management with 70 per cent marks. She was born on 5th July 1979. She has scored 65 per cent marks in graduation and 50 per cent marks in the selection process.

RESPONSE GRID	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ	**26.** ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ
	28. ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ		

CODED INEQUALITIES-1

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-5) : In the following questions, the symbols δ, $, *, @ and © are used with the following meanings as illustrated below:

'P $ Q' means 'P is neither equal to nor greater than Q'.

'P © Q' means 'P is neither equal to nor smaller than Q'

'P δ Q' means 'P is neither greater than nor smaller than Q.

'P @ Q' means 'P is not smaller than Q'

'P * Q' means 'P is not greater than Q'.

In each question three statements showing relationship have been given, which are followed by three conclusions I, II and III. Assuming that the given statements are true, find out which conclusion(s) is/are **definitely true?**

1. **Statements:**
   B © N, N @ R, F * R
   Conclusions:
   I.   B © R   II.   F * N   III.   R $ B
   (a) Only I and II are true   (b) Only I and III are true
   (c) Only II and III are true   (d) All I, II and III are true
   (e) None of these

2. **Statements:**
   D $ M, M * B, B δ J
   Conclusions:
   I.   J © D   II.   B @ D   III.   J @ M
   (a) Only I and II are true   (b) Only I and III are true
   (c) Only II and III are true   (d) All I, II and III are true
   (e) None of these

3. **Statements:**
   F * T, T $ N, N @ R
   I.   B © R   II.   F * N   III.   R $ B
   Conclusions:
   I.   R $ T   II.   N © F   III.   F $ R
   (a) None is true   (b) Only I is true
   (c) Only II is true   (d) Only III is true
   (e) Only II and III are true

4. **Statements:**
   W δ K, K © F, F $ M
   Conclusions:
   I.   M © K   II.   W @ F   III.   F @ W

(a) Only I is true   (b) Only II is true
(c) Only III is true   (d) Only II and III are true
(e) None is true

5. **Statements:**
   M @ D, D δ K, K © R
   Conclusions:
   I.   R $ M   II.   K δ M   III.   K $ M
   (a) Only I is true
   (b) Only II is true
   (c) Only III is true
   (d) Only either II or III and I are true
   (e) Only either II or III is true

DIRECTIONS (Qs. 6-10) : In the following questions, the symbols @, #, %, $ and © are used with the following meaning as illustrated below:

'P # Q' means 'P is neither greater than nor equal to Q'.

'P © Q' means 'P is neither equal to nor smaller than Q'

'P % Q' means 'P is neither smaller than nor greater than Q.

'P $ Q' means 'P is not smaller than Q'

'P @ Q' means 'P is not greater than Q'.

Now in each of the following questions, assuming the given statements to be true, find which of the three conclusions I, II and III given below them is/are definitely true and give your answer accordingly.

6. **Statements:** R @ D, D © W, B $ W
   Conclusions:
   I.   W # R   II.   B © D   III.   W $ R
   (a) None is true   (b) Only I is true
   (c) Only III is true   (d) Only either I or III is true
   (e) All are true

7. **Statements:**
   H $ V, V % M, K © M
   Conclusions: I. K © V
   II. M @ H
   III. H © K
   (a) Only I and III are true   (b) Only II and III are true
   (c) Only I and II are true   (d) All are true
   (e) None of these

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |
| | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | | | |

8. **Statements:**

K # T, T $ B, B @ F

Conclusions: I. F $ T

II. K # B

III. T $ F

(a) None is true
(b) Only I is true
(c) Only I and II are true
(d) Only II and III are true
(e) All are true

9. **Statements:**

Z # F, R @ F, D © R

Conclusions: I. Z # R

II. F # D

III. D @ Z

(a) None is true
(b) Only I is true
(c) Only III is true
(d) Only either I or III is true
(e) All are true

10. **Statements:**

M © R, R % D, D @ N

Conclusions: I. M © N

II. N $ R

III. M © D

(a) Only I and II are true
(b) Only II and III are true
(c) Only I and III are true
(d) All are true
(e) None of these

DIRECTIONS (Qs. 11-15): In the following questions, certain symbols are used with the following meanings:

P × Q means P is not smaller than Q.

P - Q means P is neither greater than nor smaller than Q.

P+ Q means P is not greater than Q.

P @ Q means P is neither smaller than nor equal to Q.

P ÷ Q means P is neither greater than nor equal to Q.

P © Q means P is not equal to Q.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

(a) If only conclusion I is true.
(b) If only conclusion II is true.
(c) If either conclusion I or II is true.
(d) If neither conclusion I nor II is true.
(e) If both conclusions I and II are true.

11. **Statements:** J-O, T + O, T © Y, E × J

Conclusions: I. E © T

II. E @ T

12. **Statements:** T ÷ R, P @ A, R + A, L - T

Conclusions: I. L ÷ P

II. A @ L

13. **Statements:** T © O, O © P, P - A, A × Z

Conclusions: I. P © T

II. O © A

14. **Statements:** D × E, S ÷ E, S - X, M @ S

Conclusions: I. D @ M

II. D + M

15. **Statements:** A + P, A @ T, T - N, N × S

Conclusions: I. P × S

II. P + S

DIRECTIONS (Qs. 16-20): In the following questions, the symbols @, $, %, # and © are used with the following meanings illustrated-

(i) 'X @ Y' means 'X is not smaller than Y'.

(ii) 'X $ Y' means 'X is not greater than Y'.

(iii) 'X % Y' means 'X is neither smaller than nor equal to Y'.

(iv) 'X # Y' means 'X is neither greater than nor equal to Y'.

(v) 'X © Y' means 'X is neither smaller than nor greater than Y'.

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true. Give answer-

(a) If only I is true.
(b) If only II is true.
(c) If either I or II is true
(d) If neither I nor II is true.
(e) If both I and II are true.

16. **Statements :** P $ T, T @ L, U % L

Conclusions : I. P @ L

II. U © L

17. **Statements :** A @ B, B % D, D © K

Conclusions : I. A © K

II. B % K

18. **Statements :** J # K, K © L, P $ L

Conclusions : I. P $ K

II. J # L

19. **Statements :** T % O, T # M, M @ V

Conclusions : I. M % T

II. O % V

20. **Statements :** K @ T, T # C, U $ P

Conclusions : I. C © K

II. C % K

RESPONSE GRID	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ	**11.** ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	
	13. ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	
	18. ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ			

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CODED INEQUALITIES-2

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-5): In each of the following questions assuming the given statements to be true, find out which of the following two conclusions definitely follow.

Give Answer

(a)   Only Conclusion I is true
(b)   Only Conclusion II is true
(c)   Either Conclusion I or II is true
(d)   Neither Conclusion I nor II is true
(e)   Both Conclusions I and II are true

1.   **Statements:**   A ≥ B; C > D = E; B ≥ C
     Conclusions: I.   A < E   II.   C E
2.   **Statements:**   P ≤ Q; S > T; Q ≥ R = S
     Conclusions: I.   P < R   II.   R > T
3.   **Statements:**   G = H < I; J > K; I ≤ J
     Conclusions: I.   H < J   II.   G > K
4.   **Statements:**   Y ≥ W = N; N ≥ M
     Conclusions: I.   Y > M   II.   Y = M
5.   **Statements:**   J ≤ K; L > M; K ≥ N = L
     Conclusions: I.   J < N   II.   N > M

DIRECTIONS (Qs. 6-10): In each of the following questions, assuming the given statements to be true, find which of the following two conclusions I and II is/are definitely true. Give answer:

(a)   if only conclusion I is true.
(b)   if only conclusion II is true.
(c)   if either I or II is true.
(d)   if neither I nor II is true.
(e)   if both I and II are true.

In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Mark answer-

6.   **Statement:**   P ≥ F, L = K, N = P, F ≥ L,
     Conclusions: I.   F = K   II.   F > K
7.   **Statement:**   C ≥ G, Q ≥ R, J ≥ C, Q = Z, G ≥ Q
     Conclusions: I.   G ≥ Z   II.   C ≥ R

8.   **Statement:**   D > C, A > B > C, D > E > F,
     Conclusions: I.   E > C   II.   F > B
9.   **Statement:**   M ≥ N, K < L, N > O, K > M,
     Conclusions : I.   O < M   II.   O < K
10. **Statement:**   E < F ≤ G = H > S
     Conclusions: I.   G > S   II.   F ≤ H

DIRECTIONS (Qs. 11-15): In these questions, relationships between different elements is shown in the statements. These statements are followed by two conclusions. Give answer

(a)   if only conclusion I follows.
(b)   if only conclusion II follows.
(c)   if either conclusion I or conclusion II follows.
(d)   if neither conclusion I nor conclusion II follows.
(e)   if both conclusions I and II follow.

11. **Statement:**   A > L = T < R ≤ H > K
     Conclusions: I.   H > L   II.   K > T
12. **Statement:**   P ≥ N > D ≥ G < B ≤ J
     Conclusions: I.   G < P   II.   G < J
13. **Statement:**   Q ≤ E < I > N = R ≥ S
     Conclusions: I.   E ≥ S   II.   S ≤ N
14. **Statement:**   R = S ≥ Y ≥ M < W > O
     Conclusions: I.   Y < M   II.   O > S
15. **Statement:**   F ≤ C ≤ V = Z < X = U
     Conclusions: I.   V < U   II.   Z < F

DIRECTIONS (Qs. 16-20): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Mark answer if

(a)   Only conclusion I follows.
(b)   Only conclusion II follows.
(c)   Either conclusion I or II follows.
(d)   Neither conclusion I nor II follows.
(e)   Both conclusions I and II follow.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. **Statement:** N = P, P < F, F > L, L = K

    Conclusions: I. F = K   II. F > K

17. **Statement:** Z > T, T < M, M < J

    Conclusions: I. T < J   II. J < Z

18. **Statements:** Q = Z, C ≥ G, G ≥ Q, Q ≥ R

    Conclusions: I. G ≥ Z   II. C ≥ R

19. **Statement:** A > B > C, D > E > F, D > C

    Conclusions: I. E > C   II. F > B

20. **Statement:** K < L, K > M, M ≥ N, N > O

    Conclusions: I. O < M   II. O < K

| RESPONSE GRID | 16. ⓐⓑⓒⓓⓔ | 17. ⓐⓑⓒⓓⓔ | 18. ⓐⓑⓒⓓⓔ | 19. ⓐⓑⓒⓓⓔ | 20. ⓐⓑⓒⓓⓔ |

SYLLOGISMS - 1

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-10) : In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read both of the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

1. **Statements:**   Some phones are computers.
   All computers are radios.
   All radios are televisions.
   Conclusions: I. All televisions are computers.
   II. Some radios are phones.
   (a)   None follows   (b)   Only I follows
   (c)   Only II follows   (d)   Both I and II follow
   (e)   None of these

2. **Statements:**   All rings are fingers.
   Some ears are fingers.
   All ears are necklaces.
   Conclusions: I. Some necklaces are fingers.
   II. Some necklaces are rings.
   (a)   None follows   (b)   Only I follows
   (c)   Only II follows   (d)   Both I and II follow
   (e)   None of these

3. **Statements:**   All rockets are poles.
   Some poles are trams.
   Some trams are ropes.
   All ropes are tents.
   Conclusion: I. Some tents are trams.
   II. Some ropes are rockets.
   III. Some trams are rockets.
   IV. Some poles are rockets
   (a)   Only I and II follow   (b)   Only I, II and III follow
   (c)   Only I and III follow   (d)   Only I and IV follow
   (e)   None of these

4. **Statements:**   All dials are mirrors.
   All mirrors are spoons.
   Some spoons are decks.
   Some decks are chairs.
   Conclusions: I. Some decks are mirrors.
   II. Some spoons are dials.
   III. Some decks are dials.
   IV. Some chairs are spoons.
   (a)   None follows   (b)   Only I follows
   (c)   Only II follows   (d)   Only III follows
   (e)   Only IV follows

5. **Statements:**   Some houses are forests.
   All forests are trees.
   Some trees are hills.
   All hills are buses.
   Conclusions: I. Some buses are trees.
   II. Some trees are houses.
   III. Some hills are houses.
   IV. Some buses are forests.
   (a)   Only I and II follow   (b)   Only I, II and IV follow
   (c)   Only I, II and III follow   (d)   All I, II, III and IV follow
   (e)   None of these

6. **Statements:**   All notebooks are pens.
   No pen is a table
   Some tables are desks.
   All desks are tanks.
   Conclusions: I. Some tanks are pens.
   II. Some desks are notebooks.
   III. Some tanks are tables.
   IV. No tanks is a pen.
   (a)   Only I follows   (b)   Only III follows
   (c)   Only IV follows   (d)   Only either I or IV follows
   (e)   Only either I or IV and III follows

7. **Statements:**   All belts are rollers.
   Some rollers are wheels.
   All wheels are mats.
   Some mats are cars.
   Conclusions: I. Some mats are rollers.
   II. Some mats are belts.
   III. Some cars are rollers.
   IV. Some rollers are belts.
   (a)   Only I and II follow   (b)   Only I, III and IV follow
   (c)   Only I and IV follow   (d)   Only II, III and IV follow
   (e)   None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ	
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ				

8. **Statements:** Some tyres are rains.
   Some rains are flowers.
   All flowers are jungles.
   All jungles are tubes.
   Conclusions: I. Some jungles are tyres.
   II. Some tubes are rains.
   III. Some jungles are rains.
   IV. Some tubes are flowers.
   (a) Only I, II and III follow (b) Only II, III and IV follow
   (c) Only I, III and IV follow (d) All follow
   (e) None of these

9. **Statements:** All desks are chairs.
   All chairs are tables.
   All tables are boxes.
   All boxes are trunks.
   Conclusions: I. Some trunks are tables.
   II. All chairs are boxes.
   III. Some boxes are desks.
   IV. All desks are trunks.
   (a) Only I, II and III follow (b) Only I, II and IV follow
   (c) Only II, III and IV follow (d) All follow
   (e) None of these

10. **Statements:** Some birds are goats.
    Some goats are horses
    Some horses are lions.
    Some lions are tigers.
    Conclusions: I. Some tigers are goats.
    II. No tigers is goat
    III. Some lions are birds.
    IV. No lion is bird.
    (a) Only either I or II follows
    (b) Only either III or IV follows
    (c) Only either I or II and either III or IV follow
    (d) Only I and III follow
    (e) None of these

DIRECTIONS (Qs. 11-20): Each question consists of three statements followed by three-four conclusions numbered I, II, III and IV. Consider the statements to be true even if they are in variance with the commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements using all the "three" statements together.

11. **Statements:** Some nails are hair.
    All hair are skins.
    No hair is dry.
    Conclusions: I. Some nails are dries.
    II. Some skins are not dries.
    III. Some nails are not dries.
    IV. No hair is a skin.
    (a) Only I and II follow
    (b) Only II and III follow
    (c) Only III and IV follow
    (d) Only I, II, and III follow
    (e) All of the above

12. **Statements:** All radios are televisions.
    All televisions are vehicles.
    All vehicles are bikes.
    Conclusions: I. All radios are vehicles.
    II. All bikes are radios.
    III. Some bikes are radios.
    IV. Some vehicles are televisions.
    (a) Either I and III or II and III follow
    (b) Either II and IV or III and IV follow
    (c) Either II and IV or I and II follow
    (d) Only I and IV follow
    (e) None of these

13. **Statements:** No shirt is tie.
    Some ties are trousers.
    Some shirts are not trousers.
    Conclusions: I. Some trousers are not shirts.
    II. No shirt is trouser.
    III. Some ties are not trousers.
    IV. All trousers are shirts.
    (a) Only I and II follow
    (b) Only III and IV follow
    (c) Only II and III follow
    (d) Only I follow
    (e) None of these

14. **Statements:** All cars are buses.
    Some buses are cycles.
    All cycles are cars.
    Conclusions: I. All buses are cars.
    II. Some buses are cars.
    III. All cycles are buses.
    IV. All buses are cycles.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II and IV follow
    (e) Only III and IV follow

15. **Statements:** All houses are homes.
    Some homes are apartments.
    All apartments are lodges.
    Conclusions: I. Some lodges are apartments.
    II. Some lodges are homes.
    III. Some apartments are houses.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II follow
    (e) Only III follow

| **RESPONSE GRID** | 8. ⓐⓑⓒⓓⓔ | 9. ⓐⓑⓒⓓⓔ | 10. ⓐⓑⓒⓓⓔ | 11. ⓐⓑⓒⓓⓔ | 12. ⓐⓑⓒⓓⓔ |
| | 13. ⓐⓑⓒⓓⓔ | 14. ⓐⓑⓒⓓⓔ | 15. ⓐⓑⓒⓓⓔ | | |

16. **Statements:** Some air conditions are coolers.
    Some coolers are freezes.
    All freezes are fans.
    Conclusions: I. Some fans are air conditions.
    II. Some fans are coolers.
    III. Some freezes are coolers.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II follow
    (e) Only III follow

17. **Statements:** Some colleges are schools.
    No school is kinder garden.
    Some schools are universities.
    Conclusions: I. No university is kinder garden.
    II. No college is university.
    III. Some schools are kinder gardens.
    IV. All universities are schools
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II follow
    (e) None

18. **Statements:** Some pinks are reds.
    All reds are oranges.
    No orange is brown.
    Some browns pinks.
    Conclusions: I. Some pinks are oranges.
    II. Some pinks which are oranges are not browns.
    III. Some pinks are not browns.
    (a) I and III follow   (b) II and III follow
    (c) All follows   (d) None follow
    (e) I and II follow

19. **Statements:** Some post offices are villages.
    No police station is a district.
    All villages are police stations.
    All districts are states.
    Conclusions: I. Some police stations are states.
    II. No police station is a state.
    III. Some police stations may be post offices.
    (a) Only I and III follow
    (b) All follow
    (c) Only either I or II
    (d) None follow
    (e) Only II and III follow

20. **Statements:** No child is adult.
    Some young are elders.
    Some adults are young.
    Some olds are child.

Conclusions: I. All elders are either young or adults.
    II. Some adults are not olds.
    III. All olds are either adults or young.
    (a) Only I follow   (b) Only II follows
    (c) Only III follows   (d) None follow
    (e) All follow

DIRECTIONS (Qs. 21-30): Each question consists of three statements followed by three-four conclusions numbered I, II, III and IV. Consider the statements to be true even if they are in variance with the commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements using all the "three" statements together.

21. **Statements:** Some seconds are minutes.
    All minutes are hours.
    No second is month.
    Conclusions: I. Some seconds are months.
    II. Some hours are not months.
    III. Some seconds are not months.
    IV. No minute is an hour.
    (a) Only I and II follow
    (b) Only II and III follow
    (c) Only III and IV follow
    (d) Only I, II, and III follow
    (e) All of the above

22. **Statements:** All bluebirds are crows.
    All crows are doves.
    All doves are eagles.
    Conclusions: I. All bluebirds are doves.
    II. All eagles are bluebirds.
    III. Some eagles are bluebirds.
    IV. Some doves are crows.
    (a) Either I and III or II and III follow
    (b) Either II and IV or III and IV follow
    (c) Either II and IV or I and II follow
    (d) Only I and IV follow
    (e) None of these

23. **Statements:** No falcon is finch.
    Some finches are gold wits.
    Some falcons are not gold wits.
    Conclusions: I. Some gold wits are not falcons.
    II. No falcon is gold wit.
    III. Some finches are not gold wits.
    IV. All gold wits are falcons.
    (a) Only I and II follow
    (b) Only III and IV follow
    (c) Only II and III follow
    (d) Only I follow
    (e) None of these

24. **Statements:** All kingbirds are kinglets.
    Some kinglets are kites.
    All kites are kingbirds.
    Conclusions: I. All kinglets are kingbirds.
            II. Some kinglets are kingbirds.
            III. All kites are kinglets.
            IV. All kinglets are kites.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II and IV follow
    (e) Only III and IV follow

25. **Statements:** All herons are ibises.
    Some ibises are jaegers.
    All jaegers are juncos.
    Conclusions: I. Some juncos are jaegers.
            II. Some juncos are ibises.
            III. Some jaegers are herons.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II follow
    (e) Only III follow

26. **Statements:** Some gooses are grebes.
    Some grebes are hawks.
    All hawks are gulls.
    Conclusions: I. Some gulls are gooses.
            II. Some gulls are grebes.
            III. Some hawks are grebes.
    (a) Only I and II follow
    (b) Only I and III follow
    (c) Only II and III follow
    (d) Only II follow
    (e) Only III follow

27. **Statements:** Some loons are magpies.
    No magpie is murrelet.
    Some magpies are nuthatches.
    Conclusions: I. No nuthatch is murrelet.
            II. No loon is nuthatch.
            III. Some magpies are murrelets.
            IV. All nuthatches are magpies.

(a) Only I and II follow
(b) Only I and III follow
(c) Only II and III follow
(d) Only II follow
(e) None

28. **Statements:** Some owls are pelicans.
    All pelicans are petrels.
    No petrel is pigeon.
    Some pigeons are owls.
    Conclusions: I. Some owls are petrels.
            II. Some owls which are petrels are not pigeons.
            III. Some owls are not pigeons.
    (a) I and III follow   (b) II and III follow
    (c) All follows   (d) None follow
    (e) I and II follow

29. **Statements:** Some plovers are puffins.
    No parrot is a rail.
    All puffins are parrots.
    All rails are scoters.
    Conclusions: I. Some parrots are scoters.
            II. No parrot is a scoter.
            III. Some parrots may be plovers.
    (a) Only I and III follow
    (b) All follow
    (c) Only either I or II
    (d) None follow
    (e) Only II and III follow

30. Statements: No swallow is swift.
    Some teals are warblers.
    Some swifts are teals.
    Some vultures are swallows.
    Conclusions: I. All warblers are either teals or swifts.
            II. Some swifts are not vultures.
            III. All vultures are either swifts or teals.
    (a) Only I follow   (b) Only II follows
    (c) Only III follows   (d) None follow
    (e) All follow

RESPONSE GRID	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ
	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ			
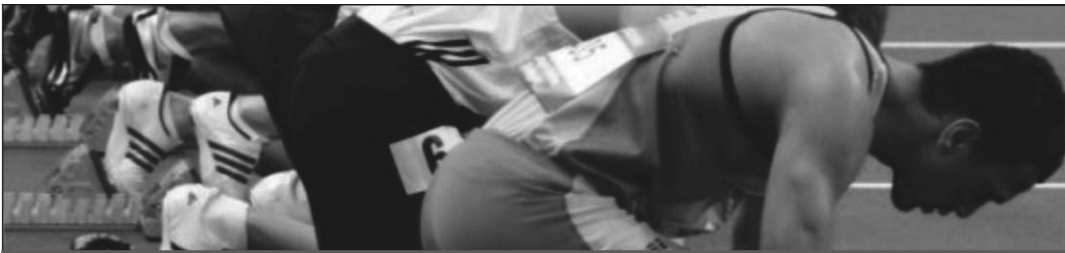
SYLLOGISMS - 2

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../......../...............**

DIRECTIONS (Qs. 1-5) : In each of the following questions two statements are given and these statements are followed by two conclusions numbered (1) and (2). You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give answer:
(a)   If only (1) conclusion follows
(b)   If only (2) conclusion follows
(c)   If either (1) or (2) follows
(d)   If neither (1) nor (2) follows and
(e)   If both (1) and (2) follow.

1.   **Statements :** All fans are lamps. Some lamps are tubes.
     Conclusions:
     1.   Some tubes are fan.
     2.   All fan being tubes is a possibility.
2.   **Statements:** Some pens are pencils. No pencil is sharpener.
     Conclusions:
     1.   Some pens being sharpeners is a possibility.
     2.   Some sharpeners are pencils
3.   **Statements:** Some hens are parrots. Some peacocks are hens.
     Conclusions:
     1.   Some peacocks are parrots.
     2.   All peacocks being parrots is a possibility.
4.   **Statements:** All the ties are shirts. Some pants are shirts.
     Conclusions:
     1.   Some ties are pants.
     2.   No ties is a pants.
5.   **Statements:** Some wolfs are bears. Some bears are lions.
     Conclusions:
     1.   All wolfs being lions is a possibility.
     2.   Some lions are wolfs

DIRECTIONS (Qs. 6-10): In each question below are two/three Statements followed by two conclusions numbered I and II. You have to take the two/three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Give answers:

(a)   If only conclusion I follows
(b)   If only conclusion II follows.
(c)   If either conclusion I or conclusion II follows.
(d)   If neither conclusion I nor conclusion II follows.
(e)   If both conclusion I and conclusion II follow.

6.   **Statements:** I. Some rats are fans.
     II.   All tigers are fans.
     Conclusions:
     I.   All tigers being rats is a possibility
     II.   No tiger is a rat.

For (7-8):
     Statements: No mat is cat. Some cats are cows.
     All cows are hats.
7.   **Conclusions:**
     I.   No hat is a cat.
     II.   At least some hats are cats.
8.   **Conclusions:**
     I.   All mats being hats is a possibility.
     II.   No mat is a cow.

For (9-10):
     Statements: All clerks are assistants.
     No assistant is an officer. All officers are managers.
9.   **Conclusions:**
     I.   No manager is a clerk.
     II.   All assistants being managers is a possibility.
10. **Conclusions:**
     I.   No clerk is an officer
     II.   All clerks being managers is a possibility.

DIRECTIONS (Qs. 11-20): Each question consists of three statements followed by three-four conclusions numbered I, II, III and IV. Consider the statements to be true even if they are in variance with the commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow from the given statements using all the "three" statements together.

11. **Statements:**
     Some roots are stems.
     All stems are grounds.
     All grounds are water
     No leaf is a ground.
     Conclusions:
     I.   All roots are grounds.
     II.   All stems are water.
     III.   Some roots are leaves being possibility.
     (a)   Only I and II follow
     (b)   Only II and III follow
     (c)   Only III follow
     (d)   Only I, II, and III follow
     (e)   None is follow

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

12. **Statements:**
Some riches are strong.
All strong are weak.
All weak are health.
Conclusions:
I. All health being rich is a possibility.
II. At least some weak are riches.
III. All riches being weak is a possibility.
(a) Either I or II follow   (b) Either II or III follow
(c) Both I and II follow   (d) All are follows
(e) None of these

13. Statements:
No statement is a logic.
Some logics are rights.
All rights are wrongs.
Conclusions:
I. No statement is a right.
II. All wrongs are logics.
III. Some statements not being right is a possibility.
(a) Only I and II follow   (b) Only III follow
(c) Only II and III follow   (d) Only I follow
(e) None of these

14. **Statements:**
No state is a district.
Some districts are capitals.
All capitals are countries.
Conclusions:
I. At least some countries are districts.
II. All capitals are districts.
III. Some states not being countries is a possibility.
(a) Only I and II follow   (b) Only I and III follow
(c) Only II and III follow   (d) Only II follow
(e) None is follow

15. **Statements:**
Some oranges are papayas.
All papayas are pears.
Some pears are pineapples
All pineapples are mangoes.
Conclusions:
I. Some mangoes are pears.
II. Some pears are oranges.
III. Some pineapples are oranges.
IV. Some mangoes are papayas
(a) Only I and II follow   (b) Only I and III follow
(c) Only II and III follow   (d) Only II follow
(e) Only III follow

16. **Statements:**
All bears are buffaloes.
No buffalo is camel
Some camels are cats.
All cats are cows.

Conclusions:
I. Some cows are buffaloes.
II. Some cats are bears.
III. Some cows are camels.
IV. No cow is a buffalo
(a) Only I and II follow
(b) Only either I or IV and III follow
(c) Only II and III follow
(d) Only II follow
(e) Only III follow

17. **Statements:**
Some carrots are cauliflowers.
All cauliflowers are corns.
All corns are onions.
Some onions are potatoes.
Conclusions:
I. Some potatoes are carrots.
II. Some onions are cauliflowers.
III. Some corns are carrots.
IV. Some potatoes are cauliflowers.
(a) Only I and II follow   (b) Only I and III follow
(c) Only II and III follow   (d) Only II and IV follow
(e) None

18. **Statements:**
All squares are circles.
All rectangles are squares.
No cube is a cuboid.
Conclusions:
I. Some squares being cube is a possibility.
II. At least some circles are rectangles.
(a) Both I and II follow   (b) Only II follow
(c) Only I follow   (d) None follow
(e) Either I or II follow

19. **Statements:**
Some students are boys.
Some girls are students.
Some boys are teachers.
Conclusions:
I. All students as well as boys being girls is a possibility.
II. All those students who are girls are also boys.
(a) Only I and II follow   (b) Only I follow
(c) Only either I or II   (d) None follow
(e) Only II follow

20. **Statements:**
Some beers are liquids.
All liquid are water.
Some water are juices.
Conclusions:
I. All such beers which are not water can never be liquids.
II. All beers being water is a possibility.
(a) Only I follow   (b) Only II follows
(c) Both I and II follows   (d) None follow
(e) Either I or II follow

| RESPONSE GRID | 12. ⓐⓑⓒⓓⓔ | 13. ⓐⓑⓒⓓⓔ | 14. ⓐⓑⓒⓓⓔ | 15. ⓐⓑⓒⓓⓔ | 16. ⓐⓑⓒⓓⓔ |
| | 17. ⓐⓑⓒⓓⓔ | 18. ⓐⓑⓒⓓⓔ | 19. ⓐⓑⓒⓓⓔ | 20. ⓐⓑⓒⓓⓔ | |
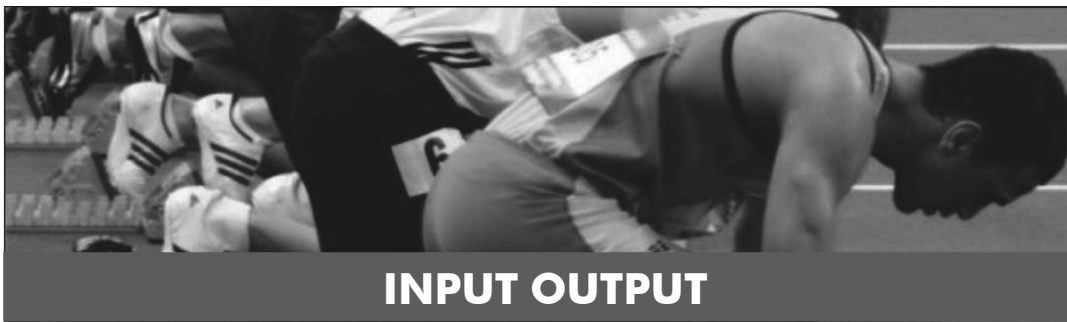
INPUT OUTPUT

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-5) : Study the following information to answer the given questions.

A word arrangement machine when given an input line of words rearranges them following a particular rule. The following is an illustration of input and rearrangement.

Input: age road own wire tire ink pen uni dice eat

Step I   : uni age road own wire tire ink pen eat dice

Step II   : uni own age road wire tire ink eat pen dice

Step III : uni own ink age wire tire eat road pen dice

Step IV   : uni own ink eat age wire tire road pen dice

And step four is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

Input for the questions

Input: gem stat ace cast omit fan rate uncut era input

1. Which of the following would be the final arrangement?
    - (a) cast gem fan rate stat uncut omit input era ace
    - (b) uncut omit input era ace cast fan gem rate stat
    - (c) uncut omit input era ace stat rate gem fan cast
    - (d) uncut omit input era ace stat fan gem rate cast
    - (e) None of these

2. In Step III, which of the following words would be at 6th position from the left?
    - (a) rate   (b) ace   (c) stat
    - (d) gem   (e) None of these

3. Which step number would be the following output? uncut omit gem stat ace rate era input fan cast
    - (a) II   (b) III   (c) V
    - (d) IV   (e) None of these

4. In step IV of the rearrangement, if **omit** is related to **era** and rate is related to **fan** in a certain way, which of the following would **ace** be related to following the same pattern?
    - (a) rate   (b) input   (c) stat
    - (d) gem   (e) None of these

5. Which of the following would be step VII?
    - (a) uncut omit input era ace stat rate gem fan cast
    - (b) uncut omit input era ace rate stat fan gem cast
    - (c) uncut omit input era ace cast fan gem rate stat
    - (d) uncut omit input era stat ace rate gem fan cast
    - (e) There will be no such step as the input gets rearranged before step VII.

DIRECTIONS (Qs. 6-10) : Study the following information to answer the given questions.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two-digit numbers.)

Input : sine 88 71 cos theta 14 56 gamma delta 26

Step I   : cos sine 71 theta 14 56 gamma delta 26 88

Step II   : delta cos sine theta 14 56 gamma 26 88 71

Step III : gamma delta cos sine theta 14 26 88 71 56

Step IV   : sine gamma delta cos theta 14 88 71 56 26

Step V   : theta sine gamma delta cos 88 71 56 26 14

Step V is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input for the questions:

Input : for 52 all 96 25 jam road 15 hut 73 bus stop 38 46 (All the numbers given in the arrangement are two digit numbers).

6. Which word/ number would be at 8th position from the right in step IV ?
    - (a) 15   (b) road   (c) hut
    - (d) jam   (e) stop

7. Which step number would be the following output? Bus all for 52 25 jam road 15 hut stop 38 46 96 73.
    - (a) There will be no such step.
    - (b) III   (c) II
    - (d) V   (e) VI

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |
| | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | | | |

8.   Which of the following would be step VII?

   (a) stop road jam hut for bus all 15 96 73 5246 38 25

   (b) road jam hut for bus all stop 15 25 38 46 52 73 96

   (c) stop road jam hut for bus all 96 73 52 46 38 25 15

   (d) jam hut for bus all 25 road stop 15 96 73 52 46 38

   (e) There will be no such step

9.   Which word/number would be at 6th position from the left in step V?

   (a) 25   (b) stop   (c) jam

   (d) all   (e) road

10. Which of the following would be step III?

   (a) hut for bus all 25 jam road 15 stop 38 96 73 52 46

   (b) for bus all 25 jam road 15 hut 38 stop 96 46 73 52

   (c) hut for bus all jam road 15 stop 38 96 73 52 46 25

   (d) for bus all 25 jam road 15 hut stop 38 46 96 73 52

   (e) None of these

DIRECTIONS (Qs. 11-15) : Study the following information carefully and answer the given questions.

A word arrangement machine when given an input line of words and number rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input   : shop 17 table 20 53 oven desk 39

Step I   : 17 shop table 20 53 oven desk 39

Step II   : 17 table shop 20 53 oven desk 39

Step III   : 17 table 20 shop 53 oven desk 39

Step IV   : 17 table 20 shop 39 53 oven desk

Step V   : 17 table 20 shop 39 oven 53 desk

and **Step V** is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

11. **Input :** 89 bind 32 goal house 61 12 joy

   How many steps will be required to complete the arrangement?

   (a) Four   (b) Five   (c) Six

   (d) Seven   (e) None of these

12. Step II of an input is : 15 yes 62 51 48 talk now gone

   Which of the following will be step VI ?

   (a) 15 yes 48 talk 51 now gone 62

   (b) 15 yes 48 talk 51 62 now gone

   (c) 15 yes 48 talk 51 now 62 gone

   (d) There will be no such step.

   (e) None of these

13. Step III of an input is : 21 victory 30 joint 64 47 all gone

   How many steps will be required to complete the rearrangement?

   (a) Three   (b) Four   (c) Five

   (d) Six   (e) None of these

14. **Input :** win 92 task 73 59 house range 34

   Which of the following will be step IV of the above input?

   (a) 34 win 59 task 73 range 92 house

   (b) 34 win 92 59 task 73 house range

   (c) 34 win 92 task 73 59 house range

   (d) There will be no such step

   (e) None of these

15. **Input :** save 21 43 78 them early 36 for

   Which of the following steps will be the last but one?

   (a) VI   (b) VII   (c) VIII

   (d) V   (e) None of these

DIRECTIONS (Qs. 16 to 20) : Study the following information carefully and answer the given questions.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input   : 51 pour 32 start now 23 46 house

Step I   : 23 51 pour 32 start now 46 house

Step II   : 23 start 51 pour 32 now 46 house

Step III   : 23 start 32 51 pour now 46 house

Step IV   : 23 start 32 pour 51 now 46 house

Step V   : 23 start 32 pour 46 51 now house

Step VI   : 23 start 32 pour 46 now 51 house

and step VI is the last step of the rearrangement

As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

16. **Step II** of an input is : 18 task bear cold dish 81 63 31

   How many more steps will be required to complete the rearrangement?

   (a) Three   (b) Four   (c) Five

   (d) Six   (e) None of these

17. **Input :** 72 59 37 go for picnic 24 journey

   How many steps will it take to complete the rearrangement?

   (a) Three   (b) Four   (c) Five

   (d) Six   (e) None of these

RESPONSE GRID	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ	**11.** ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ
	13. ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ

18. **Input :** nice flower 24 12 costly height 41 56
     Which of the following will be step III ?
     (a) 12 nice 34 height flower costly 41 56
     (b) 12 nice 34 height 41 flower costly 56
     (c) 12 nice 34 flower costly height 41 56
     (d) 12 nice flower 34 costly height 41 56
     (e) None of these

19. **Step II** of an input is : 16 victory 19 36 53 store lake town.
     Which of the following will be step V ?
     (a) 16 victory 19 town store 36 53 lake
     (b) 16 victory 19 town 36 store 53 lake
     (c) 16 victory 19 town 36 53 store lake
     (d) There will be no such step
     (e) None of these

20. **Step III** of an input is : 15 yes 29 ask for soap 42 37
     Which of the following is definitely the input?
     (a) ask yes 29 15 for soap 42 37
     (b) yes ask 15 29 for soap 42 37
     (c) 29 15 yes ask for soap 42 37
     (d) Cannot be determined
     (e) None of these

DIRECTIONS (Qs. 21-26) : Study the following information carefully and answer the given questions.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement steps:

Input : gone 92 over 46 83 now 33 for

Step 1 :   92 gone over 46 83 now for 33
Step 2 :   92 83 gone over now for 46 33
Step 3 :   92 83 over gone now for 46 33
Step 4 :   92 83 over now gone for 46 33

And step 4 is the last step of the rearrangement of the above input.

As per the rule followed in the above steps, find out in each of the following question the appropriate step for the given input:

Input : '25 woman 29 92 88 South toy boy for giving'

21. Which of the following will be step1?
     (a) 25 woman 29 88 South toy boy for giving 92.
     (b) 92 woman 29 88 South toy boy for giving 25
     (c) 92 88 woman South toy boy for giving 29 25
     (d) 25 29 woman South toy boy for 92 88 giving
     (e) None of these

22. Which of the following word/number would be 4th position (from left) in step II?
     (a) toy   (b) 88   (c) South
     (d) woman   (e) None of these

23. How many steps would be needed to complete the arrangement?
     (a) 8th   (b) 7th   (c) 6th
     (d) 5th   (e) None of these

24. In step IV which of the following word/number would be on 8th position (from left)?
     (a) 29   (b) boy   (c) for
     (d) toy   (e) None of these

25. Which step number would be the following output?
     92 88 woman toy South boy for giving 29 25
     (a) 1st   (b) 2nd   (c) 3rd
     (d) 4th   (e) There is no such step

26. Which of the following would be the final arrangement?
     (a) 92 88 woman toy South giving boy for 29 25
     (b) 92 88 woman toy South giving for boy 29 25
     (c) 92 88 woman South toy giving for boy 29 15
     (d) There is no such step.
     (e) None of these

DIRECTIONS (Qs. 27-30): Study the following information carefully to answer the given questions.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input :   say to 12 by 29 all 71 same 53 81 above 61
Step I :   above say to by 29 all 71 same 53 81 61 12
Step II :   above same say to by all 71 53 81 61 12 29
Step III : above same say all to by 71 81 61 12 29 53
Step IV :   above same say all to by 71 81 12 29 53 61
Step V :   above same say all to by 81 12 29 53 61 71
Step VI :   above same say all to by 12 29 53 61 71 81

And Step VI is the last step of the above input. Now, the following questions are based on the given input.

Input : toy 18 till 24 36 is of never 87 99 cut 73

27. Which of the following will be the penultimate step?
     (a) Step VI   (b) Step V   (c) Step IV
     (d) Step III   (e) None of these
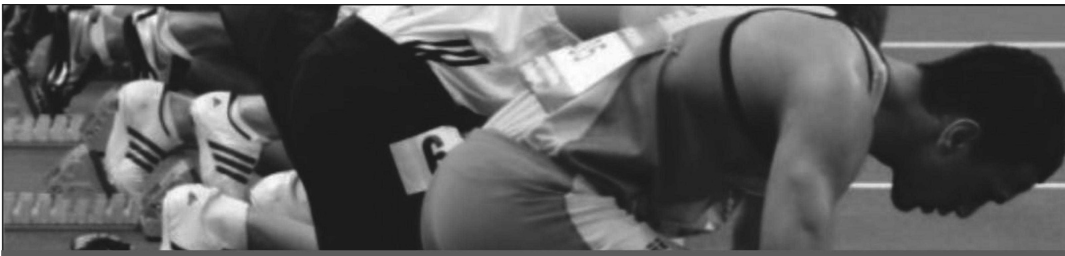
RESPONSE GRID
18. (a)(b)(c)(d)(e)   19. (a)(b)(c)(d)(e)   20. (a)(b)(c)(d)(e)   21. (a)(b)(c)(d)(e)   22. (a)(b)(c)(d)(e)
23. (a)(b)(c)(d)(e)   24. (a)(b)(c)(d)(e)   25. (a)(b)(c)(d)(e)   26. (a)(b)(c)(d)(e)   27. (a)(b)(c)(d)(e)

28. What will be the position of 'is' in the last but one step?

    (a) Seventh from the left

    (b) Sixth from the right

    (c) Sixth from the left

    (d) Fifth from the left

    (e) None of these

29. Which word/number would be the fourth from the right end in Step IV?

    (a) cut   (b) 18   (c) 24

    (d) 99   (e) 73

30. How many steps will be required to give the final output?

    (a) Five   (b) Four   (c) Six

    (d) Seven   (e) Eight

RESPONSE GRID	28. ⓐ ⓑ ⓒ ⓓ ⓔ 29. ⓐ ⓑ ⓒ ⓓ ⓔ 30. ⓐ ⓑ ⓒ ⓓ ⓔ

STATEMENTS & ARGUMENTS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-10) : In making decisions about important questions, it is desirable to be able to distinguish between "strong" arguments and "weak" arguments. "Strong" arguments must be both important and directly related to the questions. "Weak" arguments may not be directly related to the question and may be of minor importance or may be related to the trivial aspects of the question.

Each question below is followed by three arguments numbered I, II and III. You have to decide which of the arguments is a "strong" argument and which is a "weak" argument.

1. Should smoking cigarettes and drinking alcohol by the actors be completely banned in the movies in India?
    Arguments: I. Yes, this will significantly reduce the trend of smoking cigarettes and drinking alcohol among the youth in India.
    II. No, there should be no such ban on the creative pursuits of the filmmaker.
    III. No, the films portray the society and hence such scenes should be an integral part of the movie if the storyline demands so.
    (a) None is strong   (b) Only I & II are strong
    (c) Only II & III are strong (d) Only I & III are strong
    (e) All are strong

2. Should sale of vital human organs be made legal in India?
    Arguments: I. No, it goes against our culture.
    II. No, this will lead to unhealthy practices.
    III. Yes, this will bring an end to the illegal trading of human organs.
    (a) None is strong   (b) Only I & II are strong
    (c) Only III is strong   (d) Only II & III are strong
    (e) All are strong

3. Should the conscription of citizens for defence services be made compulsory in India?
    Arguments: I. Yes, this is the only way to tackle the serious shortage of manpower in defence services.
    II. No, instead the compensation package be made comparable to other job sectors to attract people to join defence services.
    III. Yes, many other countries have made this compulsory.
    (a) Only I is strong   (b) Only II is strong
    (c) Only I and II are strong
    (d) Only either I or II is strong
    (e) None of these

4. Should the salary and perquisites of public sector undertaking employees to made equivalent to those in the private sector?
    Arguments: I. Yes, this will help the public sector undertakings to attract and retain competent workforce.
    II. No, public sector undertakings cannot afford to pay salaries to the level of private sector.
    III. Yes, otherwise the public sector undertakings will not be able to compete with the private sector organisations.
    (a) None is strong   (b) Only III is strong
    (c) Only I is strong   (d) Only II is strong
    (e) Only I and III are strong

5. Should there be a complete ban on registration of new cars for a few months in the big cities in India?
    Arguments: I. Yes, this will significantly reduce the number of cars on the already overcrowded roads of the big cities in India.
    II. Yes, the existing car owners will be very happy as they will face less traffic snarls in peak hours.
    III. No, this is highly discriminatory against those who decide to buy cars now and hence should not be enforced.
    (a) Only I is strong   (b) Only I & III are strong
    (c) Only III is strong   (d) All are strong
    (e) None of these

6. Should the Govt restrict use of electricity for each household depending upon the requirement?
    Arguments: I. Yes, this will help government tide over the problem of inadequate generation of electricity.
    II. No, every citizen has the right to consume electricity as per their requirement as they pay for using electricity.
    III. No, the Govt does not have the machinery to put such a restriction on the use of electricity.
    (a) Only I is strong   (b) Only II is strong
    (c) Only I and II are strong (d) Only II and III are strong
    (e) All I, II and III are strong

7. Should the Govt order closure of all educational institutions for a month to avoid fast spreading of the contagious viral infection?
    Arguments: I. No, the closure of educational institutions alone is not the solution for curbing the spread of the viral infection.
    II. No, students will visit crowded places like malls, markets, playgrounds etc. in more numbers and spread the disease, as they will have a lot of spare time at their disposal.
    III. Yes, young persons are more prone to get affected by the viral infection and hence they should remain indoors.
    (a) None is strong   (b) Only I is strong
    (c) Only III is strong   (d) Only I and II are strong
    (e) All I, II and III are strong

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ			

8. Should the Govt ban export of all types of foodgrains for the next one year to tide over the unpredicted drought situation in the country?
    Arguments: I. Yes, there is no other way to provide food to its citizens during the year.
    II. No, the Govt does not have its jurisdiction over private exporters for banning exporters.
    III. Yes, the Govt should not allow the exporters to export foodgrains and procure all the foodgrains held by such exporters and make it available for home consumption.
    (a) Only I and II are strong   (b) Only II and III strong
    (c) Only I and III are strong   (d) All I, II and III are strong
    (e) None of these

9. Should there be a common syllabus for all subjects in graduate courses in all the universities across the country?
    Arguments: I. Yes, this is the only way to spring in uniformity in the education system in the country.
    II. Yes, it will help standardise the quality of graduation certificates being given by different universities in the country.
    III. No, each universities should have the autonomy to decide its syllabus based on the specific requirement of the university.
    (a) None is strong   (b) Only I is strong
    (c) Only II is strong   (d) Only I and II are strong
    (e) Only II and III are strong

10. Should all those students who failed in one or two subjects in HSC be allowed to take admission in degree courses and continue their study, subject to their successfully passing in the supplementary examination?
    Arguments: I. Yes, this will help the students to complete their education without a break of one year.
    II. Yes, this is a forward-looking strategy to help the students and motivate them for higher studies.
    III. No, such students do not choose to continue their studies without having passed in all the subjects in HSC.
    (a) Only I is strong   (b) Only II is strong
    (c) Only III is strong
    (d) Only either II or III and I are strong
    (e) None of these

DIRECTIONS (Qs. 11-17) : In making decisions about important questions, it is desirable to be able to distinguish between "strong" arguments and "weak" arguments. "Strong" arguments must be both important and directly related to the question. "Weak" arguments may not be directly related to the question and may be of minor importance or may be related to the trivial aspects of the question. Each question below is followed by two arguments numbered I and II. You have to decide which of the arguments is a "strong" argument and which is a "weak" argument.
Each question below is followed by two arguments numbered I and II. You have to decide which of the arguments is a "strong" argument and which is a "weak" argument.

Give answer (a) if only argument I is strong.
Give answer (b) if only argument II is strong.
Give answer (c) if either argument I or II is strong.
Give answer (d) if neither argument I nor II is strong.
Give answer (e) if both arguments I and II are strong.

11. **Statement:** Should the number of holidays given to Govt employees be reduced to only five in a year?
    Arguments: I. Yes, such holidays subsequently reduce working hours, thus adversely affecting the economy of the nation.
    II. No, employees require intermittent rest from hectic work schedule.

12. **Statement:** Should all correspondence courses at graduate level be stopped?
    Arguments: I. No, correspondence courses help needy students to pursue studies and earn at the same time.
    II. Yes, quality education is not possible without teachers and classrooms.

13. **Statement:** Should only nuclear power be used to generate electricity?
    Arguments: I. Yes, this will help reduce air pollution to a great extent.
    II. No, radioactive material used in nuclear plants is unsafe for large-scale use.

14. **Statement:** Should the Govt remove all the slums in major cities?
    Arguments: I. Yes, slums are a nuisance to the people living in big cities.
    II. No, inhabitants of slums are also citizens of the country and they contribute towards the growth of the nation.

15. **Statement:** Should cricket replace hockey as the national sport of India?
    Arguments: I. Yes, the performance of the hockey team has been dismal for the last few years.
    II. No, cricket is the national sport of Australia and no two countries must have the same national sport.

16. **Statement:** Should the sale of all the toys made in China be banned in India?
    Arguments: I. Yes, there are very cheap and hence will put the local toy manufacturers out of business.
    II. No, Indian toys are of much better quality and their sale will not be affected.

17. **Statement:** Should there be no examination upto Std IX in all the schools in India?
    Arguments: I. No, students need to go through the process of giving examinations right from young age.
    II. Yes, this will help students to think laterally and achieve then creative pursuits.

RESPONSE GRID					
8. ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ	**11.** ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ
13. ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 18-22) : Each of these questions are followed by two arguments numbered I and II. Decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Mark answer as

(a) If only argument II is strong.
(b) If only argument I is strong.
(c) If either argument I or II is strong.
(d) If neither argument I nor II is strong.
(e) If both arguments I and II are strong.

18. Should there be only one rate of interest for term deposits of varying durations in banks?
    Arguments:
    I. No, people will refrain money for longer duration resulting into reduction of liquidity level of banks.
    II. Yes, this will be much simpler for the common people and they may be encouraged to keep more money in banks.

19. Should all those who have come in contact with the patients' infectious respiratory disease be quarantined in their houses?
    Arguments:
    I. No, nobody should be quarantined unless they are tested and found to be infected by the virus causing the disease.
    II. Yes, this is the only way to control the spread of the dreaded disease.

20. Should mutual funds be brought under strict Govt. control?
    Arguments:
    I. Yes, that is one of the ways to protect the interest of the investors.
    II. No, strict Govt. controls are likely to be counter productive.

21. Should all the profit making public sector units be sold to private companies?
    Arguments:
    I. Yes, this will help the government to augment its resources for implementing the development programmes.
    II. No, the private companies will not be able to run these units effectively.

22. Should the public sector undertakings be allowed to adopt hire and fire policy?
    Arguments:
    I. Yes, this will help the public sector undertakings to get rid of non-performing employees and will also help to reward the performing employees.
    II. No, the management may not be able to implement the policy in an unbiased manner and the employees will suffer due to the high-handedness of the management.

DIRECTIONS (Qs. 23-26) : Each of these questions consists of a statement, followed by two arguments numbered I and II. Decide which of the arguments is a 'strong' argument and which is a 'weak', Mark answer as :

(a) If only argument II is strong
(b) If only argument I is strong
(c) If neither I nor II is strong
(d) If both I and II are strong
(e) If both arguments I and II are strong.

23. **Statement :** Should there be a ceiling on the salary of top executives of multinationals in our country?
    Arguments :
    I. Yes, otherwise it would lead to unhealthy competition and our own industry would not be able to withstand that
    II. No, with the accent on liberalization of economy, any such move would be counter-productive. Once the economy picks up, this disparity will be reduced

24. **Statement :** Should India encourage exports, when most things are insufficient for internal use itself?
    Arguments :
    I. Yes, we have to earn foreign exchange to pay for our imports
    II. No, even selective encouragement would lead to shortages

25. **Statement :** Should government stop spending huge amounts of money on international sports?
    Arguments :
    I. Yes, this money can be utilized for upliftment of the poor.
    II. No, sportspersons will be frustrated and will not get international exposure.

26. **Statement :** Should all refugees, who make unauthorized entry into a country, be forced to go back to their homeland?
    Arguments :
    I. Yes, they make their colonies and occupy a lot of land
    II. No, they leave their homes because of hunger or some terror and on human grounds, should not be forced to go back.

DIRECTIONS (Qs. 27-30) : Each of these has a question followed by two arguments numbered I and II. Decide which of the arguments is 'strong' and which is 'weak '. Mark answer as

(a) if only argument II is strong.
(b) if only argument I is strong.
(c) if either argument I or II is strong.
(d) if neither argument I nor II is strong.
(e) If both arguments I and II are strong.

RESPONSE GRID					
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	

27. Should all the professional colleges in India be encouraged to run their own courses without affiliation to any university?

   Arguments :
   I. Yes, this is the only way to create more opportunities for those who seek professional training.
   II. No, this will dilute the quality of professional training as all such colleges may not be equipped to conduct such courses.

28. Should all those who have come in contact with· the patients of infectious respiratory disease be quarantined in their houses?

   Arguments:
   I. No, nobody should be quarantined unless they are tested and found to be infected by the virus causing the disease.
   II. Yes, this is the only way to control the spread of the dreaded disease.

29. Should India support all the international policies of United States of America?

   Arguments:
   I. No, many other powerful countries do not support the same.
   II. Yes, this is the only way to gain access to US development funds.

30. Should there be a complete ban on advertising of tobacco products in all media?

   Arguments:
   I. Yes, this is the only way to save people from suffering from cancer.
   II. No, this will adversely affect the sale of tobacco products.

RESPONSE GRID	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

STATEMENT AND ASSUMPTIONS

Max. Marks : 30　　**No. of Qs. 30**　　**Time : 20 min.**　　**Date : ..../........./................**

DIRECTIONS (Q. 1-13) : In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumption and decide which of the assumptions is implicit in the statement.

Give answer (a) if only assumption I is implicit

Give answer (b) if only assumption II is implicit.

Give answer (c) if either assumption I or II is implicit.

Give answer (d) if neither assumption I nor II is implicit.

Give answer (e) if both assumptions I and II are implicit.

1. **Statement :** Even though the number of sugar factories is increasing at a fast rate in India, we still continue to import it from other countries.

   Assumptions I : Even the increased number of factories may not be able to meet the demand of sugar in India

   II : The demand for sugar may increase substantially in future.

2. **Statement :** The government announced a heavy compensation package for all the victims of the terrorist attacks.

   Assumptions I : Such incidents of terror may not occur in near future.

   II : Compensation may mitigate the anger among the citizens against the current government.

3. **Statement :** Many organizations have switched over to online mode of examinations.

   Assumptions I : Candidates from all parts of the country may be well-versed using computers.

   II : Online mode of examinations helps in recruiting more capable personnel.

4. **Statement :** Many employees of the organisation applied for special sabbatical leave of two years to pursue higher education.

   Assumptions I : The management of the organisation may not grant leave to most of these employees.

   II : These employees may be able to complete their education during the sabbatical leave.

5. **Statement :** The college administration has instructed all the students to stop using cell phones within the college premises.

   Assumptions I : The students may stop using cell phones in the college premises.

   II : The students may continue to use cell phones in the college premises.

6. **Statement :** The Govt has decided to levy congestion tax on passengers traveling by air to and from the metro cities.

   Assumptions I : The tax so collected may be adequate to meet part of the expenses for providing additional resources to handle huge traffic.

   II : Passengers traveling by air to and from these cities may be able to pay extra amount by way of congestion tax.

7. **Statement :** The local citizens group submitted a memorandum to the civic authority for allowing them to convert the vacant plot in the locality into a garden at their own cost.

   Assumptions I : The local citizen group may be able to gather enough funds to develop the garden.

   II : The civic authority may not accede to the requests of the local citizen group.

8. **Statement :** Most of the private companies have decided against awarding annual increase in the salaries of their employees for the previous year due to the current economic situation.

   Assumptions I : Majority of the employees may leave their job to protest against the decision.

   II : These companies may announce hike in salaries next year.

9. **Statement :** Mr X started at 9.00 am from his residence to attend a meeting scheduled to be held at 11.00 am and instructed his assistant to meet him at the venue of the meeting and hand over the relevant documents.

   Assumptions I : Mr. X may arrive at the meeting place before 11.00 am.

   II : Mr. X's assistant may be able to arrive at the venue before commencement of the meeting.

10. **Statement :** The city transport corporation has introduced air-conditioned buses on various routes to attract people travelling to their work places by car and hence reduce congestion on the roads.

    Assumptions I : Majority of the people may still prefer to travel to their work places in their own cars.

    II : Many people may now opt for these buses for travelling to their work places.

RESPONSE	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
GRID	**6.** ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ

11. **Statement :** The state govt has announced an amnesty scheme for all the housing societies defaulting on payment of municipal taxes asking these societies to pay upfront six per cent of the dues and regularize their status without any penalty.

    Assumptions I : Most of the defaulting housing societies may now opt for the amnesty scheme and pay up their dues.

    II : Other housing societies which have been paying their taxes regularly may file case against the govt for discriminatory practices.

12. **Statement :** The railway authority has announced suspension of movements of train on the main track within the city limit for carrying out major repair works of Saturday and Sunday and advised the commuters to plan their journey accordingly.

    Assumptions I : The commuters may protest against the decision of the railway authority and may disrupt other transport services.

    II : The municipal authority may be able to deploy additional buses during Saturday and Sunday to help the commuters.

13. **Statement :** "If you are a first-class graduate with good communication skills an also have work experience of at least two years in sales-related activities, you are welcome in our organization" - An employment advertisement.

    Assumptions I : Many with good communication skills may not respond to the advertisement.

    II : All the first-class graduates may possess good communication skills.

DIRECTIONS (Qs. 14-18) : In each question below is given a statement followed by three assumptions (A), (B) and (C). An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

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14. **Statement :** The police authority cordoned off the entire locality for the entire day and stopped all vehicular movement for the visit of a top functionary of the government in view of the threat perception and advised all the residents in the area to limit their movement outside their dwellings.

    Which of the following assumptions is/are implicit in the above statement?

    (A) The police personnel may not be able to control the vechicular movement in the locality and may seek help from the armed forces.

    (B) People living in the locality may move out of their houses for the day to avoid inconvenience.

    (C) The Govt functionary may request the police authority to lift the ban on the movement of residents of the locality outside their dwellings.

    (a) None of implicit   (b) Only (A) is implicit

    (c) Only (B) is implicit (d) Only (C) is implicit

    (e) Only (B) and (C) are implicit

15. **Statement :** The apex body controlling universities in the country has decided to revise the syllabus of all the technical course to make them focused towards the present needs of the industry, thereby making the technical graduates more employable that they are at present.

    Which of the following assumptions is/are implicit in the above statement?

    (A) Technical colleges affiliated to different universities may not welcome the apex body's decision and may continue with the same syllabus as at present.

    (B) The industry may welcome the decision of the apex body and scale up their hiring from these colleges.

    (C) The Govt may not allow the apex body to implement its decision in all the colleges as it may lead to chaos.

    (a) None of implicit   (b) Only (A) is implicit

    (c) Only (B) is implicit (d) Only (C) is implicit

    (e) Only (A) and (B) are implicit

16. **Statement :** Govt has urged all the citizens to use electronic media for carrying out their daily activities, whenever possible, instead of using paper as the manufacture of paper requires the cutting down of a large number of trees causing severe damage to the ecosystem.

    Which of the following assumptions is/are implicit in the above statement?

    (A) Most people may be capable of using electronic media to carry out various routines.

    (B) Most people may have access to electronic media for carrying out their daily routine activities.

    (C) People at large may reject the govt's appeal and continue using paper as before.

    (a) Only (A) is implicit

    (b) Only (B) is implicit

    (c) Only (A) and (B) are implicit

    (d) Only (C) is implicit

    (e) None of these

17. **Statement :** The Govt has decided to auction construction of highway to private entities in several blocks across the country on build-operate-transfer basis.

    Which of the following assumptions is/are implicit in the above statement?

    (A) An adequate number of private entities may not respond to the Government's auction notification.

    (B) Many private entities in the country are capable of constructing highways within a reasonable time.

    (C) The Govt's proposal of build-operate-transfer may financially benefit the private entities.

    (a) Only (A) and (B) are implicit

    (b) Only (B) and (C) are implicit

    (c) Only (B) is implicit

    (d) Only (A) and (C) are implicit

    (e) None of these

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18. **Statement :** The airlines have requested all their bona fide passengers to check the status of flight operations before leaving their homes as heavy fog is causing immense problems to normal flight operations.

Which of the following assumptions is/are implicit in the above statement?

(A) Majority of the air passengers may check the flight status before starting their journey to the airport.

(B) The Govt may take serious objection to the notice issued by the airline company.

(C) Majority of the passengers may cancel their tickets and postpone their journey till the situation becomes normal.

(a) None of implicit   (b) Only (A) is implicit

(c) Only (B) is implicit (d) Only (C) is implicit

(e) Only (A) and (C) are implicit

DIRECTIONS (Qs. 19-22) : In each question, a statement is followed by two assumptions numbered I and II. Consider the statement and the following assumptions to decide which of , the assumptions is implicit in the statement. Mark answer as

(a) if only assumption I is implicit;

(b) if either I or II is implicit;

(c) if only assumption II is implicit;

(d) if neither I nor II is implicit.

19. **Statement:** Like a mad man, I decided to follow him.

Assumptions:

I. I am not a mad man.

II. I am a mad man.

20. **Statement:** All the employees are notified that the organisation will provide transport facilities at half the 'cost from the nearby railway station to the office except those who have been provided with travelling allowance.

Assumptions:

I. Most of the employees will travel by the office transport.

II. Those who are provided with travelling allowance will not read such notice.

21. **Statement:** An advertisement of a Bank "Want to open a bank account! Just dial our 'room service' and we will come at your doorsteps."

Assumptions:

I. There is a section of people who require such service at their home.

II. Now-a-days banking has become very competitive.

22. **Statement:** I can take you quickly from Kanpur to Lucknow by my cab but then you must pay me double the normal charges.

Assumptions:

I. Normally, it will take more time to reach Lucknow from Kanpur.

II. People want to reach quickly but they will not pay extra money for it.

DIRECTIONS (Qs. 23-26) : Each of these has a statement followed by two assumptions. Mark answer as:

(a) if only assumption I is implicit;

(b) if only assumption II is implicit;

(c) if either I or II is implicit;

(d) if neither I nor II is implicit.

23. **Statement :**

Unemployment allowance should be given to all unemployed Indian youth above 18 years of age.

Assumptions :

I. There are unemployed youth in India who need monetary support.

II. The government has sufficient funds to provide allowance to all unemployed youth.

24. **Statement :**

All the employees are notified that the organization will provide transport facilities at half cost from the nearby railway station to the office except those who have been provided with travelling allowance.

Assumptions :

I. Most of the employees will travel by the office transport.

II. Those who are provided with travelling allowance will not read such notice.

25. **Statement :**

Retired persons should not be appointed for executive posts in other organizations.

Assumptions :

I. Retired persons may lack the zeal and commitment to carry out executive's work.

II. Retired persons do not take interest in the work and welfare of the new organizations.

26. **Statement :**

Government aided schools should have uniformity in charging various fees.

Assumptions :

I. The government's subsidy comes from the money collected by way of taxes from people.

II. The government while giving subsidy may have stipulated certain uniform conditions regarding fees.

| **RESPONSE** | 18. ⓐⓑⓒⓓⓔ | 19. ⓐⓑⓒⓓⓔ | 20. ⓐⓑⓒⓓⓔ | 21. ⓐⓑⓒⓓⓔ | 22. ⓐⓑⓒⓓⓔ |
| **GRID** | 23. ⓐⓑⓒⓓⓔ | 24. ⓐⓑⓒⓓⓔ | 25. ⓐⓑⓒⓓⓔ | 26. ⓐⓑⓒⓓⓔ | |

DIRECTIONS (Qs. 27-30) : In each of these questions, a statement is followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. Consider the statement and the following assumptions. Mark answer as :

(a) If only assumption I is implicit
(b) If either assumption I or II is implicit
(c) If only assumption II is implicit
(d) If neither assumption I nor II is implicit

27. **Statement :** The Mohan Cooperative Housing Society has put up a notice at its gate that sales persons are not allowed inside the society .

    Assumptions :
    I. All the sales persons will stay away from the Mohan Cooperative Housing Society.
    II. The security guard posted at the gate may be able to stop the sales persons entering the society.

28. **Statement :** Bank 'A' has announced reduction of half percentage on the interest rate on retail lending with immediate effect.

    Assumptions :
    I. Other banks may also reduce their retail lending rates to be in competition.
    II. The bank 'A' may be able to attract more customers for availing retail loans.

29. **Statement :** The government has decided to hold the employers responsible for deducting tax at source for all its employees.

    Assumptions :
    I. The employers may still not arrange to deduct tax at source for its employees.
    II. The employees may not allow the employers to deduct tax at source.

30. **Statement :** The Union Government has decided to withdraw existing tax relief on various small savings schemes in a phased manner to augment its tax collection.

    Assumptions :
    I. People may still continue to keep money in small savings schemes and also pay taxes.
    II. The total tax collection may increase substantially.

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STATEMENT AND CONCLUSIONS

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../........./.................**

DIRECTIONS (Qs. 1-18) : In each question below is given a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

Give answer (a) if only conclusion I follows.

Give answer (b) if only conclusion II follows.

Give answer (c) if either I or II follows.

Give answer (d) if neither I nor II follows.

Give answer (e) if both I and II follow.

1. **Statement :** Although we have rating agencies like Crisil, ICRA, there is demand to have a separate rating agency for IT Companies to protect investors.
   Conclusions :
   I :   Assessment of financial worth of IT Companies calls for separate set of skills, insight and competencies.
   II : Now the investors investing in I. T. Companies will get protection of their investment.

2. **Statement :** Company "Y" will improve the manufacturing facilities for the production of shaving kits as a result of which capacity would increase and cost would be reduced – A spokesperson of the Company "Y".
   Conclusions :
   I :   The products of Company "Y" will complete the market norms in the quality and cost factor.
   II : There will be demand of shaving kits of Company "Y"?

3. **Statement :** During 1997-98 the total loss incurred by the 111 Public Sector Units was to the tune of ₹ 6809 crore, which was converted into paid capitals by the Government of its total investment of ₹ 5129 crore.
   Conclusions :
   I :   The Government is left with only one option that is to privatise these units.
   II : The Government did not take care in the matter of investments in these public sector units.

4. **Statement :** Population increase coupled with depleting resources is going to be the scenario of many developing countries in days to come.

   Conclusions :
   I :   The population of developing countries will not continue to increase in future.
   II : It will be very difficult for the governments of developing countries to provide its people decent quality of life.

5. **Statement :** Mr. X is one of the probable candidates shortlisted for the post of Director of K. L. M. Institute.
   Conclusions :
   I :   Mr. X will be selected as Director of K. L. M. Institute.
   II : Mr. X will not be selected as Director of K. L. M. Institute.

6. **Statement :**
   'We follow some of the best and effective teaching learning practices used by leading institutes all over the world'. — A statement of professor of MN Institute.
   Conclusions :
   I. The MN Institute is one of the leading institutes of the world.
   II. Whatever is being followed by world's leading institutes will definitely be good and useful.

7. **Statement :**
   In the absence of national health insurance or social security cover, a person with limited resources has to depend on government hospitals, which are crowded, overburdened and understaffed.
   Conclusions :
   I. National health insurance is meant only for the affluent sections of society.
   II. The government hospitals provide treatment on nominal charges or free.

8. **Statement :**
   We do not need today in India extraordinary specialists but those trained ordinary doctors who are dedicated to their profession.
   Conclusions :
   I. We should promote medical profession with dedicated ordinary doctors rather than promoting high specialised medical education.
   II. Extraordinary specialists are not dedicated to their profession.

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ		

9. **Statement :**
"The Government will review the present policy of the diesel price in view of further spurt in the international oil prices" — A spokesman of the Government.
Conclusions :
I. The Government will increase the price of the diesel after the imminent spurt in the international oil prices.
II. The Government will not increase the price of the diesel even after the imminent spurt in the international oil prices.

10. **Statement :**
Vegetable prices are soaring in the market.
Conclusions :
I. Vegetables are becoming a rare commodity.
II. People cannot eat vegetables.

11. **Statement :**
Being from a business family, Chandan was apparently convinced by his parents and other family members to join the family trade.
Conclusions :
I. People should take up their family profession so that family prospers.
II. It is necessary to keep in family members happy by choosing family's business.

12. **Statement :**
Global ecological issues have eclipsed local environmental problems which are being faced by the poor societies.
Conclusions :
I. Poor societies always have to suffer because of their poverty.
II. Global ecological issues are not so important. Rich societies can bear with it.

13. **Statements :**
Of the ten fishermen caught in a storm, nine managed to return to the shore.
Praveen has not yet returned after four days.
Conclusions :
I. Praveen got killed in the storm.
II. Praveen has survived the storm.

14. **Statements :**
Now you don't need an import licence to own a VCR.
Conclusions :
I. VCRs are now manufactured indigenously.
II. VCRs are now freely permitted to be imported.

15. **Statements :**
Just about everyone in Germany has been on a diet at one time or the other and millions of them have learned that the weight they lose is all too easily regained. Still' despite their frustration, few question the wisdom of dieting.
Conclusions :
I. Germany should stop dieting.
II. Germans do not learn from experience.

16. **Statements :**
A study of planning commission reveals boom in revenues. However, this has been of little avail owing to soaring expenditure. In the event, there has been a high dose of deficit financing, leading to marked rise in prices.
Large financial outlays year after year had little impact on the standard of living.
Conclusions :
I. A boom in revenues leads to soar in prices.
II. Large financial outlays should be avoided.

17. **Statements :**
The average number of students per teacher is 50 in the urban area whereas it is 60 in rural areas. The national average is 55.
Conclusions :
I. The student-teacher ratio in the rural areas is higher than in the urban areas.
II. More students study with the same teacher in the rural areas as compared to those in the urban areas.

18. **Statement :**
Morning walks are good for health.
Conclusions :
I. All healthy people go for morning walks.
II. Evening walks are harmful.

19. **Statement :** The cost of manufacturing cars in state A is 30 per cent less than the cost of manufacturing cars in state B. After transportation fee for the differential distances of states A and B and the interstate taxes, it is cheaper to manufacture cars in state B than in state A for selling these cars in State C. Which of he following supports the conclusion draw in the above statement?
(a) The cost of transportation from state A to state C is more than 30 per cent of the production cost.
(b) The production cost of cars in state B is lower in comparison to state A.
(c) Only entry tax at state C is more for the production originating in state A.
(d) Entry tax at state C is more for the products originating in state B.
(e) The total of transportation cost of cars from state B to state C and entry tax of cars at state C is less than 30 per cent of the production cost of cars in state B.

20. **Statement :** There was a slow decline in the number of patients with flu-like symptoms visiting various health facilities in the city during the last fortnight.
Which of the following substantiates the fact mentioned in the above statement?
(a) Majority of the people suffering from flu visit the health facilities in the city.
(b) There has been a continuous increase in the sale of medicines for curing flu in the city limits.
(c) People have started visiting the crowded places like malls and cinema halls during the last fortnight after a cautioned gap of one month.
(d) There is a sudden increase in the number of deaths caused by flu-like symptoms followed by respiratory complications.
(e) None of these

RESPONSE GRID	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ
	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ			

COURSE OF ACTION

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-6) : In each question below is given a statement followed by three courses of action numbered (A), (B) and (C). A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

1. **Statement :** A heavy unseasonal downpour during the last two days has paralysed the normal life in the state in which five persons were killed but this has provided a huge relief to the problem of acute water crisis in the state.

   Courses of action:
   (A) The state government should set up a committee to review the alarming situation.
   (B) The state government should immediately remove all the restrictions on use of potable water in all the major cities in the state.
   (C) The state government should send relief supplies to all the affected areas in the state.
   (a) None   (b) Only (A)
   (c) Only (B) and (C)   (d) Only (C)
   (e) All (A), (B) and (C)

2. **Statement :** A large private bank has decided to retrench one-third of its employees in view of the huge losses incurred by it during the past three quarters.

   Courses of action:
   (A) The Govt should issue a notification to general public to immediately stop all transactions with the bank.
   (B) The Govt should direct the bank to refrain from retrenching its employees.
   (C) The Govt should ask the central bank of the country to initiate an enquiry into the bank's activities and submit its report.
   (a) None   (b) Only (A)   (c) Only (B)
   (d) Only (C)   (e) All (A) and (C)

3. **Statement :** The school dropout rate in many districts in the state has increased sharply during the last few years as the parents of these children make them work in the fields owned by others to earn enough for them to least one meal a day.

   Courses of action:
   (A) The Govt should put up a mechanism to provide food grains to the poor people in these districts through public distribution system to encourage the parents to send their wards to school.
   (B) The Govt should close down some of these schools in the district and deploy the teachers of these schools to nearby schools and also ask remaining students to join these schools.
   (C) Govt should issue arrest warrants for all the parents who force their children to work in fields instead of attending classes.
   (a) Only (A)   (b) Only (B)   (c) Only (C)
   (d) Only (A) and (B)   (e) None of these

4. **Statement :** One aspirant was killed due to stampede while participating in a recruitment drive of police constables.

   Courses of action:
   (A) The officials in charge of the recruitment process should immediately be suspended.
   (B) A team of officials should be asked to find out the circumstances which led to the death of the aspirant and submit its report within a week.
   (C) The Govt should ask the home department to stagger the number of aspirants over more number of days to avoid such incidents in future.
   (a) Only (A)   (b) Only (B)
   (c) Only (C)   (d) Only (B) and (C)
   (e) None of these

5. **Statement :** Many students of the local school fell ill for the fourth time in a row in the last six months after consuming food prepared by the school canteen.

   Courses of action :
   (A) The school management should immediately terminate the contract of the canteen and ask for compensation.
   (B) The school management should advise all the students not to eat food articles from the canteen.
   (C) The owner of the canteen should immediately be arrested for negligence.
   (a) None follows   (b) Only B follows
   (c) Only C follows   (d) Only A and B follows
   (e) Only B and C follows

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |

6. **Statement :** A sudden cloud burst over the island city resulted into unpredicted rainfall causing a flood-like situation in the entire area. A large number of people were caught unaware and were stranded on the road.

    Courses of action :

    (A) The local administration should immediately put in place an action plan for avoiding such a situation in future.

    (B) : The local administration should immediately deploy personnel to help the stranded people to move to safer places.

    (C) The local administration should advise all the citizens not to venture out on the road till the situation improves.

    (a) Only A follows   (b) Only B follows

    (c) Only C follows   (d) Both B and C follows

    (e) All A, B and C follows

DIRECTIONS (Qs. 7-20) : In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

Give answer (a) if only course of action I follows.

Give answer (b) if only course of action II follows.

Give answer (c) if either course of action I or II follows.

Give answer (d) if neither course of action I nor II follows.

Give answer (e) if both courses of action I and II follow.

7. **Statement :** There have been sporadic cases of stone throwing and damaging vehicles in the locality during the day following altercation between two local youth clubs last night.

    Courses of action :

    I : The local police administration should arrest all those who are caught committing these acts.

    II : The local police administration should call a meeting of office bearers of both the clubs of the local to bring the situation under control.

8. **Statement :** A huge truck overturned on the middle of the main road and blocked most part of the road, causing a huge traffic jam.

    Courses of action :

    I : The traffic department should immediately deploy its personnel to divert traffic through other roads.

    II : The traffic department should immediately send men and equipment to move the truck and clear the road.

9. **Statement :** A huge tidal wave swept away many fishing boats and hutments of the fishermen living along the coastline.

    Courses of action :

    I : The fishermen should henceforth be restrained from constructing their huts along the coast line.

    II : The local administration should send a team of officials to assess the extent of damage and suggest remedial measures.

10. **Statement :** A large number of invitees who attended the marriage function fell ill due to food poisoning and were rushed to various hospitals located in the area.

    Courses of action :

    I : The government should ban such marriage functions till further notice.

    II : The local hospitals should be advised by the government to provide best services to the affected people.

11. **Statement :** An increasing number of farmers prefer to avail loans from local moneylenders instead of the banks owing to complicated paperwork involved in banks.

    Courses of action :

    I : Local moneylenders who charge interest rates lower than the banks should be punished.

    II : Banks should simplify the procedure to avail of loans so as to suit the farmers.

12. **Statement :** A major river in the city was reduced to a polluted and dirty canal after tonnes of sewage made way into it over the years.

    Courses of action :

    I : All those who dumped garbage and sewage into the river should be penalized.

    II : The government should modify the sewage system and find an alternate way to dump the city's waste.

13. **Statement :** Indigenous tribes living near Amazon forests are cutting down trees to cover their basic needs, thus severely affecting the ecological balance in the area.

    Courses of action :

    I : All the tribes living near the Amazon rain forests should be forced to shift to urban areas of the country.

    II : The tribes should be allowed to continue doing so as they cut down trees for their basic needs and not for commercial purposes.

14. **Statement :** A large number of lower ranked politicians are murdered by anti-social elements in City A.

    Courses of action :

    I : All those in the city with criminal records should immediately be arrested.

    II : The city police should keep a close vigil on the movements of anti-social elements so as to prevent future attacks.

RESPONSE GRID	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. **Statement :** It is reported that though Vitamin E present in fresh fruits and fresh vegetables is beneficial for human body, capsuled Vitamin E does not have same effect on human body.

    Courses of action :

    I : The sale of capsuled Vitamin E should be banned.

    II : People should be encouraged to take fresh fruits and fresh vegetables to meet the body requirement of Vitamin E.

16. **Statement :** India has now been recognised by the Western World as a vast resource of knowledge and are eager to use the same.

    Courses of action :

    I : India should exploit this opportunity to hasten its economic growth.

    II : India should bargain effectively with the Western World and become a super power in South Asia.

17. **Statement :** It is estimated that about twenty lakhs people will visit the city during the ensuring festival.

    Courses of action :

    I : The civic authority should make adequate arrangements to tackle the situation.

    II : All the hospitals in the city should be put on high alert in case on any eventuality.

18. **Statement :** Drinking water supply to many parts of the town has been disrupted due to loss of water because of leakage in pipes supplying water.

    Courses of action :

    I : The government should order an enquiry into the matter.

    II : The civic body should set up a fact-finding team to assess the damage and take effective steps.

19. **Statement :** Many people have encroached upon govt. property and built their houses and business establishments.

    Courses of action :

    I : The government should take immediate steps to remove all unauthorised constructions on govt land.

    II : All the encroachers should immediately be put behind bars and also be slapped with a hefty fine.

20. **Statement :** The meteorological department has predicted normal rainfall throughout the country during the current monsoon.

    Courses of action :

    I : The govt should reduce the procurement price of foodgrains for the current year.

    II : The govt should reduce subsidy on fertilizers for the current year.

DIRECTIONS (Qs. 21-25) : In each of the questions below, there is a statement followed by two courses of action I and II. Assume everything in the statement to be true and then decide which of the two suggested courses of action logically follows. Mark your answer as :

(a) if only course of action I follows,

(b) if only course of action II follows,

(c) if either I or II follows

(d) if neither I nor II follows,

(e) if both I and II follow.

21. **Statement :**

    Every year, at the beginning or at the end of the monsoons, we have some cases of conjectivities, but this year, it seems to be a major epidemic witnessed after nearly four years.

    Courses of Action :

    I. Precautionary measures should be taken after every four years to check this epidemic.

    II. People should be advised to drink boiled water during the rainy season.

22. **Statement :**

    Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post-shipment export credit dominated in foreign currency at international interest rates from January this year.

    Courses of Action :

    I. The officers concerned in the commerical banks are to be suspended.

    II. The RBI should be asked to stop giving such directives to commercial banks.

23. **Statement :**

    Courts take too long in deciding important disputes of various departments.

    Courses of Action :

    I. Courts should be ordered to speed up matters.

    II. Special powers should be granted to officers to settle the disputes concerning their departments.

24. **Statements :**

    The chairman stressed the need for making education system more flexible and regretted that the curriculum has not been revised in keeping with the pace of the changes taking place.

    Courses of Action :

    I. Curriculum should be reviewed and revised periodically.

    II. System of education should be made more flexible.

RESPONSE GRID	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 25) : A statement is followed by three courses of Action numbered I, II and III, You have to assume everything in the statement to be true. Decide which Course(s) of Action logically follow(s) for pursuing from the given options marked (a), (b), (c), (d) and (e) :

25. **Statement :**
    In one of the worst accidents on railway level crossing, fifty people died when a bus carrying them collided on to a running train.
    Courses of Action :
    I.   The train driver should immediately be suspended.
    II. The driver of the bus should be tried in court for negligence on his part.
    III. The railway authority should be asked to man all its level crossings.
    (a) None follows   (b) Only I and II follow
    (c) Only III follows   (d) Only II and III follow
    (e) None of these

DIRECTIONS (Qs. 26-30) : In each question, a statement is followed by three courses of action numbered I, II and III. Assume everything in the statement to be true. Decide which of the three given suggested courses of action logically follows for pursuing.

26. **Statement :**
    There was a spurt in criminal activities in the city during the recent festival season.
    Courses of Action :
    I.   The police should immediately investigate into the causes of this increase.
    II. In future, the police should take adequate precaution to avoid recurrence of such situation during the festival season.
    III. The known criminals should be arrested before any such season.
    (a) None follows
    (b) Only I and II follow
    (c) Only II and III follow
    (d) All follow
    (e) Only I and III follow.

27. **Statement :**
    A mass mortality of shrimps in ponds on the entire andhra coast has recently been reported due to the presence of a virus.
    Courses of Action :
    I.   The water of the ponds affected should immediately be treated for identifying the nature of the virus.
    II. The catching of shrimps from the ponds should temporarily be stopped.

III. The fishermen should be asked to watch for the onset of such phenomenon in nature.
    (a) Only I follows   (b) Only I and II follow
    (c) All follow   (d) Only II and III follow
    (e) None of these

28. **Statement :**
    The world will have to feed more than 10 billion people in the next century of whom half will be in Asia and will eat rice as their staple.
    Courses of Action :
    I.   More funds should immediately be allocated for rice research to help ensure adequate supplies.
    II. The people in Asia should be encouraged to change their food habit.
    III. The rice should be grown in countries outside Asia to meet the demand.
    (a) Only I and II follow
    (b) Only II and III follow
    (c) All follow
    (d) None follows
    (e) None of these

29. **Statement :**
    If the faculty members also join the strike, then there is going to be a serious problem. *[Feb. 2006]*
    Courses of Action :
    I.   The faculty members should be persuaded not to go on strike.
    II. Those faculty members who join the strike should be suspended.
    III. The management should not worry about such small things
    (a) None follows   (b) Only I follows
    (c) Only I and II follow (d) Only II and III follow
    (e) Only I follow

30. **Statement:** The weather bureau has through a recent bulletin forecast heavy rainfall during the next week which may cause water logging in several parts of the city. Courses of action:
    Courses of Action :
    I.   The bulletin should be given wide publicity through the mass media.
    II. The civic authority should keep in readiness the pumping system for removal of water from these parts.
    III. The people should be advised to stay indoors during the period.
    (a) None follows
    (b) Only II follows
    (c) Only I and II follow
    (d) Only II and III follow
    (e) All follows

RESPONSE GRID	25. ⓐⓑⓒⓓⓔ 26. ⓐⓑⓒⓓⓔ 27. ⓐⓑⓒⓓⓔ 28. ⓐⓑⓒⓓⓔ 29. ⓐⓑⓒⓓⓔ 30. ⓐⓑⓒⓓⓔ

CAUSE AND EFFECT

Max. Marks : 30　　**No. of Qs. 30**　　**Time : 20 min.**　　Date : ..../......../................

DIRECTIONS (Qs. 1-10) : Below in each question are given two statements (A) and (B). These statements may be either independent causes or may be effects of independent causes or of a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choices correctly depicts the relationship between these two statements.

Give answer (a) if statement (A) is the cause and statement (B) is its effect.

Give answer (b) if statement (B) is the cause and statement (A) is its effect.

Give answer (c) if both the statements (A) and (B) are independent causes.

Give answer (d) if both the statements (A) and (B) are effects of independent causes.

Give answer (e) if both the statements (A) and (B) are effects of some common cause.

1. **A.** State Govt has ordered immediate ban on airing of certain movie channels on television.
   B. A few social activities have come together and demanded ban on telecasting 'Adult' movies on television.

2. **A.** Government has tightened security checks at all important places and also at various public places.
   B. Incidences of terrorist attacks are increasing day by day.

3. **A.** There is an outbreak of several epidemics in the country.
   B. There was a worst flood situation ever experienced in the past in most parts of the country.

4. **A.** Most of the shopkeepers in the locality closed their shops for the second continuous day.
   B. Two groups of people living in the locality have been fighting with each other with bricks and stones, forcing people to stay indoors.

5. **A.** The Govt has decided to increase the prices of LPG cylinders with immediate effect.
   B. The Govt has decided to increase the prices of kerosene with immediate effect.

6. **A.** Majority of the first year students of the engineering college failed in Mathematics in the semester examination.
   B. The college authority terminated the contract of the Professor who taught mathematics to the first-year students.

7. **A.** The committee appointed by the Government on the fee structure of the professional courses has drastically reduced the fees of various courses in comparison to those charged in the last year.
   B. The parents of aspiring students seeking admission to professional courses had launched a severe agitation protesting against the high fees charged by the professional institutes and the admission process was delayed considerably.

8. **A.** The Reserve Bank of India has recently put restrictions on few small banks in the country.
   B. The small banks in the private and co-operative sector in India are not a position to withstand the competitions of the bigger in the public sector.

9. **A.** Large number of people living in the low lying areas have been evacuated during the last few days to safer places.
   B. The Government has rushed in relief supplies to the people living in the affected areas.

10. **A.** Many schools have banned the sale of fast food in their premises.
    B. Obesity in youngsters has been linked to their poor eating habits.

11. **A.** A substantial increase in unhealthy competition has been observed among the students.
    B. A rise of 23% is reported every year in the cases of suicide after declaration of grade 10th and 12th examination results.

12. **A.** Though mobile phones find a good number of users in rural India, computers and Internet still remain a distant dream.
    B. In the recent past there has been a large-scale migration from the rural parts of India to the urban sectors.

13. **A.** There has been a continuous increase in average temperature during winter in many parts of the country over the past few years.
    B. There has been significant changes in the wind pattern across the country over the last few years.

14. **A.** The conditions of all the major roads in the city have deteriorated causing hardship to motorists.
    B. The municipal authority has sanctioned significant amount to repair all the major roads in the city.

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ 2. ⓐⓑⓒⓓⓔ 3. ⓐⓑⓒⓓⓔ 4. ⓐⓑⓒⓓⓔ 5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ 7. ⓐⓑⓒⓓⓔ 8. ⓐⓑⓒⓓⓔ 9. ⓐⓑⓒⓓⓔ 10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ 12. ⓐⓑⓒⓓⓔ 13. ⓐⓑⓒⓓⓔ 14. ⓐⓑⓒⓓⓔ

15. **A.** The BPO sector has laid off a large number of employees in the recent months.
    B. Very few projects are now being outsourced to BPO sector.
16. **A.** There has been sharp decline in sales of passenger cars during the last few months.
    B. Many finance companies have announced attractive schemes of car loans with moderate interest rate.
17. **A.** The standard of education in evening college of the State has been deteriorating.
    B. The standard of school education has been fast deteriorating in the State.
18. **A.** All domestic airlines increased the fares in all sectors with immediate effect.
    B. Railways increased the fare of all its classes with immediate effect.
19. **A.** The prices of petrol and diesel in the domestic market have remained unchanged for the past few months.
    B. The crude oil prices in the international market have gone up substantially in the last few months.
20. **A**. The government has recently fixed the fees for professional courses offered by the unaided institutions which are much lower than the fees charged last year.
    B. The parents of the aspiring students launched a severe agitation last year protesting against the high fees charged by the unaided institutions.

DIRECTIONS (Qs.21-24) : In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer as

(a) If statement I is the cause and statement II is its effect;
(b) If statement II is the cause and statement I is its effect;
(c) If both the statements I and II are independent causes;
(d) If both the statements I and II are effects of independent causes; and
(e) If both the statements I and II are effects of some common cause.

21. Statements:
    I. All the schools in the area had to be kept closed for most part of the week.
    II. Many parents have withdrawn their children from the local schools.
22. Statements:
    I. The police authority has recently caught a group of house breakers.
    II. The citizens groups in the locality have started night vigil in the area.

23. Statements:
    I. Majority of the students in the college expressed their opinion against the college authority's decision to break away from the university and become autonomous.
    II. The university authorities have expressed their inability to provide grants to its constituent colleges.
24. Statements:
    I. The literacy rate in the district has been increasing for the last four years.
    II. The district administration has conducted extensive training programme for the workers involved in the literacy drive.

DIRECTIONS (Qs. 25-30) : In each of these questions two statements numbered I and II are given.

(a) If statement I is the cause and statement II is its effect.
(b) If both the statement I and II are independent.
(c) If statement II is the cause and statement I is its effect.
(d) If both the statement I and II are effects of independent causes.
(e) If both the statement I and II are effects of some common cause.

25. I. Most parts of both the arterial roads in the city are waterlogged and this has brought vehicular movement to a halt.
    II. There have been heavy showers in the city area during the past thirty-six hours.
26. I. The prices of all the petroleum products have increased substantially in the recent price hike announced a week ago due to increase in price of crude oil in the international market.
    II. Oil producing countries have increased the output of crude oil by ten percent for the last one month.
27. I. The private medical colleges have increased the tuition fees in the current year by 200 per cent over the last year's fees to meet the expenses.
    II. The government medical colleges have not increased their fees inspite of price escalation.
28. I. The university authority has decided to conduct all terminal examinations in March/April every year to enable them to declare results in time.
    II. There has been considerable delay in declaring results in the past due to shortage of teachers evaluating the answer papers of the examination conducted by the university.
29. I. India has surpassed the value of tea exports this year over all the earlier years due to an increase in demand for quality tea in the European market.
    II. There is an increase in demand of coffee in the domestic market during the last two years.
30. I. There is unprecedented increase in the number of young unemployed in comparison to the previous year.
    II. A large number of candidates submitted applications against an advertisement for the post of manager issued by a bank.

RESPONSE GRID	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ
	30. ⓐⓑⓒⓓⓔ				

53

STRENGTHENING AND WEAKENING ARGUMENT

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs.1-10) : Each question given below consists of a statement, followed by two arguments numbered I and II. You have to decide which of the arguments is a 'strong' argument and which is a 'weak' argument.

Give answer:
(a)   If only argument I is strong
(b)   If only argument II is strong
(c)   If either I or II is strong
(d)   If neither I nor II is strong and
(e)   If both I and II are strong.

1. **Statement:** Should India encourage exports, when most things are insufficient for internal use itself?
   Arguments:
   I.   Yes. We have to earn foreign exchange to pay for our imports.
   II.   No. Even selective encouragement would lead to shortages.

2. **Statement:** Should all the drugs patented and manufactured in Western countries be first tried out on sample basis before giving licence for sale to general public in India?
   Arguments:
   I.   Yes. Many such drugs require different doses and duration for Indian population and hence it is necessary.
   II.   No. This is just not feasible and hence cannot be implemented.

3. **Statement:** Should India make efforts to harness solar energy to fulfil its energy requirements?
   Arguments:
   I.   Yes, Most of the energy sources used at present is exhaustible.
   II.   No. Harnessing solar energy requires a lot of capital, which India lacks in.

4. **Statement:** Should there be students' union in college/ university?
   Arguments:
   I.   No. This will create a political atmosphere in the campus.
   II.   Yes, it is very necessary. Students are future political leaders.

5. **Statement:** Should India give away Kashmir to Pakistan?
   Arguments:
   I.   No. Kashmir is a beautiful state. It earns a lot of foreign exchange for India.
   II.   Yes. This would help settle conflicts.

6. **Statement:** Should all the annual examinations up to Std. V be abolished?
   Arguments:
   I.   Yes. The young students should not be burdened with such examinations which hampers their natural growth.

II.   No. The students will not study seriously as they will get automatic promotion to the next class and this will affect them in future.

7. **Statement:** Should Indian scientists working abroad be called back to India?
   Arguments:
   I.   Yes. They must serve the motherland first and forget about discoveries, honours, facilities and all.
   II.   No. We have enough talent; let them stay where they want.

8. **Statement:** Should there be an upper age limit of 65 years for contesting Parliamentary/ Legislative Assembly elections?
   Arguments:
   I.   Yes. Generally, people above the age of 65 lose their dynamism and will power.
   II.   No. The life span is so increased that people remain physically and mentally active even up to the age of 80.

9. **Statement:** Should articles of only deserving authors be allowed to be published?
   Arguments:
   I.   Yes. It will save a lot of paper which is in short supply.
   II.   No. It is not possible to draw a line between the deserving and the undeserving.

10. **Statement:** Should colleges be given the status of a university in India?
   Arguments:
   I.   Yes. Colleges are in a better position to assess the student's performance and therefore the degrees will be more valid.
   II.   No. It is Utopian to think that there will not be nepotism and corruption in awarding degrees by colleges.

DIRECTIONS (Qs. 11-15) : Each question given below consists of a statement, followed by three or four arguments numbered I, II, III and IV. You have to decide which of the arguments is/are 'strong' arguments) and which is/are 'weak' arguments) and accordingly choose your answer from the alternatives given below each question.

11. **Statement:** Should the public sector undertakings be kilo wed to adopt hire and fire policy?
   Arguments:
   I.   Yes. This will help the public sector undertakings to get rid of non-performing employees and reward the performing employees.
   II.   No. This will give an unjust handle to the management and they may use it indiscriminately.

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

III. Yes. This will help increase the level of efficiency of these organizations and these will become profitable establishments.
(a) None is strong
(b) Only I and II are strong
(c) Only II and III are strong
(d) Only I and III are strong
(d) All are strong

12. **Statement:** Is caste-based reservation policy in professional colleges justified?
Arguments:
I. I. Yes. The step is a must to bring the underprivileged at par with the privileged ones.
II. II. No. It obstructs the establishment of a classless society.
III. III. Yes. This will help the backward castes and classes of people to come out of the oppression of upper caste people.
(a) Only I and II are strong
(b) Only II is strong
(c) Only II and III are strong
(d) Only I and III are strong
(e) All are strong

13. **Statement:** Should there be a complete ban on genetically modified imported seeds?
Arguments:
I. Yes. This will boost the demand of domestically developed seeds.
II. No. This is the only way to increase production substantially.
III. Yes. Genetically modified products will adversely affect the health of those who consume these products.
(a) Only I and II are strong
(b) Only II is strong
(c) Only II and III are strong
(d) Only I and III are strong
(e) All are strong

14. **Statement:** Should the income generated out of agricultural activities be taxed?
Arguments:
I. No. Farmers are otherwise suffering from natural calamities and low yield coupled with low procurement price and their income should not be taxed.
II. Yes. Majority of the population is dependent on agriculture and hence their income should be taxed to augment the resources.
III. Yes. Many big farmers earn much more than the majority of the service earners and they should be taxed to remove the disparity.
(a) Only I is strong
(b) Only I and II are strong
(c) Only II and III are strong
(d) All are strong
(e) None of these

15. **Statement:** Should the system of Lok Adalats and mobile courts be encouraged in India?
Arguments:
I. Yes. It helps to grant speedy justice to the masses.
II. Yes. The dispensing of minor cases at this level would reduce the burden on the higher courts.
III. No. These courts are usually partial in justice.
(a) Only I and II are strong
(b) Only II and III are strong
(c) Only I and III are strong
(d) All are strong
(e) Only I is strong

DIRECTIONS (Qs. 16-20) : Each question given below consists of a statement, followed by three or four arguments numbered I, II, III and IV. You have to decide which of the arguments is/are 'strong' arguments) and which is/are 'weak' arguments) and accordingly choose your answer from the alternatives given below each question.

16. **Statement:** Should people with educational qualification higher than the optimum requirements be debarred from seeking jobs?
Arguments:
I. No. It will further aggravate the problem of educated unemployment.
II. Yes. It creates complexes among employees and affects the work adversely.
III. No. This goes against the basic rights of the individuals.
IV. Yes. This will increase productivity.
(a) Only I and III are strong
(b) All are strong
(c) Only II and IV are strong
(d) Only III is strong
(e) None of these

17. **Statement:** Should India go in for computerization in all possible sectors?
Arguments:
I. Yes. It will bring efficiency and accuracy in the work.
II. No. It will be an injustice to the monumental human resources which are at present underutilized.
III. No. Computerization demands a lot of money. We should not waste money on it.
IV. Yes. When advanced countries are introducing computers in every field, how can India afford to lag behind?
(a) Only I is strong
(b) Only I and II are strong
(c) Only I and III are strong
(d) Only II and III are strong
(e) All are strong

18. **Statement:** Should all the school teachers be debarred from giving private tuitions?
Arguments:
I. No. The needy students will be deprived of the expertise of these teachers.
II. Yes. This is an injustice to the unemployed educated people who can earn their living by giving tuitions.
III. Yes. Only then the quality of teaching in schools will improve.
IV. Yes. Now salary of these teachers is reasonable.
(a) Only I and III are strong
(b) Only I, II and III are strong
(c) Only III and IV are strong
(d) Only II, III and IV are strong
(e) None of these

19. **Statement:** Should education be made compulsory for all children up to the age of 14?
Arguments:
I. Yes. This will help to eradicate the system of forced employment of these children.
II. Yes. This is an effective way to make the entire population educated.
III. No. We do not have adequate infrastructure to educate the entire population.
IV. Yes. This would increase the standard of living.
(a) All are strong
(b) Only I, II and III are strong
(c) Only I, II and IV are strong
(d) Only II is strong
(d) Only II and III are strong

20. **Statement:** Should trade unions be banned completely?
Arguments:
I. Yes. Workers can concentrate on production.
II. No. This is the only way through which employees can put their demands before the management.
III. Yes. Employees get their illegal demands fulfilled through these unions.
IV. No. Trade unions are not banned in other economically advanced countries.
(a) Only I is strong
(b) Only II is strong
(c) Only I and II are strong
(d) Only I, II and III are strong
(e) None of these

21. Except from a research report – 'Average life expectancy in southern part of India is far more than that in Western India. While the average life of a native of South India is 82 years, the average life of a native of Western India is only 74 years.'
Based on the above fact, the proposal that the above study makes is that if an individual moves from Western India to South India, his/her life expectancy would immediately increase by eight years.
Which of the following statements would weaken the above-mentioned study's proposal that people belonging to Western parts of India should move to South India to increase their life expectancy?
(a) The average life expectancy of population living in Eastern part of the country is also less than the population living in South India.
(b) Nearly 80% of the population in Southern India has a minimum age of 83 years.
(c) Higher life expectancy in Southern India can be ascribed to the genetic makeup of the population belonging to that area.
(d) The average life expectancy of South India is comparable to the best averages in the world.
(e) Higher life expectancy in Southern India can be attributed to better environmental conditions and better healthcare facilities.

22. The chairman of a car company announced in a meeting that all trials of its first product, a new model of car 'X', are over and the company is planning to launch its car in the market after six months.
Which of the following would strengthen the chairman's decision?
I. Material management and other resources will have to be in fine tune to maintain production schedule.

II. Company should also make plans for products other than car.
III. The network of dealers must be finalised and all legal, financial and other matters in this regard should be finalised at the earliest.
(a) Only I
(b) Only II
(c) Only I and III
(d) All the three
(e) None of these

23. The prospects for the Indian economy this year will be influenced by the behaviour of the monsoon and expansion of commerce and trade. The Eleventh Plan has envisaged a growth target of 8%. If the agriculture sector does well and the world trade conditions improve then it is possible to achieve a growth of 6-7%. We need to improve our economy and aim at a higher rate of growth in order to feed our population, maintain the standard of living and improve the quality of life. It is now more than 10 years since we have adopted reforms. We need to go forward in liberalisation but we cannot throw open the market for everything. There are sectors like village industries which need protection.
Which of the following weakens the following statement: "The current trend of liberalisation is good enough to sustain about 6% growth."
(a) Micro and small industries are helpful in achieving sustained growth, so they need protection.
(b) Govt should not hesitate in opening market operations.
(c) India should make bilateral trade agreements with other countries.
(d) India should open its market for all.
(e) None of these

24. Mass public education in the past half-century has clearly failed at the most basic level. In fact, it has been detrimental to the public welfare. Recent studies show that only about half of the country's graduating high school seniors can compose a simple business letter.
Which one of the following, if true, gives the strongest support to the author's argument?
(a) A larger percentage of high school seniors than ever before are able to write a business letter correctly.
(b) At least 15 percent of today's high school seniors speak English as a second language.
(c) Fewer than half of the high school seniors graduating today can do the math necessary to complete an income tax return.
(d) More accurate data show that only 46 percent of the nation's high school seniors can compose a simple business letter.
(e) A survey taken five decades ago showed that four out of five graduating seniors could write an acceptable business letter.

25. Considering the current economy, the introduction of a new brand of cereal is unlikely to expand total sales of cereal, but rather will just cause some existing buyers of cereal to switch brands. So it makes no sense for the Coolidge Corporation to introduce another brand of cereal, since it will only hurt sales of the brands of cereal it already produces.
Which one of the following, if true, would most seriously weaken the argument above?
(a) Total sales of cereal will increase as the total population increases.

(b) Many new brands of cereal sell extremely well for the first year of their existence.

(c) Coolidge Corporation currently produces fewer brands of cereal than do its competitors.

(d) Some cereal buyers regularly switch from brand to brand, even when no new brands have been introduced.

(e) Research indicates that the new brand will attract more buyers of competitors' cereals than buyers of other Coolidge brands.

26. In friendship one sees one's friends as another "self." One cares about him or her in the same way that one cares about oneself. Since each of us desires to know that we exist and are in good circumstances, each of us also wishes to know that our friends are likewise alive and well. Thus, true friendship requires that one live with or near one's friends.

Which one of the following, if true, would most weaken the argument above?

(a) Most people care for themselves much more than they care for their friends.

(b) Technologies like the telephone allow us to confirm that our friends are alive and well even when we are separated from them by vast distances.

(c) It is possible to live near and even with a friend without knowing for certain that he or she is in good circumstances.

(d) Merely living near or with a friends will not necessarily ensure that the friend remains alive and in good circumstances.

(e) Often circumstances dictate that one friend must move far away, and for him instead to remain among his friends would be so inconvenient that it would place too much strain on the friendship.

27. If too much pressure is exerted on the bottom shelf of a bookcase, the entire bookcase will collapse. Sherry's bookcase has collapsed. Therefore, too much pressure must have been exerted on its bottom shelf.

Which one of the following criticisms best describes a weakness in the argument above?

(a) It supports its conclusion with irrelevant evidence.

(b) It contains a shift in the meaning of the word "collapse" from "partial collapse" to "full collapse".

(c) It concludes that an outcome has been caused by a particular factor that may be only one possible cause of the outcome in question.

(d) It overlooks the possibility that some bookshelves have only one shelf.

(e) It draws an overly broad conclusion from contradictory evidence.

28. Ethologists, people who study animal behaviour, have traditionally divided an organism's actions into two categories: learned behaviour (based on experience) and instinctive behaviour (based on genotype). Some current scholars reject this distinction, claiming that all behaviour is a predictable interaction of experience and genotype.

Which of the following, if true, most strengthens the arguments made in the sentence above?

(a) All organisms with identical genotypes and identical experience sometimes respond differently in different situations.

(b) All organisms with different genotypes and identical experience always respond identically in identical situations.

(c) All organisms with similar genotypes and similar experience always respond differently in identical situations.

(d) All organisms with identical genotypes and identical experience always respond identically in identical situations.

(e) All organisms with identical genotypes and different experience always respond identically in identical situations.

29. Media are not just passive channels of information. Not only do they supply the stuff of thought, but they also shape the process of thought. And what the Internet seems to be doing is chipping away our capacity for concentration. Which of the following if true, would most strengthen the argument presented above ?

(a) Nietzsche was forced to use a typewriter when he started losing his vision. After he mastered the machine, he could type with his eyes closed. It was later found that under the effect of the machine. Nietzsche's prose "changed from arguments to aphorisms, from thoughts to puns, from rhetoric to telegram style".

(b) One of the effects of the timekeeping instruments has been that we have started deciding on our daily activities based on the clock and not based on our senses.

(c) Studies have shown that the essay writing skills of an average 15 -20 year old, who spends a lot of time browsing the Internet, is comparable to what it was among the average 15-20 year old, throughout the 1980s and the 1990s.

(d) A recent study has shown that the number of people who fall asleep while reading a printed book has increased in the last five years.

(e) The ability of the younger judges, who have grown up with ready access to Internet, to judge complex and intricate cases, has, on an average, become better as compared to what it was for judges of comparable age profile during the 1920s.

30. Silver is especially and repetitively savage about what he sees as the extravagant claims made for particle physics, arguing that once the proton, neutron and electron were found and their properties experimentally confirmed, the very expensive searches for ever more exotic particles, such as the Higgs Boson, were increasingly harder to justify other than by their importance to particle physicists. Most of the particles resemble ecstatic happiness: They are very short-lived and have nothing to do with everyday life. His repeated assault goes to the level of sarcasm: "Finding the Higgs Boson will be a magnificent technical and theoretical triumph. Like a great Bobby Fisher game". Of course, this is a tad unfair, even if some of the claims of its practitioners invite such assaults on their field.

Which of the following, if true, will weaken the argument described in the passage?

(a) All streams of new science need to undergo through a period of uncertainty and we should not criticize research in particle physics alone.

(b) Necessity is the mother of every invention.

(c) Knowledge has preceded application in all spheres of science.

(d) Funding agency supporting research on Higgs Boson do not mind wasting their money.

(e) Do not expect everyone to appreciate everything.

RESPONSE GRID					
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

CRITICAL REASONING

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-3) : Study the following information to answer the given questions.

Science is a sort of news agency comparable in principle to other news agencies. But this news agency gives us information which is reliable to an extraordinarily high degree due to elaborate studies spread over centuries. So, science should be read with the same interest with which we read news.

1.   Which of the following will weaken the above argument?
      (a)   Man is an intelligent creature.
      (b)   Science gives information.
      (c)   Scientific information is revised.
      (d)   News agencies cannot verify news.
      (e)   None of these

2.   Which of the following may be regarded as an assumption in the above passage?
      (a)   Verification of news is necessary.
      (b)   Science encourages investigative spirit.
      (c)   Science is objective in approach.
      (d)   Science gives us news and not any other information regarding national phenomenon.
      (e)   None of these

3.   Which of the following strengthens the argument?
      (a)   Agricultural research is scientific.
      (b)   Science gives abstract theories.
      (c)   Verified information is reliable.
      (d)   Science is a compulsory subject.
      (e)   None of these

4.   As the information on air warfare tasks and stressors was being gathered and scenarios were being developed, a parallel effort ensued to identify a test bed simulation for air warfare teams. To maintain experimental control it was determined by the designers that choosing a low physical fidelity simulation was acceptable as long as cognitive fidelity in a team simulation was maintained through subjecting soldiers to pressure situations in a simulated combat setting and attempting to ensure that naturalistic decision making of soldiers would not be compromised.

      Which of the following statements, if true, weakens the logic of the above passage ?
      i.   A number of studies have shown that high levels of physical stress lead to a weaking of the decision making capabilities of human beings.
      ii.   It has been convincingly demonstrated by various studies that human beings by nature are not designed to adapt to high levels of mental stress.
      iii. Numerious studies have shown that simulated environments can be designed to be good substitutes for real life combat situations.
      iv.   Studies have shown that simulated exercises for armed forces personnel have tended to induce a systematic type of "correct" and common behaviour among the trainees.
      v.   Officers, when short listing soldiers for critical operations, pick up battle-hardened soldiers rather than those who have been trained through simulations.
      (a)   i and ii   (b)   ii and iii   (c)   i and iv
      (d)   i, ii, iv, and v   (e)   ii, iii, iv and v

5.   The Yoga system is divided into two principal parts — Hatha and Raja Yoga. Hatha Yoga deals principally with the physiological part of man with a view to establish his health and train his will. The processes prescribed to arrive at this end are so difficult that only a few resolute souls go through all the stages of its practice. Many have failed and some have died in the attempt. It is therefore strongly denounced by all the philosophers. The most illustrious Shankaracharya has remarked in his treatise called Aparokshanubhuti that "the system of Hatha Yoga was intended for those whose wordly desires are not pacified or uprooted."

      Which one of the following, if true, most substantially strengthens the idea given in the passage?
      (a)   The percentage of people in a given ashram practising Raja Yoga is more than the percentage of people practising Hatha Yoga.
      (b)   The number of people in a given ashram practising Raja Yoga is more than the number of people practising Hatha Yoga.
      (c)   The number of Yoga schools teaching Raja Yoga is more than the number of Yoga schools teaching Hatha Yoga.
      (d)   The number of teachers teaching Raja Yoga is more than the number of teachers teaching Hatha Yoga.
      (e)   The percentage of students who have successfully learnt Raja Yoga is more than the percentage of students who have successfully learnt Hatha Yoga.

(6-7): According to recent reports, CEOs of large organisations are paid more than CEOs of small organisations. It does not seem fair that just because a CEO is heading a big organisation she/he should be paid more. CEOs' salary should be related to performance, especially growth in terms of sales and profits.

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ 2. ⓐⓑⓒⓓⓔ 3. ⓐⓑⓒⓓⓔ 4. ⓐⓑⓒⓓⓔ 5. ⓐⓑⓒⓓⓔ

Of course, big organisations are more complex than 'the small, but all CEOs require significant amount of energy and time in managing organisations. There is no proof that CEOs of big organisations are more stressed than CEOs of small organisations. All CEOs should be paid according to their performance.

6. A person seeking to refute the argument might argue that
   (a) CEOs should be paid equally.
   (b) Managing big organisation is more challenging than small.
   (c) If CEOs of small companies performs well, the company would become big and so would be CEOs' salary.
   (d) CEOs, who travel more should be paid more.
   (e) Highly qualified CEOs should be paid more because they have acquired difficult education.

7. Which of the following, if true, would strengthen the speaker's argument?
   (a) CEOs of small organisations come from good educational background.
   (b) CEOs of big organisations are very difficult to hire.
   (c) A few big family businesses have CEOs from within the family.
   (d) CEOs in big organisation take much longer to reach top, as compared to their counterparts in small organisations.
   (e) Big organisations contribute more towards moral development of society.

8. The purpose of the proposed law requiring a doctor's prescription for obtaining hypodermic needles is to lower the incidence of drug-related deaths, both accidental and intentional, involving hypodermic needles. But even knitting needles can be lethal if they fall into the wrong hands; yet everyone would agree that imposing legal restrictions on obtaining knitting needles would be preposterous. Hence the proposed law involving hypodermic makes no sense and should not be enacted.
   Which of the following, it true, would provide most support for the argument above?
   (a) Knitting needles have been known to cause injury and death.
   (b) The benefits of hypodermic needles outweigh those of knitting needles.
   (c) The proposed law would not deter the sort of activity known to result in drug-related deaths.
   (d) Knitting needles are not readily available to anybody who wants to obtain them.
   (e) None of the above

9. A drug that is very effective in treating some forms of cancer can, at present, be obtained only from the bark of the Raynhu, a tree that is quite rare in the wild. It takes the bark of approximately 5,000 trees to make one pound of the drug. It follows, then, that continued production of the drug must inevitably lead to the raynhu's extinction.
   Which of the following, if true, most seriously weakens the above conclusion?
   (a) The drug made from Raynhu bark is dispensed to doctors from a central authority.
   (b) The drug made from the Raynhu bark is expensive to produce.

(c) The Raynhu generally grows in largely inaccessible places.
(d) The Raynhu can be propagated from cuttings and cultivated by farmers.
(e) None of the above

10. Govt of India is providing a unique identity card to every citizen. Some important information like his blood group, permanent address, bank account number and mobile/telephone number is mentioned on this card to identify that person for security purpose or in case some serious accident takes place. Which of the following conclusions can be drawn from the above information?
    (a) In a country like India, which is one of the most populated countries in the world, it is not possible to provide every citizen a unique identification card.
    (b) The police need this information (on the card), especially when the accident is fatal.
    (c) None is supposed to forget his phone number under any circumstances.
    (d) Blood cannot be transfused until its group is mentioned on the card.
    (e) None of these

11. Study the following information carefully and answer the question.
    In a recent performance approval done by Company X, more than 70% of the employees were found to be underperforming. "I think that the restructuring done by the company in the previous year is responsible for the under-performance of the employees"- HR manager of company X. Which of the following statements weakens the statement of HR Manager of Company X ?
    (a) The incentives linked to performance were abolished upon restructuring creating dissatisfaction among employees.
    (b) After restructuring the decision making power was taken away from employees thus delaying the work by long hours.
    (c) The number of projects in Company X increased by 60% this year thereby increasing the burden on the existing employees this year.
    (d) After restructuring the employees were required to report to multiple bosses/ officers leading to ambiguity at the work place.
    (e) Adequate training was not provided to the employees transferred to different departments and locations after restructuring.

12. Read the given information and answer the question.
    The government of State D was recently criticised for accepting a proposal as per which schools in the State will not conduct exams up to standard nine. Rather, schools will promote all the students up to standard nine and from standard nine onwards the students would either be passed or failed depending upon their marks in the exams.
    Which of the following may not be a reason for the criticism of the government of State D for accepting the proposal ?
    (a) Several parents have raised concern that students would not be willing to pay attention in class and retain the information because they do not have to write exams.

| RESPONSE GRID | 6. ⓐⓑⓒⓓⓔ | 7. ⓐⓑⓒⓓⓔ | 8. ⓐⓑⓒⓓⓔ | 9. ⓐⓑⓒⓓⓔ | 10. ⓐⓑⓒⓓⓔ |
| | 11. ⓐⓑⓒⓓⓔ | 12. ⓐⓑⓒⓓⓔ | | | |

(b) Students learn to write exam papers in a stipulated period of time with practice of solving exam papers over the years and many students may not be able to grasp this directly in the standard nine.

(c) Many teachers are of the opinion that students have become very competitive and are mainly focused on acquiring marks rather than gaining knowledge.

(d) Studies suggest that students become less prone to exam anxiety and exam fear when they get used to passing exams over the years as compared to when they do not appear for an exam at all.

(e) Experts suggest that the special needs of children can be adequately assessed through examining of their exam papers and early assessment helps initiate early intervention and major projects through exams.

DIRECTIONS (Qs. 13-16): Read the following information and five statements given below it carefully and answer the questions which follow:

Since 2008, migration to urban areas in search of employement has increased several times, surpassing marriage as the biggest reason for migration in India.

(A) The wages and employment opportunities in rural parts of India have been at part with those in urban areas for last five years.

(B) The government and foreign MNCs have concentrated on development of job opportunities only in urban parts of the country.

(C) Marriage was once the biggest reason for migration in India.

(D) More skilled professionals than manual laborers migrate to urban area in search of employment.

(E) The urban areas attracting migrants are already facing and will further face a severe challenge accommodating increased population while the resources need to do so remain the same.

13. Which of the statements numbered (A), (B), (C), (D) and (E) mentioned above can be a reason/cause for increased migration to urban areas?
   (a) A   (b) B
   (c) C   (d) D
   (e) E

14. Which of the following represents a result repercussion of the increased migration to urban areas?
   (a) A   (b) B
   (c) C   (d) D
   (e) E

15. Which of the statements numbered (A), (B), (C), (D) and (E) directly follow/s from the given statement?
   (a) Only A   (b) Only E
   (c) Only C   (d) Only D
   (e) Both A and B

16. Which of the statements numbered (A), (B), (C), (D) and (E) mentioned above would weaken/contradict the facts presented in the given statement?
   (a) Only A   (b) Only B
   (c) Only C   (d) Only E
   (e) Only C and D

17. Read the following information carefully and answer the given questions:
   'Pets are not allowed in the park premises.' - A notice put up at the park entrance by the authority that is responsible for maintenance of the park.
   Which of the following can be assumption according to the given information? (An assumption is something that is supposed or taken for granted)
   (a) At least some people who visit the park have pets.
   (b) This is the only park which does not allow pets.
   (c) People who ignored this notice were fined.
   (d) There are more than one entrance to the park.
   (e) Many people have now stopped visiting the park.

DIRECTIONS (Qs. 18-20): Read the following information carefully and answer the given questions:

Despite repeated announcements that mobile phones were allowed in the examination hall, three students were caught with their mobile phones.

(A) Mobile phones nowadays have a lot of features and it is very easy to cheat with their help.

(B) The invigilator must immediateluy confiscate the mobile phones and ask the students to leave the exam hall immediately.

(C) Mobile phones are very expensive and leaving them in bags outside the exam hall is not safe.

(D) There have been incidents where students who left the exam hall early stole the mobile phones kept in the bags of the students who were writing the exam.

(E) The school authorities must ask the students to leave their phones in the custody of the inviliator before the exam in order to avoid thefts of mobile phones.

(F) None of the other students were carrying their exam hall.

18. Which of the following among (A), (B), (C) and (D) may be a strong argument in favour of the three students who were caught with their mobile phones?
   (a) Only (A)   (b) Both (A) and (B)
   (c) Both (C) and (D) (d) Only (C)
   (e) Both (B) and (D)

19. Which of the following among (A), (B), (E) and (F) may be the reason behind the school making such announcements before the exam?
   (a) Only (B)   (b) Both (B) and (E)
   (c) Only (F)   (d) Only (A)
   (e) Both (E) and (F)

20. Which of the following among (A), (B), (D) and (F) can be an immediate course of action for the invigilator?
   (a) Only (B)   (b) Both (A) and (D)
   (c) Only (A)   (d) Both (D) and (F)
   (e) Only (F)

DIRECTIONS (Qs. 21-24): Read the following information and the sentences (A), (B), (C), (D) and (E) given below it carefully and answer the questions which follow:

A host of foreign companies are in talks with the Indian governement for selling B150, a tough, a short-haul plane ideal for connectivity of smaller towns which is lacking in India at present.

(A) B150 planes have not only low operating costs than competing planes like Cezana but also a much better track record in terms of saftey and efficiency.

(B) The profit margin of road transport operators in the smal ler towns connected by B150 planes has been reduced substantially as a majority of people prefer air transport over other means of transport.

(C) Smaller towns, at present, are better connected by roads and railways as compared to flight services.

(D) B150 planes are capable of operating I sectors where large airlines cannot fly due to challenging conditions such as mist, short runways, etc. Such planes can also double up as cargo planes and charter flights for the rich and the elite.

(E) B150 planes need to operate in the existing airports which are situated in bigger cities only and are poorly connected to the smaller cities.

21. Which of the statements (A), (B), (C), (D) and (E) can be inferred from the facts/information given in the statement? (An inference is something which is not directly stated but can be inferred from the given facts.)
    (a) Only (A)   (b) Only (B)
    (c) Only (C)   (d) Only (B) and (D)
    (e) Only

22. Which of the statements (A), (B), (C), (D) and (E) mentioned above would weaken the offer made by the foreign companies for selling B150 planes to Indian government?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

23. Which of the statements (A), (B), (C), (D) and (E) mentioned above represents a possible consequence of the success of B150 planes in smaller cities?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

24. Which of the statements (A), (B), (C), (D) and (E) would favour the foreign companies bid to sell B150 planes in India?
    (a) Only (A)   (b) Only (B)
    (c) Both (B) and (C)   (d) Both (A) and (D)
    (e) Both (E) and (C)

DIRECTIONS (Qs. 25-28) : Read the following information carefully and answer the questions that follow:

"The financial results of IT companies in the quarter ending December were 'far ahead' of estimates and very promising," Som Mittal, President of Nasscom said. "These results," he said, "reflected the 'strong fundamentals' of Indian IT companies." These questions are based on the information given above and the sentences labelled as (A), (B), (C), (D) and (E) given below.

(A) Nasscom is an organisation which keeps an eye on the performance of IT companies.

(B) IT companies form the crux of the Indian economy.

(C) The financial results of the previous three quarters were admirable.

(D) A strong financial position forms the backdrop of the overall health of the organisation.

(E) The financial results of this quarter are dismal as compared to those of the last year.

25. Which of the statements, if true, would strengthen the statement of the speaker?
    (a) Only A   (b) Only C
    (c) Only E   (d) Both D and E
    (e) Both A and D

26. Which of the following can be a conclusion from the above passage?
    (a) Only A   (b) Only E
    (c) Only B   (d) Only C
    (e) Both B and E

27. Which of the following can be an assumption in the above passage?
    (a) Only B   (b) Only E
    (c) Only D   (d) Both B and C
    (e) Both A and E

28. Which of the statements, if true, would weaken the argument in the speaker?
    (a) Only C   (b) Only E
    (c) Both E and C   (d) Only D
    (e) None of these

DIRECTIONS (Qs. 29-30) : Read the following paragraph carefully and answer the questions that follows.

After rising for several months, gold prices are likely to see a gradual decline in the short term on the back of strong global cues. With the US economy showing signs of recovery, domestic gold prices are expected to settle at under ` 30000 per 10 grams by March, although the decline may not be as steep as international prices.

(A) Gold prices are determined by international market prices.

(B) Prices of gold in local market are on a continuous decline.

(C) Soaring price of gold is not a positive sign for an economy.

(D) The US economy is very speculative.

(E) There are strong signs of decline in the price as it was in the case of petroleum and crude oil five years ago. Later, the market did decline.

29. Which of the following statements (A), (B), (C), (D) and (E) can be a conclusion from the above paragraph?
    (a) Only A   (b) Only B
    (c) Both A and B   (d) Both C and D
    (e) None of these

30. Which of the following statements (A), (B), (C), (D) and (E) would weaken the argument of the author?
    (a) Only A   (b) Only B
    (c) Only D   (d) Both B and C
    (e) Both A and E

RESPONSE GRID
21. (a)(b)(c)(d)(e)   22. (a)(b)(c)(d)(e)   23. (a)(b)(c)(d)(e)   24. (a)(b)(c)(d)(e)   25. (a)(b)(c)(d)(e)
26. (a)(b)(c)(d)(e)   27. (a)(b)(c)(d)(e)   28. (a)(b)(c)(d)(e)   29. (a)(b)(c)(d)(e)   30. (a)(b)(c)(d)(e)

DATA SUFFICIENCY

Max. Marks : 30   **No. of Qs. 30**   **Time : 35 min.**   **Date : ..../........./................**

DIRECTIONS (Qs.1-10) : In each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

1. Seven friends P, Q, R, S, T, U and V are sitting in a circular table facing the centre. Who is sitting on the immediate left of R.
   I.   Q is fourth to the right of P, who is not an immediate neighbour of either S or R, V sits third to the right of T.
   II. U sits second to the right of V and T sits second to the right of U.
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

2. How is X related to Z ?
   I.   M is married to I, X is sister of M, I has only one daughter K, K is the granddaughter of Z.
   II. M is the daughter of Z. M is married to I, I is the only child of H. X is the sister-in-law of I
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

3. How many pens does A have ?
   I.   A has 12 pens less than what B have
   II. D has eight pens, which are twenty percent less than what B has
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

4. How is ' home' written in a given language?
   I.   'go to home' is written as ' sa la da' and 'on the way' is written as 'ni da ka'
   II. 'way for market is written as ' sh da pi' and way to home is written as ' da pi ma
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

5. Who scores highest run in a event among five students K, L, M, N and O.
   I.   K scores equal to L, who scores five runs more than M
   II. N does not score the highest runs, but scores nine more than M

   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

6. How is D related to J ?
   I.   J is mother of K and wife of C, who is son-in-law of H.
   II. K is niece of D and C is brother-in-law of D
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

7. In a four floor building, on which floor does P live?(Ground floor is numbered 1)
   I.   P lives exactly above R's flat, whose flat is exactly above S's flat
   II. Q lives above P's flat and S lives on the first floor
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

8. Find the direction of F with respect to H?
   I.   E is 5m to the north of G, who is 10m to the west of H.
   II. D is 10m to the south of F, who is 8m to the west of E
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

9. How many people are standing between R and U in a straight line of 15 people facing North?
   I.   T stands fifth from the left end of the line. R and O are immediate neighbours of T. Only two people stands between T and U.
   II. Q stands third from the right end of the line. Only 6 people stand between O and Q. Only one person stands between R and O. O stands exactly between R and U
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

10. Who among U, V, W, X and Z is shortest ?
   I.   W is shorter than V and equal to X, Z is not taller than U, V
   II. X is taller than Z and equal to W. V and U is not shorter than W
   (a) Only I   (b) Only II
   (c) Both I and II (d) Either I or II
   (e) Neither I or II

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ **2.** ⓐⓑⓒⓓⓔ **3.** ⓐⓑⓒⓓⓔ **4.** ⓐⓑⓒⓓⓔ **5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ **7.** ⓐⓑⓒⓓⓔ **8.** ⓐⓑⓒⓓⓔ **9.** ⓐⓑⓒⓓⓔ **10.** ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs.11-30) : In each of the following problems, there is one question and three statements I, II and III given below the question. You have to decide whether the data given in the statements is sufficient to answer the question. Read all the statements carefully and find which of the statements is/are sufficient to answer the given question. Choose the correct alternative in each question.

11. On which day of the week did Arjun arrive?
    I. His sister, Malavika, correctly remembers that he did not arrive on Wednesday.
    II. His friend, Bala, correctly remembers that he arrived before Friday.
    III. His mother correctly mentions that he arrived before Friday but after Tuesday.
    (a) Only I and II   (b) Only II and III
    (c) Only I and III   (d) All I,II and III
    (e) Can't be determined

12. Who among Jai, Surya, Hari and Mani is the heaviest?
    I. Surya is heavier than Mani.
    II. Jai is not as heavy as either Hari or Surya.
    III. Mani is neither the heaviest nor the lightest.
    (a) Only I   (b) Only II and III
    (c) Only I and III   (d) All I,II and III
    (e) Can't be determined

13. What is Priya's position with respect to Anu?
    I. Priya is sitting 12th from right end of row and Anu is sitting 20th from left end of the row.II.Anu is 6th from left end.
    III. The row has a total of 25 students.
    (a) Only I   (b) Only II and III
    (c) Only I and III   (d) Only I and II
    (e) Can't be determined

14. How many pages of the Book did Aruna read on Sunday ?
    I. Aruna read the last 50 pages of the book on Monday morning
    II. The book has 300 pages out of which two-thirds were read by Aruna before Sunday.
    III. Aruna always read less pages in Monday compared to Wednesday.
    (a) Only I   (b) Only I and II
    (c) Only I and III   (d) Only II and III
    (e) Can't be determined

15. How many students are there between Venu and Prakash in a row of sixty students?
    I. Ramesh is twentieth from the left end and Venu is five places away from Ramesh.
    II. Venu is twenty-second from the left end and Prakash is twenty-seventh from the right end.
    III. Prakash sits at an end
    (a) Only I   (b) Only II
    (c) Only III   (d) Only I and II
    (e) None of these

16. Who among A, B, C, D and E is the highest ?
    I. B is heavier than A and D, and heavier than E
    II. A is heavier than B and lighter than D
    III. C is lighter than E
    (a) Only I   (b) Both I and II
    (c) Both I and III   (d) Either I or III
    (e) All of these

17. Among five friends P, Q, R, S and T each studying in a different standard, viz3rd, 4th, 5th, 6th and 8th. In which standard does R study?
    I. Q studies in a standard which is an odd number. R is Q's senior but does not study in 8th standard.
    II. Only three students are senior to P. Q is senior to P but junior to R.
    III. S is not junior to T.
    (a) Only 1   (b) Only 2
    (c) Only 1 and 2   (d) Only 1 and 3
    (e) All 1, 2 and 3

18. How many pens does A have ?
    I. A has 12 pens less than what B have
    II. C has 18 pens more than what B what
    III. D has eight pens, which are forty percent less than what B has
    (a) Only I   (b) Only II
    (c) Both I and II   (d) Both II or III
    (e) Both I or III

19. On which day of the week did Priya arrive?
    I. Her sister, Anu, correctly remembers that she did not arrive on Monday.
    II. Her friend, Bala, correctly remembers that she arrived before Friday.
    III. Her mother correctly mentions that she arrived before Friday but after Tuesday.
    (a) Only I and II   (b) Only II and III
    (c) Only I and III   (d) All I, II and III
    (e) Data inadequate

20. How many students are there between Gopal and Arun in a row of sixty students?
    I. Ramesh is twentieth from the left end and Gopal is five places away from Ramesh.
    II. Gopal is twenty-second from the left end and Arun is twenty-seventh from the right end.
    III. Arun sits at an end
    (a) Only I   (b) Only II
    (c) Only III   (d) Only I and II
    (e) None of these

21. On which day of the week from Monday to Sunday did Vijay leave for Mumbai?
    I. Vijay's brother left for Mumbai on Friday.
    II. Vijay leaves for Mumbai after Tuesday.
    III. Vijay left before his brother.
    (a) Only I   (b) Only II
    (c) Both I and II   (d) Both I and III
    (e) Data inadequate

22. In a five-floor building, on which floors does Mr.Ravi live? (Starting from first floor going up to fifth floor)
    I. Mr. Ravi lives exactly above Ram's flat, whose flat is exactly above Vinay's flat.
    II. Shiva lives on top floor.
    III. Rohan lives exactly above Mr. Ravi's flat. Vinay lives on the first floor.
    (a) Only I   (b) Only II
    (c) Both II and III   (d) Both I and III
    (e) Data inadequate

23. Who among Jagan, Siva, Hari and Moorthy is the heaviest?
   I. Siva is heavier than Moorthy.
   II. Jagan is not as heavy as either Hari or Siva.
   III. Moorthy is neither the heaviest nor the lightest.
   (a) Only I
   (b) Only II and III
   (c) Only I and III
   (d) All I, II and III
   (e) Can't be determined

24. Who among A, B, C, D and E was the first to reach the station?
   (1) B reached earlier than E, A and C were not the first to reach.
   (2) A reached earlier than both C and E, but could not reach earlier than D, who was at the station before B.
   (3) C didn't reach just after A
   (a) only 1 and 2
   (b) only 2 and 3
   (c) only 2
   (d) all 1, 2 and 3
   (e) none of these

25. P, Q, R, S, T and U are sitting around a circular table, facing the centre. Who is sitting opposite P?
   (1) Q and R are sitting opposite each other.
   (2) T may sit either on the immediate left of Q or on the immediate right of R.
   (3) S cannot sit opposite T, and P cannot sit opposite T
   (a) only 1
   (b) only 1 and 2
   (c) only 2 and 3
   (d) all of them
   (e) none of these

26. Who is the tallest among A, B, C, D and E?
   (1) C is taller than B but not as tall as E.
   (2) A is not the shortest.
   (3) A is taller than only D.
   (a) only 1
   (b) only 2 and 3
   (c) only 1 and either 2 or 3
   (d) only 1 and 3
   (e) none of these

27. On which day of the week did Anil arrive?
   (1) His sister, Tanvi, correctly remembers that he did not arrive on Wednesday.
   (2) His friend, Manav, correctly remembers that he arrived before Friday.
   (3) His mother correctly mentions that he arrived before Friday but after Tuesday.
   (a) only 1 and 2
   (b) only 2 and 3
   (c) only 1 and 3
   (d) all 1, 2 and 3
   (e) none of these

28. P, Q, R, S and T are sitting in a row facing North. Who among them is in the middle?
   (1) T is at the right end of the row.
   (2) S sits between P and R.
   (3) Neither P nor R sits at an extreme end
   (a) only 2 and 3
   (b) only 3
   (c) only 1 and 3
   (d) all of them
   (e) none of these

29. Among A, B, C, D and E each with a different weight, who is the lightest?
   (1) C is heavier than B but lighter than E.
   (2) A is heavier than B but lighter than D.
   (3) E is not the heaviest.
   (a) only 1 and 3
   (b) only 2
   (c) only 1 and 2
   (d) only 2 and 3
   (e) none of these

30. How many sons does C have?
   (1) A's father has at most three children.
   (2) B is the brother of A and the son of C.
   (3) E is C's wife and has one daughter D, who is younger than her brothers".
   (a) only 2 and 3
   (b) only 1 and 3
   (c) only 1 and 2
   (d) all of them
   (e) none of these

| **RESPONSE GRID** | 23. ⓐⓑⓒⓓⓔ | 24. ⓐⓑⓒⓓⓔ | 25. ⓐⓑⓒⓓⓔ | 26. ⓐⓑⓒⓓⓔ | 27. ⓐⓑⓒⓓⓔ |
| | 28. ⓐⓑⓒⓓⓔ | 29. ⓐⓑⓒⓓⓔ | 30. ⓐⓑⓒⓓⓔ | | |

REASONING SECTION TEST

Max. Marks : 50   **No. of Qs. 50**   **Time : 40 min.**   Date : ..../......../...............

DIRECTIONS (Qs. 1-5): Study the following information carefully to answer the given questions:

Eight persons from different banks, viz UCO Bank, Syndicate Bank, Canara Bank, PNB, Dena Bank, Oriental Bank of Commerce, Indian Bank and Bank of Maharashtra, are sitting in two parallel rows containing four people each, in such a way that there is an equal distance between adjacent persons. In row 1: A, B, C and D are seated and all of them are facing south. In row 2: P, Q, R and S are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. (All the information given above does not necessarily represent the order of seating as in the final arrangement.) C sits second to the right of the person from Bank of Maharashtra. R is an immediate neighbour of the person who faces the person from Bank of Maharashtra. Only one person sits between R and the person from PNB. The immediate neighbour of the person from PNB faces the person from Canara Bank. The person from UCO Bank faces the person from Oriental Bank of Commerce. R is not from Oriental Bank of Commerce. P is not from PNB. P does not face the person from Bank of Maharashtra. Q faces the person from Dena Bank. The one who faces S sits to the immediate left of A. B does not sit at any of the extreme ends of the line. The person from Bank of Maharashtra does not face the person from Syndicate Bank.

1. Which of the following is true regarding A?
   (a) The person from UCO Bank faces A.
   (b) The person from Bank of Maharashtra is an immediate neighbour of A.
   (c) A faces the person who sits second to the right of R.
   (d) A is from Oriental Bank of Commerce.
   (e) A sits at one of the extreme ends of the line.

2. Who is seated between R and the person from PNB?
   (a) The person from Oriental Bank of Commerce
   (b) P
   (c) Q
   (d) The person from Syndicate Bank
   (e) S

3. Who amongst the following sit at extreme ends of the rows?
   (a) D and the person from PNB

   (b) The persons from Indian Bank and UCO Bank
   (c) The persons from Dena Bank and P
   (d) The persons from Syndicate Bank and D
   (e) C, Q

4. Who amongst the following faces the person from Bank of Maharashtra?
   (a) The person from Indian Bank
   (b) P
   (c) R
   (d) The person from Syndicate Bank
   (e) The person from Canara Bank

5. P is related to Dena Bank in the same way as B is related to PNB based on the given arrangement. Who amongst the following is D related to, following the same pattern?
   (a) Syndicate Bank
   (b) Canara Bank
   (c) Bank of Maharashtra
   (d) Indian Bank
   (e) Oriental Bank of Commerce

DIRECTIONS (Qs. 6-10) : Study the following information carefully to answer the given questions

Eight People - A, B, C, D, E, F, G and H live in eight different floors of building (but not necessarily in the same order). The lowermost floor of the building is numbered one, the one above that is numbered two, and so on till the topmost floor is numbered eight. Each one of them also owns a different brands of laptops, namely Acer, Lenovo, Dell, HP, Samsung, Apple, Asus and TOSHIBA (but not necessarily in the same order).

F lives an odd numbered floor above the floor numbered four. Only one person lives between B and the one who owns Samsung. Only three people live between D and the one who owns Apple. The one who owns Asus lives immediately above G, G owns neither Apple nor Acer. E does not own Asus. Only three people live between G and A. The one who owns TOSHIBA lives immediately above the one who owns Lenovo, but not on the topmost floor. C lives an one of the odd numbered floors above the one who owns Apple. Only one person lives between F and the one who owns DELL. Only one person lives between the one who owns TOSHIBA and H. Only two people live between C and the one who owns Acer. The number of people leaving above F is same as the number of people living between F and D

6. Which of the following Statements is true with respect to the given information?
   (a) G lives immediately above the one who owns Apple
   (b) E lives immediately above C
   (c) Only three people live between F and the one who owns TOSHIBA.
   (d) D owns Samsung.
   (e) All the given statements are true.

7. Who amongst the following lives exactly between H and the one who owns Lenovo Laptop?
   (a) B, C   (b) G, D
   (c) F, G   (d) A, B
   (e) E, A

8. Which of the following laptops does E own?
   (a) TOSHIBA   (b) Lenovo
   (c) DELL   (d) Samsung
   (e) Asus

9. Four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group?
   (a) G - HP   (b) C - Apple
   (c) F - Samsung   (d) H - TOSHIBA
   (e) D - DELL

10. How many people live between C and the one who owns DELL?
    (a) Four   (b) Three
    (c) Two   (d) Five
    (e) None

DIRECTIONS (Qs. 11-15) : Study the following information carefully to answer the given questions

Ten students namely viz A, B, C, D, E, F, G, H, I and J of ten different colleges but not necessarily in the same order have seminar on five different days starting from Monday to Friday of the same week. Each student have seminar at two different time slots, i.e 10.00 AM and 3 P.M

I has a seminar on Tuesday at 10.00 A.M. The number of people who have seminar between G and D is same as the number of people who have seminar between C and H. B has a seminar immediately before I. I does not have seminar on any of the days before G. The one who has seminar at 10.00 A.M immediately before J. H does not has seminar at 3 P.M. D has a seminar immediately after the day of one who has seminar on Monday. F does not have seminar at 3 P.M. D does not has seminar on any one of the days after E. Only three people have seminar between G and E. Neither E nor G does not have seminar on Friday. Only two people have seminar between F and J. F does not have seminar on any of the days after H.

11. How many persons have seminar at 3'0 clock between G and C?
    (a) 5   (b) 6
    (c) 2   (d) 4
    (e) None of these.

12. Who among the following person has seminar at 3 P.M?
    (a) C   (b) G
    (c) I   (d) F
    (e) E

13. Four among the following form a group in a certain way. Which of the following does not belong to Group?
    (a) G - Tuesday   (b) I - Wednesday
    (c) F - Friday   (d) G - Wednesday
    (e) E - Thursday

14. Which of the following is correctly matched?
    (a) D - Monday   (b) C - Tuesday
    (c) A - Friday   (d) G - Tuesday
    (e) E - Wednesday

15. Who among the following have seminar on Friday?
    (a) I, E   (b) H, J
    (c) B, A   (d) D, E
    (e) E, C

DIRECTIONS (Qs. 16-20): Study the following information carefully to answer the given questions.

Eight people L, M, N, O, P, Q, R and S are sitting around a circular table with equal distance between each other but not necessarily in the same order. Some of them are facing the centre while some are facing outside.(i.e away from the centre)

• M sits third to the left of L. Only three people sit between M and S. P sits to the immediate right of S.
• Immediate neighbours of P face opposite directions(i.e. if one neighbour faces the centre then the other neighbour faces outside and vice-versa.) Only one person sit between P and O.
• R sits second to the right of O. Both R and N face the same direction as S.(i.e if S faces the centre then R and N also faces the centre and vice-versa.)
• Immediate neighbours of Q faces opposite directions(i.e if one neighbour faces the centre then the other neighbour faces outside and Vice-versa.)
• P does not face outside. O faces a direction opposite to that of M.

16. How many people sit between L and Q when counted from the left of Q?
    (a) Five   (b) None
    (c) Four   (d) One
    (e) Two

17. Which of the following statements is true as per the given arrangement?
    (a) Q faces the centre
    (b) Only three people sit between P and L
    (c) R sits to the immediate right of N
    (d) None of the given options is true
    (e) N is an immediate neighbour of O

18. Who amongst the following sits third to the left of P?
    (a) Q   (b) N
    (c) M   (d) L
    (e) R

RESPONSE GRID						
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ		
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ		
16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ				

19. How many people face the centre as per the given arrangement?
    (a) Four   (b) One
    (c) Two   (d) Three
    (e) More than four

20. What will come in place of question mark (?) in the given series based on the positions as given in the arrangement?
    PS LR MP SM ?
    (a) ON   (b) SO
    (c) NQ   (d) OL
    (e) LS

DIRECTIONS (Qs. 21-25) : Study the following information carefully and answer the given questions.

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of Input and rearrangement.

INPUT : expect 30 more funny 41 52 sea 61 ring 36 89 joy
STEP 1 : expect funny 30 more 41 52 sea 61 ring 36 89 joy
STEP 2 : expect funny 89 61 30 more 41 52 sea ring 36 joy
STEP 3 : expect funny 89 61 joy more 30 41 52 sea ring 36
STEP 4 : expect funny 89 61 joy more 52 41 30 sea ring 36
STEP 5 : expect funny 89 61 joy more 52 41 sea ring 30 36
STEP 6 : expect funny 89 61 joy more 52 41 ring sea 36 30

And step VI is the last step of the above input. As per the rules followed in the above step, find out the appropriate step for the given output.

21. Which of the following term exactly comes between 49 and equal in step 3 ?
    (a) my   (b) 11
    (c) strength   (d) best
    (e) None of these

22. How many elements are there between 25 and 16 in step 5 ?
    (a) One   (b) Three
    (c) Two   (d) Five
    (e) None of these

23. In step 6, equal and my, 11 and 49 are interchanged then which will be placed between 49 and equal ?
    (a) Two   (b) Three
    (c) Four   (d) Six
    (e) None of these

24. What is the position of 25 in step 4 from the right end?
    (a) Third   (b) Fourth
    (c) Sixth   (d) Fifth
    (e) None of these

25. Which of the following will be the final step of the given input ?
    (a) all and 16 11 best equal 25 47 my strength 49 81
    (b) my and 49 81 equal best 47 25 all strength 16 11
    (c) all and 81 49 best equal 25 47 my strength 11 16
    (d) all best 81 49 and equal 47 25 my strength 16 11
    (e) None of these

DIRECTIONS (Qs. 26-28): Read the following information carefully to answer the following questions

'P # Q' means 'P is the daughter of Q'
'P © Q' means 'Q is the brother of P'
'P = Q' means 'Q is the sister of P'
'P & Q' means 'P is the son of Q'
'P * Q' means 'P is the father of Q'
'P @ Q' means 'P is the mother of Q'

26. What does the expression 'P @ R = S © T & V'?
    (a) V is the husband of P
    (b) R is the son of V
    (c) R is the daughter of V
    (d) V is the wife of P
    (e) None of these

27. Which of the following indicates that 'C is the paternal uncle of D'?
    (a) C & V # N @ L © D
    (b) C & V & L @ N © D
    (c) D & L & N @ V © C
    (d) D & N # V @ L © C
    (e) None of these

28. Which of the following can be the correct conclusion drawn from the expression
    'L = M # N © P * Q'?
    (a) Q is the grandson of M
    (b) L is the uncle of N
    (c) N is the uncle of Q
    (d) Q is the niece of N
    (e) None of these

29. Which of the following symbols should be placed in the blank spaces respectively(in the same order from left to right) in order to complete the given expression in such a manner that both 'D>S' as well as 'E≤B' definitely holds true?
    B _ A _ S _ E _ D
    (a) >, ≥, <, =   (b) >, >, ≥, <
    (c) ≥, ≥, ≥, ≤   (d) ≥, =, ≥, <
    (e) Other than those given as options

30. In Which of the following expressions does the expression 'L=T' to definitely hold true?
    (a) K ≥ L ? R = P < S ≤ T
    (b) U ≥ T ≥ M = F ≤ A ≥ L
    (c) L ≥ C > Q ≥ B = N ≤ T
    (d) G ≥ L = A < B ≤ S ≤ T
    (e) T ≥ E = G ≥ W = Y ≥ L

RESPONSE GRID
19. (a)(b)(c)(d)(e)   20. (a)(b)(c)(d)(e)   21. (a)(b)(c)(d)(e)   22. (a)(b)(c)(d)(e)   23. (a)(b)(c)(d)(e)
24. (a)(b)(c)(d)(e)   25. (a)(b)(c)(d)(e)   26. (a)(b)(c)(d)(e)   27. (a)(b)(c)(d)(e)   28. (a)(b)(c)(d)(e)
29. (a)(b)(c)(d)(e)   30. (a)(b)(c)(d)(e)

DIRECTIONS (Qs. 31-35) : Read the following infomation carefully and answer the questions that follow.

31. **Statements:** Some trees are plants. All trees are houses. No plant is pot. All tools are pots.
    Conclusions:
    I. Some plants are tools is a possibility.
    II. All trees are tools is a possibility.
    III. No plant is house.
    IV. All plants are houses is a possibility.
    (a) Only I and III follow.
    (b) Either III or IV follows
    (c) Only IV follows
    (d) None follows.
    (e) Only II follow
32. **Statements:** All trees are plants. All houses are trees. Some pots are plants. All tools are plants.
    Conclusions:
    I. Some plants are not houses
    II. Some tools being trees is a possibility
    III. All pots are tools is a possibility.
    IV. All houses are tools is a possibility.
    (a) Only III and IV follow
    (b) Only II, III, and IV follow
    (c) Only I and IV follow.
    (d) All follow.
    (e) None of these
33. **Statements:** Some roofs are figures. All figures are lions. All lions are goats. No tool is lion.
    Conclusions:
    I. Some tools are figures is a possibility.
    II. All tools being goats is a possibility.
    III. No roof is tool.
    IV. Some goats are figures
    (a) Only II and IV follow
    (b) Only I and II follow
    (c) Only either I or II and IV follow
    (d) All follows
    (e) None follows.
34. **Statements :** No photo is frame. All frames are sites. Some buckets are photos. Some sites are buckets.
    Conclusions:
    I. No photo is site.
    II. All buckets being frames is a possibility
    III. Some sites are photos
    IV. Some buckets are frames.
    (a) All follows
    (b) Only II and III follow
    (c) Only II, III and IV follow.
    (d) Only either I or III follows
    (e) None of these
35. **Statements:** All seats are covers. No cover is bun. Some buns are roofs. Some sites are covers.
    Conclusions:
    I. All sites being buns is a possibility
    II. All sites being roof is a possibility
    III. Some sites are not buns.
    IV. No seat is bun

(a) Only II, III and either I or IV follow.
(b) Only III follows
(c) All follows.
(d) Only II, III and IV follow
(e) None of these

DIRECTIONS (Qs. 36-38): Study the following information to answer the given questions.

In a certain code 'colours of the sky' is written as 'ki la fa so', 'rainbow colours' is written as 'ro ki' and 'sky high rocket' is written as 'la pe jo' and 'the rocket world' is written as 'pe so ne'.

36. Which of the following is the code for 'colours sky high'?
    (a) ro jo la   (b) fa la jo
    (c) la ki jo   (d) ki jo la
    (e) fa ki jo
37. Which of the following will/may represent 'the'?
    (a) Only fa   (b) Only la
    (c) Only so   (d) Either (a) or (b)
    (e) Either (a) or (c)
38. What does 'pe' represent in the code?
    (a) colours   (b) sky
    (c) high   (d) rainbow
    (e) rocket

DIRECTIONS (Qs. 39-43) : Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and and answer the questions.

Give answer (a) if the data in statement I alone is sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
Give answer (b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
Give answer (c) if the data either in statement I alone or in statement II alone are sufficient to answer the question; and
Give answer (d) if the data given in both the statements I and II together are not sufficient to answer the question; and
Give answer (e) if the data in both the statements I and II together are necessary to answer the question.

39. How is J related to K?
    I. J's father P is the brother of N. N is K's wife.
    II. J is the son of P. P is the brother of N. N is K's wife.
40. On which floor of the building does G stay? (the building has five floor 1, 2, 3, 4, 5.)
    I. Only the even-numbered floors are occupied and G does not stay on the second floor.
    II. G does not stay on an odd-numbered floor.
41. How many days did Raju take to complete his assignment?
    I. Mohit correctly remembers that Raju took more than 3 days less than 9 days to complete his assignment.
    II. Mina correctly remembers that Raju took more than 7 days less than 11 days to complete his assignment.

RESPONSE GRID	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ
	41. ⓐⓑⓒⓓⓔ				

42. How is the word 'GATES' coded in the code language?
   I. 'BRICK' is coded as 'LDJSC' and 'PIN' is coded as 'OJQ'
   II. 'WATER' is coded as 'SFUBX' and 'DISH' is coded as 'ITJE'

43. Among A, B, C and D, which school has the highest number of students.
   I. School A has fewer students than school D.
   II. School C has fewer students than school D.

DIRECTIONS (Qs. 44-46) : In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer
   (a) If only assumption I is implicit
   (b) If only assumption II is implicit
   (c) If either I or II is implicit
   (d) If neither I nor II is implicit
   (e) If both I and II are implicit.

44. **Statement:** "You are hereby appointed as a programmer with a probation period of one year and your performance will be reviewed at the end of the period for confirmation." - A line in an appointment letter.
   Assumptions:
   I. The performance of an individual generally is not known at the time of appointment offer.
   II. Generally an individual tries to prove his worth in the probation period.

45. **Statement:** It is desirable to put the child in school at the age of 5 or so.
   Assumptions:
   I. At that age the child reaches appropriate level of development and is ready to learn.
   II. The schools do not admit children after six years of age.

46. **Statement:** "In order to bring punctuality in our office, we must provide conveyance allowance to our employees." - In charge of a company tells Personnel Manager.
   Assumptions:
   I. Conveyance allowance will not help in bringing punctuality.
   II. Discipline and reward should always go hand in hand.

47. How many pairs of letters are there in the word UNDERSUBSCRIBED which have number of letters between them in the word two less than the number of letters between them in English alphabet?
   (a) one   (b) two
   (c) three   (d) four
   (e) more than four

48. The positions of the first and the fifth digits in the number 89123654 are interchanged. Similarly, the positions of the second and the sixth digits are interchanged. And so on. Which of the following will be the second digit from the right end after the rearrangement?
   (a) 9   (b) 8
   (c) 1   (d) 2
   (e) None of these

49. **Statement:** Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post shipment export credit denominated in foreign currency at international rates from January this year.
   Courses of Action:
   I. The officers concerned in the commercial banks are to be suspended.
   II. The RBI should be asked to stop giving such directives to commercial banks.
   (a) Only I follows   (b) Only II follows
   (c) Either I or II follows (d) Neither I nor II follows
   (e) Both I and II follow

50. **Statement**
   It is reported that during the last fortnight there has been three cases of near miss situation involving two aircrafts over the busy city airport. In all these cases both the aircrafts came perilously close to each other and could avoid collision as the pilots acted just in time.
   Courses of action
   I. The pilots of all the six aircrafts involved in these incidents should immediately be derostered.
   II. Some flights should be diverted to other airports for the next few months to decongest the sky over the city airport.
   III. Air traffic controllers of the city airport should be sent for refresher courses in batches to prepare themselves to handle such pressure situation.
   (a) Only 1 follows   (b) Only II follows
   (c) Only III follows   (d) II and III follows
   (e) None of these

RESPONSE GRID					
41. ⓐⓑⓒⓓⓔ	**42.** ⓐⓑⓒⓓⓔ	**43.** ⓐⓑⓒⓓⓔ	**44.** ⓐⓑⓒⓓⓔ	**45.** ⓐⓑⓒⓓⓔ
46. ⓐⓑⓒⓓⓔ	**47.** ⓐⓑⓒⓓⓔ	**48.** ⓐⓑⓒⓓⓔ	**49.** ⓐⓑⓒⓓⓔ	**50.** ⓐⓑⓒⓓⓔ

57

SYNONYMS/ANTONYMS

Max. Marks : 40   **No. of Qs. 40**   **Time : 30 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-20) : Pick up the correct synonyms for each of the following words.

1. HAUGHTY
   - (a) imperial
   - (b) imperious
   - (c) adamant
   - (d) empire
   - (e) None of these

2. LOQUACIOUS
   - (a) Victorian
   - (b) bombastic
   - (c) verbose
   - (d) ambiguous
   - (e) None of these

3. BEQUEST
   - (a) Parsimony
   - (b) matrimony
   - (c) heritage
   - (d) patrimony
   - (e) None of these

4. RECUPERATE
   - (a) recapture
   - (b) reclaim
   - (c) recover
   - (d) regain
   - (e) None of these

5. ATTENUATE
   - (a) repent
   - (b) make thin
   - (c) force
   - (d) divide
   - (e) None of these

6. ABSTINENCE
   - (a) synchronic
   - (b) torrential
   - (c) restraint
   - (d) gluttony
   - (e) None of these

7. TACITURNITY
   - (a) dumbness
   - (b) changeableness
   - (c) hesitation
   - (d) reserve
   - (e) None of these

8. BLITHE
   - (a) joyless
   - (b) grudging
   - (c) somnolent
   - (d) cheerful
   - (e) None of these

9. CAPTIVATE
   - (a) repel
   - (b) subjugate
   - (c) dangerous
   - (d) fascinate
   - (e) None of these

10. HONORARY
    - (a) honest
    - (b) dignified
    - (c) unpaid
    - (d) praiseworthy
    - (e) None of these

11. FORESEE
    - (a) contemplate
    - (b) visualise
    - (c) assume
    - (d) hypothesis
    - (e) None of these

12. ANNEX
    - (a) add
    - (b) low
    - (c) copy
    - (d) initial
    - (e) None of these

13. MENAGE
    - (a) suffocation
    - (b) system
    - (c) law
    - (d) household
    - (e) None of these

14. INFIRMITY
    - (a) disease
    - (b) malady
    - (c) weakness
    - (d) slimness
    - (e) None of these

15. IMMINENT
    - (a) eminent
    - (b) immediate
    - (c) future
    - (d) impending
    - (e) None of these

16. SPEND
    - (a) pay
    - (b) bought
    - (c) devote
    - (d) settle
    - (e) empty

17. LYING
    - (a) sleeping
    - (b) dishonest
    - (c) relaxing
    - (d) remaining
    - (e) untruthful

18. STARVED
    - (a) Deprived
    - (b) Disadvantaged
    - (c) Hungry
    - (d) Fasting
    - (e) Emaciated

19. SLAPPED
    - (a) Beaten
    - (b) Imposed
    - (c) Withdrawn
    - (d) Avoided
    - (e) Persuaded

20. PLOWED
    - (a) Cultivated
    - (b) Bulldozed
    - (c) Recovered
    - (d) Instilled
    - (e) Withdrew

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ

DIRECTIONS (Qs. 21-35) : Pick up the correct antonyms for each of the following words.

21. REINFORCING
    - (a) contradicting
    - (b) wishing
    - (c) jolting
    - (d) forcing
    - (e) re-inventing

22. SLUMP
    - (a) output
    - (b) rise
    - (c) slide
    - (d) slack
    - (e) input

23. SHRANK
    - (a) Hope
    - (b) Depended
    - (c) Grew
    - (d) Pretended
    - (e) Integrated

24. DETERIORATED
    - (a) Reduced
    - (b) Moderated
    - (c) Depreciated
    - (d) Encouraged
    - (e) Recovered

25. BANISHED
    - (a) Secluded
    - (b) Embraced
    - (c) Included
    - (d) Loved
    - (e) Delivered

26. BEFRIENDED
    - (a) recoiled
    - (b) killed
    - (c) accepted
    - (d) mistrusted
    - (e) ignored

27. FRAIL
    - (a) Unhealthy
    - (b) Massive
    - (c) Rich
    - (d) Robust
    - (e) Civilised

28. SPLENDIDLY
    - (a) Wisely
    - (b) Unfairly
    - (c) Rudely
    - (d) Reluctantly
    - (e) Unimpressively

29. CHARMED
    - (a) Offended
    - (b) Stunned
    - (c) Repulsed
    - (d) Jealous
    - (e) Outraged

30. AVID
    - (a) unenthusiastic
    - (b) efficient
    - (c) boring
    - (d) impartial
    - (e) incompetent

31. DISMAY
    - (a) joy
    - (b) interest
    - (c) desire
    - (d) humour
    - (e) luck

32. TENDED
    - (a) negligible
    - (b) watched
    - (c) inclined
    - (d) ignored
    - (e) spoil

33. PRESSING
    - (a) Unpopular
    - (b) Undemanding
    - (c) Unobtrusive
    - (d) Unsuitable
    - (e) Unimportant

34. EVAPORATED
    - (a) Absorbed
    - (b) Accelerated
    - (c) Grew
    - (d) Plunged
    - (e) Mismanaged

35. THRIVE
    - (a) succeed
    - (b) deteriorate
    - (c) worry
    - (d) tremble
    - (e) strive

DIRECTIONS (Qs. 36-40) : In these questions, you find a number of sentences, part of which is underlined. You may also find only a group of words which is underlined. For each underlined part, four words/phrase are listed below. Choose the word which is nearest of the opposite of the underlined word or phrase.

36. He plunged into the turbid waters of the stream.
    - (a) deep
    - (b) muddy
    - (c) clear
    - (d) fresh
    - (e) None of these

37. Where ignorance is sometimes bliss, illiteracy is always considered a curse.
    - (a) erudition
    - (b) experience
    - (c) education
    - (d) information
    - (e) None of these

38. The news brought by the maidservants authentic.
    - (a) authoritative
    - (b) baseless
    - (c) rediculous
    - (d) vacuous
    - (e) None of these

39. The proposal was denounced by one and all.
    - (a) announced
    - (b) pronounced
    - (c) appraised
    - (d) commended
    - (e) None of these

40. The doctor said that there is no improvement in the condition of the patient.
    - (a) depression
    - (b) deterioration
    - (c) change
    - (d) degradation
    - (e) None of these

RESPONSE GRID	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ
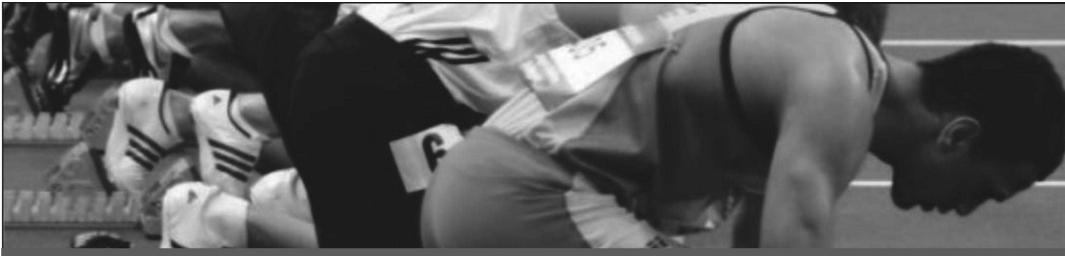
ONE WORD SUBSTITUTION

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../......../................**

DIRECTIONS (Qs. 1-30): In each of the following questions, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

1. List of headings of the business to be transacted at a meeting
    (a) Schedule   (b) Agenda
    (c) Proceedings   (d) Excerpts
    (e) None of these

2. Through which light cannot pass
    (a) Dull   (b) Dark   (c) Obscure
    (d) Opaque   (e) None of these

3. Stealing from the writings of others
    (a) Copying   (b) Reframing
    (c) Reproducing   (d) Plagiarism
    (e) None of these

4. Constant effort to achieve something
    (a) Perseverance (b) Attempt
    (c) Enthusiasm   (d) Vigour
    (e) None of these

5. A person not sure of the existence of God
    (a) Theist   (b) Atheist   (c) Agnostic
    (d) Cynic   (e) None of these

6. One who deserts his religion
    (a) Deserter   (b) Turn-coat   (c) Fanatic
    (d) Apostate   (e) None of these

7. One who uses fear as a weapon of power
    (a) Terrorist   (b) Militant   (c) Extremist
    (d) Anarchist   (e) None of these

8. The original inhabitants of a country
    (a) Aborigines   (b) Citizens   (c) Natives
    (d) Primitive   (e) None of these

9. One desirous of getting money
    (a) Avaracious   (b) Voracious   (c) Garrulous
    (d) Greedy   (e) None of these

10. Be the embodiment or perfect example of
    (a) Signify   (b) Characterise   (c) Personify
    (d) Masquerade   (e) None of these

11. Cutting for stone in the bladder
    (a) Dichotomy   (b) Tubectomy
    (c) Vasectomy   (d) Lithotomy

12. That which makes it difficult to recognise the presence of real nature of somebody or something
    (a) Cover   (b) Mask   (c) Pretence
    (d) Camouflage   (e) None of these

13. Yearly celebration of a date or an event
    (a) Centenary   (b) Jubilee
    (c) Anniversary   (d) Birthday
    (e) None of these

14. One who has suddenly gained new wealth, Power or prestige
    (a) Aristocrat   (b) Affluent   (c) Maverick
    (d) Parvenu   (e) None of these

15. Code of diplomatic etiquette and precedence
    (a) Formalism   (b) Statesmanship   (c) Protocol
    (d) Hierarchy   (e) None of these

16. Of outstanding significance
    (a) Meaningful   (b) Ominous   (c) Evident
    (d) Monumental   (e) Rational

17. One who promotes the idea of absence of government of any kind, when every man should be a law into himself
    (a) Anarchist   (b) Belligerent
    (c) Iconoclast   (d) Agnostic
    (e) None of these

18. Land so surrounded by water as to be almost an island
    (a) Archipelago   (b) Isthmus   (c) Peninsula
    (d) Lagoon   (e) None of these

19. That which cannot be done without
    (a) Irrevocable   (b) Impracticable
    (c) Indispensable (d) Impossible
    (e) None of these

20. One who travels from place to place
    (a) Itinerant   (b) Mendicant
    (c) Journeyman   (d) Tramp
    (e) None of these

RESPONSE GRID

1. (a)(b)(c)(d)(e)   2. (a)(b)(c)(d)(e)   3. (a)(b)(c)(d)(e)   4. (a)(b)(c)(d)(e)   5. (a)(b)(c)(d)(e)
6. (a)(b)(c)(d)(e)   7. (a)(b)(c)(d)(e)   8. (a)(b)(c)(d)(e)   9. (a)(b)(c)(d)(e)   10. (a)(b)(c)(d)(e)
11. (a)(b)(c)(d)(e)   12. (a)(b)(c)(d)(e)   13. (a)(b)(c)(d)(e)   14. (a)(b)(c)(d)(e)   15. (a)(b)(c)(d)(e)
16. (a)(b)(c)(d)(e)   17. (a)(b)(c)(d)(e)   18. (a)(b)(c)(d)(e)   19. (a)(b)(c)(d)(e)   20. (a)(b)(c)(d)(e)

21. He spent a long time *cutting* all the waste paper *into pieces*.
    (a) slashing   (b) ripping   (c) shredding
    (d) disposing   (e) None of these

22. We are *looking forward to* a good winter this year.
    (a) encouraging   (b) getting   (c) hoping
    (d) predicting   (e) visualising

23. Rajesh was a *hater of learning and knowledge*.
    (a) misogynist   (b) misologist
    (c) misanthropist   (d) bibliophile
    (e) None of these

24. Ravi impressed everyone with his *persuasive and fluent speech*.
    (a) discourse   (b) expression   (c) eloquence
    (d) lecture   (e) None of these

25. The bus has *to go back and forth every six hours*.
    (a) travel   (b) run   (c) cross
    (d) shuttle   (e) commute

26. A man can be sentenced to death for *killing another human being*.
    (a) fratricide   (b) regicide   (c) homicide
    (d) genocide   (e) None of these

27. A *careful preservation and protection* of wildlife is the need of the hour.
    (a) Embarkment   (b) Promotion
    (c) Conservation   (d) Management
    (e) Enhancement

28. The officer was *not willing to take a definite stand* on that point.
    (a) vague   (b) evasive
    (c) ambiguous   (d) complex
    (e) None of these

29. He does unpaid work for the Red Cross.
    (a) honorific   (b) honest   (c) honorary
    (d) honourable   (e) None of these

30. The advertisement assured the public that the medicine would give back to the users, *their youthful vigour and appearance*.
    (a) rejuvenate   (b) restore   (c) replenish
    (d) render   (e) None of these

RESPONSE GRID	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

ONE WORD WITH DIFFERENT MEANINGS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-10): In each question below are given two sentences numbered I and II. In these sentences, two homonyms are given in italics type, which may be either mis-spelt or inappropriate in the context of the sentences. Read both the sentences carefully and decide on their correctness on the basis of the italicised words.

Give answer.

(a), if only sentence I is correct;

(b), if only sentence II is correct;

(c), if both the sentences I and II are correct;

(d), if I as well as II are incorrect, but both could be made correct by interchanging the italicised words;

(e), if neither I nor II is correct and the sentence could not be made correct by interchanging the italicised words.

1. I. An *ordnance* declaring President's rule in the state has been issued today.
   II. The *ordinance* depot is situated far away from this city.
2. I. You should talk to your boss in a *reverent* manner.
   II. Our *reverend* Principal is coming.
3. I. He was being laughed at for his *antic* gesture.
   II. Antique articles are priced much these days.
4. I. The tragic tale narrated by the old man *efected* all the children.
   II. The humane attitude of the new manager *affected* a profound change in labour relations.
5. I. He is *wrapt* up in pleasurable contemplation.
   II. I listened to her song with *rapt* attention.
6. I. I think this electric *metre* is faulty.
   II. I require two meters of cloth for this purpose.
7. I. His manners are *urban*.
   II. People of urbane area are civil in manners.
8. I. He won the election only because of the support he got from his *zealous* party workers.
   II. Savita's friends were *jealous* of her success in the prestigious competition.
9. I. Some of the African *immigrants* indulge in smuggling in our country.
   II. Many *emmigrants* from India have settled in America.
10. I. He did not *accede* to may request.
    II. Don't *exceed* the limits.

DIRECTIONS (Qs. 11-30): Below is given a single word with options to its meaning in different contexts. You have to select all those options which are synonyms of the word when the context is changed. Select the correct alterative from (a), (b), (c), (d) and (e) which represents all those synonyms.

11. ALTER
    (1) Fix   (2) Change
    (3) Gender   (4) Modify
    (a) Only (1)   (b) Both (2) and (4)
    (c) Only (2), (3) and (4)   (d) Only (1), (2) and (3)
    (e) All (1), (2), (3) and (4)

12. MYSTERIOUS
    (1) Cryptic   (2) peculiar
    (3) Queer   (4) Secret
    (a) Only (4)   (b) Both (2) and (4)
    (c) Both (1) and (4)   (d) Only (1), (2) and (4)
    (e) All (1), (2), (3) and (4)

13. NAIVE
    (1) Sophisticated   (2) primitive
    (3) Uninitiated   (4) uninstructed
    (a) Only (4)   (b) Both (1) and (3)
    (c) All (2), (3) and (4)   (d) Only (1), (3) and (4)
    (e) All (1), (2), (3) and (4)

14. EXAGGERATE
    (1) Boast   (2) Brag
    (3) Overdo   (4) Overstate
    (a) Only (3)   (b) Both (1) and (4)
    (c) Only (1), (3) and (4)   (d) Only (1), (2) and (4)
    (e) All (1), (2), (3) and (4)

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. TENDENCY
   - (1) Disposition
   - (2) inclination
   - (3) Trend
   - (4) leaning
   - (a) Only (1)
   - (b) Both (1) and (3)
   - (c) Both (2) and (3)
   - (d) Only (1), (3) and (4)
   - (e) All (1), (2), (3) and (4)

16. PROSPECTIVE
   - (1) Future
   - (2) likely
   - (3) Retrospective
   - (4) potential
   - (a) Only (1)
   - (b) Both (2) and (4)
   - (c) Only (1), (2) and (4)
   - (d) Only (1), (2) and (3)
   - (e) All (1), (2), (3) and (4)

17. DEFICIENCY
   - (1) Insufficiency
   - (2) totally
   - (3) Wholly
   - (4) entirely
   - (a) Only (1)
   - (b) Both (2) and (4)
   - (c) Both (1) and (3)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

18. DIGNITY
   - (1) Humility
   - (2) Self-respect
   - (3) Humbleness
   - (4) Self-regard
   - (a) Only (1)
   - (b) Both (2) and (4)
   - (c) Only (1), (3) and (4)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

19. OBSOLETE
   - (1) Disused
   - (2) redundant
   - (3) Superfluous
   - (4) surplus
   - (a) Only (1)
   - (b) Both (1) and (4)
   - (c) Only (1), (3) and (4)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

20. REFLECTION
   - (1) Observation
   - (2) suspension
   - (3) Outburst
   - (4) Expression
   - (a) Only (1)
   - (b) Both (1) and (4)
   - (c) Both (2) and (3)
   - (d) Only (1), (3) and (4)
   - (e) All (1), (2), (3) and (4)

21. INTEGRATION
   - (1) Intensifying
   - (2) combination
   - (3) Heightening
   - (4) consolidation
   - (a) Only (4)
   - (b) Both (2) and (4)
   - (c) Both (1) and (2)
   - (d) Only (1), (2) and (3)
   - (e) All (1), (2), (3) and (4)

22. NOURISHING
   - (1) Tiring
   - (2) toiling
   - (3) Tasty
   - (4) nutritious
   - (a) Only (4)
   - (b) Both (2) and (4)
   - (c) Both (1) and (3)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

23. OBEDIENCE
   - (1) Accomplishment
   - (2) Flexibility
   - (3) Obeisance
   - (4) Respect
   - (a) Only (4)
   - (b) Both (1) and (3)
   - (c) Both (3) and (4)
   - (d) Only (1), (3) and (4)
   - (e) All (1), (2), (3) and (4)

24. OBLIGATION
   - (1) Indebtedness
   - (2) Demand
   - (3) Responsibility
   - (4) Duty
   - (a) Only (3)
   - (b) Both (1) and (4)
   - (c) Only (1), (3) and (4)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

25. RESPITE
   - (1) Reprieve
   - (2) Relief
   - (3) Suspension
   - (4) Recess
   - (a) Only (1)
   - (b) Both (1) and (3)
   - (c) Both (2) and (3)
   - (d) Only (1), (3) and (4)
   - (e) All (1), (2), (3) and (4)

26. COMPATIBLE
   - (1) Similar
   - (2) standardised
   - (3) Simpatico
   - (4) interchangeable
   - (a) Only (3)
   - (b) Both (1) and (2)
   - (c) Only (1), (2) and (4)
   - (d) Only (1), (2) and (3)
   - (e) All (1), (2), (3) and (4)

27. INTERRUPT
   - (1) Disrupt
   - (2) Break up
   - (3) Examination
   - (4) Progress
   - (a) Only (4)
   - (b) Both (2) and (4)
   - (c) Both (1) and (2)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

28. TANTALISE
   - (1) Taunt
   - (2) Spoof
   - (3) Charade
   - (4) Tease
   - (a) Only (1)
   - (b) Both (1) and (4)
   - (c) Only (1), (3) and (4)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

29. STALEMATE
   - (1) Deadlock
   - (2) Impasse
   - (3) Standstill
   - (4) Dead-end
   - (a) Only (1)
   - (b) Both (1) and (4)
   - (c) Only (1), (3) and (4)
   - (d) Only (1), (2) and (4)
   - (e) All (1), (2), (3) and (4)

30. RITUAL
   - (1) Rite
   - (2) pattern
   - (3) Use
   - (4) habit
   - (a) Only (1)
   - (b) Both (1) and (4)
   - (c) Both (2) and (3)
   - (d) Only (1), (3) and (4)
   - (e) All (1), (2), (3) and (4)

RESPONSE GRID

15. (a) (b) (c) (d) (e)　16. (a) (b) (c) (d) (e)　17. (a) (b) (c) (d) (e)　18. (a) (b) (c) (d) (e)　19. (a) (b) (c) (d) (e)
20. (a) (b) (c) (d) (e)　21. (a) (b) (c) (d) (e)　22. (a) (b) (c) (d) (e)　23. (a) (b) (c) (d) (e)　24. (a) (b) (c) (d) (e)
25. (a) (b) (c) (d) (e)　26. (a) (b) (c) (d) (e)　27. (a) (b) (c) (d) (e)　28. (a) (b) (c) (d) (e)　29. (a) (b) (c) (d) (e)
30. (a) (b) (c) (d) (e)
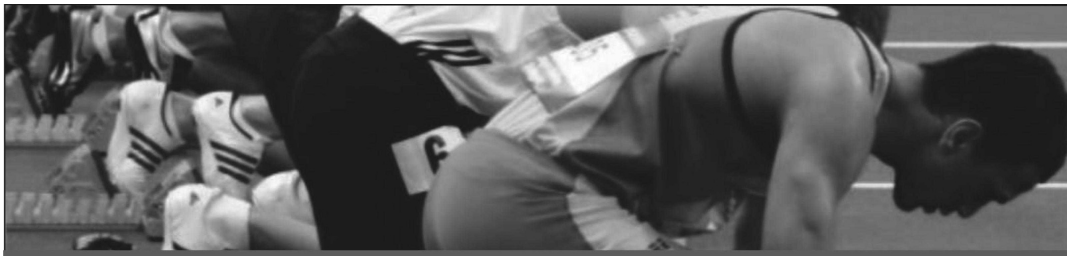
Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1- 5) : In each of the following sentences, an idiomatic expression or a proverb is highlighted. Select the alternative which best describes its use in the sentence.

1. The team put their plan **into execution** the very next day.
    (a) proposed a plan.
    (b) discussed their plan.
    (c) started thinking about a plan
    (d) started carrying out their plan.
    (e) None of these

2. Mrs. Nayak **opened the discussion** on the "alarming rate of poverty in India".
    (a) started the discussion.
    (b) gave her opinion in the discussion.
    (c) did not agree on the discussion.
    (d) welcomed the people to the discussion.
    (e) None of these

3. The **course of events** made it necessary for Joseph to start working.
    (a) events that were planned.
    (b) long list of future events.
    (c) A succession of unexpected events.
    (d) nature of events that followed after Joseph joined work.
    (e) None of these

4. The new law on "Right to Food Safety" **will come into force next month.**
    (a) be forced upon the people.
    (b) be associated from next month onwards.
    (c) be implemented next month.
    (d) be withdrawn next month.
    (e) be widely rejected next month.

5. When the girl wanted to stay out past midnight, her father **put his foot down.**
    (a) gave in to her request
    (b) walked away disapprovingly.
    (c) obstructed her from leaving the house.
    (d) requested her to be home on time.
    (e) None of these

DIRECTIONS (Qs. 6-10): In each of the following sentences, an idiomatic expression or a proverb is highlighted. Select the alternative which best describes its use in the sentence.

6. **In all likelihood** the missing boy has run away to the forest
    (a) with good intentions   (b) there's no chance
    (c) without doubt   (d) in most probability
    (e) None of these

7. The parents were completely **in the dark** concerning their daughter's plans.
    (a) ignorant about
    (b) ashamed of
    (c) pretending to be unaware
    (d) unhappy about
    (e) None of these

8. I am **in touch with** the police, and they will be here in ten minutes.
    (a) in communication with
    (b) in close proximity with
    (c) in good terms with
    (d) familiar with
    (e) None of these

9. I **stumbled upon** some interesting old letters in my Grandfather's desk.
    (a) deliberately went through
    (b) surveyed
    (c) tripped over
    (d) discovered by chance
    (e) None of these

10. The secretary **made an entry** of the arrangement.
    (a) initiated discussion   (b) made a record
    (c) brought notice   (d) showed approval
    (e) None of these

DIRECTIONS (Qs. 11-15) : In each of the following sentences, an idiomatic expression or a proverb is highlighted. Select the alternative which best describes its use in the sentence.

11. The stunt that I recently attempted was a **piece of cake**
    (a) The stunt that I recently attempted was enjoyable to watch
    (b) The stunt that I recently attempted was very challenging
    (c) The stunt that I recently attempted was celebrated by all
    (d) The stunt that I recently attempted turned out to be a failure
    (e) The stunt that I recently attempted was a simple task

12. The boy broke the window and **took to his heels.**
    (a) The boy broke the window and fell on his heels
    (b) The boy broke the window and ran away
    (c) The boy broke the window with his heels
    (d) The boy ran into the window
    (e) The boy broke the window and robbed a pair of heels

13. **I pledged myself** to serve the king faithfully.
    (a) I made a mistake by promising to serve the king faithfully
    (b) I made a fool of myself in order to serve the king
    (c) I boasted about serving the king faithfully
    (d) I was forcibly made to serve the king
    (e) I made a solemn and formal promise to serve the king faithfully

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ		

14. There is a **crying need** for improvements to our public transport system.
   (a) There is an obvious need for improvements to our public transport system
   (b) There is a well documented need for improvements to our public transport system.
   (c) There is a minor need for improvements to our public transport system.
   (d) There is a serious need for improvements to our public transport system.
   (e) There is no urgency for improvements to our public transport system.

15. In an old bookshop I happened to **light upon** a volume that belonged to my grandfather.
   (a) In an old bookshop I happened to discard a volume that belonged to my grandfather.
   (b) In an old bookshop I happened to purchase a volume that belonged to my grandfather.
   (c) In an old bookshop I happened to look for a volume that belonged to my grandfather.
   (d) In an old bookshop I happened to discover by chance a volume that belonged to my grandfather
   (e) In an old bookshop I happened to reveal a volume that belonged to my grandfather.

DIRECTIONS (Qs. 16-20): In the following questions, four alternatives are given for the idiom/phrase printed in bold in the sentence. Choose the alternative which best expresses the meaning of the idiom/phrase.

16. The project is carried over to this year, and we need to **keep the ball rolling**.
   (a) to continue the work   (b) more information
   (c) to do better   (d) new strategies
   (e) None of these

17. The host team **bore the palm** in the league matches.
   (a) played quite well
   (b) was victorious
   (c) was defeated
   (d) played a very boring match
   (e) None of these

18. Just **keep your wig on**. Everything will be alright.
   (a) Hold on to your wig, so it won't fall off
   (b) Get another hair cut
   (c) Calm down
   (d) Take off your wig
   (e) None of these

19. Parents **pay through the nose** for their children's education.
   (a) by taking loans   (b) an extremely high price
   (c) grudgingly   (d) willingly
   (e) None of these

20. Monica's habit of **picking holes** in every relationship is very irksome.
   (a) admiring people   (b) finding fault
   (c) criticizing people (d) arguing with people
   (e) None of these

DIRECTIONS (Qs. 21-25): In the following questions, four alternatives are given for the Idiom/Phrase printed in **bold** the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase and mark it in the Answer Sheet.

21. Hard work pays **in the long run.**
   (a) always   (b) over a period of time
   (c) indefinitely   (d) never
   (e) None of these

22. I felt **a fish out of water** among the lawyers.
   (a) special   (b) happy
   (c) uncomfortable   (d) proud
   (e) None of these

23. The Cauvery water issue led to **apple of discord** between the two Governments.
   (a) cause of anger   (b) cause of hatred
   (c) cause of quarrel (d) cause of animosity
   (e) None of these

24. The construction remains unfinished and the workers have **let the grass grow under their feet.**
   (a) grown grass all over the lawn
   (b) gone on a luxury tour
   (c) delayed doing the work
   (d) demanded more benefits
   (e) None of these

25. The police **smelt the rat** behind the death of the girl.
   (a) got very much confused
   (b) identified the cause of death
   (c) suspected that something is fishy
   (d) jumped to the conclusion
   (e) None of these

DIRECTIONS (Qs. 26-30) : In these questions four alternatives are given for the Idiom/Phrase bold in the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase.

26. **Let sleeping dogs lie.**
   (a) Do not bring up an old controversial issue
   (b) Dogs can raise tempers
   (c) Do not allow dogs to stand
   (d) Prevent dog mobility
   (e) None of these

27. To get admission in present day educational institutions, all children should **be born with a silver spoon in the mouth.**
   (a) be born to silver spoon manufacturer
   (b) always hold a silver spoon
   (c) be born with silver spoon
   (d) be born in a rich family
   (e) None of these

28. **A man of straw means**
   (a) a worthy fellow   (b) an unreasonable person
   (c) a man of no substance (d) a very active person
   (e) None of these

29. Children complain about their parents' gifts. They should learn not to **look gift horse in the mouth.**
   (a) not to look at a horse's mouth
   (b) not to find fault with the gifts received
   (c) not to ask for more gift
   (d) not to find goodness in the gifts
   (e) None of these

30. Acquiring a job **a cakewalk** for a student who has good academic performance coupled with the good attitude.
   (a) walk away with a cake (b) a difficult achievement
   (c) a walkway made with cakes
   (d) an easy achievement   (e) None of these

RESPONSE GRID	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ
	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ
	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ			

SPELLING TEST

Max. Marks : 40   **No. of Qs. 40**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-40): In each question below, a sentence with four words printed in bold type is given. These are numbered as (a), (b), (c) and (d). One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. The number of that word is your answer. If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark (e) ie. 'All correct' as your answer.

1. The **Whole** (a)/ time she walked with her child in her arms the only **thing** (b)/ that **worried** (c)/ her was her son's **feature.** (d)/ All correct (e)

2. When the young artist **returned** (a)/ to his village, his family held a **festive** (b)/ dinner on it's lawn to celebrate his **triumpant** (c)/ **homecoming.** (d)/ All correct (e)

3. Had she not **suppressed** (a)/ all the details of her Company's **project** (b)/ her Company would have **bagged** (c)/ the **contract.** (d)/ All correct (e)

4. She trusted Mira with all her **heart** (a)/ and thus **handled** (b)/ over her **life's** (c)/ savings to her **instantly.** (d)/ All correct (e).

5. It is **difficullt** (a)/ to see the **picture** (b)/ when you are **inside** (c)/ the **frame.** (d)/ All correct (e)

6. **Discussion** (a)/ is an exchange of **knowledge** (b)/ whereas **argument** (c)/ is a **depiction** (d)/ of ignorance. All correct (e).

7. He was **arrested** (a)/ for the **crime** (b)/ and was **charged** (c)/ with **attempt** (d)/ to murder. All correct (e)

8. **Commit** (a)/ yourself to lifelong **learning** (b)/ as the most **valuable** (c)/ **aset** (d)/ you will have is your mind. All correct (e)

9. **Belive** (a)/ that life is **worth** (b)/ living and your belief will **create** (c)/ the **fact**. (d)/ All correct (e)

10. The best **educated** (a)/ human **bing** (b)/ is the one who **understands** (c)/ most about the life in **which** (d)/ he is placed. All correct (e).

11. The **ship** (a) / was at sea for many days and **finally** (b)/ **anchored** (c)/ near the **costline**. (d)/All Correct (e)

12. Employees must **familiarise (a)/** themselves with the **health** (b)/ and **safety** (c)/ **mannual** of the organisation. (d)/ All Correct (e)

13. The **political** (a) / **environment** (b)/is not **condusive** (c)/ to economic **reforms**. (d)/ All Correct (e)

14. The **report** (a) / found that **safty** (b)/ equipment has very **poorly** (c)/ **maintained** (d)/ All Correct (e)

15. Some of our **listenors** (a) / **complained** (b)/about the **programme** (c)/ schedule (d)/ All Correct (e)

16. All the **competitors** (a)/ **completed** (b)/ the **race** (c), with just one **acception** (d)/. All Correct (e)

17. Poor **posture** (a)/ can **lead** (b)/ to **muscular** (c)/ **problems** (d)/ in later life. All Correct (e)

18. The **pump** (a)/ shut **off** (b)/ as a **result** (c)/ of a **mechenical** (d) failure. All Correct (e)

19. The **Principal** (a)/ gave a very **pompous** (b)/ **spech** (c)/ about 'The **portals** (d) / of learning'. All Correct (e)

20. **Copeing** (a)/ with her mother's long **illness** (b) / was a heavy **load** (c)/ to **bear** (d)/. All Correct (e)

21. In our daily life, we **frequancly** (a)/ **observe** (b)/ how **disruptive** (c)/ **innovations** (d)/ are wiping out businesses. All correct (e)

22. We **decided** (a)/ to look **after** (b)/ the **mistake** (c)/ by just **ignoring** (d)/ it. All Correct (e)

23. The **accomodation** (a)/ **though** (b)/ was in a good **locality** (c)/ the **construction** (d)/ work was not good All correct(e)

24. **Despite** (a)/ the **obviously** (b)/ **advantages**, (c)/ is it really **worth-while**(d)/ to invest in the device? All correct (e)

25. We also gained (a)/ ample (b)/ **experinece** (c)/ in the banking sector. (d)/All correct (e)

RESPONSE GRID					
	1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ

26. Another **advantage** is that **technology** can be **quickly**
                    (a)   (b)   (c)
    adapted to the client's needs. **All correct**
      (d)   (e)

27. It freed me to **enter** one of the **most creatively periods** of
                    (a)   (b)   (c)   (d)
    my life. **All correct**
              (e)

28. About 4,500 **private** and 2000 government **hospitels** are
                    (a)   (b)
    empanelled under the scheme. All correct
         (c)   (d)   (e)

29. More **often then** not we feel **concerned** with the
        (a)   (b)   (c)
    development **around** us. All correct
                  (d)   (e)

30. **Software** makers in India are **facing** a **huge presure**.
       (a)   (b)   (c)   (d)
    All correct
       (e)

31. **Mental disordors** have become Europe's largest **health**
       (a)   (b)   (c)
    challenge of the 21st century. All correct
       (d)   (e)

32. By **created** the most **precise** lunar **gravity** map,
       (a)   (b)   (c)
    scientists hope to find out what is beneath the lunar
       (d)   surface. All correct
                        (e)

33. The book is **full** of **updated** and **contemparary**
                    (a)   (b)   (c)
    commentary. All correct.
       (d)   (e)

34. Now, **electronic** mail is becoming the **primary** tool for
              (a)   (b)
    exchanging messages. All correct
       (c)   (d)   (e)

35. My **overall financial** goal is to **build suffecient** wealth.
          (a)   (b)   (c)   (d)
    All correct
       (e)

36. Solving the energy **challange** requires **behaviour** change
                          (a)   (b)
    and new **technological approaches:** All correct
              (c)   (d)   (e)

37. The first thing that catches your **eye** in this **building** is
                                          (a)   (b)
    the **flour** with laser **lights.** All correct
          (c)   (d)   (e)

38. The **services** sector has **contributed significantly** to the
       (a)   (b)   (c)
    economic **grow.** All correct
              (d)   (e)

39. IT Companies **have been** allotted **landing** in this area to
                    (a)   (b)
    develop and start their **operations**. All correct
       (c)   (d)   (e)

40. Other **then** the regular **incentives,** the **government** is
          (a)   (b)   (c)
    offering land sites at **concessional** rates. All correct
                              (d)   (e)

RESPONSE GRID					
	26. ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	**32.** ⓐⓑⓒⓓⓔ	**33.** ⓐⓑⓒⓓⓔ	**34.** ⓐⓑⓒⓓⓔ	**35.** ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	**37.** ⓐⓑⓒⓓⓔ	**38.** ⓐⓑⓒⓓⓔ	**39.** ⓐⓑⓒⓓⓔ	**40.** ⓐⓑⓒⓓⓔ

SENTENCE IMPROVEMENT

Max. Marks : 25　　　**No. of Qs. 25**　　　**Time : 20 min.**　　　Date : ..../........./................

DIRECTIONS (Qs. 1-25) : Below each sentence has given four possible substitutions for the *bold* part. If one of them (a), (b), (c) or (d) is better than the underlined part, indicate your response on the Answer Sheet against the corresponding letter (a), (b), (c) or (d). If none of the substitutions improves the sentence, indicate (e) as your response on the Answer Sheet. Thus a 'No' improvement' response will be signified by the letter (e).

1. **I laid all the facts before him** so that he could make his own Judgement.
   - (a) laid all the facts in front of him
   - (b) lay all the facts before him
   - (c) lay all the facts in front of him
   - (d) did I lay all the facts before his
   - (e) No improvement

2. If only she had told me about her problem I **would have helped her**.
   - (a) would help
   - (b) could help
   - (c) had helped
   - (d) would not help
   - (e) No improvement

3. Apollo was worshipped as long as the Roman Empire **continued**.
   - (a) was continued
   - (b) ruled
   - (c) lasted
   - (d) did not exist
   - (e) No improvement

4. The patient **could have been sayed** if he had been taken to the hospital in time.
   - (a) could be saved
   - (b) could save
   - (c) had been saved
   - (d) can sayed
   - (e) No improvement

5. Knowing very little English, **it was difficult to converse** with the foreigner.
   - (a) I found it difficult to converse
   - (b) to converse was difficult
   - (c) conversing was difficult
   - (d) It was not easy to conversed
   - (e) No improvement

6. People in underdeveloped countries **are distressing because of the** antagonistic attitude of developed countries.
   - (a) have been distressing
   - (b) are distressed because
   - (c) are distressed at
   - (d) were distressing by
   - (e) No correction required

7. He **had been behaved** impolitely and suffered owing to that.
   - (a) was behaved
   - (b) had behaved
   - (c) have been behaved
   - (d) would have behaved
   - (e) No correction required

8. It has become **a commonly practice to talk about** women liberation.
   - (a) commonly practised talk about
   - (b) common practice to talk about
   - (c) common practice of talking with
   - (d) commonly practising to talk about
   - (e) No correction required

9. He is so brisk himself that he cannot **tolerate any efficiency.**
   - (a) tolerate hardly any inefficiency
   - (b) hardly tolerates lethargy
   - (c) tolerate any haste
   - (d) tolerate any delay
   - (e) No correction required

10. No person with a **reasonably self-esteem** would ever like to succumb to any pressure.
    - (a) reasonable self-esteemed
    - (b) reasonable self-esteemed
    - (c) reasonably self-esteemed
    - (d) reasonably a self esteem
    - (e) No correction required

11. **Unless you dedicated to** your studies, you cannot expect success.
    - (a) Unless you donot dedicate to
    - (b) If you dedicate to
    - (c) In case you didnot dedicate to
    - (d) Unless you dedicate to
    - (e) No correction required

12. The output of our factory **was not been satisfactory** monitored.
    - (a) was not being satisfactory
    - (b) has not been satisfactorily
    - (c) has not being satisfactorily
    - (d) is not being satisfactory
    - (e) No correction required

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. He **is firmly believing** on democratic principles.
    (a) firm believer for   (b) firmly believe in
    (c) firmly believes in   (d) firmly belief on
    (e) No correction required

14. He persevered and succeeded **to face of all the** obstacles.
    (a) to face of all the   (b) to all the face of
    (c) in the face of all   (d) at the face of the all
    (e) No correction required

15. He always **claims to be superior than** everyone in his company.
    (a) claim to be superior to
    (b) claims to be superior to
    (c) claimed to superiority over
    (d) claims superiority for
    (e) No correction required

16. That was the record that **make me sit up and take notice** of Neil Hannon.
    (a) made me sit up and take notice
    (b) had made me sit up and take notice
    (c) has made me sit up and take notice
    (d) sit up and take notice
    (e) No correction required

17. These mistakes **catch up with** him when he ran for President.
    (a) caught up in   (b) caught up with
    (c) caught up on   (d) caught up at
    (e) No correction required

18. When I told her about breaking the window, **she goes through the roof**.
    (a) she went through the roof
    (b) she went via the roof
    (c) she went through roof
    (d) she went with roof
    (e) No correction required

19. **A preventive programme for the break out of** epidemic in quake-hit areas must be introduced.
    (a) A preventive programme before the break out of
    (b) A preventive programme for the breaking out of
    (c) A preventive programme for the out break of
    (d) A preventive programme before the out break of
    (e) No correction required

20. **Last but not the least, I would like to thank all the workers without whose co-operation,** the rally wouldn't be a success.
    (a) Last but not least, I would like to thank all the worker without their co-operation.
    (b) Last but not the least, I would like to thank all the worker without their co-operation,
    (c) Last but not least, I would like to thank all the workers without whose co-operation,
    (d) Last but not the least, I would like to thank all those workers without their co-operation,
    (e) No correction required

21. They didn't pay any heed to their superior's instructions : **I did neither.**
    (a) I either did   (b) Either 1 did not.
    (c) Neither didn't I   (d) Nor did I
    (e) No correction required

22. Every poet **gives voice to** his anger and his compassion through his poems.
    (a) voiced to give   (b) gives voice for
    (c) gave voice against   (d) voiced at giving
    (e) No correction required

23. The police nabbed a notorious criminal who **had been terrorising builders and extorted** money from them for the past two years.
    (a) was terrorising builders and extorted
    (b) had not been terrorised builders and extorted
    (c) had been terrorising builders and extorting
    (d) had terrorised builders and extorted
    (e) No correction required

24. Managers frequently encounter situations where they need **to help others solved** problems.
    (a) to helping others solved
    (b) help others solved
    (c) to help others solve
    (d) help others solving
    (e) No correction required

25. From among various alternatives we should choose the one which **is viable and consumes less** time and energy.
    (a) is viable and consuming lesser
    (b) is viability and consumes less
    (c) being viable and consumes less
    (d) has viable and consuming less
    (e) No correction required

RESPONSE GRID	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ		

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SPOTTING ERRORS

Max. Marks : 50   **No. of Qs. 50**   **Time : 30 min.**   Date : ..../......../................

DIRECTION (Qs. 1-50) : Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of this part is the answer. If there is no error, the answer is (e).

1. A band of musician (a) / have been engaged (b) / for the (c) inauguration function. (d) /(e)

2. The number (a) / of persons interested (b) / in psychology are (c) / generally small. (d) / No Error (e)

3. The manager's comments (a) / on the preparation of the test matches (b) / for this tour (c) / has been generally praised. (d) / No Error (e)

4. The details (a) / of the incident (b) / was not known (c) / to me. (d) / No Error (e)

5. The majority of (a) / writers never (b) / passes (c) / this stage. (d) / No Error (e)

6. A large part of (a) / the distinctive features (b) / of the mind is due to its being (c) / an instrument of communication. (d) / No Error (e)

7. A part of (a) / the mango (b) / are (c) / rotten. (d) / No Error (e)

8. A part of (a) / the mangoes (b) / are (c) / rotten. (d) / No Error (e)

9. The governing body at (a) / its first meeting (b) / have decided (c) / to conduct the test again. (d) / No Error (e)

10. The banker's association (a) / has submitted a memorandum (b) / for the fulfilment of (c) / their demands. (d) / No Error (e)

11. Five quintals of wooden coal (a) / are (b) / his annual requirement (c) / for the unit. (d) / No Error (e)

12. Dickens have (a) / vehemently criticised (b) / the philosophy (c) in 'Hard Times'. (d) / No Error (e)

13. All his money (a) / is spent (b) / and all his (c) / hopes ruined. (d) / No Error (e)

14. This rule may (a) / and ought to be (b) / disregarded for (c) / the time being. (d) / No Error (e)

15. He is one of the (a) richest man (b) / if not the richest man (c) / in the world. (d) / No Error (e)

16. We can almost get (a) / everything in (b) / this market (c) / at reasonable price. (d) / No Error (e)

17. Every (a) / Tom, Dick and Harry (b) / drink (c) / wine these days. (d) / No Error (e)

18. He and I (a) / is partners in (b) the firm (c) / named 'Unique builders'. (d) No Error (e)

19. He is one of the (a) / great man (b) that have (c) / ever lived. (d) / No Error (e)

20. The magistrate and collector (a) were (b) / present there (c) / on the spot. (d) / No Error (e)

21. Horse and carriage (a) / are (b) / waiting there (c) for the couple. (d) / No Error (e)

22. Rice and fish (a) / are (b) / my (c) / favourite dish. (d) / No Error (e)

23. "Under no circumstances (a) / I can help you in (b) / this venture," said Sita. (d) / No Error (e)

24. "I don't like (a) / such a bright colour (b) / nor she does," (c) / said to Ram. (d) / No Error (e)

25. Every member of (a) / his family is (b) / addicted to gambling (c) / and so John is. (d) / No Error (e)

26. Never before (a) / I had been asked (b) / to go there (c) / by bus. (d) / No Error (e)

27. On no account (a) / this switch must (b) / be touched (c) / by you. (d) / No Error (e)

28. "Seldom I had seen (a) / such a (b) / beautiful girl," (c) / said Mohanti. (d) / No Error (e)

29. Under a tree (a) / was sleeping an (b) old lady (c) with her young child. (d) / No Error (e)

30. To such a degree (a) / he created (b) the problems that (c) people thrashed him. (d) / No Error (e)

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ

31. She asked me (a)/ Where I was going to (b)/ and what I had done (c)/ the previous day. (d)/ No error (e)

32. Yesterday in the night (a)/ he came (b)/ by bus (c)/ and was disturbed. (d)/ No error (e)

33. Within two hours (a)/ we will approach (b)/ near Agra (c)/ by car. (d)/ No error (e)

34. Throughout the whole year (a)/ there was (b)/ not a single day (c)/ without any incidence of violence. (d)/ No error (e)

35. The P.M. said (a)/ that it was his decision (b)/ and that nobody (c)/ could get it changed. (d)/ No error (e)

36. "The Patient is comparatively better (a)/ today and I hope (b)/ that he will recover soon" (c)/ said the doctor (d)/ No error (e)

37. All the members (a)/ of the committee are (b)/ kindly requested to appear (c)/ in the next morning (d)/ No error (e).

38. This is the new (a)/ book "One Night @ the call centre" authored by Chetan Bhagat which my father (b)/ bought it (c)/ for you (d)/ No error (e)

39. The passing marks (a)/ in Economics is thirty three (b)/ but he has secured (c)/ just twenty-nine (d)/ No error

40. As my neighbourers (a)/ are very co-operative (b)/ I do not (c)/ feel any difficultly in living in this locality (d)/ No error (e)

41. They started to scratch (a)/ a few years ago and leveraged (b)/ the mobile services boom (c)/ to become key market players. (d)/ No error (e)

42. Private banks and financial services firms (a)/ too had a reasoning quarter (b)/ given an apparent (c) / slowdown in the economy. (d)/ No error (e)

43. Air India is considering (a)/ selling of its properties (b)/ in foreign destinations (c)/ because of parting of asset monetisation to garner resources. (d)/ No error (e)

44. The law will prevail over (a)/ a standard (b)/ clause unilateral (c)/ printed on a bill.(d)/ No error (e)

45. Industry experts points out (a)/ that there is an urgent need (b)/ to overhaul the patent filing (c)/ and generation process. (d)/ No error (e)

46. A 24-year-old metallurgical engineer (l)/who lost his leg (b)/ in a road accident, awarded (c)/ ₹ 30 lakh as a compensation. (d)/ No error (e)

47. It is imperative to (l)/clear communication (b)/priority areas (c)/and a credible road-map for deficit reduction. (d)/ No error (e)

48. There are certain aspects for (a)/ modern life that are (b)/ a special challenge (c)/ to traditional table manners. (d)/ No error (e)

49. It will be (a)/ a terrible mistake (b)/ for them to ascribe any victory (c)/ to their popularity.(d)/ No error (e)

50. Tornadoes ripped through the south-central US (a)/ killing at least 100 people (b)/ and wiped out (c)/ entire neighbourhoods. (d)/ No error (e)

RESPONSE GRID	**31.** ⓐⓑⓒⓓⓔ	**32.** ⓐⓑⓒⓓⓔ	**33.** ⓐⓑⓒⓓⓔ	**34.** ⓐⓑⓒⓓⓔ	**35.** ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	**37.** ⓐⓑⓒⓓⓔ	**38.** ⓐⓑⓒⓓⓔ	**39.** ⓐⓑⓒⓓⓔ	**40.** ⓐⓑⓒⓓⓔ
	41. ⓐⓑⓒⓓⓔ	**42.** ⓐⓑⓒⓓⓔ	**43.** ⓐⓑⓒⓓⓔ	**44.** ⓐⓑⓒⓓⓔ	**45.** ⓐⓑⓒⓓⓔ
	46. ⓐⓑⓒⓓⓔ	**47.** ⓐⓑⓒⓓⓔ	**48.** ⓐⓑⓒⓓⓔ	**49.** ⓐⓑⓒⓓⓔ	**50.** ⓐⓑⓒⓓⓔ

SENTENCE COMPLETION

Max. Marks : 25   **No. of Qs. 25**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-10) : In each of these questions, a sentence has one or two blanks, each blank indicating the something has been omitted. Beneath the sentence are given four words or a set of word. Choose the word or the set of words for each blank that best fits the meaning of the sentence as a whole.

1. The _____ successfully repelled every _____ on the city.
   (a) defenders-comment
   (b) citizens-onslaught
   (c) thieves-robbery
   (d) judge-criticism
   (e) None of these

2. He was _____ very clever, but he _____ performed excellently.
   (a) certainly-obviously
   (b) never-also
   (c) not-always
   (d) rarely-seldom
   (e) None of these

3. A _____ analysis of these substances will show that they differ _____ .
   (a) random-minutely   (b) detailed-essentially
   (c) careful-completely   (d) final-Structurally
   (e) None of these

4. When the _____ polished the stones, they gleamed with a breath-taking brilliance.
   (a) graphologist   (b) cosmetologist
   (c) lapidary   (d) beagle
   (e) None of these

5. As _____ head of the organisation, he attended social functions and civil meetings, but had no _____ in the formulation of company policy.
   (a) hypothetical-vote
   (b) titular-voice
   (c) nominal-competition
   (d) former-pride
   (e) None of these

6. The perpetual spinning of particles is much like that of a top, with one significant difference, unlike the top, the particles have no need to be wound up, for .... is one of their .... properties.
   (a) revolution-radical
   (b) rotation-intrinsic
   (c) motion-intangible
   (d) acceleration- hypothetical
   (e) None of these

7. The .... terrorist was finally .... by the police.
   (a) famous-apprehended
   (b) notorious-nabbed
   (c) crafty-admonished
   (d) renowned, caught
   (e) None of these

8. It is foolish to vent your spleen on a/an .... object. Still, you make .... enemies that way.
   (a) immobile-bitter   (b) interesting-curious
   (c) humane-more   (d) inanimate-fewer
   (e) None of these

9. Compromise is .... to passionate natures because it seems to surrender, and to intellectual natures it seems a ....
   (a) unsuited-submission
   (b) odious-confusion
   (c) intimidations-dichotomy
   (d) inherent-fabrication
   (e) None of these

10. The village headman was unlettered, but he was no fool, he could see through the .... of the businessman's proposition and promptly .... him down.
   (a) deception -forced   (b) naivete-turned
   (c) potential-forced   (d) sophistry-turned
   (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ

DIRECTIONS (Q. 11-25) : Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole

11. Many teachers .... the lack of professional freedom as the .... for leaving the job.
    (a) cited, reason
    (b) explained, force
    (c) claimed, understanding
    (d) argued, culprit
    (e) believe, ground

12. Skeptics would not .... that the earth actually moves, let alone that it .... around the sun.
    (a) permit, orbits   (b) accept, revolves
    (c) experience, circles (d) assume, went
    (e) challenge, spins

13. Unpredictable .... of the child could not lead the consultants to any ....
    (a) performance, setting
    (b) belief, judgement
    (c) operation, purpose
    (d) behaviour, conclusion
    (e) react, decision

14. A public servant who is guilty will not .... punishment and no .... person will be punished.
    (a) be, sincere   (b) flee, guilty
    (c) defend, common   (d) avoid, uniformed
    (e) escape, innocent

15. Few professions can .... the sheer variety and constant .... of being a doctor.
    (a) like, struggle   (b) share, enthusiast
    (c) match, challenge   (d) draw, work-load
    (e) justify, exception

16. Prabha's .... in athletics yielded rich .... as she got a scholarship.
    (a) performance, money
    (b) defeat, results
    (c) behaviour, appreciation
    (d) excellence, dividends
    (e) failure, disappointment

17. The police .... any attempt of arson by .... at the trouble spot quite in time.
    (a) squashed, surrounding
    (b) made, encircling
    (c) predisposed, visiting
    (d) thwarted, presenting
    (e) pre-empted, arriving

18. The .... imposed for non-payment was too .... for it to bring in improvement in collection.
    (a) fine, severe   (b) toll, simple
    (c) penalty, low   (d) damage, cruel
    (e) punishment, harsh

19. Somesh .... me coming to his table, he smiled and .... me a chair.
    (a) found, signalled   (b) met, sat
    (c) looked, gave   (d) saw, offered
    (e) welcomed, took

20. The leaders were .... needed by those to .... they addressed.
    (a) angrily, who   (b) readily, which
    (c) scarcely, whom   (d) rarely, where
    (e) joyfully, when

21. I am not .... to sell you my house unless you offer a more .... price.
    (a) agree, better   (b) prepared, realistic
    (c) ready, correct   (d) having, actual
    (e) None of these

22. Due to .... rainfall this year, there will be .... cut in water supply.
    (a) scanty, substantial
    (b) meagre, least
    (c) insufficient, no
    (d) surplus, abundant
    (e) abundant, considerable

23. In a changing and .... unstructured business environment, creativity and innovation are being .... demanded of executives.
    (a) excessively, rapidly
    (b) highly, extremely
    (c) increasingly, moderately
    (d) progressively, increasingly
    (e) highly, speedily

24. We are .... to have him .... here to make this function a great success.
    (a) happy, have   (b) unhappy, arrive
    (c) sure, come   (d) pleased, over
    (e) wonderful, again

25. Efforts to .... the issue will not be successful .... both sides continue to blame each other.
    (a) resolve, if   (b) discuss, unless
    (c) address, whether   (d) settled, because
    (e) close, although
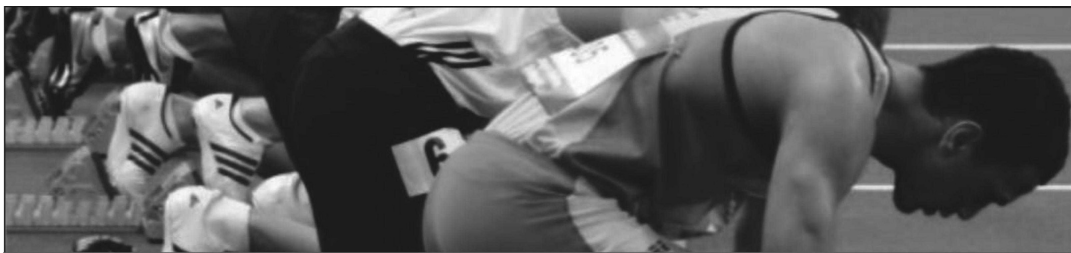
RESPONSE GRID	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ

PASSAGE COMPLETION

Max. Marks : 25   **No. of Qs. 25**   **Time : 20 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs. 1-5) : In each of the following questions a short passage is given with one of the lines in the passage missing and represented by a blank. Select the best out of the five answer choices given, to make the passage complete and coherent.

1. After the East Asia crisis, the World Bank conducted a study on the underlying reasons for the crisis. It was found that at least a major part of the fundamental responsibility was on banks, which had understated their non performing accounts by as much as 47%. Since this was a study and not an investigation…………….. Nevertheless, the Basel committee on supervision did take cognizance, and issued circulars and directives not only on supervision, but also on Internal Functional Management. It will be remembered by those interested that Basel committee had also acted expeditiously after the Barring Bank's failure, to separate treasury and lending operations from the decision making processes. Bank failures are nothing new in the world, although we in India have been insulated g from such traumas for more than two decades.
   (a) The findings were not taken note of
   (b) The findings were not taken seriously
   (c) The findings were not legally binding on any one
   (d) The fallout from this revelation was only taken note of
   (e) The fallout from this revelation was seriously taken

2. Whether the Government is right in bailing out a private sector bank is an issue that is decided more than by the long term social security policy of the Government ,than by economic reasons alone…………………. Nevertheless, in a situation of scarcity of resources, bailing out somebody means the denial of resources to others. The irony of it is that in performing its duties of proper governance to the larger society through the process of bailing out, Government excuses the lack of corporate governance in banks.
   (a) Economists world over learnt it hard way during the Great depression
   (b) This is elementary principle of economics taught in schools
   (c) Reasons are not limited to these two but extend to debts, liquidity & credit ratings issues
   (d) It was unexpected and came like a bolt from the blue
   (e) Particularly true for the Asian countries like India and China

3. But no depreciation is allowed on Live Stock i.e. Horses. Although the horses are in the nature of fixed assets in the hands of the owner, no depreciation is allowed under Income Tax Act. Instead when the animal dies or becomes permanently useless the entire value of the horse can be written off as revenue loss in the year in which it dies or becomes permanently useless. When the gross income exceeds the total expenditure, it results in net profit which will be taxable at usual rates of tax applicable to the person. …………………….. Although the live stock is in the nature of fixed assets of the owners buy them, maintain them, train them, and participate in races and Sell them or send them away to studs when they are useless.
   (a) But when the gross income is less than the expenditure, then results in loss
   (b) But when the gross income is higher than the expenditure, then results in loss
   (c) But when the gross income is equal to expenditure then result is loss
   (d) But when the gross income is there loss is the result
   (e) But when the gross income is increasing then result is becoming evident

4. Aggregation of risks is somewhat quite new to banks in India. While some banks have started thinking in that line by trying to put integrated limits framework and integrated risk policies as well as using CBS solutions for technological integration, the effort required is beyond such requirement. Risk aggregation would mean aggregating the individual risk measures to decide most appropriate assets class that would contain the risk to the desired level dictated by the risk appetite .Capital allocation (about how much) would be based on such strategies………..
   (a) Most banks are yet to conceptualize the same in their processes
   (b) Most banks have already integrated it in their functioning; it is working over the years satisfactorily.
   (c) Which would in long run prove to be the growth impeding
   (d) Of risk aggregation which is really a new concept to Indian banks
   (e) On expected lines of the regulation conditions laid down in the manual of the bank

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ |

5. However, it is possible that the non -resident entity may have a business connection with the resident Indian entity. In such a case, the resident Indian entity could be treated as Permanent Establishment of the nonresident entity. ……………During the last decade or so, India has seen a steady growth of outsourcing of business processes by non residents or foreign companies to IT -enabled entities in India. Such entities are either branches or associated enterprises of the foreign enterprise or an independent India enterprise. The nonresident entity or foreign company will be liable to tax in India only if the IT -enabled BPO unit in India constitutes its Permanent Establishment.
   (a) The tax treatment of the Permanent Establishment in such a case is under consideration
   (b) How would the profit would be shared is not decided yet?
   (c) A lengthy and cumber some process requiring a lot of application of mind and revenue principles is ahead for the tax department of India
   (d) A new trend is seen in last decade.
   (e) Indian companies have a lot on stake as competition increases.

DIRECTIONS (Qs. 6-10) : Which of the phrases (a), (b), (c) and (d) given below each statement should be placed in the blank space provided so as to make a meaningful and grammatically correct sentence? If none of the sentences is appropriate, mark (e), ie 'None of these', as the answer.

6. Refuting the rationale behind frequent agitations for formation of separate States, a recent report_____ .
   (a) proved that such agitations result in loss of governmental property
   (b) indicated that the formation of small states does not necessarily improve the economy
   (c) suggested that only large-scale agitations have been effective in bringing out desired change in the past
   (d) recommended dividing large States into smaller ones to improve governance
   (e) None of these

7. Overlooking the fact that water scarcity intensifies during summer, _____.
   (a) the government issued guidelines to all builders to limit their consumption to acceptable limits
   (b) provision for rainwater harvesting has been made to aid irrigation in drought-prone areas
   (c) the water table did not improve even after receiving normal monsoon in the current year
   (d) many residential areas continue to use swimming pools, wasting large quantities of water
   (e) None of these

8. He has lost most of his life's earning in the stock market but _____.
   (a) he still seems to be leading his life luxuriously and extravagantly
   (b) he could not save enough to repay his enormous debts
   (c) stock market is not a safe option to invest money unless done with caution
   (d) experts have been suggesting to avoid investments in stock market because of its unpredictable nature
   (e) None of these

9. Achieving equality for women is not only a laudable goal, _____.
   (a) political reforms are also neglected preventing women from entering legislatures and positions of power
   (b) the problem is also deep-rooted in the society and supported by it
   (c) their empowerment is purposefully hampered by people with vested interests in all sections of the society
   (d) it is also equally difficult to achieve and maintain for a long term
   (e) None of these

10. _____ or else they would not keep electing him year after year.
   (a) The party leader gave a strong message to the mayor for improving his political style
   (b) Owing to numerous scandals against the mayor, he was told to resign from the post immediately
   (c) The mayor threatened the residents against filing a complaint against him
   (d) The residents must really be impressed with the political style of their mayor
   (e) None of these

DIRECTIONS (Qs. 11-20) : Which of the phrases (a), (b), (c) and (d) given below each statement should be placed in the blank space provided so as to make a meaningful and grammatically correct sentence? If none of the sentences is appropriate, mark (e) as the answer.

11. ....the soil today is nowhere as rich in native minerals as it used to be some centuries ago.
   (a) As there is a growing consent among farmers regarding limiting the use of chemical fertilizers
   (b) As the chemical inputs in agriculture improved the yield many folds
   (c) Owing to the uninhibited use of chemical inputs in agriculture
   (d) Awareness among farmers regarding the side effects of chemical farming grew when
   (e) None of the above

12. Although information technology has entered the homes, offices and hearts of many citizens of India,........ .
    (a) India provides the highest number of IT experts to the world every year
    (b) many people in rural areas still remain ignorant of its immense benefits
    (c) government has done its best by funding research in this field appropriately
    (d) the face of communication in the years to come would change completely from the bygone years
    (e) None of the above

13. While the environment friendly nuclear energy could make a large addition to the energy resources,........ .
    (a) experts have a lot of expectations from this cleaner method of producing energy
    (b) the government is determined to extract maximum out of this technology in the near future
    (c) international lobby has been pressurizing the developing nations to shift their energy production from coal to nuclear power.
    (d) the problem of locating adequate numbers of Uranium reserves to run the reactors is yet be sorted out
    (e) None of the above

14. ...., experts proposed the idea of a common school system.
    (a) Overlooking the fundamental right of quality education of every child in India
    (b) Since the curricular requirements of a rural child is different from an urban child
    (c) Based on the fact that difference in the quality of schools acts as a ground for discrimination
    (d) Since a large percentage of Indian children are getting free education
    (e) None of the above

15. As allegations of crores of rupees changing hands to permit illegal mining began to fly thick and fast,...... .
    (a) government ordered an enquiry which exposed a nexus between mine operators and bureaucrats
    (b) it caused great damage to the surrounding ecosystem and the environment in general
    (c) the officials have been irresponsible in failing to bring it to the notice of the court in time
    (d) the powerful mining lobby had bribed the officials to obtain permit for mining on ecologically sensitive land
    (e) None of the above

16. After two years, high inflation moderated in the later part of 2015-16 in response to past monetary tightening and growth deceleration. High inflation had adverse consequences on welfare and on saving and investment, particularly household saving in financial assets. The most serious consequence of inflation is ……………………As growth slowed down, in part due to high inflation, it further reduced the welfare of the common man through adverse impact on employment and incomes.
    (a) its destructive allocation impact on the industries that were lately coming up.
    (b) its negative impact on the rich and high-profile people.
    (c) its adverse distributional impact on the poor, people without social security and pensioners.
    (d) its wayward consequences on the public distribution system meant for the poor.
    (e) its unfavourable bearing on day to day commodities that are used by the common man.

17. Current indications are that fiscal targets can again be missed in 2015-16, unless immediate remedial measures are undertaken. The risks to fiscal targets laid down for 2015-16 are large if the envisaged tax buoyancies are not realised and the cap on subsidies is not adhered to. During the first quarter of 2015-16, the fiscal deficit of the central government was more than one third of the budget estimate for the whole year. Estimates of fiscal multipliers for India show that while impact multiplier on growth is higher for revenue and expenditures, the long-run multiplier is higher for capital outlays. In this context, credible fiscal consolidation .... is crucial for improving long-run growth prospects.
    (a) accompanied with macro-financial stability
    (b) accompanied with an expenditure switching strategy that reduces government's revenue spending
    (c) accompanied with the human face of its financial policy
    (d) accompanied with a greater thrust on effective financial inclusion
    (e) accompanied with higher capital outlay

18. During 2015-16, the banking sector remained robust with high capital adequacy, even though rising NPA levels emerged as a concern. The NPAs, however, are in part a reflection of overall slowdown in the economy. An analysis using data since June 2000 brings out this pro-cyclicality in asset quality of Indian banks. The Reserve Bank has undertaken several initiatives .... facilitating better banking experience for the disabled and intra-bank transfer of deposit facility to benefit the common man.
    (a) like some concrete steps to attract FDI in this sector
    (b) like faster grievances redressal mechanism
    (c) like steps to augment the production potential of core sectors
    (d) like initiatives to augment non-debt creating flows
    (e) like initiatives to improve transparency and accountability

| RESPONSE GRID | 12. ⓐ ⓑ ⓒ ⓓ ⓔ | 13. ⓐ ⓑ ⓒ ⓓ ⓔ | 14. ⓐ ⓑ ⓒ ⓓ ⓔ | 15. ⓐ ⓑ ⓒ ⓓ ⓔ | 16. ⓐ ⓑ ⓒ ⓓ ⓔ |
| | 17. ⓐ ⓑ ⓒ ⓓ ⓔ | 18. ⓐ ⓑ ⓒ ⓓ ⓔ | | | |

19. With limited fiscal and monetary space available to provide a direct stimulus to domestic growth, an expenditure switching policy is needed that reduces government's revenue spending by cutting subsidies and using the resources so released to step up public capital expenditures. Such an action would also provide some space for monetary policy, but, importantly, lower interest rates alone are unlikely to jumpstart the investment cycle. Fast-tracking of infrastructure projects and pending regulatory clearances.. The Government has initiated some steps to augment the production potential of core sectors, in particular mining, in the recent period.
    (a) will be detrimental to exports
    (b) will hamper the economic growth
    (c) will help to boost investments
    (d) will encourage to boost the performance of core industries.
    (e) will lead revival of industrial growth

20. During 2011-12, the Reserve Bank continued with its efforts to strengthen security features of banknotes and increase public awareness ....There was a marked decline in the volume and value of small coins in circulation in 2011-12 as coins of denomination of 25 paise and below ceased to be legal tender from June 30, 2011. A committee constituted by the government is examining the issues relating to the increase in demand for coins and supply/distribution bottlenecks.
    (a) to address the challenge of counterfeit notes
    (b) to initiate steps to encourage debit/credit cards in place of banknotes
    (c) to handle the situation of using smaller denomination of coins
    (d) to cover the expenses of printing new banknotes
    (e) to stop the menace of black money

DIRECTIONS (Qs. 21-25) : Which of the phrases (a), (b), (c) and (d) given below each statement should be placed in the blank space provided so as to make a meaningful and grammatically correct sentence? If none of the sentences is appropriate, mark (e) as the answer.

21. Although information technology has entered the homes offices and hearts of many citizens of India, _____ .
    (a) India provides the highest number of IT experts to the world every year
    (b) many people in rural areas still remain ignorant of its immense benefits
    (c) government has done its best by funding research in this field appropriately

    (d) the face of communication in the years to come would change completely from the by gone years
    (e) None of these

22. While the environment-friendly nuclear energy could make a large addition to the energy resources, _____ .
    (a) experts have a lot of expectations from this cleaner method of producing energy
    (b) the government is determined to extract maximum out of this technology in the near future
    (c) international lobby has been pressurising the developing nations to shift their energy production from coal to nuclear power.
    (d) the problem of locating adequate numbers of uranium reserves to run the reactors is yet to be sorted out
    (e) None of these

23. _____ experts proposed the idea of a common school system.
    (a) Overlooking the fundamental right of quality education of every child in India
    (b) Since the curricular requirements of a rural child is different from an urban child
    (c) Based on the fact that difference in the quality of schools acts as a ground for discrimination
    (d) Since a large percentage of Indian children are getting free education
    (e) None of these

24. _____ the soil today is nowhere as rich in native minerals as it used to be some centuries ago.
    (a) As there is a growing consent among farmers regarding limiting the use of chemical fertilizers
    (b) As the chemical inputs in agriculture improved the yield many folds
    (c) Owing to the uninhibited use of chemical inputs in agriculture
    (d) Awareness among farmers regarding the side-effects of chemical farming grew when
    (e) None of these

25. As allegations of crores of rupees changing hands to permit illegal mining began to fly thick and fast, _____.
    (a) government ordered an enquiry which exposed a nexus between mine operators and bureaucrats
    (b) it caused great damage to the surrounding ecosystem and the environment in general
    (c) the officials have been irresponsible in failing to bring it to the notice of the court in time
    (d) the powerful mining lobby had bribed the officials to obtain permit for mining on ecologically sensitive land
    (e) None of these

PARAJUMBLES

Max. Marks : 25   **No. of Qs. 25**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-5): Rearrange the following six sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph, then answer the questions given below them.

A. It will take extraordinary political commitment and liberal public funding during the 11th Plan for affordable housing to become a credible goal.

B. The National Urban Housing and Habitat Policy of the United Progressive Alliance Government seeks to make access to housing, long acknowledged as a fundamental right, a reality for all.

C. The task is staggering even if we go by conservative estimates.

D. The housing shortage to be met during the Plan is 26.53 million units, which include the backlog from the 10th Plan.

E. If the existing stock of poor quality dwellings and the growing urbanization–driven demand are taken into account, the real deficit will be even higher.

1. Which of the following should be the **FIRST** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

2. Which of the following should be the **SECOND** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

3. Which of the following should be the **THIRD** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

4. Which of the following should be the **FOURTH** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

5. Which of the following should be the **FIFTH (LAST)** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

DIRECTIONS (Qs. 6-10): Rearrange the following six sentences (A), (B), (C), (D) and (E) and in the proper sequence to form a meaningful paragraph, then answer the questions given below them.

A. The upsurge of public activism against the setting up of Special Economic Zones, which eventually forced the State Government to announce the scrapping of all 15 such projects, is an impressive case in point.

B. Early last year, a similar agitation coerced the government into calling for a revision of the Goa Regional Plan 2011, a controversial document that opened up large swathes of land, including green belts and coastal stretches, for construction.

C. The broad–based agitation against SEZs has demonstrated the power of popular protest in the State.

D. Those opposed to the projects had questioned the propriety of the government acquiring large tracts of land and then selling them to promoters at low prices.

E. A coastal State with an area of 3,700 square kilometers and a population of about 1.4 million, Goa has always been extremely sensitive to the impact of unrestrained economic development.

6. Which of the following should be the **FIRST** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

7. Which of the following should be the **SECOND** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

8. Which of the following should be the **THIRD** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

9. Which of the following should be the **FOURTH** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

10. Which of the **following should** be the **FIFTH (LAST)** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

DIRECTIONS (Qs. 11-15): Rearrange the following six sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph, then answer the questions given below them.

A. The British government plans to insist that spouses should have to learn English before they are allowed into Britain to join their husbands or wives have run into a barrage of opposition and warnings that the idea could breach human rights laws.

B. The responses to an official consultation on the proposal published on Thursday was more than two to one against the proposal, with many warning it could break up marriages because many cannot afford or access English lessons.

RESPONSE **GRID**	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ

C. Immigration lawyers have told ministers that spouses and fiances should not be barred from joining a partner in the U.K. for language reasons and that the plan could breach the human rights convention's guarantees to the right to marry and have a family life.

D. The anonymised responses were 68 to 31 against the pre-entry english test for spouses.

E. Other immigration organizations said the measure would discriminate against those from rural areas in South Asia, where the opportunities to learn English are limited.

11. Which of the following should be the **FIRST** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

12. Which of the following should be the **SECOND** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

13. Which of the following should be the **THIRD** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

14. Which of the following should be the **FOURTH** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

15. Which of the **following should** be the **FIFTH (LAST)** sentence?
   (a) A   (b) B   (c) C
   (d) D   (e) E

DIRECTIONS (Qs. 16-20) : Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to from a meaningful paragraph; then answer the questions given below them.

(A) He immediately acknowledged Mohan's good work and invited him to his home for dinner.

(B) One day a wealthy merchant sent his son's bicycle to the shop for repair.

(C) The next day the merchant came to claim the bicycle and noticed that it was shiny.

(D) After repairing the bicycle, Mohan cleaned it up and made it look new.

(E) Once upon a time, there was a boy named Mohan who worked as an apprentice in a bicycle shop.

(F) Other apprentices in the shop laughed at Mohan for doing unnecessary work.

16. Which of the following should be the **SECOND** sentence after rearrangement?
   (a) A   (b) B   (c) C
   (d) D   (e) F

17. Which of the following should be the **THIRD** sentence after rearrangement?
   (a) A   (b) B   (c) C
   (d) D   (e) E

18. Which of the following should be the **FIRST** sentence after rearrangement?
   (a) A   (b) B   (c) C
   (d) D   (e) E

19. Which of the following should be the **LAST** (SIXTH) sentence after rearrangement?
   (a) A   (b) B   (c) D
   (d) E   (e) F

20. Which of the following should be the **FOURTH** sentence after rearrangement?
   (a) B   (b) C   (c) D
   (d) E   (e) F

DIRECTIONS (Qs. 21-25) : Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to from a meaningful paragraph; then answer the questions given below them.

(A) At first he got scared, but then he thought, "I have never worshipped her; that is why I am not able to get anything from my land."

(B) One day unable to tolerate the summer heat, he went to rest under a big banyan tree.

(C) He rushed to his village and placed his humble offering of milk in a bowl before the snake.

(D) Vishnu Raman was a poor Brahmin and a farmer by profession.

(E) The next day when he returned, he was rewarded with a gold coin in the bowl he left behind.

(F) Just as he was preparing to lie down he saw a huge cobra swaying with his hood open.

21. Which of the following should be the **SECOND** sentence after rearrangement?
   (a) B   (b) C   (c) E
   (d) D   (e) F

22. Which of the following should be the **FIRST** sentence after rearrangement?
   (a) A   (b) D   (c) F
   (d) C   (e) E

23. Which of the following should be the **FIFTH** sentence after rearrangement?
   (a) F   (b) D   (c) C
   (d) B   (e) E

24. Which of the following should be the **SIXTH** (LAST) sentence after rearrangement?
   (a) D   (b) B   (c) C
   (d) E   (e) F

25. Which of the following should be the **FOURTH** sentence after rearrangement?
   (a) E   (b) F   (c) B
   (d) A   (e) E

RESPONSE GRID	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ

101 SPEED TEST

67

ODD SENTENCE TEST

Max. Marks : 20   **No. of Qs. 20**   **Time : 20 min.**   **Date : ..../........./................**

DIRECTIONS (QS. 1-20) : Four sentences are given below a, b, c and d. Of these, three statements are in logical order and form a coherent paragraph/ passage. From the given options, choose the option that does not fit into the sequence.

1. (a) The list of horrors goes on.
   (c) And one in every five is malnourished.
   (d) Nobody has been able to figure out a way to reduce the speed that is at the root of India's over-population problems: a baby born every second.
   (b) Foods with a high content of absorbable micronutrients are considered the best means for preventing micronutrient deficiencies.

2. (b) In fact, it suites the purpose of the politicians, they can drag the people into submission by appealing to them in the name of religion.
   (a) In order to inculcate, the unquestioning belief, they condemn the other states which do not follow their religion.
   (d) The emergence of the theocratic states, where all types of crimes are committed in the name of religion of the Middle Ages is dangerous.
   (c) Monarchy thus entails not only a political-administrative organization but also a "court society".

3. (d) It was something I knew that it would give me a chance to be my own boss.
   (b) Today I have 800 on my staff, office and members.
   (c) Although if you work for an ad agency in the 1960s, evidently it isn't there either.
   (a) I was sick of working for others.

4. (d) Fire ripped through another pipeline in southern Nigeria, killing at least 40 people.
   (b) Fuel is supplied not only to homes, but also to a variety of businesses and commercial establishments without any difficulty.
   (a) The explosion was the third in two weeks.
   (c) Police were deployed to stop villagers from stealing fuel from other pipelines.

5. (d) You would be very surprised indeed to find it hot.
   (b) Cold, of course.
   (c) Rivers are the most obvious and significant feature of the landscape.
   (a) When you go bathing in a river or a pond, do you expect the water to be hot or cold?

6. (b) In a number of cases, the drivers have refused to carry passengers according to the meter reading despite it being in working condition.
   (a) Refusal to carry commuters to their respective destinations is another common complaint which has been lodged with the call centres.
   (d) The most shocking is the complaints about misbehaviour by the rickshaw drivers with the passengers.
   (c) It's hard to reconcile the image of the paan-chewing driver greeting you with `Good morning'.

7. (b) Finish specialists recommended a chewing gum containing xylitol - a natural sweetener present in birch, maple, corn and straw - to be used several times a day by young children.
   (c) Chewing gum is a new solution that "may work for parents whose children suffer from chronic ear infections.
   (a) Sugared gums can with heavy use cause tooth decay, gum disease and cavities.
   (d) After Finish studies showed that xylitol is effective in preventing cavities, a team of researchers decided to investigate its effects on a very similar type of bacteria which causes ear infections.

8. (d) The CEO's leadership role also entails being ultimately responsible for all day-to-day management decisions.
   (a) The chief executive had done an excellent job in welding a group of motley and successful companies into one profitable company.
   (b) It is not surprising that company had been sitting on a cash hoard of about $24 billion year after year without any attempt to use it for growth or development.
   (c) The chief executive of the General Electric Company in England once told me that he was very happy when there were no problems in any of his many divisions.

9. (d) Businesses often feel that since they have a lot of market muscle and in such a dominant position, maintenance will be enough.
   (b) IBM fell behind on the concept of "connectivity" and has suffered as a result.
   (a) In recent years, however, even mighty IBM found that market domination was not enough if you fall behind on concept.
   (c) IBM has been well known through most of its recent history as one of the world's largest computer companies.

| **RESPONSE GRID** | 1. ⓐⓑⓒⓓ | 2. ⓐⓑⓒⓓ | 3. ⓐⓑⓒⓓ | 4. ⓐⓑⓒⓓ | 5. ⓐⓑⓒⓓ |
| | 6. ⓐⓑⓒⓓ | 7. ⓐⓑⓒⓓ | 8. ⓐⓑⓒⓓ | 9. ⓐⓑⓒⓓ | |

10. (b) In the past, the customised tailoring units were localised to the township or city and catered exclusively to domestic demand.

(a) Traditionally, Indians preferred custom-made clothing and the concept of ready-to-wear is a relatively recent one.

(d) This is contrary to the popular notion that Indian men do not spend as much as women on clothing.

(c) The customised tailoring outfits have always been a major source of clothing for domestic market.

11. (a) Michael Hofman, a poet and translator, accepts this sorry fact without approval.

(c) He acknowledges too - in fact, he returns to the point often - the best translators of poetry always fail at some level.

(b) Poetry typically follows some type of pattern while prose does not follow any formal patterns of verse.

(d) In terms of the gap between worth and rewards, translators come somewhere near nurses and street cleaners.

12. (b) Reservation should not exceed 50% for the civil services for want of balance and efficiency.

(a) A common form of caste discrimination in India has been the practice of untouchability.

(c) The number of aspirants to the civil services in India is very large and they come from various socio-economic backgrounds.

(d) These aspirants come from both reserved and unreserved category.

13. (d) Almost a century ago, when the father of the modern automobile industry, Henry Ford, sold the first Model T car, he decided that only the best would do for his customers.

(a) In October 2012, Toyota announced a recall of 7.43 million vehicles worldwide to fix malfunctioning power window switches, the largest recall since that of Ford Motor Company in 1996.

(b) And for over 90 years, this philosophy has endured in the Ford Motor company.

(c) Thus a vehicle is ready for the customers only, if it passes the Ford 'Zero Defect Programme'.

14. (a) Because, if the manager's subordinates are inefficient and ineffective and are not helped to increase their efficiency and effectiveness, the task may not be achieved.

(b) This must be just as true as the responsibility for achieving his prescribed tasks.

(c) Dealing with employees who don't respect you or your authority can eventually make your job unbearable.

(d) It is often and that one of the prime responsibilities of a manager is the training and development of his staff.

15. (b) Over the last decade, Australia and India have set up Test cricket's most absorbing rivalry.

(d) Every champion needs a counterpoint; legacies, defined referentially, draw from the dynamic between world-beater and contender.

(c) It was tough but India outperformed most of the teams in all three departments of the game in the last two years.

(a) India, thanks to its natural style of calm aggressive cricket, its distinctive ability to play at the level of the opposition, and the confluence of some of the finest cricketers in the contemporary game, fulfilled this role of contender.

16. (c) Early in August, as his jeep wound its way through the piles of burning tyres that angry protestors had used to barricade the road from Srinagar airport into the city, former Chief Minister Farooq Abdullah, turned to a journalist sitting next to him with a smile on his face.

(b) "So," he said, "Are you here to write another article about how I don't know how to run a government?"

(a) More likely than not, Dr. Abdullah's leadership - or that of Jammu and Kashmir National Conference President, his son Omar Abdullah - will soon be put to the test.

(d) The three time chief minister of Jammu & Kashmir asserted that only dialogue can bring peace in the valley.

17. (a) A nation has gone against its historical record.

(d) The single undeniable aspect of Obama's legacy is that he demonstrated that a black man can become president of the United States.

(b) Risen above its worst prejudices in one, emotional incandescent moment.

(c) Well, at least partly, and for a while Americans have voted in larger numbers than they have in decades, perhaps ever.

18. (d) This is the time of the year when people go out and shop for their winter wear.

(b) But it seems economic recession has hit the fashion industry as well.

(a) We haven't seen exclusive fashion shows from big designers this winter.

(c) Winters for the past two years have been among the warmest, during December to March, in north India that heavily impacted sales of winter clothing by almost 30%.

19. (b) After all, a story told on the large screen inevitably differs from that told on the small screen.

(c) This critical difference has an impact on viewership in terms of age, income and occupation.

(a) In this, the age of multimedia, we have to train ourselves to understand that as a rule, the medium is the message.

(d) In any play you've got to know what's going on around you so you can hear your cue to give a line or move in the scene.

20. (d) The size of the carbon footprint of nations in the developing world has again come in for serious international discussion.

(c) The failed mission of Copenhagen is the immediate cause of the resumption of this debate.

(b) While the main triggers of the debate are economic, social and cultural factors also have a major role to play.

(a) There are both natural and human sources of carbon dioxide emissions.

RESPONSE GRID

10. ⓐⓑⓒⓓ	11. ⓐⓑⓒⓓ	12. ⓐⓑⓒⓓ	13. ⓐⓑⓒⓓ	14. ⓐⓑⓒⓓ
15. ⓐⓑⓒⓓ	16. ⓐⓑⓒⓓ	17. ⓐⓑⓒⓓ	18. ⓐⓑⓒⓓ	19. ⓐⓑⓒⓓ
20. ⓐⓑⓒⓓ				

CLOZE TEST- I

Max. Marks : 40   **No. of Qs. 40**   **Time : 30 min.**   **Date : ..../........./................**

DIRECTIONS (Qs. 1-40) : In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

PASSAGE -1

'Quit India' came not from the lips but the aching heart of millions. In this open rebellion, the Indian **(1)** reached its climax. The British were nut only **(2)** by it, but also were obliged to quit unilaterally, The importance of Quit India can be **(3)** from Lord Linlithgow's statement, "I am engaged here, in meeting by far the most **(4)** rebellion since that 6£ 1857, the gravity and extent ill which we have so far **(5)** from the world for reasons of military security". Still more significant was Churchill's gloomy disclosure to the King Emperor that, "the idea of **(6)** of power had become an admitted **(7)** in the minds of British party leaders", although his public statements were diametrically opposite. The **(8)** created by Quit India made the British **(9)** that they could no longer keep India in **(10)**

1. (a) patriotism   (b) freedom   (c) liberation
    (d) revolution   (e) leadership
2. (a) attacked   (b) inspired   (c) enfeebled
    (d) threatened   (e) impressed
3. (a) established   (b) diffused   (c) gauged
    (d) determined   (e) invigorated
4. (a) trivial   (b) serious   (c) auspicious
    (d) praiseworthy   (e) magnificent
5. (a) elicited   (b) excluded   (c) abstained
    (d) concealed   (e) prevented
6. (a) transfer   (b) seizure   (c) grabbing
    (d) retainment   (e) enhancement
7. (a) fantasy   (b) tactics   (c) occurrence
    (d) inevitability   (e) disillusionment
8. (a) anarchy   (b) violence   (c) taboos
    (d) exigencies   (e) vengeance
9. (a) anxious   (b) realise   (c) imagine
    (d) pretend   (e) apprehend
10. (a) exile   (b) power   (c) bondage
    (d) suspense   (e) abeyance

PASSAGE -2

Now-a-days, under the **(11)** system of education, however good it may be, when a young man comes out of the university, there seems to be this **(12)** in him that the higher the standard of living rises, the less should a man work. Thus, mathematically, higher the standard of living, according to this misconceived notion, the less the **(13)** ultimately, what? should be the highest standard of living then? **(14)** work ! This leads to an unhealthy **(15)** among the workers . A typist who types over twenty letters a day asks his **(16)** how many letters he had typed that day. The latter **(17)** "fifteen". The former thinks , " Tomorrow I should type only fifteen or even **(18)**. This tendency is quite **(19)** and may ultimately lead to **(20)** even one's family life may be affected adversely due to such tendency.

11. (a) extinct   (b) proposed   (c) developed
    (d) modern   (e) outdated
12. (a) apprehension   (b) realisation   (c) anxiety
    (d) worry   (e) misconception
13. (a) work   (b) time   (c) salary
    (d) energy   (e) comfort
14. (a) Ample   (b) No   (c) Minimum
    (d) Less   (e) Maximum
15. (a) ambition   (b) jealousy   (c) delay
    (d) dispute   (e) competition
16. (a) colleague   (b) client   (c) boss
    (d) subordinate   (e) employee
17. (a) remembers   (b) types   (c) suggests
    (d) replies   (e) does
18. (a) more   (b) all   (c) less
    (d) some   (e) few
19. (a) unnatural   (b) unfortunates (c) healthy
    (d) heartening   (e) discouraging
20. (a) retardation   (b) denial   (c) evil
    (d) complexity   (e) progress

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ

PASSAGE -3

Hundreds of plants and animals are **(21)** every day due to deforestation and urbanization what might happen if this continues in the future ? The last mass extinction of plant and animal species occurred 65 million years ago with the Dinosaurs. In all, five mass extinctions have occurred and scientists **(22)** earth is in sixth mass extinction. The world as it is now is threatened, including people, who are responsible for earth's **(23)**. Pesticides contaminating water; over harvesting of animals and plants; air pollution; illegal fishing and the Clearing of land are direct results of urbanization and deforestation. People have **(24)** and damaged almost half a earth's land, at a very unsustainable rate.

Global warming is having a serious impact as well. A six-degree Celsius increase in global temperature killed 95% of All species on Earth 251 million years ago. An increase of six-degree Celsius is forecast this Century if a change is not made to **(25)** the damage done to earth. Humans will be one of the 95% of species lost. Noticeable, changes of global warming include migration **(26)** and the change in season Urnings. Migrating birds are migrating earlier, which in turn is causing them to hatch eggs and **(27)** young earlier than they did at the beginning of this Century. While this is just the tip of the iceberg many other **(28)** regarding the extinction of plant and animal species need addressing. It is more important now than ever before to pull our heads out of the sand arid make changes for the **(29)** of the earth. Future generations are **(30)**, as they are a species as well.

21. (a) killing   (b) alive   (c) born
     (d) left   (e) lost
22. (a) speak   (b) told   (c) estimation
     (d) believe   (e) consider
23. (a) shape   (b) development
     (c) deterioration   (d) warmth   (e) expansion
24. (a) altered   (b) created   (c) produced
     (d) made   (e) brought
25. (a) void   (b) dissipate   (c) argument
     (d) reverse   (e) increase
26. (a) delay   (b) birds   (c) slowdown
     (d) hasten   (e) acceleration

27. (a) spare   (b) bear   (c) destroy
     (d) amend   (e) generation
28. (a) animals   (b) difficulty   (c) issues
     (d) humans   (e) problem
29. (a) extinction   (b) better   (c) wealth
     (d) sugma   (e) demand
30. (a) endangered   (b) threaten   (c) evaluated
     (d) living   (e) compared

PASSAGE -4

Man has been tampering **(31)** ecosphere for a very **(32)** time and is forced to **(33)** that the environmental resources are **(34)**. Environmental problems are **(35)** social problems. They begin with people as **(36)** and end with people as victims. Unplanned uses of resource **(37)** in the depletion of fossil fuels and **(38)** of air and water, Deforestation has led to **(39)** imbalance and draining away of national wealth **(40)** heavy expenditure on oil and power generation.

31. (a) on   (b) in   (c) with
     (d) for   (e) from
32. (a) short   (b) long   (c) small
     (d) tall   (e) high
33. (a) see   (b) look   (c) do
     (d) recognise   (e) realise
34. (a) plenty   (b) scarce   (c) minute
     (d) enough   (e) minimum
35. (a) really   (b) coldly   (c) badly
     (d) happily   (e) seriously
36. (a) effect   (b) result   (c) cause
     (d) wisdom   (e) affect
37. (a) cause   (b) rest
     (c) consequence   (d) result   (e) get
38. (a) revolution   (b) pollution   (c) resolution
     (d) evolution   (e) solution
39. (a) ecological   (b) biological   (c) logical
     (d) chronological   (e) geographical
40. (a) by   (b) in   (c) out
     (d) through   (e) from

RESPONSE GRID					
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ

CLOZE TEST- II

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-30) : In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blanks appropriately. Find out the appropriate word in each case.

PASSAGE-1

Prior to independence the healthcare sector in India was in a **(1)** with a large number of deaths and rampant spread of infectious diseases. After independence the Government of India laid **(2)** on primary healthcare and India has put in sustained efforts to better the healthcare system **(3)** the country, The government initiative was not enough to meet the demands of a growing population be it in primary, secondary or tertiary healthcare. Alternate sources of finance were critical for the sustainability of the health sector. Till about 20 years ago, private sector ventures in the healthcare sector **(4)** of only solo practitioners, small hospitals and nursing homes. The quality of service provided was excellent especially in the hospitals run by charitable trusts and religious foundations. In 1980's realizing that the government on its own would not be able to **(5)** for healthcare, the government allowed the entry of private sector to reduce the **(6)** between supply and demand for healthcare. The establishment of the private sector has resulted in the **(7)** of opportunities in terms of medical equipment, information technology in health services. BPO, telemedicine and medical tourism.

Large companies and **(8)** individuals have now started five star hospitals which dominate the space for the high end market. The private sector has made **(9)** progress, but on the flip side it is also responsible for increasing **(10)** in the healthcare sector. The private sector should be more socially relevant and effort must be made to make private sector accessible to the weaker sections of society.

1. (a) shambles   (b) failure   (c) demand
    (d) prosperity   (e) ruined
2. (a) bricks   (b) emphasize   (c) request
    (d) stress   (e) important
3. (a) through   (b) across   (c) sharing
    (d) with   (e) on
4. (a) made   (b) comprise   (c) consisted
    (d) is   (e) contained

5. (a) cater   (b) provide   (c) manage
    (d) survive   (e) give
6. (a) gap   (b) position   (c) distance
    (d) length   (e) thought
7. (a) reduction   (b) sea   (c) cropping
    (d) disabling   (e) emergence
8. (a) needy   (b) destitute   (c) bigger
    (d) affluent   (e) much
9. (a) slowly   (b) improve   (c) many
    (d) improvised   (e) tremendous
10. (a) speed   (b) pace   (c) inequality
    (d) uniformity   (e) seriousness

PASSAGE-2

The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which came **(11)** effect in April this year, is meant to transform the education sector and take India closer to the goal of universal schooling. But with admissions to the new academic session just **(12)** the corner, it is fast becoming clear that **(13)** well intentioned ideas into **(14)** will take some doing. For a start, the guidelines for admissions under the RTE prohibit schools from conducting any sort of student profiling. The stress on a random yet justifiable admission process means that schools will have to resort to something as quirky as a lottery system. However, leaving admission to a good school to pure **(15)** will only incentivise manipulations, defeating the very essence of RTE.

The main problem facing the education sector is that of a resource crunch. The provisions for ensuring universal access to education are all very well, **(16)** we have the infrastructure in place first. Brick and mortar schools need to precede open admission and not the **(17)** way around. In that sense, legislators' assessment of ground realities is **(18)** target when they endorse the closure of tens of thousands of low-cost private schools for not meeting the minimum standards of land plot, building specifications and playground area as laid out in the RTE Act. Instead of bearing down **(19)** on private schools for failing to conform to abstract bureaucratic criteria, efforts to bring about universal education should focus on upgrading and expanding the existing government school infrastructure to accommodate all. Only then can we ensure the much needed supply-demand **(20)** in the education sector.

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ

11. (a) with   (b) for   (c) on
     (d) into   (e) in

12. (a) around   (b) near   (c) into
     (d) about   (e) reaching

13. (a) forming   (b) translating   (c) having
     (d) taking   (e) framing

14. (a) affect   (b) ideas   (c) practice
     (d) concept   (e) procedure

15. (a) benefit   (b) merit   (c) chance
     (d) basis   (e) method

16. (a) unless   (b) until   (c) executed
     (d) provided   (e) exercised

17. (a) other   (b) any   (c) two
     (d) differ   (e) after

18. (a) on   (b) of   (c) often
     (d) taken   (e) off

19. (a) soft   (b) more   (c) less
     (d) only   (e) hard

20. (a) need   (b) equilibrium
     (c) expectation   (d) attempt   (e) aspects

PASSAGE-3

There is a considerable amount of research about the factors that make a company innovate. So is it possible to create an environment **(21)** to innovation? This is a particularly pertinent **(22)** for India today. Massive problems in health, education etc. **(23)** be solved using a conventional approach but **(24)** creative and innovative solutions that can ensure radical change and **(25)**. There are several factors in India's **(26)**. Few countries have the rich diversity that India or its large, young population **(27)**. While these **(28)** innovation policy interventions certain additional steps are also required. These include **(29)** investment in research and development by **(30)** the government and the private sector, easy transfer of technology from the academic world etc. To fulfill its promise of being prosperous and to be at the forefront, India must be innovative.

21. (a) stimuli   (b) conducive   (c) incentive
     (d) facilitated   (e) impetus

22. (a) objective   (b) controversy   (c) doubt
     (d) question   (e) inference

23. (a) cannot   (b) possibly   (c) should
     (d) never   (e) must

24. (a) necessary   (b) apply   (c) need
     (d) consider   (e) requires

25. (a) quantity   (b) advantages   (c) increase
     (d) chaos   (e) growth

26. (a) challenges   (b) praises   (c) favour
     (d) leverage   (e) esteem

27. (a) blessed   (b) enjoys   (c) endows
     (d) prevails   (e) occurs

28. (a) aid   (b) jeopardise   (c) promotes
     (d) endure   (e) cater

29. (a) acute   (b) utilising   (c) restricting
     (d) inspiring   (e) increased

30. (a) both   (b) besides
     (c) combining   (d) participating
     (e) a

RESPONSE GRID					
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

READING COMPREHENSION - I

Max. Marks : 33   **No. of Qs. 33**   **Time : 30 min.**   **Date : ..../........./...............**

DIRECTIONS (Qs.1-33) : Read the following passages carefully and answer the questions given below it. Certain words have been printed in bold to help you locate them while answering some of the questions.

PASSAGE-1

Thinking of what education might look like in the next decade, one quickly realizes that the trends in technology are leaving a large number of our students behind. Today is an age of exponential change. New and ever-improving technologies are popping up every day and in every corner of society.

Educating the best and the brightest in this brave new world will take a new and improved educational **paradigm**. Allowing our educational tools to age in the corner of the classroom will be the mistake that may cost us our future. Throwing away masses of children to **inequitable** access will ensure that we **languish** at the bottom of the global pool of employable workers for decades to come.

Technology will shape in a way we educate students in the next decade. A user is not simply a person who uses. For the student, being a user should involve using the latest technology in a free and **autonomous** manner. This new-found freedom will allow the student to become an active participant in his/her education instead of a passive passenger. In our current technological society, being a user also means being tracked. Tracking a student means having the ability to target education towards weaknesses and strengths. The ability to accurately customize curricula to the individual has been the holy grail of educational philosophy for many years. This golden age of technological development may soon enable this dream to become a reality.

Current educational curricula and individual assessment is **arbitrary** at best. Accurately assessing a student can only be achieved by using modern tracking and database technologies. Imagine a world where every child has a tablet computer with ready access to the internet. Further, imagine that every student can access all the knowledge of humankind freely at any moment in time. Continue to imagine a world where a misspelled word brings up a spelling challenge application instead of an auto correction. Try to contemplate what it would mean for a teacher to have a database of every misspelled word, every misunderstood concept or every missed, equation for each of their students. Try to envision a teacher with the ability to customize the experience of the individual "user" with minimal effort. Imagine the curriculum being automatically targeted to the user through an intuitive educational platform that knows all strengths and each unique weakness. In the last few hundred years, most individuals would consider an education as something you receive. You often hear

the question asked, "Where did you receive your education?" As we proceed through the next decade, education will slowly move away from reception and toward being custom designed for the individual user. New technology will not only allow us to receive an education, but also develop an education. The question we might ask in ten years, "How did you develop your education?" The question of where will still be important, but the how of the matter will be the focus that defines the individual.

To make this a reality we will need a standardized platform from which to develop a student's unique education. This standardized platform will allow us to tailor a custom curriculum that will be matched to talents, interests and life goals. For the educator, a standardized platform will create a way to assist the student in discovering a true purpose in life through a unique educational experience. The basics of reading, writing and arithmetic will not be taught as much as they will be discovered and used. Learning will become a **reciprocal** experience between the teacher, the student and the machine.

Under a standardized platform, each of these three participants will have a role to play. The teacher will be the facilitator, assisting the development of the curriculum and inspiring the direction the student takes. The student will be the user, gathering resources, skills and knowledge in an efficient and measured sequence. The machine will do the work of data gathering and analysis, which will assist the teacher and student in refining the curriculum. This data gathering work of the machine will also free the teacher from the burden of record-keeping and tedious tasks that currently distract from the real job of teaching and learning.

Under a standardized system, grade level will be far less important. Achievement and progression will be measured by accomplishment and intelligence as a benchmark for success. The question of failure or success will be irrelevant and replaced with a standard and consistent measurement of potential and overall intelligence. Information will no longer be missed but continually rehearsed and monitored for retention by the machine. Tasks such as data tracking, reporting and record keeping are currently accomplished manually. These tasks could easily be delegated to an intuitive database. Developing a standard to follow would eliminate these tasks and free the teacher to do their main job of teaching students.

The next decade may mark the moment in history when all are granted equal access to technology. Access to quality education will only be gained through investment and universal standardization of this technology. If we continue to divert wealth towards fruitless goals and corporate greed, this opportunity will be lost or hopelessly delayed.

1. According to the author, which of the following will be the benefit(s) of introducing a standardized technological platform?
   (A) Potential of a child will take precedence over the grades he/she scores.
   (B) Improving the educational syllabus would become easier.
   (C) Teachers would be able to devote more time to teaching.
   (a) Only (C)   (b) All (A), (B) and (C)
   (c) Only (B) and (C) (d) Only (A) and (B)
   (e) Only (A)

2. Which of the following is/are true in the context of the passage?
   (A) In the presence of technology each student would require constant monitoring by other individuals to maximize learning.
   (B) Educational philosophy is based on the belief of tailoring educational syllabus to individual student capability.
   (C) The author visualizes that each student 'will have access to technology in the future.
   (a) Only (A) and (B)   (b) Only (B)
   (c) Only (C)   (d) Only (B) and (C)
   (e) All (A), (B) and (C)

3. Which of the following is possibly the most appropriate title for the passage?
   (a) Technology - A Welcome Relief to Teachers
   (b) Revamping the Educational Sector - An Impossible Future
   (c) Education - Arbitrary But a Reality
   (d) Technology and the Economy
   (e) Technology - Reshaping the Future of Education

4. How, according to the author, will the perception towards education change over the next decade?
   (a) Where an individual gets his education will gain increasing importance
   (b) Education will be viewed as a prerogative of the elite only
   (c) Creativity in an individual will be regarded as needless
   (d) The importance of education will decline
   (e) None of these

5. What does the author mean by the term "tracking a student"?
   (a) Analyzing the strengths and weaknesses of a student and designing an educational syllabus accordingly
   (b) Assessing whether a student is paying due attention to the existing curriculum offered by an institute of learning
   (c) Analyzing the positives and negatives of an educational institute and modifying it suitably to cater to industrial requirements

   (d) Following a student to the educational institute that he visits frequently in order to estimate the time he spends there
   (e) None of these

6. According to the author, why is the current education provided not satisfactory?
   (a) The teachers providing education are not qualified enough to emphasize on quality
   (b) Quality of education provided is not uniform across the globe and individual assessment is subjective
   (c) The educational sector is fraught with corrupt practices and thus does not produce the desired result
   (d) The education system is not guided by technology and hence the pace of learning is slow
   (e) There are too many schools in the country which cannot be monitored effectively

7. What is the author's vision regarding the integration of technology with education?
   (A) A substantial database consisting of each student's learning curve would be readily available.
   (B) An error would activate a software which would encourage learning rather than auto-correcting.
   (C) Experimentation in academics would be encouraged.
   (a) Only (C)
   (b) Only (A) and (B)
   (c) All (A), (B) and (C)
   (d) Only (A) and (C)
   (e) None of these

8. How has the author defined the term 'user' ?
   (a) One who invests in the latest technology even when it is beyond his/her means
   (b) One who uses available technology to the maximum and for the longest period
   (c) One who freely and actively participates in acquiring skills and knowledge in a systematic manner
   (d) Anyone who invests in technology as per his/her requirement and where with all
   (e) None of these

PASSAGE-2

Keshava, the washerman had a donkey. They worked together all day, and Keshava would pour out his heart to the donkey. One day, Keshava was walking home with the donkey when he felt tired. He tied the donkey to a tree and sat down to rest for a while, near a school. A window was open, and through it, a teacher could be heard scolding the students, "Here I am, trying to turn you donkeys into human beings, but you just won't study! As soon as Keshava heard these words, his ears pricked up. A man who could actually turn donkeys into humans! This was the answer to his prayers. Impatiently, he waited for school to be over that day. When everyone had gone home, and only the teacher **remained** behind to check some papers, Keshava entered the classroom.

RESPONSE GRID
1. (a)(b)(c)(d)(e) 2. (a)(b)(c)(d)(e) 3. (a)(b)(c)(d)(e) 4. (a)(b)(c)(d)(e) 5. (a)(b)(c)(d)(e)
6. (a)(b)(c)(d)(e) 7. (a)(b)(c)(d)(e) 8. (a)(b)(c)(d)(e)

"How can I help you?" asked the teacher. Keshava scratched his head and said, "I heard what you said to the children. This donkey is my companion. If you made it human, we could have such good times together." The teacher decided to **trick** Keshava. He pretended to think for a while and then said, "Give me six months and it will cost you a thousand rupees." The washerman agreed and rushed home to get the money. He then left the donkey in the teacher's care.

After the six months were up, Keshava went to the teacher. The teacher had been using the donkey for his own work. Not wanting to give it up, he said, "Oh, your donkey became so clever that it ran away. He is the headman of the next village." When Keshava reached the next village he found the village elders sitting under a tree, discussing serious problems. How surprised they were when Keshava marched up to the headman, grabbed his arm and said, " How dare you? You think you are so clever that you ran away? Come home at once!"

The headman understood someone had played a trick on Keshava. "I am not your donkey!" he said. "Go find the sage in the forest." Keshava found the sage sitting under a tree with his eyes closed, **deep** in meditation. He crept up and grabbed the sage's beard. "Come back home now!" he shouted. The startled sage somehow calmed Keshava. When he heard what had happened. He had a good laugh. Then he told the washerman kindly, "The teacher made a fool of you. Your donkey must be still with him. Go and take it back from him. Try to make some **real** friends, who will talk with you and share your troubles. A donkey will never be able to do that!" Keshava returned home later that day with his donkey, sadder and wiser.

9. Which of the following can be said about the teacher?
   (a) He had the ability to transform animals into human beings
   (b) He took advantage of Keshava's simple nature
   (c) He had plotted with the village headman to cheat Keshava
   (d) He enjoyed teaching children though he was poorly paid
   (e) He was honest and used Keshava's money to care for the donkey

10. Why did Keshava talk to his donkey while working?
    (a) He wanted to practise his communication skills because he wanted to make friends
    (b) To entertain himself because he found his work monotonous
    (c) The donkey helped him to find answers to his problems
    (d) He regarded the donkey as his friend and confided in him
    (e) He believed the donkey to be a human being in disguise

11. Which of the following is **NOT** true in the context of the passage?
    A. The donkey was overburdened by the teacher.
    B. The teacher was cunning by nature.
    C. The sage laughed at Keshava and treated him unkindly.

(a) Both (A) and (C)   (b) Both (B) and (C)
(c) Only (B)   (d) All (A), (B) and (C)
(e) None of these.

12. What made Keshava pull the sage's beard?
    (a) He wanted to wake up the sage who was asleep under the tree
    (b) The headman requested him to move the sage from under the tree
    (c) He wanted the sage to explain what had happened to the donkey
    (d) He misunderstood the village headman and took the sage to be his donkey
    (e) None of these

13. Why did the teacher ask Keshava to leave to donkey with him for six months?
    (A) He realised that the donkey would require a lot of training.
    (B) To reduce Keshava's dependence on the donkey.
    (C) He wanted to rescue the donkey from Keshava who did not know how to treat the donkey properly.
    (a) Only (A)   (b) Only (B)
    (c) Both (A) and (B) (d) Only (C)
    (e) None of these

14. Why was Keshava keen to meet the teacher one day?
    (a) Keshava wanted to ask the teacher how to make his donkey a better companion
    (b) He wanted to learn more prayers as he was devout
    (c) He had been reliably informed that the teacher had changed donkey into human beings
    (d) He needed the teacher's words of advice and wanted to study
    (e) None of these

15. How did Keshava get his donkey back?
    (a) He threatened to take the teacher to the village elders
    (b) The sage told Keshava the truth that donkey was with the teacher
    (c) He asked the village headman for help
    (d) The teacher returned it on learning that Keshava had not learnt his lesson
    (e) None of these

16. Why did Keshava interrupt the discussion among the village elders?
    (a) He did not agree with their views on different issues
    (b) To confront the headman who had cheated him out of one thousand rupees
    (c) He wanted them to get justice for him
    (d) He was looking for the donkey and wanted to ask for directions
    (e) None of these

RESPONSE GRID	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ
	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ		

PASSAGE-3

There was a country long time ago where the people would change a king every year. The person who would become the king had to agree to a **contract** that he would be sent to an island after one year of his being a king.

One king had finished his term and it was time for him to go to the island and live there. The people dressed him up in expensive clothes and put him on an elephant and took him around the cities to say goodbye to all the people. This was a moment of sadness for all kings who ruled for one year. After **bidding** farewell, the people took the king to a remote island in a boat and left him there. On their way back, they discovered a ship that had sunk just recently. They saw a young man who had **survived** by holding on to a floating piece of wood. As they needed a new king, they picked up the young man and took him to their country. They requested him to be king for a year. First he refused but later he agreed to be the king. People told him about all the rules and regulations and that how he would be sent to an island after one year.

After three days of being a king, he asked the ministers if they could show him the island where all the other kings were sent. They agreed and took him to the island. The island was covered with a thick Jungle and sounds of **vicious** animals were heard coming out of it. The king went a little bit further to check. Soon he discovered dead bodies of all the past kings. He understood that as soon as they were left on the island, the wild animals had come and killed them.

The king went back to the country and collected 100 strong workers. He took them to the island and instructed them to clean the jungle, remove all the deadly animals and cut down all excess trees. He would visit the island every month to see how the work was progressing. In the first month, all the animals were removed and many trees were cut down. In the second month, the whole island was cleaned out. The king then told the workers to plant gardens in various parts of the island. He also took with himself useful animals like chickens, ducks, birds, goats, cows etc. In the third month, he ordered the workers to build big houses and docking stations for ships. Over the months, the island turned into a beautiful place. The young king would wear simple clothes and spend very little from his earnings as a king. He sent all the earnings to the island for storage. When nine months passed like this, the king called the ministers and told them: "I know that I have to go the island after one year, but I would like to go there right now." But the ministers didn't agree to this and said that he had to wait for another three months to complete the year.

Three months passed and now it was a full year. The people dressed up the young king and put him on an elephant to take him around the country to say goodbye to others. However, this king was unusually happy to leave the kingdom. People asked him, "All the other kings would cry at this moment. Why is it that you are laughing?" He replied, "Don't you know what the wise people say? They say that when you come to this world as a baby, you are crying and everyone else is smiling. Live such a life that when you die, you will be smiling and everyone around you will be crying. I have lived that life. While all the other kings were lost into the luxuries of the kingdom, I always thought about the future and planned for it. I turned the deadly island into a beautiful **abode** for me where I can stay peacefully."

17. Why did the people of the kingdom change the king every year?
    (a) As their first king had invented this system and had recorded it in the form of a contract
    (b) As they believed that the new king would bring better ideas to the kingdom.
    (c) As they wanted their king to relax on an island after one year of hard work
    (d) Not mentioned in the passage
    (e) None of the above

18. What would happen to the king once his term of one year was over ?
    (a) He would be paraded in the cities as a farewell and then be taken to a remote island
    (b) He would be gifted with expensive clothes and jewellery
    (c) He would be sent on an island which required a lot of work to be done
    (d) He would be asked to buy an elephant and go to the remote island himself
    (e) None of the above

19. What did the young man notice on his visit to the remote island after three days of being king?
    (a) That the animals on the island were too many to be killed
    (b) That the island was very big
    (c) That the jungle on the island was full of animals that had killed all the previous kings placed on the island
    (d) That the island was very beautiful and clean
    (e) Not mentioned in the passage

20. What happened to the island in the first month of the young king's tenure?
    (A) The wild animals were removed from the island.
    (B) The whole island was cleaned.
    (C) Many unnecessary trees were cut down.
    (a) Only A   (b) Only B
    (c) Only C   (d) B and C
    (e) A and C

21. What could be said about the island after the young king had made his servants work on it ?
    (a) The dangerous island had been turned to a beautiful place
    (b) The island still remained the same despite all the young king's efforts
    (c) The island was barely tolerable now
    (d) The island was safe from all types of attacks
    (e) None of the above

| RESPONSE GRID | 17. ⓐⓑⓒⓓⓔ | 18. ⓐⓑⓒⓓⓔ | 19. ⓐⓑⓒⓓⓔ | 20. ⓐⓑⓒⓓⓔ | 21. ⓐⓑⓒⓓⓔ |

22. Which of the following describes the young king correctly?
    (A) He was intelligent
    (B) He had foresight
    (C) He was cunning
    (a) Only A   (b) A and B
    (c) Only C   (d) B and C
    (e) All A, B and C

23. What was the king's request to the ministers after the completion of nine months?
    (a) That he should not be sent to the island after completion of one year
    (b) That he would like to go to the island immediately
    (c) That he should be paid more in order to improve work on the island
    (d) That he should be sent to the island after a year
    (e) None of the above

24. How did the young king arrange for money on the island?
    (a) By selling a large amount of his property
    (b) By spending all the money derived from his income as a king
    (c) By borrowing money from the ministers and sending it to the island
    (d) By spending very less of his income as a king and sending it to the island for storage
    (e) None of the above

25. Why were the people of the kingdom puzzled when the young king was taken around the country to say goodbye to everyone?
    (a) As they could not believe that one year had elapsed so soon
    (b) As they were nor aware that the young king was actually a wise sage
    (c) As the young king was happy to go to the island unlike the previous kings
    (d) Not mentioned in the passage
    (e) None of the above

26. What can possibly be the moral of the story?
    (a) Always put others before yourself
    (b) Give respect to others
    (c) Live in the present and forget about the future
    (d) Do not put things off until tomorrow
    (e) Always think and plan ahead

PASSAGE-4

Once upon a time there lived a queen in the city of Benaras. Her name was Khema and she was the wife of King Bahuputtaka. One night, the queen had a dream of a beautiful golden goose that spoke with great wisdom, almost as if he was a sage. She told her husband that she desperately wanted to see a bird just like the one in her dream. So the king asked his ministers to find out all that they could about a bird such as this. He was told that such a bird did exist but was extremely rare and difficult to find. They advised him to build a beautiful lake on the outskirts of Benaras so that he may attract such rare and lovely creatures to reside there. In this way the queen might have her wish.

Towards the north, on Mount Cittakuta, there lived about ninety thousand wild geese headed by beautiful golden goose called king Dhatarattha. He got to hear of this **exquisite** lake surrounded by water lilies and lotuses floating on the surface. The king had invited all the birds to come and live on it, promising that none 'of them would ever be harmed. Corn was scattered on a daily basis in order to attract the bird. So a couple of geese went up to their king, the golden goose and told him that they were quite tired of living up on the mountains and would like to see this wonderful lake where they had· been promised food and protection. The king agreed to their request and took the flock down south, towards Benaras. Meanwhile, at the lake king Bahuputtaka had placed hunters all around in order to capture any golden goose :that happened to pass by: So the next morning when the headhunter saw this flock of geese approaching he was very excited to see their golden leader. He immediately went about setting up a **snare** amongst the water lilies and lotuses, as he knew that the leader would definitely be the first to alight.

The whole flock came flying down in one mighty swoop and as expected it was the king's foot that touched the water first. He was ensnared and could' not escape. Seeing this, the other geese flew into a panic. But none had the courage to try to free their king and so flew back to Mount Cittacutta for safety. All except one. He was the chief captain, Sumukha. King Dhatarattha entreated him to fly to safety too, as he would surely be captured if he stayed by his side. But Sumukha replied that he would never desert his master in the face of danger and would either try to save him or die by his side.

At this point the hunter approached and as Sumukha saw him he decided to appeal to his compassion. The hunter asked the golden goose how come he had not noticed the trap that was set. The golden goose replied that when one's time was up it was no use to struggle against what was fated and one must just accept it. The huntsman was very impressed with his grace and wisdom. He then turned to Sumukha and asked why he had hot fled with the other birds even though he was free to do so. Sumukha answered that the golden goose was his king, best friend and master and that he could never desert him even at the cost of his own life. Hearing this, the hunter realised that these were a couple ohare birds of great nobility. He did not much care for his own kings reward and decided to do the right thing and set them free. He told Sumukha. that as he was ready to die for his King he would set them both free to fly wherever they wish.

27. Why were the geese keen on visiting the lake in Benaras?
    (a) They were invited personally by king Bahuputtaka.
    (b) They were tired of their old lake.
    (c) They were amused by the water lilies and lotuses.
    (d) The lake was not very far from the mountains.
    (e) The lake was to be a source of good food and protection.

RESPONSE GRID	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ
	27. ⓐⓑⓒⓓⓔ				

28. Why did the king approach the ministers?
   (a) In order to find out the best location for the lake.
   (b) In order to find out if a golden goose existed.
   (c) To enquire about his wife's dreams.
   (d) To devise a plan to capture all rare bird species.
   (e) To enquire about the best hunter in the locality.

29. What advice did the ministers give to the king?
   (a) That no such golden goose existed and he was only wasting his time searching for one.
   (b) To create an artificial golden goose for the queen .
   (c) To build a lake in order to attract the golden goose.
   (d) To open a sanctuary of rare birds for the queen.
   (e) To have a beautiful garden surrounded by flowers and trees.

30. Which of the following statements would best describe the qualities of Sumukha?
   (A) Betrayer of the flock.
   (B) The Selfless Goose.
   (C) Loyal towards the king.
   (D) The naive and ignorant goose.
   (a) Only (A)   (b) Only (B)
   (c) Only (C) and (D)   (d) Only (A) and (D)
   (e) Only (B) arid (C)

31. What was the king's intention behind building a lake?
   (a) To attract all rare species of living animals and birds.
   (b) To beautify the city of Benaras
   (c) He did not want to go against the wishes of his wife.
   (d) He wanted to capture the golden goose.
   (e) He enjoyed bird watching and wanted to create a natural habitat for them.

32. Why did the head hunter release the king, the golden goose?
   (a) He was impressed by his wisdom and nobility.
   (b) The geese were a rare species of birds.
   (c) The golden goose king Dhatarattha promised him a handsome reward
   (d) The hunter sympathised with the golden goose.
   (e) The hunter did not want the chief captain to lose a friend.

33. Why did the flock of geese panic and retreat to Mount Cittacuta ?
   (a) Their king took the wrong route to the lake and they lost their way.
   (b) Their king, the golden goose was captured.
   (c) Their chief captain, Sumukha betrayed the king.
   (d) They spotted many hunters by the lake.
   (e) None of these

| RESPONSE GRID | 28. ⓐⓑⓒⓓⓔ | 29. ⓐⓑⓒⓓⓔ | 30. ⓐⓑⓒⓓⓔ | 31. ⓐⓑⓒⓓⓔ | 32. ⓐⓑⓒⓓⓔ |
| | 33. ⓐⓑⓒⓓⓔ | | | | |

READING COMPREHENSION - II

Max. Marks : 35   **No. of Qs. 35**   **Time : 30 min.**   **Date : ..../......../...............**

DIRECTIONS (Qs. 1-35): Read the following passage carefully and answer the questions given below it. Certain words / phrases have been printed in bold to help you locate them while answering some of the questions.

PASSAGE-1

Amartya Sen wrote about the Indian tradition of skepticism and heterodoxy of opinion that led to high levels of intellectual argument. The power sector in India is a victim of this tradition at its worst. Instead of **forcefully** communicating, supporting and honestly and firmly implementing policies, people just debate them. It is argued that central undertakings produce power at lower tariffs and must therefore build most of the required extra capacities. This is a **delusion.** They no longer have access to low-cost government funds.

Uncertainty about payment remains a reason for the hesitation of private investment. They had to sell only to SEBs (State Electricity Boards). SEB balance sheets are cleaner after the "securitisation" of the ₹ 40,000 crore or so owed by SEBs to central government undertakings, now shown as debt instruments. But state governments have not implemented agreed plans to ensure repayment when due. The current annual losses of around ₹ 28,000 crore make repayment highly uncertain. The central undertakings that are their main suppliers have payment security because the government will come to their help. Private enterprises do not have such assurance and are concerned about payment security, that must be resolved.

By the late 1990s, improving the SEB finances was recognised as fundamental to power reform. **Unbundling** SEBs, working under corporate discipline and even privatisation and not vertically integrated state enterprises, are necessary for efficient and financially viable electricity enterprises. Since government will not **distance** itself from managing them, privatising is an option. The Delhi model has worked. But it receives no public support.

The Electricity Act 2003, the APRDP (Accelerated Power Reform and Development Programme) with its incentives and penalties, and the creation of independent regulatory commissions, were the means to bring about reforms to improve financial **viability** of power sector. Implementation has been half-hearted and results disappointing. The concurrent nature of electricity in the Constitution **impedes** power sector improvement. States are more responsive to populist pressures than the central government, and less inclined to take drastic action against electricity thieves.

Captive power would add significantly to capacity. However, captive generation, three years after the Act enabled it, has added little to capacity because rules for open access were delayed. Redefined captive generation avoids state vetoes on purchase or sale of electricity except to state electricity enterprises. Mandating open access on state-owned wires to power regardless of ownership and customer would encourage electricity trading. The Act recognised electricity trading as a separate activity. A surcharge on transmission charges will pay for cross-subsidies. These were to be eliminated in time. Rules for open access and the quantum of surcharge by each state commission (under broad principles defined by the central commission) have yet to be announced by some. The few that have announced the surcharge have kept it so high that no trading can take place.

1. The author thinks it appropriate to
   (a) discuss any policy in details and make it fool proof instead of implementing it hastily.
   (b) follow Indian tradition meticulously as skepticism is essential for major decisions.
   (c) divert our energies from fruitlessly contracting policies to supporting its implementation whole-heartedly.
   (d) intellectual arguments and conceptualisation of every policy is definitely better than its enforcement.
   (e) none of these

2. Why are the central undertakings not capable of generating power at low cost?
   (a) Due to paucity of low-cost funds
   (b) Due to their access to Government funds
   (c) Due to their delusion about government funds
   (d) Because of their extra capacities
   (e) None of these

3. Which of the following is the reason for apathy of private investors in power sector?
   (a) Their hesitation
   (b) Uncertainly of their survival
   (c) Cut-throat competition
   (d) Lack of guarantee of timely returns
   (e) None of these

4. What was the serious omission on the part of the State Government?
   (a) Agreement for late recovery of dues
   (b) Reluctance to repay to private investors as per agreed plan
   (c) Non-implementation of recovery due to unplanned and haphazard polices
   (d) Lack of assurance from private enterprises
   (e) None of these

RESPONSE GRID   **1.** ⓐⓑⓒⓓⓔ   **2.** ⓐⓑⓒⓓⓔ   **3.** ⓐⓑⓒⓓⓔ   **4.** ⓐⓑⓒⓓⓔ

5. Which of the following is/are considered necessary for improving performance of electricity enterprises?
   (A) Corporate work culture
   (B) Privatisation
   (C) Properly integrated state enterprises
   (a) All the three   (b) (a) and (b) only
   (c) (a) and (c) only   (d) (b) and (c) only
   (e) None of these

6. The example of "Delhi Model" quoted by the author underlines his feelings of
   A. happiness about its success.
   B. unhappiness for lack of public support
   C. disgust towards privatisation.
   (a) (a) and (b) only   (b) (b) and (c) only
   (c) (a) and (c) only   (d) All the three
   (e) None of these

7. Which of the following was/were not considered as the instrument(s) to accomplish financial well-being of power sector?
   (a) The Electricity Act 2003
   (b) The APRDP with its incentives and penalties
   (c) Setting up of independent regulatory commissions
   (d) States vulnerability to populist pressures
   (e) Taking drastic action against electricity thieves.

8. Why were the results of the power sector reforms NOT as had been anticipated?
   (a) The means to bring about reforms were illconceived.
   (b) The enforcement of the reform means was inadequate and apathetic.
   (c) The Act and the reform measures were contradicting with each other.
   (d) The incentives on the one hand and penalties on the other created dissatisfaction.
   (e) None of these

PASSAGE-2

We have inherited the tradition of secrecy about the budget from Britain where also the system has been strongly attacked by eminent economists and political scientists including Peter Jay. Sir Richard Clarke, who was the originating genius of nearly every **important** development in the British budgeting techniques during the last two decades, has spoken out about the abuse of budget secrecy: "The problems of long-term tax policy should surely be debated openly with the facts on the table. In my opinion, all governments should have just the same **duty** to publish their expenditure policy. Indeed, this obligation to publish taxation policy is really essential for the control of public expenditure in order to get realistic taxation implications." Realising that democracy **flourishes** best on the principles of open government, more and more democracies are having an open public debate on budget proposals before introducing the appropriate Bill in the legislature. In the United States the budget is conveyed in a message by the President to the Congress, which comes well in advance of the date when the Bill is introduced in the Congress. In Finland the Parliament and the people are already discussing in June the tentative budget proposals which are to be introduced in the Finnish Parliament in September. Every budget contains a cartload of figures in black and white - but the dark figures represent the **myriad** lights and shades of India's life, the contrasting tones of poverty and wealth, and of bread so dear and flesh and blood so cheap, the deep tints of adventure and enterprise and man's ageless struggle for a brighter morning. The Union budget should not be an annual **scourge** but a part of presentation of annual accounts of a partnership between the Government and the people. That partnership would work much better when the nonsensical secrecy is replaced by openness and public consultations, resulting in fair laws and the people's acceptance of their moral duty to pay.

9. How do the British economists and political scientists react to budget secrecy? They are
   (a) in favour of having a mix of secrecy and openness.
   (b) indifferent to the budgeting techniques and taxation policies.
   (c) very critical about maintenance of budget secrecy.
   (d) advocates of not disclosing in advance the budget contents.
   (e) None of these

10. The author thinks that openness in budget is essential as it leads to
   (a) prevention of tax implications
   (b) people's reluctance to accept their moral duties
   (c) exaggerated revelation of the strengths and weaknesses of economy
   (d) making our country on par with Finland
   (e) None of these

11. The author seems to be in favour of
   (a) maintaining secrecy of budget
   (b) judicious blend of secrecy and openness
   (c) transparency in budget proposals
   (d) replacement of public constitution by secrecy
   (e) None of these

12. The secrecy of the budget is maintained by all of the following countries **except**
   A. Finland
   B. India
   C. United States
   (a) Only A   (b) Only B   (c) Only C
   (d) A and C   (e) B and C

13. Which of the following statements is definitely TRUE in the context of the passage?
   (a) The British Government has been religiously maintaining budget secrecy.
   (b) Budget secrecy is likely to lead to corrupt practices.
   (c) Consulting unjustifiable taxes with public helps make them accept those taxes.
   (d) There should be no control on public expenditure in democratic condition.
   (e) None of these

14. Sir Richard Clarke seems to deserve the credit for
   (a) transformation in the British budgetary techniques.
   (b) maintenance of secrecy of the British budget.
   (c) detection of abuse of transparency in budget.
   (d) bringing down the tax load on British people.
   (e) None of these

RESPONSE GRID	5. ⓐⓑⓒⓓⓔ	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ
	10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ

15. From the contents of the passage, it can be inferred that the author is
    (a) authoritarian in his approach.
    (b) a democratic person.
    (c) unaware of India's recent economic developments.
    (d) a conservative person.
    (e) None of these

PASSAGE-3

True, it is the function of the army to maintain law and order in abnormal times. But in normal times there is another force that compels citizens to obey the laws and to act with due regard to the rights of others. The force also protects the lives and the properties of law abiding men. Laws are made to secure the personal safety of its subjects and to prevent murder and crimes of violence. The are made to secure the property of the citizens against theft and damage to protect the rights of communities and castes to carry out their customs and ceremonies, so long as they do not conflict with the rights of other. Now the good citizen, of his own free will obey these laws and he takes care that everything he does is done with due regard to the rights and well-being of others. But the bad citizen is only restrained from breaking these laws by fear of the consequence of his actions. And the necessary steps to compel the bad citizen to act as a good citizen are taken by this force. The supreme control of law and order in a state is in the hands of a Minister who is responsible to the State Assembly and acts through the Inspector General of Police.

16. The expression 'customs and ceremonies' means
    (a) fairs and festivals.
    (b) habits and traditions.
    (c) usual practices and religious rites.
    (d) superstitions and formalities.
    (e) None of these

17. A suitable title for the passage would be :
    (a) the function of the army.
    (b) laws and the people's rights.
    (c) the fear of the law and citizen's security.
    (d) the functions of the police.
    (e) None of these

18. Which of the following is not implied in the passage?
    (a) Law protects those who respect it.
    (b) Law ensures people's religious and social rights absolutely and unconditionally.
    (c) A criminal is deterred from committing cirmes only for fear of the law.
    (d) The forces of law help to transform irresponsible citizens into responsibile ones.
    (e) None of these

19. According to the writer, which one of the following is not the responsibility of the police?
    (a) To protect the privileges of all citizens.
    (b) To check violent activities of citizens.
    (c) To ensure peace among citizens by safeguarding individual rights.
    (d) To maintain peace during extraordinary circumstances.
    (e) None of these

20. Which of the following reflects the main thrust of the passage.
    (a) It deals with the importance of the army in maintaining law and other.
    (b) It highlights role of the police as superior to that of the army.
    (c) It discusses the roles of the army and the police in different circumstances.
    (d) It points to the responsibility of the Minister and the Inspector General of Police.
    (e) None of thesess

21. "They are made to secure the property of citizens against theft and damage", means that the law :
    (a) helps in recovering the stolen property of the citizens.
    (b) assist the citizens whose property has been stolen or destroyed.
    (c) initiate process against offenders of law.
    (d) safeguard people's possessions against being stolen or lost.
    (e) None of thesess

22. Out of the following which one has the opposite meaning to the word 'restrained' in the passage?
    (a) Promoted   (b) Accelerated
    (c) Intruded   (d) Inhibited
    (e) None of thesess

23. Which one of the following statement is implied in the passage?
    (a) Peaceful citizens seldom violate the law, but bad citizens have to be restrained by the police.
    (b) Criminals, who flout the law, are seldom brought to book.
    (c) The police hardly succeed in converting bad citizens into good citizens.
    (d) The police check the citizens, whether they are good or bad, and stop them from violating the law.
    (e) None of thesess

24. Which of the following statement expresses most accurately the idea contained in the first sentence?
    (a) It is the job of the army to ensure internal peace at all times.
    (b) It is the police that should always enforce law and order in the country.
    (c) Army and the police ensure people's security through combined operations.
    (d) It is in exceptional circumstances that the army has to ensure peace in the country.
    (e) None of thesess

25. The last sentence of the passage implies that
    (a) The Inspector General of Police is the sole authority in matters of law and order.
    (b) In every State maintenance of public peace is under the overall control of the responsible Minister.
    (c) A Minister and a responsible State, Assembly exercise direct authority in matters pertaining to law and order.
    (d) The Inspector General of Police is responsible to the State Assembly for maintaining law and order.
    (e) None of thesess

RESPONSE GRID	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
	25. ⓐⓑⓒⓓⓔ				

PASSAGE-4

A recent report in News Week says that in American colleges, students of Asian origin outperform not only the minority group students but the majority whites as well. Many of these students must be of Indian origin, and their achievement is something we can be proud of. It is unlikely that these talented youngsters will come back to India and that is the familiar brain drain problem. However recent statements by the nation's policy-makers indicate that the perception of this issue is changing. 'Brain bank' and not 'brain drain' is the more appropriate idea, they suggest since the expertise of indians abroad is only deposited in other places and not lost.

This may be so, but this brain bank, like most other banks, is one that primarily serves customers in its neighborhood. The skills of the Asians now excelling in America's colleges will mainly help the U.S.A.. No matter how significant, what non-resident Indians do for India and what their counterparts do for other Asian lands is only a by-product.

But it is also necessary to ask, or be remained, why Indians study fruitfully when abroad. The Asians whose accomplishments News Week records would have probably has a very different tale if they had studied in India. In America they found elbow room, books and facilities not available and not likely to be available here. The need to prove themselves in their new country and the competition of an international standard they faced there must have cured mental and physical laziness. But other things helping them in America can be obtained here if we achieve a change is social attitudes, specially towards youth.

We need to learn to value individuals and their unique qualities more than conformity and respectability. We need to learn the language of encouragement to add to our skill in flattery.

26. Among the many groups of students in American colleges, Asian students.
    (a) are often written about in magazines like News Week
    (b) are most successful academically
    (c) have proved that they are as good as the whites.
    (d) have only a minority status like the blacks.
    (e) None of these

27. The student of Asian origin in America include :
    (a) a fair number from India.
    (b) a small group from India.
    (c) persons from India who are very proud.
    (d) Indians who are the most hard working of all.
    (e) None of thesess

28. In general, the talented young Indians studying in America:
    (a) have a reputation for being hard working
    (b) have the opportunity to contribute to India's development.
    (c) can solve the brain drain problem because of recent changes in policy.
    (d) will not return to pursue their careers in India.
    (e) None of thesess

29. There is talk now of the 'brain bank' This idea :
    (a) is a solution to the brain drain problem
    (b) is a new problem caused parly by the brain drain

(c) is a new way of looking at the role of qualified Indians living abroad.
(d) is based on a plan to utilize foreign exchange remittances to stimulate research and development.
(e) None of thesess

30. The brain bank has limitations like all banks in the sense that:
    (a) a bank's services go mainly to those near it.
    (b) small neighbourhoods banks are not visible in this age of multinationals.
    (c) only what is deposited can be withdrawn and utilized.
    (d) no one can be forced to put his assets in a bank.
    (e) None of thesess

31. The author feels that what non-resident Indians do for India:
    (a) will have many useful side effects.
    (b) will not be their main interest and concern.
    (c) can benefit other Asian countries as a by-product.
    (d) can American colleges be of service to the world community.
    (e) None of thesess

32. The performance of Indians when they go to study in the West :
    (a) shows the fruits of hardwork done by school teachers in India.
    (b) should remind us that knowledge and wisdom are not limited by the boundaries of race and nation.
    (c) is better than people in the West expect of non-whites.
    (d) is better than what it would have been if they had studied in India.
    (e) None of thesess

33. The high level of competition faced by Asian students in America.
    (a) helps them overcome their lazy habits.
    (b) makes them lazy since the facilities there are good.
    (c) makes them worried about failing.
    (d) helps them prove that they are as good as whites.
    (e) None of thesess

34. The author feels that some of the conditions other than the level of facilities that make the West attractive.
    (a) are available in India but young people do not appreciate them.
    (b) can never be found here because we believe in conformity.
    (c) can be created if our attitudes and values change.
    (d) can also give respectability to our traditions and customs.
    (e) None of thesess

35. One of the ways of making the situation in India better would be
    (a) to eliminate flattery from public life.
    (b) to distinguish between conformity and respectability.
    (c) to give appreciation and not be tightfisted.
    (d) to encourage people and no merely flatter them.
    (e) None of thesess

RESPONSE GRID	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ

ENGLISH LANGUAGE SECTION TEST

Max. Marks : 40   **No. of Qs. 40**   **Time : 30 min.**   Date : ..../........./................

DIRECTIONS (Qs. 1-15): Read the following passage based on an Interview to answer the given questions based on it. Certain words are printed in **bold** to help you locate them while answering some of the questions.

A spate of farmer sucides linked to harassment by recovery agents employed by Micro Finance Institutions (MFIs) in Andhra Pradesh **spurred** the state government to bring in regulation to protect consumer interests. But, while the Bill has brought into sharp focus the need for consumer protection, it tries to micro-manage MFI operations and in the process it could **scuttle** some of the crucial benefits that MFIs bring to farmers, says the author of Microfinance India, State of the Sector Report 2010. In an interview he points out that prudent regulation can ensure the original goal of the MFIs–social uplift of the poor.

Do you feel the AP Bill to regulate MFIs is well thought out? Does it ensure fairness to the borrowers and the long-term health of the sector ?

The AP bill has brought into sharp focus the need for customer protection in four critical areas First is pricing. Second is tender's liability — whether the Lender can give too much loan without assessing the customer's ability to pay. Third is the structure of loan repayment – whether you can ask money on a weekly basis from people who don't produce weekly incomes. Fourth is the practices that attend to how you deal with defaults.

But the Act should have looked at the positive benefits that institutions could bring in, and where they need to be regulated in the interests of the customers. It should have brought only those features in.

Say, you want the recovery practices to be consistent with what the customer can really **manage**. If the customer is aggrieved and complains that somebody is harassing him, then those complaints should be investigated by the District Rural Development Authority.

Instead what the Bill says is that MFIs cannot go to the customer's premises to ask for recovery and that all transactions will be done in the Panchayat office. With great difficulty, MFIs brought services to the door of people. It is such a relief for the customers not to be spending time out going to banks or Panchayat offices, which could be 10 km away in some cases. A facility which has brought some relief to people is being shut. Moreover, you are practically telling the MFI where it should do business and how it should do it.

Social responsibilities were in-built when the MFIs were first conceived. If MFIs go for profit with loose regulations, how are they different from moneylenders?

Even among moneylenders there are very good people who take care of the customer's circumstance, and there are really bad ones. A large number of the MFIs are good and there are some who are **coercive** because of the kind of prices and processes they have adopted. But Moneylenders never got this organised. They did not have such a large footprint. An MFI brought in organisations, it mobilized the equity, it brought in commercial funding. It invested in systems. It appointed a large number of people. But some of then **exacted** a much higher price than they should have. They wanted to break even very fast and greed did take over in some cases.

Are the for-profit MFIs the only ones harassing people for recoveries ?

Some not-for-profit outfits have also adopted the same kind of recovery methods. That may be because you have to show that you are very efficient in your recovery methods and that your portfoilo is of a very high quality if you want to get commercial funding from a bank.

In fact, among for-profits there are many who have sensible recovery practices. Some have fortnightly recovery, some have monthly recovery. So we have differing practices. We just describe a few dominant ones and assume every for-profit MFI operates like that.

How can you introduce regulations to ensure social upliftment in a sector that is moving towards for -profit models ?

I am not really concerned whether someone wants to make a profit or not. The bottom-line for me is customer protection. The first area is fair practices. Are you telling your customers how the loan is structured ? Are you being transparent about your performance ? There should also be a lender's lilability attached to what you do. Suppose you lend excessively to a customer without assessing their ability to service the loan, you have to take the hit.

Then there's the question of limiting returns. You can say that an MFI cannot have a return on assets more than X, a return on equity of more than Y. Then suppose there is a privately promoted MFI, there should be a regulation to ensure the MFI cannot access equity markets till a certain amount of time. MFIs went to markets perhaps because of the need to grow too big too fast. The government thought they were making profit off the poor, and that's an indirect reasons why they decided to clamp down on MFIs. If you say an MFI won't go to capital market, then it will keep political compulsions **under rein**.

1. Which of the following best explains 'Structure of loan repayment' in the context of the first question asked to the author ?
   (a) Higher interest rate
   (b) Payment on weekly basis
   (c) Giving loan without assessing ability to pay
   (d) Method of dealing with defaults
   (e) Total amount of loan

RESPONSE GRID	1. ⓐ ⓑ ⓒ ⓓ ⓔ

2. The author is of the view that _____
   (a) the bill to regulate MFIs is not needed
   (b) the bill neglects the interests of the customers
   (c) the positive aspects of MFIs should also be considered.
   (d) most of the MFIs are not good.
   (e) MFIs must be told what and where they should do business

3. One of the distinct positive feature of MFIs is that _____.
   (a) they brought services to the door of people
   (b) they dealt with defaulters very firmly
   (c) they provided adequate customer protection
   (d) they are governed by the local people
   (e) they have highly flexible repayment plan

4. What is the difference between MFIs and moneylenders ?
   (a) There is no difference.
   (b) A large number of money lenders are good whereas only a few MFIs are good
   (c) Money lenders gave credit at lower rate of interest than that of MFIs
   (d) MFIs adopted a structure and put a process in place, which was not the case with moneylenders
   (e) Moneylender appointed large number of local people as against more outside people in MFIs

5. Which of the following is positive outcome of the AP Bill to regulate MFIs ?
   (a) The banks have started this service in remote areas
   (b) It highlighted some areas of customer protection
   (c) It highlighted the bad practices being followed by moneylenders
   (d) MFIs is invested in systems and broguth in commercial funding.
   (e) It will help convert MFIs into small banks

6. The author is recommending _____.
   (a) Not-for profit MFIs
   (b) For-profit MFIs
   (c) Stoppage of commercial funding to MFIs
   (d) Customer satisfaction irrespective of 'Not-for profit' or 'for profit' MFIs
   (e) Public sector promoted MFIs

7. Why did MFIs go to the equity markers ?
   (a) To repay the loan
   (b) To lower interest rate
   (c) There were political compulsions
   (d) To become a public sector institution
   (e) To grow very fast

8. Which of the following has **not** been indicated as one of the features of air practices for customer protection ?
   (a) Providing information about loan structuring.
   (b) MFIs should also be held liable for some of their actions
   (c) Not to raise money from capital market
   (d) MFIs should also inform public about their own performance also
   (e) To provide credit as per the rational assessment of their ability to service the loan

9. Which of the following could possibly be most plausible reason for banning recovery by going to customer's premises ?
   (a) To protect the family members
   (b) To protect the customer from harassment and coercion
   (c) To reduce the undue expenses of MFIs is resulting in lower interest rates.
   (d) To account systematically the money recovered in the books of accounts
   (e) To keep Panchayat office out of these transactions

DIRECTIONS (Qs. 10-13) : Choose the word which is **most nearly the same in** meaning as the word/group of words printed in **bold**.

10. **manage**
    (a) afford   (b) assess
    (c) thrust   (d) administer
    (e) use

11. **exacted**
    (a) perfected   (b) demanded
    (c) estimated   (d) corrected
    (e) accurate

12. **scuttle**
    (a) delay   (b) mix
    (c) shuffle   (d) destroy
    (e) smoothen

13. **spurred**
    (a) agitated   (b) instigated
    (c) reflected   (d) disapproved
    (e) prompted

DIRECTIONS (Qs. 14-15) : Choose the word or group of words which is most **opposite** in meaning of the word printed in **bold.**

14. **under rein**
    (a) under wrap   (b) without target
    (c) let loose   (d) no cloud
    (e) under cloud

15. **coercive**
    (a) gentle   (b) promoting
    (c) progressive   (d) natural
    (e) opinionated

DIRECTIONS (Qs. 16-20) : Rearrange are following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

(A) There are a number of item in the atomic energy programme which are being made indigenously.

(B) Given the overall energy situation in India, the use of nuclear power in some measure is inescapable even while thermal and hydro power continue to be the dominant elements.

(C) However, commercial aspects of exploiting nuclear capabilities, especially for power-generation programmes, have been recently given high priority.

(D) Atomic energy programmes have been subject to severe restrictions for every obvious reason as the Department of Atomic energy is becoming self-reliant in areas in which only a few countrices have such capability.

(E) Even to meet these nuclear power requirements, India critically requires a commercia level power-generation capability, with its commensurate safety and nuclear waste management arrangements.

(F) Thus, in Indian context energy security is also crucial, perhaps much more than it is for the U.S.A.. because India imports a good part of its crude oil requirements, paying for it with precious foreign exchange.

16. Which of the following will be the FIFTH sentence after rearrangement ?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

17. Which of the following will be the THIRD sentence after rearrangement ?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

18. Which of the following will be the SECOND sentence after rearrangement ?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

19. Which of the following will be the FIRST sentence after rearrangement ?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

20. Which of the following will be the FOURTH sentence after rearrangement ?
    (a) (A)   (b) (B)
    (c) (C)   (d) (D)
    (e) (E)

DIRECTIONS (Qs. 21-25) : In each question below, two sentences or parts of sentences are given with two blank spaces (____) (_____) between them. From among the three parts / sentences denoted by (A), (B) and (C) given below each, find out which two can fill up the blanks in proper sequence (i.e. the order in which these are given in the answer options) to make the sentence/ group of sentences meaningfully complete.

21. Four years ago, I had a major surgery. (____) . (____) . I was too ill.
    (A) It left me disabled.
    (B) My attempts to go back to work could not succeed.
    (C) I had fully recovered except for some minor weakness.
    (a) (B) and (A) only   (b) (C) and (A) only
    (c) (B) and (C) only   (d) (A) and (B) only
    (e) (A) and (C) only

22. Based on scientific research, scientists conclude that (___) (____), they will live even more than a hundred years.

(A) keep themselves active all through
(B) exercise more, ensure proper vitamin intake,
(C) human species, if regulate their diet,
    (a) Only (A) and (B)   (b) Only (A) and (C)
    (c) Only (C) and (A)   (d) Only (C) and (B)
    (e) Either C and (A) or (C) and (B)

23. The Central Government's plans to (_____) (_____) despite the fact that the opposition parties' united front had mobilized support of general public at the outskirts of Mumbai.
    (A) defy the curfew imposed to prevent the proposed rally from protesting against the hike in petrol prices
    (B) curb the rally called for by the opposition succeeded due to ruling party's an nouncement to
    (C) cancel all the trains entering Mumbai,
    (a) (A) and (B) only   (b) (B) and (A) only
    (c) (B) and (C) only   (d) (A) and (C) only
    (e) Either (B) and (C) or (A) and (C)

24. The economic gloom was exacerbated yesterday by Greek Prime Minister's surprise announcement (_____)(____), and vote might put the torturously conceived package in jeopardy.
    (A) that was struck last week
    (B) that he would recommend the Parliament to strike down the obnoxious deal
    (C) that his country would hold a referendum on the European debt deal
    (a) (C) and (A) only
    (b) (B) and (A) only
    (c) (A) and (C) only
    (d) Either (C) and (A) or (B) and (A)
    (e) None of these

25. The world's most powerful nations were warned (____) (___) and trigger mass social unrest.
    (A) that could cost millions of jobs around the globe
    (B) that international economy was on the brink of a deep new economic crisis
    (C) that the only solution was pumping a huge amount of money In the economy
    (a) (C) and (A) only   (b) (B) and (A) only
    (c) (B) and (C) only   (d) (C) and (B) only
    (e) None of these

DIRECTIONS (Qs. 26-30): Read each sentence given below and find out whether there is an error in it. The error if any will be one of the sentence which are marked as A, B, C and D. If there is no error, the answer will be (E) i.e. No error. (Ignore the errors of punctuation, if any)

26. The low learnings levels is due to the fact (a)/ that the state spends 87% of its budget (b)/ on salaries of its teachers (c)/ and not on infrastructure development for students (e)/ No error (e).

27. Recent incidents of tigers straying have brought to focus (a)/ the lack of proper regulatory mechanism and powers with the forest department (b)/ to take action against the resorts (c)/ mushroom in forest fringes (d)/ No error (e).

RESPONSE GRID	**16.** (a)(b)(c)(d)(e)	**17.** (a)(b)(c)(d)(e)	**18.** (a)(b)(c)(d)(e)	**19.** (a)(b)(c)(d)(e)	**20.** (a)(b)(c)(d)(e)
	21. (a)(b)(c)(d)(e)	**22.** (a)(b)(c)(d)(e)	**23.** (a)(b)(c)(d)(e)	**24.** (a)(b)(c)(d)(e)	**25.** (a)(b)(c)(d)(e)
	26. (a)(b)(c)(d)(e)	**27.** (a)(b)(c)(d)(e)			

28. The beauty of the palace comes alive (a)/ When over a lakh bulbs (b)/ is switched on between 7pm and 7.45pm (c)/ on specific days (d)/ No error (e)
29. In view of the rising complaints (a)/ of unscrupulous financial institutes duping people with luring them (b)/ with handsome returns on their investment, the police have appealed (c)/ to the citizens to stay away from such companies (d)/ No error (e)
30. More and more cab drivers are approaching the regional transport office (RTO) (a)/ to obtain identity cards (b)/ after the transport office intensified action against errant drivers (c)/ in the last couple of months (d)/ No error (e).

DIRECTIONS (Qs. 31-35): Fill in the blank with most appropriate words from the given options.

Tibet _____ up images of a mystic land. Snow-capped mountain peaks pierce the blue sky and fierce chilly winds sweep the rolling grasslands. Maroon-robed Buddhist monks pray in remote monasteries and _____ horsemen pound the rugged earth. People in this high plateau perform punishing rituals like prostrating hundreds of miles in tattered clothes on pilgrimage. Spirits, spells and flying apparitions are part of the Tibetan world. In short, Tibet remains an exotica. Such images are largely the result of books by Western travellers and explorers in the last century, which helped in keeping the mystique alive. And when the Communist rulers took over Tibet in the 1950s and began _____ Chinese language and culture on the people, Tibet's own history started to _____ in the background. Thus, the only books available in English to Tsering Wangmo Dhompa as a young girl growing up in India and Nepal as a refugee _____ those written by Westerners, and so she came to view the country as a forbidden land, a place where fantasy and fable collaborated against a dramatic backdrop of mountains, black magic and people with strange customs and appearances.

31. (a) makes (b) conjures
    (c) puts (d) toil
    (e) appoints
32. (a) sturdy (b) wobbly
    (c) handsome (d) herculean
    (e) beautiful
33. (a) implementing (b) evading
    (c) imposing (d) experimenting
    (e) all of these
34. (a) amplify (b) Stretch
    (c) die (d) recede
    (e) increase
35. (a) are (b) have been
    (c) was (d) were
    (e) are

DIRECTIONS (Qs. 36-40): Read the passage carefully and answer the questions given below it. Certain words/ phrases have been given in bold to help you locate them while answering some of the questions.

Mobile technology is transforming the global banking and payment industry by providing added convenience to existing bank customers in developed markets, and by offering new services to the unbanked customers in emerging markets. While consumers and governments are keen to adopt mobile technology for government-to-person (G2P) payments, intermediaries are creating barriers as they end up losing a good source of income.

Any new product for the G2P market needs to consider the incentives and motivations of all parties involved in the current value chain. As banks, mobile network operators (MNOs), NGOs and for-profit firms build new services to seize the opportunity to reach the large unbanked population, they must take time to understand the needs of customers. Even within a country, there are distinct differences in customer needs in urban and rural areas, and across segments. This has the potential to unlock a large **untapped** market. This opportunity has attracted several new players ranging from MNOs and start-ups to companies from adjacent industries such as retail, each trying its own business model to succeed in this new world. The **influx** of so many players and services has created confusion for customers, lack of coordination among players and limited scale for a single company. History tells us that after the initial stage of confusion, the dust eventually settles down as a few winners emerge.

36. What does the author mean by 'unbanked customer'?
    (a) Not having access to the services of a bank.
    (b) A person who buys goods or services from a financial institution.
    (c) A customer of a specified kind with whom one has to deal.
    (d) Both 2 and 3
    (e) Other than given options.
37. Which of the following is possibly the most appropriate title for the passage?
    (a) Progress on banking
    (b) Banking in the future
    (c) Mobile banking
    (d) Integration between e-commerce firms and banks
    (e) Instant banking
38. Which of the following is most SIMILAR in meaning of the word given in bold as used in the passage? UNTAPPED
    (a) Final (b) Fresh
    (c) Concluding (d) Latest
    (e) Last
39. Which of the following is most OPPOSITE in meaning of the word given in bold as used in the passage? INFLUX
    (a) Invasion (b) Enlargement
    (c) Advance (d) Incline
    (e) Ebb
40. Which of the following is/are true according to the passage?
    (a) With each passing day, banking is becoming narrower.
    (b) Smart users today have round-the-clock access to their bank accounts and carry their back in their pockets.
    (c) Only limited customers can avail all services of bank.
    (d) All of the above
    (e) None of these

RESPONSE GRID					
28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ
33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ
38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ		

73

COMPUTER FUNDAMENTALS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. Most of the commonly used personal computers/laptops do not have a command key known as _____.
   - (a) Turnover
   - (b) Shift
   - (c) Alter
   - (d) Delete
   - (e) Insert

2. JPEG stands for -
   - (a) Joint Photographic Expert group
   - (b) Joint Photographic Expert graphics
   - (c) Join Photographic Expert group
   - (d) Join Photographic Expert graphics
   - (e) None of these

3. What is called, a concentric circle on a disk?
   - (a) Sector
   - (b) Track
   - (c) Section
   - (d) Arc
   - (e) Directory

4. A Program designed to destroy data on your computer which can travel to "infect" other computers is called a _____.
   - (a) disease
   - (b) torpedo
   - (c) hurricane
   - (d) virus
   - (e) None of these

5. Most of the commonly available personal computers/laptops have a keyboard popularly known as _____.
   - (a) QWERTY
   - (b) QOLTY
   - (c) ALTER
   - (d) UCLIF
   - (e) None of these

6. Which of the following type of computer could be found in a digital watch?
   - (a) Handheld Computer
   - (b) Tablet
   - (c) Personal Computer
   - (d) Mainframe Computer
   - (e) Embedded Computer

7. To access a mainframe or super computer, users need _____
   - (a) Node
   - (b) Laptop
   - (c) Tablet
   - (d) CPU
   - (e) Terminal

8. What is the most common way to get a virus in your computer's hard disk?
   - (a) By installing games from their CDROMS
   - (b) By uploading pictures from mobile phones to the computer
   - (c) By opening emails
   - (d) By sending emails
   - (e) None of these

9. Codes consisting of bars or lines of varying widths or lengths that are computer-readable are known as _____.
   - (a) an ASCII code
   - (b) a magnetic tape
   - (c) an OCR scanner
   - (d) a bar code
   - (e) None of these

10. Which of the following character set supports Japanese and Chinese font?
    - (a) EBCDIC
    - (b) ASCII
    - (c) BCD
    - (d) EDCBI
    - (e) Unicode

11. AVI (Audio Video Interleave) format was developed by……..
    - (a) IBM
    - (b) Apple
    - (c) Microsoft
    - (d) Macromedia
    - (e) Adobe

12. Every component of your computer is either
    - (a) software or CPU/RAM
    - (b) hardware or software
    - (c) application software or system software
    - (d) input devices or output devices
    - (e) None of these

13. A CD-RW disk _____
    - (a) has a faster access than an internal disk
    - (b) is a form of optical disk, so it can only be written once
    - (c) can be erased and rewritten
    - (d) all the above
    - (e) None of these

14. General purpose computers are those that can be adopted to countless uses simply by changing its
    - (a) Output Device
    - (b) Input Device
    - (c) Program
    - (d) Processor
    - (e) None of these

15. Compatibility, with regard to computers, refers to
    - (a) the software doing the right job for the user
    - (b) it being versatile enough to handle the job
    - (c) the software being able to run on the computer
    - (d) software running with only other previously installed software
    - (e) software permanently available in the computer

RESPONSE GRID	1. (a)(b)(c)(d)(e)	2. (a)(b)(c)(d)(e)	3. (a)(b)(c)(d)(e)	4. (a)(b)(c)(d)(e)	5. (a)(b)(c)(d)(e)
	6. (a)(b)(c)(d)(e)	7. (a)(b)(c)(d)(e)	8. (a)(b)(c)(d)(e)	9. (a)(b)(c)(d)(e)	10. (a)(b)(c)(d)(e)
	11. (a)(b)(c)(d)(e)	12. (a)(b)(c)(d)(e)	13. (a)(b)(c)(d)(e)	14. (a)(b)(c)(d)(e)	15. (a)(b)(c)(d)(e)

16. A typical modern computer uses
    (a) Magnetic cores for secondary storage
    (b) LSI chips
    (c) Magnetic tape for primary memory
    (d) More than 10,000 vaccum tubes
    (e) None of these

17. Connectivity for a new computer means
    (a) allowing a printer to be connected to it
    (b) having a modem and/or network connection to communicate with other computers
    (c) connecting the software to the hardware of the system
    (d) connecting a mouse a keyboard and a printer – all essential hardware pieces for the average user

18. Which of the following operating systems is produced by IBM?
    (a) OS-2   (b) Windows
    (c) DOS   (d) UNIX
    (e) None of these

19. The most widely used code that represents each character as a unique 8-bit code is
    (a) ASCII
    (b) Unicode
    (c) binary numbering system
    (d) EBCDIC
    (e) ACSII

20. When was the first e-mail sent?
    (a) 1963   (b) 1969
    (c) 1971   (d) 1974
    (e) None of these.

21. The permanently etched program in ROM that automatically begins executing the computer's instructions is the
    (a) BIOS   (b) ROM   (c) CMOS
    (d) RAM   (e) None of these

22. Which of the following is not an advantage of magnetic disk storage?
    (a) The access time of magnetic disk is much less than that of magnetic tape
    (b) Disk storage is less expensive than tape storage
    (c) Disk storage is longer lasting than magnetic tape
    (d) All the above.
    (e) None of these.

23. The display size of a monitor is measured
    (a) zig-zag
    (b) horizontally
    (c) vertically
    (d) from center to the furthest corner
    (e) diagonally

24. Time during which a job is processed by the computer is:
    (a) Execution Time   (b) Delay Time
    (c) Real Time   (d) Waiting Time
    (e) None of these

25. The higher the resolution of a monitor, the
    (a) larger the pixels
    (b) less clear the screen is
    (c) further apart the pixels
    (d) closer together the pixels
    (e) None of these

26. For a computer to recognize and understnad analog data. it must first be
    (a) sent to a mainframe for interoperation
    (b) analyzed by the ALU of the CPU
    (c) decoded
    (d) analyzed for viruses
    (e) digitized

27. The basic architecture of computer was developed by
    (a) John Von Neumann
    (b) Charles Babbage
    (c) Blaise Pascal
    (d) Garden Moore
    (e) None of these

28. Fifth generation computers are based on
    (a) Artificial Intelligence
    (b) Programming Intelligence
    (c) System Knowledge
    (d) VVLSI
    (e) None of these

29. The wheel located between the two standard buttons on a mouse is used to
    (a) click in Web pages
    (b) shut down
    (c) click and select items
    (d) jump to different Web pages
    (e) scroll

30. _____ can interpret voice data into words that can be understood by the computer
    (a) Speech input hardware
    (b) Talking software
    (c) Word recognition software
    (d) Speech recognition software
    (e) Adobe reader

RESPONSE GRID	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ

101 SPEED TEST

74

MS WORD

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. The quickest and easiest way in Word, to locate a particular word or phrase in a document is to use the _____Command.
   - (a) Replace
   - (b) Find
   - (c) Lookup
   - (d) Search
   - (e) None of these

2. Editing a document consists of reading through the document you've created, then _____ .
   - (a) correcting your errors
   - (b) printing it
   - (c) saving it
   - (d) deleting it
   - (e) None of these

3. Text and graphics that have been out of copied are stored in an area called the _____.
   - (a) Pasteboard
   - (b) Copyboard
   - (c) Clipboard
   - (d) Cuttingboard
   - (e) None of these

4. What is the default file extension for all Word documents?
   - (a) WRD
   - (b) TXT
   - (c) DOC
   - (d) FIL
   - (e) None of these

5. To indent the first paragraph of your report, you should use this key _____.
   - (a) space bar
   - (b) return key
   - (c) tab key
   - (d) shift key
   - (e) None of these

6. You Microsoft Word by using _____ button.
   - (a) New
   - (b) Start
   - (c) Program
   - (d) Control Panel
   - (e) None of these

7. Which of the following could you do to remove a paragraph from a report you had written?
   - (a) Delete and edit
   - (b) Highlight and delete
   - (c) Cut and paste
   - (d) Undo typing
   - (e) None of these

8. You cannot close MS Word application by
   - (a) Choosing File menu then Exit submenu
   - (b) Press Alt+F4
   - (c) Click X button on title bar
   - (d) From File menu choose Close submenu
   - (e) None of these

9. For creating a document, you use _____ command at File Menu.
   - (a) Open
   - (b) Close
   - (c) New
   - (d) Save
   - (e) None of these

10. The justification that aligns text on both margins of a document in Word is
    - (a) Justify
    - (b) Bold
    - (c) Center
    - (d) Right
    - (e) Balanced

11. The shortcut key Ctrl + F in Word is used for
    - (a) To view document in full view
    - (b) To open the Formula dialog box
    - (c) To save the file
    - (d) To open the Find and Replace dialog box
    - (e) None of these

12. The name of a Microsoft Office Word document is displayed in both the _____ and the taskbar.
    - (a) menu bar
    - (b) taskbar
    - (c) Formatting toolbar
    - (d) Standard toolbar
    - (e) title bar

13. To select a word, you click it
    - (a) once
    - (b) twice
    - (c) three times
    - (d) four times
    - (e) None of these

14. The file that is created through word processing is a
    - (a) database file
    - (b) storage file
    - (c) worksheet file
    - (d) document file
    - (e) graphical file

15. When writing a document, you can use the _____ feature to find an appropriate word or an alternative word if you find yourself stuck for the right word.
    - (a) dictionary
    - (b) word finder
    - (c) encyclopedia
    - (d) thesaurus
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. Microsoft Office is an example of a _____.

    (a) closed-source software

    (b) open-source software

    (c) horizontal-market software

    (d) vertical-market software

    (e) compiler

17. A feature of MS Word that saves the document automatically after certain interval is available on

    (a) Save tab on Options dialog box

    (b) Save As dialog box

    (c) Save as Desktop

    (d) Both of above

    (e) None of these

18. Where can you find the horizontal split bar on MS Word screen?

    (a) On the left of horizontal scroll bar

    (b) On the right of horizontal scroll bar

    (c) On the top of vertical scroll bar

    (d) On the bottom of vertical scroll bar

    (e) None of these

19. Which of the following is not available on the Ruler of MS Word screen?

    (a) Tab stop box   (b) Left Indent

    (c) Right Indent   (d) Center Indent

    (e) All of them are available on ruler

20. Which file starts MS Word?

    (a) Winword.exe   (b) Word.exe

    (c) Msword.exe   (d) Word2003.exe

    (e) None of these

21. How many ways you can save a MS Word document?

    (a) 3   (b) 4

    (c) 5   (d) 6

    (e) None of these

22. What is the default left margin in Word 2003 document?

    (a) 1"   (b) 1.25"

    (c) 1.5"   (d) 2"

    (e) None of these

23. Background color on a document is not visible in ?

    (a) Web layout view   (b) Print preview

    (c) Reading view   (d) Print layout view

    (e) None of these

24. Which of the following is not valid version of MS Office?

    (a) Office XP   (b) Office Vista

    (c) Office 2007   (e) Both of above

    (e) None of these

25. Background color or effects applied on a document is not visible in

    (a) Web layout view   (b) Print Layout view

    (c) Reading View   (d) Print Preview

    (e) None of these

26. What is a portion of a document in which you set certain page formatting options?

    (a) Page   (b) Document

    (c) Section   (d) Page Setup

    (e) None of these

27. Borders can be applied to

    (a) Cells   (b) Paragraph

    (c) Text   (d) All of above

    (e) None of these

28. Which of the following is not a type of page margin?

    (a) Left   (b) Right

    (c) Center   (d) Top

    (e) None of these

29. In word processing, an efficient way to move the 3rd paragraph to place it after the 5th paragraph is ....

    (a) Copy and paste

    (b) copy, cut and paste

    (c) cut, copy and paste

    (d) cut and paste

    (e) None of these

30. What is gutter margin IN Ms Word document?

    (a) Margin that is added to the left margin when printing

    (b) Margin that is added to right margin when printing

    (c) Margin that is added to the binding side of page when printing

    (d) Margin that is added to the outside of the page when printing

    (e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

MS EXCEL

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../......../...............

1. On an excel sheet the active cell in indicated by?
   (a) A dotted border   (b) A dark wide border
   (c) A blinking border   (d) By italic text
   (e) None of these

2. With which of the following all formulas in excel starts?
   (a) /   (b) *
   (c) $ (d) =
   (e) @

3. Which among following is associated with excel?
   (a) Graphic program   (b) Word Processor
   (c) Presentation   (d) Spreadsheet
   (e) None of these

4. You can convert existing Excel worksheet data and charts to HTML document by using the?
   (a) Internet Assistant Wizard
   (b) Intranet Wizard
   (c) Import Wizard
   (d) Export Wizard
   (e) Internet Import Wizard

5. Which of the following is not a valid Zoom percentage in Excel?
   (a) 10   (b) 100
   (c) 300   (d) 500
   (e) 600

6. How can we set Page Border in Excel?
   (a) From Edit menu
   (b) From Home
   (c) You cannot set page border in Excel
   (d) From Tools menu
   (e) None of these

7. Which types of charts can excel produce?
   (a) Line graphs and pie charts only
   (b) Bar charts, line graphs and pie charts
   (c) Bar charts and line graphs only
   (d) Only line graphs
   (e) None of these

8. Which function in excel counts the numbers of characters in a cell?
   (a) LENGHT   (b) LGT
   (c) LT   (d) LEN
   (e) LTE

9. What is shortcut to enter current date in cell in excel?
   (a) Ctrl + ;   (b) Alt + ;
   (c) Shift + &   (d) Ctrl + $
   (e) Ctrl + *

10. When the formula bar is activated in excel, you can see
    (a) The Edit Formula button
    (b) The Cancel button
    (c) The Enter button
    (d) All of above
    (e) None of these

11. Which function will you use to enter current time in a woksheet cell?
    (a) =time()   (b) =nowtime()
    (c) =now()   (d) =currentTime()
    (e) NowcurrentTime()

12. Which among following is type of excel data types?
    (a) Numbers, Formulas, Labels
    (b) Data, Words, Numbers
    (c) Words, Number, Labels
    (d) Equations, Data, Numbers
    (e) None of these

13. On Excel screen, Tab scroll buttons are
    (a) towards the top left corner
    (b) towards the top right corner
    (c) towards the bottom right corner
    (d) towards the bottom left corner
    (e) None of these

14. In Excel Worksheet how can you show or hide the gridlines?
    (a) Click Gridline tool on Forms toolbar
    (b) Go to Tools -> Options -> View tab and mark or remove the check box named Gridline
    (c) Both of above
    (d) Only A is correct
    (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. When you press Ctrl + X after selecting some cells in Excel, what will happen then
    (a) The cell content of selected cells disappear from cell and stored in clipboard
    (b) The selected cells are deleted and cells are shifted up
    (c) The selected cells are deleted and the cells are shifted left
    (d) The cells selected are marked for cutting
    (e) None of these

16. To convert a column of data into row, which command will you choose
    (a) Edit -> Paste Special -> Transpose
    (b) Cut and Paste
    (c) Both of above
    (d) None of these

17. Each box in a spreadsheet is called a
    (a) cell   (b) empty space
    (c) record   (d) field
    (e) None of these

18. You cannot link Excel worksheet data to a Word document _____.
    (a) with the right drag method
    (b) with the hyperlink
    (c) with the copy and paste special commands
    (d) with the copy and paste buttons on the standard commands
    (e) All of these

19. In Excel, Charts are created using which option?
    (a) Chart Wizard   (b) Pivot Table
    (c) Pie Chart   (d) Bar Chart
    (e) None of these

20. A partially completed workbook that contains formulas and formatting, but no data is called a
    (a) Prototype   (b) template
    (c) model   (d) function
    (e) None of these

21. Each cell in a Microsoft Office Excel document is referred to by its cell address, which is the
    (a) cell's column label
    (b) cell's column label and worksheet tab name
    (c) cell's row label
    (d) cell's row and column labels
    (e) cell's contents

22. Excel is designed to provide visual cues to the relationships between the cells that provide values to the formulas or the cells that depend on the formulas by
    (a) Bolding the cell references to match the colour coding of the borders around the referenced worksheet cells.
    (b) Highlighting the cell references.
    (c) Colour coding the cell references in the formula to match the borders around the referenced worksheet cells.
    (d) Bolding the cell references.
    (e) None of these

23. This Excel feature includes functions to calculate an Average, Minimum, Maximum and Count.
    (a) Format   (b) Number
    (c) AutoSum   (d) Calculate
    (e) MIN

24. This is a set of values that you want to chart in Excel.
    (a) Object   (b) Numbers
    (c) Data Mart   (d) Formulas
    (e) Data series

25. The .xls extension is used for _____ files.
    (a) Windows   (b) Access   (c) PowerPoint
    (d) Word   (e) Excel

26. To copy a cell, you would drag the cell border while simultaneously holding down the Ctrl key when
    (a) You have one or more cells to copy.
    (b) Only some of the cells are visible in the window.
    (c) You don't want to refer to absolute references.
    (d) The distance between cells is short and they are both visible in the window.
    (e) None of these

27. In Excel, _____ contains one or more worksheets.
    (a) Template   (b) Workbook   (c) Active cell
    (d) Label   (e) None of these

28. Numbers in table columns are usually
    (a) right-aligned   (b) left-aligned   (c) justified
    (d) centered   (e) None of these

29. You will use which feature in excel, if you want to work with one record at a time ?
    (a) Auto Complete   (b) Auto Filter
    (c) Sub Totals   (d) Data Form
    (e) None of these

30. What term describes explanatory text attached to a cell ?
    (a) Context   (b) Callout
    (c) Comment   (d) Dialog
    (e) None of these

RESPONSE GRID	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
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101 SPEED TEST

76

MS POWER POINT & MS ACCESS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../......../...............**

1. Which file format can be added to a PowerPoint show?
   (a) .jpg   (b) .giv
   (c) .wav   (d) All of the above
   (e) None of these

2. In Microsoft Power Point two kind of sound effects files that can be added to the presentation are
   (a) .wav files and .mid files
   (b) .wav files and .gif files
   (c) .wav files and .jpg files
   (d) .jpg files and .gif files
   (e) None of these

3. Which of the following should you use if you want all the slide in the presentation to have the same "look"?
   (a) The slide layout option
   (b) Add a slide option
   (c) Outline view
   (d) A presentation design template
   (e) None of these

4. If you have a PowerPoint show you created and want to send using email to another teacher you can add the show to your email message as a (an)
   (a) Inclusion   (b) Attachment
   (c) Reply   (d) Forward
   (e) None of these

5. To exit the PowerPoint
   (a) Click the application minimize button
   (b) Click the document close button
   (c) Double click the applications control menu icon
   (d) Double click the document control menu icon
   (e) None of these

6. You can create a new presentation by completing all of the following except
   (a) Clicking the new button on the standard toolbar
   (b) Clicking file, new
   (c) Clicking file open
   (d) Pressing ctrl + N
   (e) None of these

7. You can embed a MS-Organization Chart in a slide by
   (a) Clicking the object command on the edit menu
   (b) Clicking the object command on the edit menu
   (c) Clicking the insert new slide button the standard toolbar, then double click the organization chart button on the formatting toolbar
   (d) Clicking the MS-Organization Chart button on the standard toolbar
   (e) None of these

8. To select one hyperlink after another during a slide presentation, what do you press?
   (a) Tab   (b) Ctrl + K
   (c) Ctrl + h   (d) All of above
   (e) None of these

9. How can you create a uniform appearance by adding a background image to all slides?
   (a) Create a template
   (b) Edit the slide master
   (c) Use the autocorrect wizard
   (d) All of the above
   (e) None of these

10. One way to make a PowerPoint slide display animations is to:
    (a) Select the slide in normal view; and click Format, Animation
    (b) Click the PowerPoint window and move it around vigorously with the mouse for a manual animation effect
    (c) Select the slide in slide sorter view, right click and choose preset animations from the shortcut menu
    (d) PowerPoint does not have an animation feature
    (e) None of these

11. To give a PowerPoint presentation to a large audience, you:
    (a) Set up your computer in a large auditorium, and click large, auditorium, OK
    (b) Click the slide you wish the audience to see in normal view, then click the next slide, and so on.
    (c) Choose either view, slide show or slide show, view show
    (d) Slick slide show, OK
    (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
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11. ⓐⓑⓒⓓⓔ				

12. Which PowerPoint view works best for adding slide transitions?
   (a) Slide show view
   (b) ,b. Slide sorter view
   (c) Slide view
   (d) Notes view
   (e) None of these

13. Which option can be used to set custom timings for slides in a presentation?
   (a) Slider Timings
   (b) Slider Timer
   (c) Rehearsal
   (d) Slide Show Setup
   (e) None of these

14. To import text from a word document that uses headings into a PowerPoint presentation:
   (a) This cannot be done in PowerPoint
   (b) Click Insert, Slides from Outline
   (c) Click Import, Word Document Headings
   (d) Click File, New, Presentation from Word Headings
   (e) None of these

15. The quickest way to create a PowerPoint presentation is to use the
   (a) Word for windows templates
   (b) Auto creation wizard
   (c) Auto content wizard
   (d) Presentation wizard
   (e) None of these

16. Which tab is not available on left panel when you open a presentation?
   (a) Outline
   (b) Slides
   (c) Notes
   (d) All of above are available
   (e) None of these

17. What is a form in MS Access
   (a) It is a printed page where users will write their data to fill it up
   (b) It is an input screen designed to make the viewing and entering data easier
   (c) This is an important part of database used by analysts to draw conclusions
   (d) All of above
   (e) None of these

18. Microsoft Access is A
   (a) RDBMS
   (b) OODBMS
   (c) ORDBMS
   (d) Network Database Model
   (e) None of these

19. Which Of The Following Is Not A Type Of Microsoft Access Database Object?
   (a) Table
   (b) Form
   (c) Worksheets
   (d) Modules
   (e) None of these

20. What Are The Columns In A Microsoft Access Table Called?
   (a) Rows
   (b) Records
   (c) Fields
   (d) Columns
   (e) None of these

21. The Command Center Of Access File That Appears When You Create Or Open The Ms Access Database File.
   (a) Database Window
   (b) Query Window
   (c) Design View Window
   (d) Switchboard
   (e) None of these

22. In MS-Access we press CTRL+O to
   (a) Open a new database
   (b) Open an existing database
   (c) Exit MS-Access
   (d) All of above
   (e) None of these

23. In MS-Access to open new database press
   (a) CTRL+N
   (b) CTRL+O
   (c) ALT+F4
   (d) None of these
   (e) None of these.

24. In MS-Access to open a combo box
   (a) F4 or ALT+DOWN ARROW
   (b) DOWN ARROW
   (c) PAGE DOWN
   (d) F9
   (e) None of these.

25. In MS-Access to refresh the contents of a Lookup field box or combo box
   (a) DOWN ARROW
   (b) F4 or ALT+DOWN ARROW
   (c) PAGE DOWN
   (d) F9
   (e) None of these.

26. How many save as option in MS Access 2007?
   (a) 5
   (b) 2
   (c) 3
   (d) 1
   (e) 4

27. How we save database file in MS Access 2007 for Ms Access 2000?
   (a) Save As MS Access 2000 Database
   (b) Save Only
   (c) Save Object As
   (d) Save file
   (e) None of these.

28. In MS Access 2007, to set a table to open as a document tab, you need to go to the ____.
   (a) Microsoft Office button
   (b) Navigation Pane
   (c) Quick Access toolbar
   (d) Database Tools command tab
   (e) None of these.

29. Which Of The Following Is A Method To Create A New Table In Ms Access?
   (a) Create Table In Design View
   (b) Create Table Using Wizard
   (c) Create Table By Entering Data
   (d) All of above
   (e) None of these

30. The Default And Maximum Size Of Text Field In Access
   (a) 50 And 255 Characters
   (b) 8 And 1 Gb
   (c) 266 Characters & 64000 Characters
   (d) All of above.
   (e) None of these

RESPONSE GRID					
12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ
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77

OPERATING SYSTEM

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../......../................**

1. Which of the following is NOT a famous operating system?
   - (a) Windows Vista
   - (b) Mac OS X
   - (c) Linux
   - (d) Sun OS
   - (e) Virtual Box

2. Window 95, Windows 98 and Windows NT are known as
   - (a) Processors
   - (b) Domain names
   - (c) Modems
   - (d) Operating systems
   - (d) None of these
   - (e) All the Above

3. The primary purpose of an operating system is:
   - (a) To make the most efficient use of the computer hardware
   - (b) To allow people to use the computer,
   - (c) To keep systems programmers employed
   - (d) To make computers easier to use
   - (e) None of these.

4. Which of the following Operating System does not implement multitasking truly?
   - (a) Windows 98
   - (b) Windows NT
   - (c) Windows XP
   - (d) MS DOS
   - (e) None of these.

5. _____ is used in operating system to separate mechanism from policy
   - (a) Single level implementation
   - (b) Two level implementation
   - (c) Multi level implementation
   - (d) All the Above
   - (e) None of these

6. The operating system creates ___ from the physical computer.
   - (a) Virtual space
   - (b) Virtual computers
   - (c) Virtual device
   - (d) All the Above
   - (e) None of these

7. Unix Operating System is an
   - (a) Multi User Operating System
   - (b) Time Sharing Operating System
   - (c) Multi Tasking Operating System
   - (d) All the Above
   - (e) None of these

8. In which type of the following OS, the response time is very crucial.
   - (a) Network Operating System
   - (b) Real Time Operating System
   - (c) Batch Operating System
   - (d) Unix Operating System
   - (e) None of these

9. What should be the first step while OS upgrading?
   - (a) Delete old Operating System
   - (b) Backup old Operating System
   - (c) Backup Critical Data
   - (d) Format Hard Disks
   - (e) None of these

10. .... is an user interface that uses only keyboard for input.
    - (a) Graphical User Interface
    - (b) Command Line Interface
    - (c) Both (A) & (B)
    - (d) All the Above
    - (e) None of these

11. Which operating system use write through catches.
    - (a) UNIX
    - (b) XENIX
    - (c) ULTRIX
    - (d) DOS
    - (e) None of these

12. An Operating System that can predict the exact time duration for operations is called
    - (a) Hard RTOS
    - (b) Soft RTOS
    - (c) Both (A) & (B)
    - (d) All the Above
    - (e) None of these

13. The command interpreter in Linux operating system is known as .....
    - (a) Fork
    - (b) Kernel
    - (c) Shell
    - (d) All the Above
    - (e) None of these

14. Even if a disk drive fails, the computer application running and using it can continue processing. This application is said to have been designed with this feature called
    - (a) 100 percent up-time
    - (b) Fault tolerance
    - (c) High reliability
    - (d) All of these
    - (e) None of these

15. What is the name of the operating system for the laptop computer called MacLite?
    - (a) Windows
    - (b) DOS
    - (c) MS-DOS
    - (d) OZ
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
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	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. Memory management is :
    (a) Not used in modern operating system
    (b) Replaced with virtual memory on current systems
    (c) Not used on multiprogramming systems
    (d) Critical for even the simplest operating systems
    (e) None of these

17. Every computer has a(n) _____; many also have
    _____.
    (a) Operating system; a client system
    (b) Operating system; instruction sets
    (c) Application programs; an operating system
    (d) Application programs; a client system
    (e) Operating system; application programs

18. Disk scheduling includes deciding
    (a) Which should be accessed next
    (b) The order in which disk access requests must be serviced
    (c) The physical location of the file
    (d) The logical location of the file
    (e) None of these

19. Which scheduling policy is best suited for time-sharing operating systems
    (a) Shortest job first
    (b) Round robin
    (c) First come first serve
    (d) Elevator
    (e) None of these

20. The operating system called UNIX is typically used for
    (a) Desktop computers
    (b) Laptop computers
    (c) Super computers
    (d) Web servers
    (e) All of these

21. Which among following scheduling algorithms give minimum average waiting time
    (a) FCFS(first come first served)
    (b) SJF(Shortest job first)
    (c) Round robin
    (d) On priority
    (e) None of these

22. In real time OS, which is most suitable scheduling scheme
    (a) Round robin
    (b) FCFS(first come first served)
    (c) Pre-emptive scheduling
    (d) Random scheduling
    (e) None of these

23. For multiprogramming operating system
    (a) Special support from processor is essential
    (b) Special support from processor is not essential
    (c) Cache memory is essential
    (d) Special support from processor but cache memory is essential
    (e) None of these

24. In which scheduling policies, context switching never takes place
    (a) Round robin   (b) SJF (Shortest job first).
    (c) Pre-emptive   (d) On priority
    (e) FCFS(first come first served)

25. Which is single user operating system?
    (a) MS-DOS   (b) UNIX
    (c) XENIX   (d) LINUX
    (e) None of these

26. Executing more than one program concurrently by one user on one computer is known as
    (a) Multi-programming (b) Multi-processing
    (c) Time sharing   (d) Multi-tasking
    (e) Multi-action

27. Which operating system reacts in the actual time
    (a) Batch system   (b) Quick response system
    (c) Real time system (d) Time sharing system
    (e) None of these

28. Which technique is used by operating systems to execute several programs concurrently by switching back and forth?
    (a) Partitioning   (b) Multitasking
    (c) Windowing   (d) Paging
    (e) None of these

29. A thread is
    (a) Lightweight process where the context switching is low
    (b) Lightweight process where the context switching is high
    (c) Used to speed up paging
    (d) Used in deadlocks
    (e) None of these

30. Operating system is
    (a) A collection of hardware components
    (b) A collection of input output devices
    (c) A collection of software routines
    (d) All of above
    (e) None of these

RESPONSE GRID					
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101 SPEED TEST

78

DATABASE MANAGEMENT SYSTEM

Max. Marks : 30   No. of Qs. 30   Time : 20 min.   Date : ..../........./................

1. The relational database environment has all of the following components except
   - (a) user's
   - (b) separate files
   - (c) database
   - (d) query languages
   - (e) database

2. A form defined
   - (a) where data is placed on the screen
   - (b) the width of each field
   - (c) both a and b
   - (d) the breadth of each field
   - (e) none of the above

3. Database management systems are intended to
   - (a) eliminates data redundancy
   - (b) establish relationship among records in different files
   - (c) manage file access
   - (d) maintain data integrity
   - (e) all of the above

4. The highest level in the hierarchy of data organization is called
   - (a) data bank
   - (b) data base
   - (c) data file
   - (d) data record
   - (e) None of these.

5. Choose the RDBMS which supports fully fledged client server application development
   - (a) dBase V
   - (b) Oracle 7.1
   - (c) FoxPro 2.1
   - (d) Ingress
   - (e) None of these

6. If a relation scheme is in BSNF then it is also in
   - (a) First normal form
   - (b) Second normal form
   - (c) Third normal form
   - (d) Forth normal from
   - (e) Not in any normal form

7. Report generators are used to
   - (a) store data input by a user
   - (b) retrieve information from files
   - (c) answer queries
   - (d) both b and c
   - (e) None of these

8. Data item characteristics that are important in data management include
   - (a) punctuation
   - (b) language
   - (c) spelling
   - (d) width
   - (e) None of these

9. The management information system (MIS) structure with one main computer system is called a................
   - (a) hierarchical MIS structure
   - (b) distributed MIS structure
   - (c) centralized MIS structure
   - (d) decentralized MIS structure
   - (e) None of these

10. The language used application programs to request data from the DBMS is referred to as the
    - (a) The data definition language (DDL)
    - (b) The data manipulation language (DML)
    - (c) The database administrator (DBA)
    - (d) A query language
    - (e) None of these

11. The language which has recently become the defect standard for interfacing application programs with relational database system is
    - (a) Oracle
    - (b) SQL
    - (c) DBase
    - (d) 4GL
    - (e) None of these

12. A Field is a related group of _____.
    - (a) Records
    - (b) Files
    - (c) Characters
    - (d) Tables
    - (e) None of the above

13. In an E-R diagram an entity set is represent by a
    - (a) Rectangle
    - (b) Ellipse
    - (c) Diamond box
    - (d) Circle
    - (e) None of these

14. A report generator is used to
    - (a) Update files
    - (b) Print files on paper
    - (c) Data entry
    - (d) Delete files
    - (e) None of these

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ	
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ	
11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ		

15. The property / properties of a database is / are:
    (a) It is an integrated collection of logically related records.
    (b) It consolidates separate files into a common pool of data records.
    (c) Data stored in a database is independent of the application programs using it.
    (d) All of the above.
    (e) None of these.

16. The way a particular application views the data from the database that the application uses is a
    (a) Module   (b) Relational model
    (c) Schema   (d) Sub schema
    (e) None of these

17. A relational database developer refers to a record as
    (a) A criteria   (b) A relation   (c) A tuple
    (d) An attribute (e) None of these

18. The relational model feature is that there
    (a) Is no need for primary key data?
    (b) Is much more data independence than some other database models.
    (c) Are explicit relationships among records?
    (d) Are tables with many dimensions?
    (e) None of these.

19. A transparent DBMS
    (a) cannot hide sensitive information from users
    (b) keeps its logical structure hidden from users
    (c) keeps its physical structure hidden from users
    (d) both b and c
    (e) None of these

20. A command that lets you change one or more fields in a record is
    (a) insert   (b) modify   (c) lookup
    (d) none of above (e) None of these

21. A record management system
    (a) can handle many files of information at a time
    (b) can be used to extract information stored in a computer file
    (c) always uses a list as its model
    (d) both a and b
    (e) None of these

22. When data changes in multiple lists and all lists are not updated, this causes
    (a) data redundancy   (b) information overload
    (c) duplicate data   (d) data inconsistency
    (e) data repetition

23. What is a backup?
    (a) Restoring the information backup
    (b) An exact copy of a system's information
    (c) The ability to get a system up and running in the event of a system crash or failure
    (d) All of these
    (e) None of these

24. Database management systems are used to
    (a) To eliminate data redundancy
    (b) To establish relationships among records in different files
    (c) To manage file access
    (d) To access the data warehouse.
    (e) None of these

25. Which is not a logical database structure?
    (a) Chain   (b) Tree
    (c) Relational   (d) Network
    (e) None of these

26. Data management system may be implemented as
    (a) system software
    (b) application software
    (c) computer program
    (d) all of above
    (e) None of these

27. Which among following is not a relational database?
    (a) dBase IV   (b) 4th Dimension
    (c) FoxPro   (d) Reflex
    (e) None of these

28. After a user has saved and deleted many files, many scattered areas of stored data remain that are too small to be used efficiently, causing _____.
    (a) disorder   (b) turmoil   (c) disarray
    (d) fragmentation (e) None of these

29. Which is a type of DBMS software?
    (a) utilities   (b) query language
    (c) report writer (d) All of above
    (e) None of these

30. Which of the following contains information about a single "entity" in the database like a person, place, event, or thing?
    (a) query   (b) form   (c) record
    (d) table   (e) None of these

RESPONSE GRID	15. (a)(b)(c)(d)(e)	16. (a)(b)(c)(d)(e)	17. (a)(b)(c)(d)(e)	18. (a)(b)(c)(d)(e)	19. (a)(b)(c)(d)(e)
	20. (a)(b)(c)(d)(e)	21. (a)(b)(c)(d)(e)	22. (a)(b)(c)(d)(e)	23. (a)(b)(c)(d)(e)	24. (a)(b)(c)(d)(e)
	25. (a)(b)(c)(d)(e)	26. (a)(b)(c)(d)(e)	27. (a)(b)(c)(d)(e)	28. (a)(b)(c)(d)(e)	29. (a)(b)(c)(d)(e)
	30. (a)(b)(c)(d)(e)				

101 SPEED TEST

79

SOFTWARE

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. What kind of software would you most likely use to keep track of a billing account?
   (a) Word processing (b) Electronic publishing
   (c) Spreadsheet   (d) Web authoring
   (e) None of these

2. Word processing, spreadsheet, and photo-editing are examples of:
   (a) System software   (b) Operating system software
   (c) Platform software (d) Application software
   (e) None of these

3. Software for organizing storage and retrieval of information is a(n)-
   (a) Operating system (b) Database
   (c) Database program (d) Data warehouse
   (e) None of these

4. A set of step-by-step procedures for accomplishing a task is known as a(n)-
   (a) algorithm   (b) hardware program
   (c) software bug   (d) firmware program
   (e) None of these

5. The two major categories of software include
   (a) operating system and utility
   (b) Personal productivity and system
   (c) system and application
   (d) system and utility
   (e) None of these

6. Compilers and translators are one form of-
   (a) ROM   (b) RAM
   (c) Hard disk (d) Software
   (e) None of these

7. Which of the following model is a combination of Iterative model and Waterfall model?
   (a) linear-sequential Model
   (b) Spiral Model
   (c) V Model
   (d) prototype model
   (e) None of these.

8. SRS stands for _____
   (a) Software Resolution Specification
   (b) Software Requirement Standards
   (c) Software Response Service
   (d) Software Requirements Specifications
   (e) None of these.

9. A limitation of software that digitizes voice data is that it
   (a) is prohibitively expensive.
   (b) must be trained to recognize individual voices.
   (c) can only be used on high-end computers.
   (d) cannot be used on laptop computers.
   (e) cannot be used on desktop computers

10. Which type of software is distributed free but requires the users to pay some amount for further use?
    (a) freeware   (b) shareware
    (c) rentalware   (d) public-domain software
    (e) abandonware

11. ....makes available the commands to righted the software. Instructions are translated step-by-step and executed by the processor so that some objective can be achieved or some problem can be solved.
    (a) Software patch
    (b) AI language
    (c) Presentation language
    (d) Programming language
    (e) None of these

12. Which type of software is used in the design of products, structures, civil engineering, drawings and map?
    (a) CAD programs   (b) desktop programs
    (c) drawing programs (d) painting-programs
    (e) video/audio-programs

13. Software applies _____, also called algorithms, to process data.
    (a) arithmetic   (b) procedures
    (c) objects   (d) rules
    (e) None of these

14. There is a new anti-virus software update available, when it is downloaded to your computer
    (a) Everyday
    (b) Only in the night
    (c) When you next switch on your computer
    (d) All of the above
    (e) None of these.

15. Application software is designed to accomplish _____.
    (a) real-world tasks   (b) computer-centric tasks
    (c) gaming tasks   (d) operating-system tasks
    (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. Which is the best definition of a software package?
    (a) An add-on for your computer such as additional memory
    (b) A set of computer programs used for a certain function such as word processing
    (c) A protection you can buy for a computer
    (d) The box, manual and license agreement that accompany commercial software.
    (e) None of these

17. What are the two examples of TRUE freeware software?
    (a) WinZip and Linux
    (b) Shareware and file sharing
    (c) Microsoft Word and the Google toolbar
    (d) Instant messaging and the Google toolbar
    (e) Microsoft Power Point and Microsoft Excel

18. Software programs that allow you to legally copy files and give them away at no cost are called which of the following
    (a) Time sharing   (b) Public domain
    (c) Shareware   (d) Public sharing
    (e) None of these.

19. Which of the following is not a type of computer software which can be bought?
    (a) Off-the-shelf
    (b) Tailor-made
    (c) Custom-developed
    (d) Off-the-shelf with alterations
    (e) All of these can be purchased

20. Computer software can be defined as-
    (a) The computer and its associated equipment
    (b) The instructions that tell the computer what to do
    (c) Computer components that act to accomplish a goal
    (d) An interface between the computer and the network
    (e) None of these.

21. Programs from the same developer, sold bundled together, that provide better integration and share common features, toolbars and menus are known as
    (a) Software suites
    (b) Integrated software packages
    (c) Software processing packages
    (d) Personal information managers
    (e) None of these

22. Software, such as viruses, worms and Trojan horses, that has a malicious intent, is known as:
    (a) spyware   (b) adware
    (c) spam   (d) malware
    (e) None of these

23. _____ is the process of finding errors in software code.
    (a) Debugging   (b) Compiling
    (c) Testing   (d) Running
    (e) None of these

24. The steps and tasks needed to process data, such as responses to questions or clicking an icon, are called:
    (a) Instructions.
    (b) The operating system.
    (c) Application software.
    (d) The system unit.
    (e) None of these.

25. Which of the following model is also referred to as a linear-sequential life cycle model?
    (a) Waterfall Model   (b) Iterative Model
    (c) Spiral Model   (d) V Model
    (e) None of these.

26. Which of the following is the most important phase of Software Development Life Cycle (SDLC)?
    (a) Requirements analysis
    (b) Coding
    (c) Testing
    (d) Designing
    (e) E None of these.

27. In object oriented design of software which of the following is not true?
    (a) objects inherit the properties of the class
    (b) classes are defined based on the attributes of the object
    (c) objects can belong to two classes
    (d) classes are always different
    (e) None of these.

28. Small business owners who want software to assist in managing accounts payable and receivable will likely use which of the following software products?
    (a) Business Plan Pro (b) Microsoft Project
    (c) Quicken   (d) Quickbooks
    (e) None of these.

29. Design phase includes?
    (a) data,architectural and procedural designs only
    (b) architectural,procedural and interface design only
    (c) data,architectural and interface design only
    (d) data, architectural interface and procedural design
    (e) None of these.

30. Software engineering is an engineering discipline concerned with
    (a) Software development
    (b) Software production
    (c) Software implementation
    (d) All the above
    (e) None of these

RESPONSE GRID	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

PROGRAMMING

Max. Marks : 30 **No. of Qs. 30** **Time : 20 min.** **Date : ..../........./................**

1. Which of the following is NOT a computer programming language?
   - (a) C
   - (b) C++
   - (c) Java
   - (d) COBOL
   - (e) Microsoft

2. A compiler translates higher-level programs into a machine language program, which is called–
   - (a) source code
   - (b) object code
   - (c) compiled code
   - (d) beta code
   - (e) None of these

3. A program that works like a calculator for keeping track of money and making budgets _____.
   - (a) calculator
   - (b) scholastic
   - (c) keyboard
   - (d) spreadsheet
   - (e) None of these

4. Assembly language is-
   - (a) Low-level programming language
   - (b) High level programming language
   - (c) Machine language
   - (d) All of the above
   - (e) None of these

5. A _____ contains specific rules and words that express the logical steps of an algorithm.
   - (a) programming language
   - (b) programming structure
   - (c) syntax
   - (d) logic chart
   - (e) None of these

6. C, BASIC, COBOL, and Java are example of _____ languages.
   - (a) low-level
   - (b) computer
   - (c) system programming
   - (d) high-level
   - (e) None of these

7. The human-readable version of a program is called _____.
   - (a) source code
   - (b) program code
   - (c) human code
   - (d) system code
   - (e) None of these

8. ALGOL is the
   - (a) High-level language
   - (b) Low level language
   - (c) Machine language
   - (d) All of the above
   - (e) None of these

9. Which of the following is a popular programming language for developing multimedia web pages, websites and web-based applications?
   - (a) COBOL
   - (b) Java
   - (c) BASIC
   - (d) Assembler
   - (e) None of these

10. Compiling creates a(n) _____.
    - (a) program specification
    - (b) algorithm
    - (c) executable program
    - (d) subroutine
    - (e) None of these

11. A high level programming language named after Ada Augusta, coworker with Charles Babbage-
    - (a) Augustan
    - (b) Babbage
    - (c) Ada
    - (d) Charlie
    - (e) All of the above

12. The simultaneous execution of two or more instructions is called
    - (a) sequential access
    - (b) reduced instruction set computing
    - (c) multiprocessing
    - (d) disk mirroring
    - (e) None of these

13. Multiprogramming systems:
    - (a) are easier to develop than single programming systems.
    - (b) execute each job faster.
    - (c) execute more jobs in the same time period.
    - (d) use only one large mainframe computer.
    - (e) None of these

14. Codes consisting of bars or lines of varying widths or lengths that are computer-readable are known as _____.
    - (a) a bar code
    - (b) an ASCII code
    - (c) a magnetic tape
    - (d) a light pen
    - (e) None of these

15. Which of the following is not a function related to file handling?
    - (a) fopen ();
    - (b) fclose ();
    - (c) fprintf ();
    - (d) printf ();
    - (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. _____ is a set of keywords, symbols, and a system of rules for constructing statements by which humans can communicate the instructions to be executed by a computer.
   (a) A computer program
   (b) A programming language
   (c) An assembler
   (d) Syntax
   (e) None of these

17. Which one of the following statement is true for Assembly language?
   (a) This language need not be translated into machine language.
   (b) It is the easiest language to write programs
   (c) It uses alphabetic codes.
   (d) All of the above
   (e) None of these

18. The statement which is not the characteristic of COBOL is
   (a) It is readable
   (b) It is very efficient in coding and execution
   (c) It is standardized language
   (d) It has limited facilities for mathematical calculations
   (e) None of these

19. Documentation of computer programs is important so that
   (a) users can learn how to use the program
   (b) other programmers can know how to maintain the program
   (c) the programmer can see why the code is written that way while hunting for sources of error
   (d) All of the above
   (e) None of these

20. A program that enables you to perform calculations involving rows and columns of numbers is called a _____.
   (a) spreadsheet program
   (b) word processor
   (c) graphics package
   (d) window
   (e) None of these

21. Which one of the following language reflects the way people think mathematically?
   (a) Functional
   (b) Event driven programming language
   (c) Cross platform programming language
   (d) All of the above
   (e) None of these

22. The statement that is false regarding FORTRAN is
   (a) It was developed for mathematical calculations

   (b) Excessive internal documentation is required
   (c) It is problem oriented
   (d) It is the one of the oldest high level language
   (e) None of these

23. Problem oriented language is
   (a) BASIC   (b) PL/1
   (c) Both a & b.   (d) either (a) and (b)
   (e) None of these

24. _____ is mostly used for development of various games.
   (a) C++   (b) FORTRAN
   (c) BASIC   (d) Java
   (e) None of these

25. What type of languages can easily interact with the hardware?
   (a) Very high level languages
   (b) Middle level languages
   (c) High level languages
   (d) Low level languages
   (e) None of these

26. Which program is used for business applications?
   (a) FORTRAN   (b) COBOL
   (c) BASIC   (d) C++
   (e) None of these

27. For scientific calculations which language is used?
   (a) SQL   (b) Java
   (c) C++   (d) FORTRAN
   (e) None of these

28. Which language is the set of rules that tells the computer what operation to perform?
   (a) Programming language
   (b) Command language
   (c) Procedural language
   (d) Structures
   (e) None of these

29. For selection of source language the factor which should be considered is
   (a) Language availability
   (b) Compatibility with other software
   (c) Both 1 and 2
   (d) Either 1 or 2
   (e) None of these

30. The words that are set aside by the programming language for its own use is called
   (a) Control structures (b) Control words
   (c) Reserved words   (d) Reserved keys
   (e) None of these

RESPONSE GRID					
	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
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	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ

101 SPEED TEST

81

INTERNET

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. Which of the following is a Web browser?
   - (a) Paint
   - (b) Power Point
   - (c) Fire fox
   - (d) Word
   - (e) All are Web browsers

2. The Internet allows you to _____.
   - (a) send electronic mail
   - (b) view Web pages
   - (c) connect to servers all around the world
   - (d) All of the above
   - (e) None of these

3. Junk e-mail is also called _____.
   - (a) spam
   - (b) spoof
   - (c) sniffer script
   - (d) spool
   - (e) None of these

4. What is an E-mail attachment?
   - (a) A receipt sent by the recipient
   - (b) A separate document from another program sent along with an E-mail message
   - (c) A malicious parasite that feeds off of your messages and destroys the contents
   - (d) A list of CC : or BCC : recipients
   - (e) None of these

5. Which of the following are all considered advantages of e-mail?
   - (a) Convenience, speed of delivery, generality and reliability
   - (b) Printable, global and expensive
   - (c) Global, convenience and Microsoft owned
   - (d) Slow delivery, reliable, global and inexpensive
   - (e) None of these

6. E-commerce allows companies to _____.
   - (a) issue important business reports
   - (b) conduct business over the Internet
   - (c) support decision making processes
   - (d) keep track of paper-based transactions
   - (e) None of these

7. What is the use of video conferencing?
   - (a) It is used for communication purpose
   - (b) It is used for live conferencing
   - (c) It is used to talk to each other
   - (d) All of the above
   - (e) None of these

8. Which is the slowest internet connection service?
   - (a) Digital Subscriber Line
   - (b) TI
   - (c) Cable modem
   - (d) Leased Line
   - (e) Dial-up Service

9. Computers connected to a LAN (local Area Network) can _____.
   - (a) run faster
   - (b) go on line
   - (c) share information and/or share peripheral equipment
   - (d) E-mail
   - (e) None of these

10. A Website address is a unique name that identifies a specific _____ on the web.
    - (a) Web browser
    - (b) PDA
    - (c) Website
    - (d) Link
    - (e) None of these

11. What is the term used for talking on net with the help of typed text?
    - (a) New group
    - (b) E-mail
    - (c) Chatting
    - (d) None of the above
    - (e) None of these

12. If and email is received by an unknown person then
    - (a) One should open it and respond asking their personal information
    - (b) One should open it and respond saying you don't know them
    - (c) It should be deleted without opening it
    - (d) It should be forwarded to police
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. For a company's business the term that involves the use of electronic platforms like intranets, extranets and internet is
    (a) E-business (b) E-marketing
    (c) E-commerce (d) E-procurement
    (e) None of these

14. The computer that hosts your e-mail account is known as a(n)
    (a) Host (b) E-mail client
    (c) E-mail server (d) Listserv
    (e) None of these

15. Before you can begin using e-mail, you must have a(n)
    (a) Browser (b) Modem (c) Server
    (d) Scanner (e) Account

16. Which of the following are tasks that may be comleted when configuring your e-mail client?
    (a) Provide the IP address of your ISP's mail server
    (b) Provide the name fo your e-mail account
    (c) Specify that mail is to be deleted from the host computer after it is downloaded to your computer.
    (d) All of these
    (e) None of these

17. An educational institution would generally have the following in its domain name –
    (a) .org (b) .edu (e) .inst
    (d) .com (e) .sch

18. What term is often used for an email account that includes a storage area?
    (a) IP address (b) Hyperlink
    (c) Mailbox (d) Attachment
    (e) None of these

19. Which of the following is used by the browser to connect to the location of the Internet resources?
    (a) Linkers (b) Protocol (c) Cable
    (d) URL (e) None of these

20. One can access email from anywhere with the help of
    (a) Message board (b) Weblog
    (c) Webmail interface (d) Forum
    (e) None of these

21. The connection of network which can only be attached to is
    (a) Intranet (b) Internet
    (c) Extranet (d) Virtual private network
    (e) None of these

22. To browse and search for information on the internet _____ is used
    (a) Netscape (b) Telnet
    (c) FTP (d) Eudora
    (e) None of these

23. Programs such as Internet Explorer that serve as navigable windows into the Web are called
    (a) Hypertext (b) Networks (c) Internet
    (d) Web browsers (e) None of these

24. A word in a web page that, when clicked, opens another document.
    (a) anchor (b) URL (c) hyperlink
    (d) reference (e) None of these

25. A modem
    (a) translates analog signals from a computer into digital signals that can travel along conventional telephone lines.
    (b) translates digital signals from a computer into analog signals that, can travel along conventional telephone lines.
    (c) demodulates digital signals from a computer.
    (d) modulates signals from an analog telephone line.
    (e) None of these

26. If you are going to a site you use often, instead of having to type in the address every time, you should
    (a) save it as a file (b) make a copy of it
    (c) bookmark it (d) delete it
    (e) None of the above

27. Pretty good privacy (PGP) is used in
    (a) browser security (b) email security
    (c) FTP security (d) none of the mentioned
    (e) None of these

28. A _____ is the term used when a search engine returns a Web page that matches the search criteria.
    (a) blog (b) hit (c) link
    (d) view (e) success

29. Web browser is an example of a
    (a) Client agent (b) Server agent
    (c) User agent (d) All of the above
    (e) None of these

30. The connection between your computer at home and your local ISP is called_____.
    (a) the last mile (b) the home stretch
    (c) the home page (d) the backbone
    (e) the vital mile

RESPONSE GRID					
13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	
18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	
23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	
28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ			

COMPUTER NETWORK

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   Date : ..../......../...............

1. It is the one which provides the facility of exchanging information between computing devices and is a combination of hardware and software.
    (a) Digital device   (b) Network
    (c) Peripheral   (d) Expansion board
    (e) None of these

2. The internal network of a company is very large and would like to subnet into smaller parts. From the options given below, the device that will not be used to separate LAN and still protect critical resources is
    (a) The modem between computers
    (b) A router between subnet
    (c) An internal firewall
    (d) A switch between departments
    (e) None of these

3. Which topology is used in Ethernet?
    (a) Ring   (b) Mesh
    (c) Bus   (d) Line
    (e) None of these

4. These are the components of an Ethernet LAN except
    (a) Fibre   (b) Access point
    (c) Coax   (d) STP
    (e) None of these

5. Based on the packet's address, the device that has been designed to forward packets to specific ports is
    (a) Specialty hub   (b) Filtering hub
    (c) Port hub   (d) Switching hub
    (e) None of these

6. Which one of the following devices is needed to communicate with computers using telephone lines?
    (a) VDU   (b) Modem
    (c) Disk   (d) CPU
    (e) None of these

7. To subnet LAN directly on the network server and to protect the resources of company that receives internet access through a network or gateway resources, the device which is best suited is
    (a) A router which will also act as a bridge.
    (b) VLAN
    (c) A multi-homed firewall
    (d) DSL modem
    (e) None of these

8. The benefit of using a firewall for LAN is
    (a) It provides greater security to LAN
    (b) It provide stricter access control to critical resources
    (c) Both 1 and 2
    (d) Neither 1 nor 2
    (e) None of these

9. Which one of the following requires phone line but offers faster access speed than the dial up connection?
    (a) Digital subscefer line (DSL)
    (b) Cable access
    (c) Fibre optic serving
    (d) Modem
    (e) None of these

10. When static packet filter is used on the router then the statement which is not correct for firewall protection is
    (a) Static packet filtering is less secure than stateful filtering
    (b) Static packet filtering is more secure than dynamic packet filtering
    (c) Static packet filtering is less secure than dynamic proxy filtering
    (d) All of the above
    (e) None of these

11. Which topology is used for large networks?
    (a) Bus   (b) Line
    (c) Ring   (d) Star
    (e) None of these

12. In which OSI layers a packet filtering firewall operates?
    (a) At the network
    (b) At the gateway layer
    (c) At the transport layer
    (d) All of the above
    (e) None of these

13. Which one of the following statement is not the benefit of firewall?
    (a) It limits security exposure
    (b) It is used for logging internet activity
    (c) It enforces the organizations security policy
    (d) It protects against virus
    (e) None of these

RESPONSE GRID	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ		

14. In a LAN network which one of the following allows users to share computer programs and data?
   (a) File server
   (b) Print server
   (c) Communication server
   (d) All of the above
   (e) None of these

15. The Rate of transfer of data in LAN is
   (a) Tera bits per second
   (b) Kilo bits per second
   (c) Mega bits per second
   (d) Bits per second
   (e) None of these

16. Modems are configured in such a manner that any incoming calls are automatically answered. Manufacturer provides inbuilt modems in many user computers. In this case the greatest security risk when dealing with the modems is
   (a) Server access without the knowledge of network administrator
   (b) Remote access without the knowledge of network administrator
   (c) Local access without the knowledge of network administrator
   (d) Client access without the knowledge of network administrator
   (e) None of these

17. Other than the dial-up connection, the network connection applicable to RAS is
   (a) VPN   (b) ISDN
   (c) DSL   (d) All of the above
   (e) None of these

18. IPSec is designed to provide the security at the
   (a) transport layer   (b) network layer
   (c) application layer   (d) session layer
   (e) None of these

19. Network layer firewall has two sub-categories as
   (a) stateful firewall and stateless firewall
   (b) bit oriented firewall and byte oriented firewall
   (c) frame firewall and packet firewall
   (d) All of the above.
   (e) None of these

20. WPA2 is used for security in
   (a) ethernet   (b) bluetooth
   (c) wi-fi   (d) All of the above.
   (e) None of these

21. An attempt to make a computer resource unavailable to its intended users is called
   (a) denial-of-service attack
   (b) virus attack
   (c) worms attack
   (d) botnet process
   (e) None of these

22. Extensible authentication protocol is authentication framework frequently used in
   (a) wired personal area network
   (b) wireless networks
   (c) wired local area network
   (d) all of the above.
   (e) None of these

23. PGP (Pretty good privacy) encrypts data by using a block cipher called
   (a) international data encryption algorithm
   (b) private data encryption algorithm
   (c) intrenet data encryption algorithm
   (d) all of the above.
   (e) None of these

24. When a DNS server accepts and uses incorrect information from a host that has no authority giving that information, then it is called
   (a) DNS lookup   (b) DNS hijacking
   (c) DNS spoofing   (d) all of the above.
   (e) None of these

25. What type of RJ45 UTP cable is used between switches?
   (a) Crossover cable
   (b) Straight-through
   (c) Crossover with a router in between the two switches
   (d) Crossover with a CSU/DSU
   (e) None of these

26. Which of the following are unique characteristics of half-duplex Ethernet when compared to full-duplex Ethernet?
   1. Half-duplex Ethernet operates in a shared collision domain.
   2. Half-duplex Ethernet operates in a private collision domain.
   3. Half-duplex Ethernet has lower effective throughput.
   4. Half-duplex Ethernet has higher effective throughput.
   (a) 2 only   (b) 1and 3
   (c) 2 and 4   (d) 4 only
   (e) 1, 2, 3 &4.

27. Mosaic is a
   (a) Program language (b) Operating system
   (c) Web browser   (d) Web creator
   (e) None of these

28. Ethernet is family of protocol used in
   (a) LAN   (b) MAN
   (c) WAN   (d) BIOS
   (e) None of these

29. When data is encapsulated, which is the correct order?
   (a) Data, frame, packet, segment, bit
   (b) Data, segment, packet, frame, bit
   (c) Segment, data, packet, frame, bit
   (d) Data, segment, frame, packet, bit
   (e) None of these

30. How to implement a network medium that is not susceptible to EMI. Which type of cabling should you use?
   (a) Fiber-optic cables (b) Category 5 UTP cable
   (c) Thinnet coax   (d) Thicknet coax
   (e) None of these

RESPONSE GRID					
14. ⓐⓑⓒⓓⓔ	**15.** ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ
19. ⓐⓑⓒⓓⓔ	**20.** ⓐⓑⓒⓓⓔ	**21.** ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ
24. ⓐⓑⓒⓓⓔ	**25.** ⓐⓑⓒⓓⓔ	**26.** ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ
29. ⓐⓑⓒⓓⓔ	**30.** ⓐⓑⓒⓓⓔ			

101 SPEED TEST

83

COMPUTER KNOWLEDGE SECTION TEST

Max. Marks : 20   **No. of Qs. 20**   **Time : 10 min.**   **Date : ..../........./.................**

1. Where are you likely to find an embedded operating system?

    (a) on a desktop operating system

    (b) on a networked PC

    (c) on a network server

    (d) on a PDA

    (e) on a mainframe

2. An online discussion group that allows direct "live" , communication is known as

    (a) Webcrawler

    (b) chat group

    (c) regional service provider

    (d) hyperlink

    (e) e-mail

3. Which of the following is a program that uses a variety of different approaches to identify and eliminate spam?

    (a) Directory search

    (b) Anti-spam program

    (c) Web server

    (d) Web storefront creation package

    (e) Virus

4. There is a network that can connect networks ranging from small location or area to a bigger range including public packet network and large corporate networks. That network's enterprise allows users to share access to applications, services and other centrally located resources. Its ability for a huge geographical access has transformed networking. Which among the following is that network?

    (a) SAN   (b) CAN

    (c) LAN   (d) WAN

    (e) MAN

5. Which of the following is a programming language for creating special programs like applets?

    (a) Java   (b) cable

    (c) domain name   (d) Net

    (e) COBOL

6. Which among the following is not an Object Oriented Programming Language?

    (a) Python   (b) PASCAL

    (c) Java   (d) C++

    (e) Ruby

7. System software

    (a) allows the user to diagnose and troubleshoot the device

    (b) is a programming language

    (c) is part of a productivity suite

    (d) is an optional form of software

    (e) helps the computer manage internal resources

8. Computer and communication technology, such as communication links to the Internet, that provide help and understanding to the end user is known as

    (a) presentation file   (b) information technology

    (c) program   (d) worksheet file

    (e) FTP

9. Which of the following is contained on chips connected to the system board and is a holding area for data instructions and information? (processed data waiting to be output to secondary storage)

    (a) program   (b) mouse

    (c) Internet   (d) memory

    (e) modem

10. Microsoft's Messenger allows users to

    (a) bypass a browser to surf the Web

    (b) create a blog

    (c) communicate via direct live communication

    (d) identify and eliminate spam

    (e) make graphic presentations

RESPONSE	**1.** ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
GRID	**6.** ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	**10.** ⓐⓑⓒⓓⓔ

11. Which among the following is a term representing unit of data storage in computer memory?
    (a) Pixel
    (b) Decimal
    (c) Octet
    (d) Point
    (e) Fragment

12. Which among the following carries signals that control the actions of the computer?
    (a) Control Bus
    (b) Data Bus
    (c) Memory Unit
    (d) NIC
    (e) Address Bus

13. Which is a feature included in Microsoft PowerPoint software that allows the user to see all the slides in a presentation at one time?
    (a) Slide Sorter
    (b) Slide Master
    (c) Handout Master
    (d) Slide Header
    (e) Reading View

14. A _____ code is used in retail stores to identify merchandise.
    (a) mnemonics
    (b) gray code
    (c) machine code
    (d) universal product code
    (e) access-3 code

15. What is the short-cut key to highlight the entire column?
    (a) Ctrl + Page up
    (b) Ctrl + Page down
    (c) Ctrl + Enter
    (d) Ctrl + Space bar
    (e) Ctrl + C

16. _____ can be use to send an e-mail to a large group at one time.
    (a) Group
    (b) Alias
    (c) Mail server
    (d) List server
    (e) Remote server

17. To save the current document or to open a previously saved document, _____ is used.
    (a) file menu
    (b) tools menu
    (c) view menu
    (d) edit
    (e) review menu

18. Which of the following error occurs when software tries to access protected memory?
    (a) Segmentation Fault
    (b) Display time Error
    (c) IO Error
    (d) Runtime Error
    (e) Zero Division Error

19. To organise the bookmarks, _____ can be used.
    (a) containers
    (b) folders
    (c) structure
    (d) menus
    (e) files

20. In a computer system, _____ device is functionally opposite of a keyboard.
    (a) joystick
    (b) mouse
    (c) trackball
    (d) printer
    (e) scanner

RESPONSE GRID

11. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   12. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   13. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   14. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   15. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
16. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   17. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   18. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   19. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   20. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

Max. Marks : 33   **No. of Qs. 33**   **Time : 20 min.**   **Date : ..../........./................**

1. Reserve Bank of India was established on
   (a) April 12, 1932   (b) April 1, 1935
   (c) May 2, 1943   (d) November 13, 1941
   (e) None of these

2. Reserve Bank of India was nationalised on
   (a) 21 May, 1948   (b) 13 July, 1951
   (c) 1 January, 1949   (d) 12 October, 1951
   (e) None of these

3. Which of the following is not the impact of Nationalisation?
   (a) Improved efficiency in the Banking system since the public confidence got boosted.
   (b) Sectors such as Agriculture, small and medium industries started getting funds leading to economic growth.
   (c) Increased penetration of Bank branches in the rural areas.
   (d) Flow of FDIs
   (e) None of these

4. On 19th July, 1969, the following number of commercial banks was nationalized -
   (a) 14   (b) 12
   (c) 28   (d) 24
   (e) None of these

5. Which of the following is the first commercial bank?
   (a) State Bank of India
   (b) Oudh Commercial Bank a
   (c) Union Bank of India
   (d) Indian Bank
   (e) None of these

6. State Bank of India was established on
   (a) May 2, 1951   (b) June 21, 1952
   (c) July 1, 1955   (d) August 12, 1956
   (e) None of these

7. NABARD (National Bank for Agriculture and Rural Development) was established in
   (a) 1979   (b) 1980   (c) 1981
   (d) 1982   (e) 1985

8. Regional Rural Banks were established on
   (a) July 3, 1970   (b) April 14, 1971
   (c) October 2, 1975   (d) November 23, 1978
   (e) None of these

9. Lead Bank system was started on the recommendations of
   (a) Raja Challaia Committee
   (b) Kelkar Committee
   (c) Nariman Committee
   (d) Malhotra Committee
   (e) None of these

10. Lead Bank system was started in
    (a) 1967   (b) 1968   (c) 1969
    (d) 1970   (e) 1972

11. Reserve Bank of India (RBI) follows the Minimum Reserves System in issuing currency since
    (a) 1950   (b) 1952   (c) 1954
    (d) 1956   (e) 1951

12. Reserve Bank of India started the system of ombudsman to resolve grievances of customers in
    (a) 1994   (b) 1995   (c) 1996
    (d) 1997   (e) 1998

13. The credit control methods adopted by the Reserve Bank are
    (a) Quantitative controls
    (b) Qualitative controls
    (c) Fixed controls
    (d) Both (a) and (b)
    (e) None of these

14. Which of the following Committees were appointed by the Government for restructuring the Regional Rural Development Banks?
    (a) Bhandar Committee   (b) K.Basu Committee
    (c) Raj Committee   (d) Both (a) and ((b)
    (e) None of these

15. The concept of 'Universal Banking' was implemented in India on the recommendations of:
    (a) Abid Hussain Committee
    (b) R H Khan Committee
    (c) S Padmanabhan Committee
    (d) Y H Malegam Committee
    (e) None of these

16. Oudh Commercial Bank was established in
    (a) 1878   (b) 1879   (c) 1880
    (d) 1881   (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
	16. ⓐⓑⓒⓓⓔ				

17. Which of the following is the first Private bank established based on the recommendations of the Narasimhan Committee?
   (a) UTI Bank Ltd.   (b) Union Bank
   (c) Bank of Baroda   (d) Dena Bank
   (e) None of these

18. In 1993, a Nationalized bank was merged with Punjab National Bank (PNB), what is the name of that Bank?
   (a) Bank of Baroda   (b) Global Trust Bank
   (c) New Bank of India   (d) Bank of India
   (e) None of these

19. The biggest commercial bank in India is
   (a) RBI   (b) SBI
   (c) IDBI   (d) Exim Bank of India
   (e) None of these

20. ICICI is a
   (a) Financial Institution
   (b) Rural Development Bank
   (c) Cooperative Bank
   (d) Space Research Institute
   (e) None of these

21. Which is the oldest Public Sector Bank in India?
   (a) Punjab National Bank
   (b) Dena Bank
   (c) Allahabad Bank
   (d) Oriental Bank of Commerce
   (e) None of these

22. Which of the following banks was renamed as the State Bank of India?
   (a) Bank of Madras   (b) Bank of Calcutta
   (c) Bank of Bengal   (d) Imperial Bank of India
   (e) None of these

23. Which of the following banks was the first bank of India with limited liability managed by Indian Board?
   (a) General Bank of India
   (b) Bank of Hindustan
   (c) Oudh Commercial Bank
   (d) Bank of India
   (e) None of these

24. Which of the following was not the cause of nationalization of banks in India?
   (a) The banks mostly catered to the needs of large industries, big business houses.
   (b) Sectors such as agriculture, small scale industries and exports were lagging behind.
   (c) The poor masses continued to be exploited by the moneylenders.
   (d) Banks refused to obey the rules stipulated by the government.
   (e) None of these

25. Which of the following committees gave its recommendation i.e. to allow the entry of private sector players into the banking system in 1991?
   (a) The Narsimhan committee
   (b) D R Mehta Committee
   (c) Abid Hussain Committee
   (d) B Eradi Committee
   (e) None of these

26. Which among the following is the early Indian joint stock bank surviving to the present and is now one of the largest banks in India?
   (a) Allahabad Bank
   (b) State Bank of India
   (c) Bank of Baroda
   (d) Punjab National Bank
   (e) None of these

27. In the second phase in 1980, how many more banks were nationalised?
   (a) 6   (b) 12
   (c) 4   (d) 10
   (e) None of these

28. In which year was Paper Currency Act enacted by the British Government of India?
   (a) 1872   (b) 1851
   (c) 1937   (d) 1861
   (e) None of these

29. In which year was the first bank of India 'Bank of Hindustan' established?
   (a) 1885   (b) 1921
   (c) 1770   (d) 1935
   (e) None of these

30. Which of the following banks opened a branch on a foreign soil for the first time?
   (a) State Bank of India
   (b) Bank of Punjab
   (c) Bank of Madras
   (d) Bank of India
   (e) None of these

31. In which year the Regional Rural Banks began working in India?
   (a) 1960   (b) 1962
   (c) 1975   (d) 1981
   (e) None of these

32. The earliest evidence of Banking transactions in India comes from _____ .
   (a) Vedic Era   (b) Maurya Era
   (c) Mughal Era   (d) Medieval Era
   (e) None of these

33. Which among the following are the correct locations of three presidency banks during British India?
   (a) Surat, Madras, Calcutta
   (b) Bombay, Madras, Surat
   (c) Calcutta, Bombay, Madras
   (d) Surat, Bombay, Madras
   (e) None of these

RESPONSE GRID					
	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ
	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ
	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ
	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ			

RBI AND ITS GUIDELINE

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. The 'Base rate system' which replaced BPLR in July 2010 on the recommendation of which committee?
   (a) Deepak Mohanti   (b) Ketan Parikh   (c) M. V. Nair
   (d) Basel committee   (e) None of these

2. RBI has launched which of the following initiatives following the rise of CPI and WPI based inflation?
   (a) Inflation Expectations Survey of Households
   (b) Inflation Expectations Survey of Householder
   (c) Inflation Expectation Schedule of Homes
   (d) None of the above

3. The accounting year of RBI occurs between the months of ?
   (a) April – March   (b) March – February
   (c) July – June   (d) August – July
   (e) None of these

4. In which article RBI permitted to the co-operative Banks for special Account Supervision?
   (a) Art – 30   (b) Art – 31   (c) Art – 33
   (d) Art – 32   (e) None of these

5. Who is appointed the Governor of Reserve Bank of India recently?
   (a) Dr. D. Subbarao   (b) Dr. Y. V. Reddy
   (c) Dr. Bimal Jalan   (d) R. N. Malhotra
   (e) None of these

6. The documents related to the new monotory policy passed by the Governor of RBI on?
   (a) 1 May, 2013   (b) 2 May, 2013
   (c) 3 May, 2013   (d) 4 May, 2013
   (e) None of these

7. RBI was established on _____ .
   (a) April 1, 1935   (b) August 14, 1942
   (c) May 25, 1875   (d) June 10, 1932
   (e) None of these

8. Under which act does RBI issue directives to banks?
   (a) PMLA Act, 2002
   (b) RBI Act, 1934
   (c) DICGC Act, 1961
   (d) Banking Regulation Act, 1949
   (e) None of these

9. When the Reserve Bank of India (RBI) is the lender of last resort, what does it mean?
   (a) RBI advances necessary credit against eligible securities
   (b) RBI advances money to public whenever there is any emergency
   (c) Commercial banks give fund to the RBI
   (d) All of the above
   (e) None of the above

10. Which of the following is a fully-owned subsidiary of RBI?
    (a) BRBNMPL   (b) NHB
    (c) DICGC   (d) All of the above
    (e) Only (a) and (b)

11. Open market operations of RBI refers to?
    (a) buying and selling of shares
    (b) auctioning of foreign exchange
    (c) trading in securities
    (d) transactions in gold.
    (e) None of these

12. Monetary policy in India is formulated and implemented by?
    (a) Government of India
    (b) Reserve Bank of India
    (c) Indian Banks Association
    (d) FICCI
    (e) None of these

13. Reserve bank of India follows which system for the issue of currency?
    (a) Minimum Reserve System
    (b) Proportionate Reserve System
    (c) Both of the above
    (d) None of the above
    (e) None of these

14. Which of the following controls credit creation by the commercial Banks in India?
    (a) Ministry of Finance
    (b) Reserve Bank of India
    (c) Government of India
    (d) State Bank of India
    (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. Note issuing department of Reserve Bank of India should always passes the minimum gold stock worth ?
    (a) ₹ 85 crore (b) ₹ 115 crore
    (c) ₹ 200 crore (d) None of above
    (e) None of these

16. In India which agency is entrusted with the collection of data of capital formation ?
    (a) RBI and CSO
    (b) RBI and SBI
    (c) RBI and Other Bank
    (d) CSO and NSSO
    (e) None of these

17. The Bank rate is the rate at which ?
    (a) a bank lends to the public
    (b) the RBI lends to the public
    (c) RBI gives credit to the Commercial Banks
    (d) the Government of India lends to other countries.
    (e) None of these

18. An increase in CRR by the Reserve Bank of India result in ?
    (a) decrease in debt of the government
    (b) reduction in liquidity in the economy
    (c) attracting more FDI in the country
    (d) more flow of credit to desired sectors
    (e) None of these

19. Which of the following provides the largest credit to agriculture and allied sectors ?
    (a) Co-operative Banks with RBI
    (b) Regional Rural Banks
    (c) Commercial Banks
    (d) Co-operative and Regional Rural Banks
    (e) None of these

20. Who implemented the 'Know Your Customer' (KYC) scheme for the identification of own customer/consumer?
    (a) RBI (b) SBI
    (c) ICICI (d) HDFC
    (e) None of these

21. Who is the custodian of India's Foreign Exchange Funds ?
    (a) RBI
    (b) SBI
    (c) Government of India
    (d) Central Bank
    (e) None of these

22. Who published the financial report on currency and finance?
    (a) RBI (b) CSO
    (c) WTO (d) NSSO
    (e) None of these

23. Remittance received from RBI/other chest should be examined immediately not exceeding _____ from date of receipts.
    (a) 20 Days (b) 10 Days
    (c) 15 Days (d) 30 Days
    (e) None of these

24. Which of the following authority sanctions foreign exchange for the import of goods ?
    (a) Any Nationalised Bank
    (b) Exchange Bank
    (c) Reserve Bank of India
    (d) Ministry of Finance
    (e) None of these

25. How many posts of Deputy Governor in Reserve Bank of India ?
    (a) 1 (b) 2
    (c) 3 (d) 4
    (e) None of these

26. According to the RBI Act, 1934 how much percentage of CRR could not be minimize ?
    (a) 3% (b) 2%
    (c) 4% (d) 5%
    (e) None of these

27. As of January 15, 2017, the current Repo rate is _____.
    (a) 6.75% (b) 6.50%
    (c) 6.25% (d) 7.75%
    (e) None of these

28. RBI had set up a committee to study and give suggestions on the micro-finance sector. Its chairman was ?
    (a) Y.H. Malegam (b) Abid Hussain
    (c) Bimal Jalan (d) Rakesh Mohan
    (e) None of these

29. Which among the following institutions regulates the external commercial borrowings ?
    (a) SEBI
    (b) Ministry of Finance
    (c) Ministry of Commerce
    (d) Reserve Bank of India
    (e) None of these

30. Which of the following statements is not correct ?
    (a) RBI is the Central Bank of the country
    (b) RBI is the Banker of the Central and the state Governments
    (c) RBI is the custodian of the country's Foreign Exchange Reserve
    (d) RBI was established in 1949.
    (e) None of these

RESPONSE GRID

15. ⓐⓑⓒⓓⓔ 16. ⓐⓑⓒⓓⓔ 17. ⓐⓑⓒⓓⓔ 18. ⓐⓑⓒⓓⓔ 19. ⓐⓑⓒⓓⓔ
20. ⓐⓑⓒⓓⓔ 21. ⓐⓑⓒⓓⓔ 22. ⓐⓑⓒⓓⓔ 23. ⓐⓑⓒⓓⓔ 24. ⓐⓑⓒⓓⓔ
25. ⓐⓑⓒⓓⓔ 26. ⓐⓑⓒⓓⓔ 27. ⓐⓑⓒⓓⓔ 28. ⓐⓑⓒⓓⓔ 29. ⓐⓑⓒⓓⓔ
30. ⓐⓑⓒⓓⓔ

BANKING PRODUCT AND SERVICES

Max. Marks : 21   **No. of Qs. 21**   **Time : 15 min.**   **Date : ..../........./................**

1. **Mobicash Easy** is a mobile wallet which offers facilities such as fund transfer, bill payment, balance enquiry, mini statement, mobile top-ups and DTH recharge.

   This facility has been introduced by which of the following banks?
   (a) State Bank of India
   (b) HDFC Bank
   (c) Corporation Bank
   (d) Union Bank of India
   (e) ICICI Bank

2. The Asian development Bank (ADB) and Government of India have signed loan agreement to improve rural roads.

   In this context, which of the following statement is/are correct?
   1. The loan amount is the first tranche of &800 million financing facility.
   2. The project includes the construction of 3461 km of all – weather rural roads in 5 states.
   3. The first phase of the project will be completed in December, 2015
   (a) Only 1   (b) Only 3
   (c) Both 1 & 3   (d) Both 2 &3
   (e) All are correct

3. Insurance service provided by various banks is commonly known as ....
   (a) Investment Banking
   (b) Portfolio Management
   (c) Merchant Banking
   (d) Bancassurance
   (e) Micro Finance

4. IFSC Code stands for _____.
   (a) Indian Foreign Service Code
   (b) Indian Full Service Carrier
   (c) Instant Free Space Credit
   (d) Indian Financial System Code
   (e) None of these

5. Services offered by Retail Banking include _____ .
   (a) Savings & Transactional accounts
   (b) Mortgages & Personal loans
   (c) Debit cards & Credit cards
   (d) All of the above
   (e) None of the above

6. The RBI is planning to introduce. "Plastic Currency Notes". What is/are the benefits of "Plastic Notes"?
   (1) Long shelf life.
   (2) It will replace plastic money like Credit Cards which lead to fraud.
   (3) Printing of such notes would be cheaper.
   (a) Only 3   (b) Only 2
   (c) Only 1   (d) All 1, 2 and 3
   (e) None of these

7. Which of the following is not the part of the Scheduled Banking structure in India?
   (a) Money Lenders
   (b) Public Sector Banks
   (c) Private Sector Banks
   (d) Regional Rural Banks
   (e) State Cooperative Banks

8. Small Savings Scheme like national savings certificates, Public Provident Fund, Monthly Income Schemes are popular among the salaried people. Which financial institutions manage these schemes?
   (a) Public Sector Banks (b) Commercial Banks
   (c) Post Offices   (d) Co-operative Banks
   (e) None of these

9. Which of the following is/are the right(s) of customer towards his banker?
   (a) To receive a statement of his account from a banker
   (b) To sue the bank for any loss and damages
   (c) To sue the banker for not maintaining the secrecy of his account
   (d) All of the above
   (e) None of these

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |
| | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | **8.** ⓐⓑⓒⓓⓔ | **9.** ⓐⓑⓒⓓⓔ | |

10. Which of the following factors is not required to be considered to analyze the repayment capacity of a borrower?
    (a) Working capital management
    (b) Personal educational qualifications
    (c) Financial leverage
    (d) Interest rate risk management
    (e) None of these

11. Which of the following is a facilitating service of core loan products of retail banking services?
    (a) Current or savings accounts
    (b) Legal services for documentation
    (c) Delivery of loan at promised time period
    (d) Flexibility in prepayment of loan
    (e) None of these

12. Funded Services under corporate banking does not include?
    (a) Working Capital Finance
    (b) Bill Discounting
    (c) Export Credit
    (d) Letters of Credit
    (e) None of these

13. "Swabhiman" Scheme is related-
    (a) Rich Customers of the Bank
    (b) RRBs
    (c) To provide basic banking services to bankless villages
    (d) Both (b) and (c)
    (e) None of these

14. A centralized database with online connectivity to branches, internet as well as ATM-network which has been adopted by almost all major banks of our country is known as?
    (a) Investment Banking
    (b) Core Banking
    (c) Mobile Banking
    (d) National Banking
    (e) Specialized Banking

15. The Reverse Mortgage scheme is launched to give benefit to which of the following groups of society?
    (a) Persons below 60 yrs
    (b) Senior Citizens
    (c) Unemployed youth
    (d) Orphans
    (e) All of the above

16. Which of the following scheme is not meant for investment purposes?
    (a) National saving certificate
    (b) Infrastructure bonds
    (c) Mutual funds
    (d) Letter of credit
    (e) None of these

17. Systematic investment Plans relates to:
    (a) Mutual Funds
    (b) Life Insurance Companies
    (c) Commercial Banks
    (d) Post office savings schemes
    (e) None of these

18. Which of the following is an example of cash less purchase?
    (a) Debit card
    (b) Credit card
    (c) ATM withdrawal
    (d) All of the above
    (e) None of these

19. Which one of the following is not an electronic banking delivery channel?
    (a) Mobile Vans
    (d) Mobile Phone Banking
    (c) Internet Banking
    (d) Tele Banking
    (e) ATM

20. Now-a-days Banks are selling third party products. Example of third party product is:
    (a) Mutual funds
    (b) Term deposits
    (c) Credit cards
    (d) All of these
    (e) None of these

21. What are White Label ATMs
    (a) ATMs set up and run by non-banking entities
    (b) ATMs set up and run by banking entities
    (c) ATMs in rural areas
    (d) ATMs in Defence areas
    (e) ATM set up in Uttaranchal

RESPONSE GRID	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ
	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ
	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ		

BANKING TERMS AND TERMINOLOGY

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./...............**

1. What is the full form of 'FINO', a term we see frequently in financial newspapers?
   - (a) Financial Investment Network and Operations
   - (b) Farmers' Investment in National Organisation
   - (c) Farmers Inclusion News and Operations
   - (d) Financial Inclusion Network and Operations
   - (e) None of these

2. What does the letter 'L' denote in the term 'LAF' as referred every now and then in relation to monetary policy of the RBI?
   - (a) Liquidity   (b) Liability   (c) Leveraged
   - (d) Longitudinal   (e) Linear

3. Which of the following terms is NOT a financial term?
   - (a) Investment
   - (b) El Nino effect
   - (c) Core banking Solution
   - (d) RTGS
   - (e) All are financial terms

4. The term 'Smart Money" refers to _____.
   - (a) Foreign Currency   (b) Internet Banking
   - (c) US Dollars   (d) Travelers' cheques
   - (e) Credit Cards

5. We often come across the term SWIFT in financial newspapers. What is the expanded form of this term?
   - (a) Society for Worldwide Interbank Financial Telecommunication
   - (b) Secure Worldwide Interbank Financial Telecommunication.
   - (c) Society for Worldwide Intra-bank Financial Transaction.
   - (d) Security for Worldwide Interbank Financial Transaction
   - (e) None of these

6. Many a time we read in financial newspapers about the performance of the "core sectors" in the economy. Which of the following is NOT included in the same?
   - (a) Coal   (b) Automobiles
   - (c) Steel   (d) Cement
   - (e) Oil & Petroleum

7. The Standing Committee on Finance headed by Yashwant Sinha has recommended that CSR should be mandatory for all the companies. CSR stands for

   - (a) Company Social Representation
   - (b) Company Service Responsibility
   - (c) Corporate Social Responsibility
   - (d) Corporate Security Responsibility
   - (e) None of these

8. In a bid to standardise and enhance the security features in cheque forms, it has now been made mandatory for banks to issue new format of cheques called
   - (a) CTS-2010   (b) CTS-2011   (c) CTS-2012
   - (d) CTS-2013   (e) None of these

9. The "Four Eyes" principle (mentioned by the Reserve Bank of India) refers to:
   - (a) Lenders   (b) Borrowers
   - (c) Wealth Managers (d) Micro-Fananciers
   - (e) None of these

10. NRE deposit is
    - (a) Non Resident External deposit
    - (b) Non Resident Extra deposit
    - (c) Non Resident Exchange deposit
    - (d) Non Refundable External deposit
    - (e) Non Resident Extended deposit

11. Which of the following is NOT a banking-related term?
    - (a) SME Finance   (b) Overdraft
    - (c) Drawing power   (d) Sanctioning Authority
    - (e) Equinox

12. What does the acronym LAF stand for?
    - (a) Liquidity Adjustment Fund
    - (b) Liquidity Adjustment Facility
    - (c) Liquidity Adjustment Finance
    - (d) Liquidity Adjustment Factor
    - (e) None of these

13. Which of the following terms is used in Banking Field?
    - (a) Interest rate swap (b) Input devices
    - (c) Sedimentary   (d) Zero hour
    - (e) Privilege motion

14. What is "wholesale banking"?
    - (a) It is a bank-to-bank or B2B dealing.
    - (b) It is a bank-to-customer dealing.
    - (c) It is a bank-to-trustworthy customer dealing.
    - (d) It is a bank-to-government dealing
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. Trade between India and China is in a state of "Payment imbalance". What does this mean in real terms?
    (1) China imports less from India but India imports more from China.
    (2) China delays payments to exporters.
    (3) India wants payments in US Dollars but wants to pay in Yuan.
    (a) Only 1   (b) Only 2   (c) Only 3
    (d) All 1, 2 and 3   (e) None of these

16. Banks are promoting "Branch less Banking" which means?
    (1) Banks will not reduce number of branches. Number of branches will be restricted and will concentrate on specified core business.
    (2) Banks will launch/operate multiple delivery channels like ATMs, Mobile Banking/Internet Banking etc making visit to a branch unnecessary.
    (3) Banks will issue only debit or credit cards for daily financial transactions. Cheques/Cash payment will not be allowed.
    (a) Only 1   (b) Only 2
    (c) Only 1 and 2   (d) Only 2 and 3
    (e) All 1, 2 and 3

17. NBFCs are an important part of the Indian financial system. What is the full form of this term?
    (a) New Banking Financial Companies
    (b) Non-Banking Financial Companies
    (c) Neo Banking Financial Confederation
    (d) Non-Banking Fiscal Companies
    (e) All of these

18. BCSBI stands for
    (a) Banking Codes and Standards Board of India
    (b) Banking Credit and Standards Board of India
    (c) Banking Codes and Service Board of Inida.
    (d) Banking Credit and Service Board of India.
    (e) None of these

19. What does the term 'bancassurance' mean ?
    (a) Assurance from the bank to its account holder regarding safety of his money
    (b) A special product designed by the bank
    (c) Selling of insurance policies by banks
    (d) Understanding between banks and insurance companies
    (e) None of these

20. **SEZ** stands for:
    (a) Southern Economic Zone
    (b) South European zone
    (c) Special Economic Zone
    (d) Special Eastern Zone
    (e) None of these

21. The abbreviation **IRDA** stands for:
    (a) Industrial Research and Development Authority of India
    (b) Insurance Research and Development Authority of India
    (c) Insurance Regulation Development Authority of India
    (d) Industrial Research and Demands Agency
    (e) None of these

22. Hard Currency is defined as currency :
    (a) which can hardly be used for international transactions
    (b) which is used in times of war
    (c) which loses its value very fast
    (d) traded in foreign exchange market for which demand is persistently relative to the supply
    (e) None of these

23. The terms "bull" and "bear" are used in the :
    (a) Bihar Government's Animal Husbandry Department
    (b) Income Tax Department
    (c) CBI
    (d) Stock Exchange
    (e) None of these

24. We read a term 'ECB' in the financial newspapers. What is the full form of ECB?
    (a) Essential Credit and Borrowing
    (b) Essential Commercial Borrowing
    (c) External Credit and Business
    (d) External Commercial Borrowing
    (e) None of these

25. Green Banking means
    (a) financing of irrigation projects by banks
    (b) development of forestry by banks
    (c) financing of environment friendly projects by banks
    (d) development of Railway by banks.
    (e) None of these

26. DTAA stands for
    (a) Direct Tariff Avoidance Agreement
    (b) Double Taxation Avoidance Agreement
    (c) Direct Taxation Avoidance Agreement
    (d) Double Tariff Avoidance Agreement
    (e) None of these

27. The rate at which the Reserve Bank of India lends to the commercial banks in very short term against the backing of the Government securities is known as?
    (a) Bank rate   (b) Repo rate
    (c) Reverse Repo   (d) Discount rate
    (e) None of these

28. A letter of credit (LC) wherein the credit available to the customer gets reinstated after the bill is paid is known as?
    (a) Back to back LC   (b) Red clause LC
    (c) Back to front LC   (d) Revolving LC
    (e) None of these

29. Which of the following is not an imperfect note?
    (a) Washed note   (b) Bleached note
    (c) Mutilated note   (d) Oiled note
    (e) None of these

30. Which of the following is not shown as an asset in the balance sheet of a BanK?
    (a) Investment   (b) Advances
    (c) Cash Balances with other banks
    (d) Borrowings
    (e) None of these

RESPONSE GRID					
15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ
30. ⓐⓑⓒⓓⓔ				

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GENERAL ECONOMICS

Max. Marks : 28　　　**No. of Qs. 28**　　　**Time : 20 min.**　　　**Date : ..../........./...............**

1. Which sector of Indian economy contributes longest to Gross National Product?
   - (a) Primary sector
   - (b) Secondary sector
   - (c) Tertiary sector
   - (d) Public sector
   - (e) None of these

2. The main source of National Income in India is-
   - (a) Service sector
   - (b) Agriculture
   - (c) Industrial sector
   - (d) Trade sector
   - (e) None of these

3. Which one of the following is not a tax levied by the government of India ?
   - (a) Service tax
   - (b) Education
   - (c) Custom duty
   - (d) Toll tax
   - (e) None of these

4. The most appropriate measure of a country's economic growth is its-
   - (a) Gross Domestic Product (GDP)
   - (b) Net Domestic Product (NDP)
   - (c) Net National Product (NNP)
   - (d) Per Capita Product (PCP)
   - (e) None of these

5. FEMA (Foreign Exchange Management (Act) was finally implemented in the year
   - (a) 1991
   - (b) 1997
   - (c) 2002
   - (d) 2007
   - (e) None of these

6. The most common measure of estimating inflation in India is-
   - (a) Price Index
   - (b) Wholesale Price Index
   - (c) Consumer Price Index
   - (d) Price Index of Industrial Goods
   - (e) None of these

7. The largest share of Gross Domestic Product (GDP) in India comes from-
   - (a) Agriculture and allied sectors
   - (b) Manufacturing sectors
   - (c) Service sector
   - (d) Defence and Public Administration
   - (e) None of these

8. The policy of liberalisation, privatisation and globalisation was announced as new economic policy by prime minister-
   - (a) Vishwanath Pratap Singh
   - (b) Rajeev Gandhi
   - (c) Narsimha Rao
   - (d) Atal Bihari Vajpayee
   - (e) None of these

9. The National Income of India is estimated by-
   - (a) National Sample Survey Organization
   - (b) Ministry of Finance
   - (c) Reserve Bank of India
   - (d) Central Statistical Organization
   - (e) None of these

10. In the last one decade, which of the following sectors has attracted the highest foreign direct investment inflows into India?
    - (a) Chemicals other than fertilizers
    - (b) Services sector
    - (c) Food processing
    - (d) Telecommunication
    - (e) None of these

11. The Current five year plan 2012-17 is also known as _____ .
    - (a) 10th five year plan
    - (b) 12th five year plan
    - (c) 11th five year plan
    - (d) 9th five year plan
    - (e) None of these

12. In India, which one among the following formulates the fiscal policy?
    - (a) Planning Commission
    - (b) Finance Commission
    - (c) Finance Ministry
    - (d) Reserve Bank of India
    - (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. In which of the following financial years the devaluation of rupee in India took place twice?
    (a) 1966-67   (b) 1991-92
    (c) 1990-91   (d) 1989-90
    (e) None of these

14. VAT is imposed-
    (a) On first stage of production
    (b) Directly on consumer
    (c) On all stages between production and final sale
    (d) On final stage of production
    (e) None of these

15. Term Balance of payment is used in relation to which of the following?
    (a) Annual sale of a factory
    (b) Tax collection
    (c) Exports and imports
    (d) None of the above
    (e) None of these

16. The Indian economy can be described as
    (a) a backward and stagnant economy
    (b) a developing economy
    (c) an underdeveloped economy
    (d) a developed economy
    (e) None of these

17. Distribution and administration of all currency is done by the ………………… as an agent of the Government of India.
    (a) World Bank
    (b) Reserve Bank of India
    (c) State Bank of India
    (d) Finance Department
    (e) None of these

18. ……....... refers to the withdrawal of currency from circulation which is done to ambush black market currency and unaccounted money.
    (a) Devaluation   (b) Decentralisation
    (c) Denomination   (d) Demonetization
    (e) None of these

19. The multi-dimensional poverty index of UNDP includes
    (a) 8 indicators   (b) 10 indicators
    (c) 12 indicators   (d) 14 indicators
    (e) None of these

20. Which of the following is responsible for the preparation and publication of "Economic Survey"?
    (a) Planning Commission
    (b) NSSO
    (c) Ministry of Finance
    (d) RBI
    (e) None of these

21. Which of the following is primary sector of Indian Economy?
    (a) Mining   (b) Business
    (c) Community   (d) Agriculture
    (e) None of these

22. When the national income is measured at the base year price, it is called national income at …………….
    (a) Constant price   (b) Indirect taxes
    (c) Factor Cost   (d) Current year price
    (e) None of these

23. ………………….. is the total money value of all final goods and services produced within the geographical boundaries of the country during a given period of time.
    (a) Nominal GDP
    (b) Real GDP
    (c) Gross National Product
    (d) Gross Domestic Product
    (e) None of these

24. GDP in a country is usually calculated by ……………………
    (a) International Monetary Fund
    (b) National Statistical Agency
    (c) System of National Accounts
    (d) Central Statistical Agency
    (e) None of these

25. Which of the following gives final approval to the five year plans?
    (a) Planning Commission
    (b) National Development Council
    (c) NITI Aayog
    (d) National Income committee
    (e) None of these

26. The Economy of India is the ……………………. largest in the world by nominal GDP and the third-largest by purchasing power parity.
    (a) Second   (b) Seventh
    (c) Sixth   (d) Sixteenth
    (e) None of these

27. The new W.P.I. series was introduced on ?
    (a) 1 April, 2010   (b) 1 July, 2010
    (c) 15 August, 2010   (d) 14 September, 2010
    (e) None of these

28. How many deputy members in the Finance Commission ?
    (a) 1   (b) 2
    (c) 3   (d) 4
    (e) None of these

RESPONSE GRID	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ
	28. ⓐⓑⓒⓓⓔ				

FOREIGN TRADE

Max. Marks : 24   **No. of Qs. 24**   **Time : 15 min.**   **Date : ..../........./................**

1. The new EXIM policy announced in 1992, is for a period of ?
   - (a) 3 years
   - (b) 4 years
   - (c) 7 years
   - (d) 5 years
   - (e) None of these

2. The commodities are exported to India by arid and semi-arid countries in the Middle East ?
   - (a) Raw wool and carpets
   - (b) Fruits and palm oil
   - (c) Stones and pearls
   - (d) Perfume and coffee
   - (e) None of these

3. The earlier name of WTO was ?
   - (a) UNCTAD
   - (b) GATT
   - (c) UNIDO
   - (d) OECD
   - (e) None of these

4. 'World Development Report' is an annual publication of ?
   - (a) UNDP
   - (b) IBRD
   - (c) WTO
   - (d) IMF
   - (e) None of these

5. India has the maximum volume of foreign trade with ?
   - (a) USA
   - (b) Japan
   - (c) Germany
   - (d) UAE
   - (e) None of these

6. In the last one decade, which one among the following sectors has attracted the highest FDI inflows into India ?
   - (a) Chemicals
   - (b) Services sector
   - (c) Food processing
   - (d) Telecommunication
   - (e) None of these

7. Participatory notes (PNs) are associated with which one of the followings ?
   - (a) Consolidated food
   - (b) Foreign Institutional Investors
   - (c) UNDP
   - (d) Kyoto protocal
   - (e) None of these

8. What is the purpose of India Brand-Equity Fund ?
   - (a) To promote in bound tourism
   - (b) To make 'Made in India' a label of quality
   - (c) To organise trade fairs
   - (d) To provide venture capitals to IT sector
   - (e) None of these

9. A trade policy consists of :
   - (a) Export-Import policy
   - (b) Licencing policy
   - (c) Dumping
   - (d) Double pricing
   - (e) None of these

10. FERA in India has been replaced by ?
    - (a) FEPA
    - (b) FEMA
    - (c) FENA
    - (d) FETA
    - (e) None of these

11. TRIPS and TRIMS are the term associated with ?
    - (a) IMF
    - (b) WTO
    - (c) IBRD
    - (d) IDA
    - (e) None of these

12. SEZ act was passed by the parliament in the year ?
    - (a) 2004
    - (b) 2005
    - (c) 2006
    - (d) 2007
    - (e) None of these

13. Which is known as the 3rd pillar in international economics relations ?
    - (a) IMF
    - (b) World Bank
    - (c) WTO
    - (d) GATT
    - (e) None of these

14. Which of the followings given countries are the new members of WTO ?
    - (a) Tajikisthan and Laos
    - (b) Russia and Vanauto
    - (c) Combodia and Myanmar
    - (d) Kenya and Burundi
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. How many members recently in WTO ?
    - (a) 158
    - (b) 159
    - (c) 160
    - (d) 161
    - (e) None of these

16. During 2016, India's foreign direct investment (FDI) grew _____ data released by the Department of Industrial Policy and Promotion (DIPP).
    - (a) 16%
    - (b) 18%
    - (c) 17%
    - (d) 12%
    - (e) None of these

17. According to a report released by Stockholm International Peace Research Institute (SIPRI). Which of the following countries is the world's largest importer of major arms during 2012-16.
    - (a) China
    - (b) Pakistan
    - (c) India
    - (d) Saudi Arabia
    - (e) None of these

18. The United Nations Commission on International Trade Law (UNCITRAL), celebrated its golden jubilee in New Delhi last year. Where is the headquarter of UNCITRAL?
    - (a) Paris
    - (b) Vienna
    - (c) Geneva
    - (d) London
    - (e) None of these

19. India on November 18, 2016 signed a new double tax avoidance pact with which country?
    - (a) UK
    - (b) Oman
    - (c) Cyprus
    - (d) Saudi Arabia
    - (e) None of these

20. Which country has recently become the top crude oil supplier to India?
    - (a) Saudi Arabia
    - (b) Iraq
    - (c) Bangladesh
    - (d) Iran
    - (e) None of these

21. With which country India has signed an agreement on February 14, 2017 to boost bilateral trade and enhance economic cooperation?
    - (a) Croatia
    - (b) Hungary
    - (c) Serbia
    - (d) Germany
    - (e) None of these

22. During the first half of 2016-17 telecom sector gets $ .....foreign direct investment (FDI).
    - (a) 2.78 billion
    - (b) 2.98 billion
    - (c) 3.20 billion
    - (d) 3.41 billion
    - (e) None of these

23. Which of the following sectors got the maximum FDI inflow during April-September period of 2016-17?
    - (a) Trading
    - (b) Computer hardware & softwear
    - (c) Automobiles
    - (d) Telecom
    - (e) None of these

24. Who inaugurated India International Trade Fair 2016 in Delhi?
    - (a) PM Narendra Modi
    - (b) President Pranab Mukherjee
    - (c) Rajnath Singh
    - (d) Arvind Kejirwal
    - (e) None of these

RESPONSE GRID	15. (a)(b)(c)(d)(e)	16. (a)(b)(c)(d)(e)	17. (a)(b)(c)(d)(e)	18. (a)(b)(c)(d)(e)	19. (a)(b)(c)(d)(e)
	20. (a)(b)(c)(d)(e)	21. (a)(b)(c)(d)(e)			

DIGITAL BANKING

Max. Marks : 23   **No. of Qs. 23**   **Time : 15 min.**   Date : ..../........../................

1. Name the Andriod App launched by the Mobile Wallet Payment Firm MobikWik to enable easy digital payment service in area with slow internet connection.
   - (a) MobiKwik Pay
   - (b) MobiKwik Easy
   - (c) MobiKwik Connect
   - (d) MobiKwik Lite
   - (e) None of these

2. India's first cashless township has been inaugurated in which state on February 13, 2017?
   - (a) Rajasthan
   - (b) Kerala
   - (c) Gujarat
   - (d) Haryana
   - (e) None of these

3. What is the name of the instant chat service launched by Citi Bank on February 16, 2017 to resolve the customers queries instantly?
   - (a) Citibank Online
   - (b) Citibank Chat
   - (c) Instant CitiChat
   - (d) CitiInstant
   - (e) None of these

4. Which of the following countries is not a member of ASEAN?
   - (a) Thailand
   - (b) Vietnam
   - (c) Myanmar
   - (d) Brazil
   - (e) None of these

5. Project 'Sankalp' is associated with the eradication of -
   - (a) Polio
   - (b) HIV/AIDS
   - (c) Illiteracy
   - (d) Tuberculosis
   - (e) None of these

6. The World Environment Day is celebrated on which of the following days ?
   - (a) Oct. 5
   - (b) August 5
   - (c) July 5
   - (d) June 5
   - (e) None of these

7. The third ministrial level SAARC summit held in the country-
   - (a) India
   - (b) Nepal
   - (c) Dhaka
   - (d) Laos
   - (e) None of these

8. Which of the following has been launched by Intel India to promote government's Digital India initiative?
   - (a) Vikas Kendras
   - (b) Yuva Kendras
   - (c) Unnati Kendras
   - (d) Kaushal Kendras
   - (e) None of these

9. Which of the following became the first public sector company to raise funds with the launch of its 'Green Masala Bond' on the London Stock Exchange (LSE)?
   - (a) BHEL
   - (b) ONGC
   - (c) SAIL
   - (d) NTPC
   - (e) None of these

10. Guidelines for 'on tap' Licensing of Universal Banks in the Private Sector were released by RBI recently. Industrial houses, whose income from non-banking sources is over of total will not be eligible to set up a universal bank in the couontry.
   - (a) 10 per cent
   - (b) 20 per cent
   - (c) 30 per cent
   - (d) 40 per cent
   - (e) None of these

11. Which of the following is the website launched by the Reserve Bank of India along with other financial sector regulators to address the menace of illegal deposit taking money pooling?
   - (a) www.bag.rbi.org.in
   - (b) www.sachet.rbi.org.in
   - (c) www.wallet.rbi.org.in
   - (d) www.packet.rbi.org.in
   - (e) None of these

12. Project Ananya is a digital banking initiative of which of the following banks?
   - (a) Federal Bank
   - (b) Karur Vysya Bank
   - (c) Indian Bank
   - (d) Syndicate Bank
   - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. License to issue digital signature certificates are issued by:
 (a) Finance Minister (b) Banks
 (c) Controller (d) None of the above
 (e) None of these
14. Smart Cards are based in _____ standards?
 (a) SET (b) MIME
 (c) HTTP (d) TULIP
 (e) None of these
15. Digital signature certificated are issued by:
 (a) Central Government
 (b) State Governmant
 (c) Certifying Authority
 (d) None of the above
 (e) None of these
16. The customer access E-banking services using:
 (a) PC (b) PDA
 (c) ATM (d) All of the above
 (e) None of these
17. Who can pass the law for e-banking?
 (a) SBI (b) Parliament
 (c) RBI (d) Merchant Association
 (e) None of these
18. Securer electronic transaction is a :
 (a) Protocol (b) Transaction type
 (c) Security agency (d) JSP
 (e) None of these
19. Internet Saathi is—
 (a) A digital education initiative, launched in 2015, by Tata Trust and Google.
 (b) A new mobile hand set develped by HCL
 (c) A digital initiative launched by Ministry of Information Technology

 (d) A digital initiative launched by Ministry of Communication in collaboration with MicroSoft.
 (e) None of these
20. Which of the following organizations / companies has / have associated with MobiKwik to educate rural people enabling cashless transaction?
 (a) Tata Trusts (b) Google India
 (c) Micro Soft (d) Both (a) and (b)
 (e) None of these
21. What is 'BHIM' ?
 (a) It is a re-branded version of UPI and USSD
 (b) It is an app for popularizing Hindi in non-Hindi speaking states
 (c) It is an animation film based on Bhima-a character of Mahabharata.
 (d) It is an epic
 (e) None of these
22. 'Suvidha (e) Prepaid Card' has been launched by –
 (a) UCO Bank (b) SBI
 (c) IDBI Bank (d) ICICI Bank
 (e) None of these
23. Consider the following facts about 'Lakshami' and choose the correct code given below :
 I. Lakshami is a bank robot.
 II. City Union Bank is the first Indian bank to introduce it into banking sector.
 III. HDFC banks is the second in the race.
 The correct code is–
 (a) I is correct
 (b) I, II and III are correct
 (c) III is correct
 (d) None is correct
 (e) None of these

RESPONSE GRID
13. ⓐⓑⓒⓓⓔ 14. ⓐⓑⓒⓓⓔ 15. ⓐⓑⓒⓓⓔ 16. ⓐⓑⓒⓓⓔ 17. ⓐⓑⓒⓓⓔ
18. ⓐⓑⓒⓓⓔ 19. ⓐⓑⓒⓓⓔ 20. ⓐⓑⓒⓓⓔ 21. ⓐⓑⓒⓓⓔ 22. ⓐⓑⓒⓓⓔ
23. ⓐⓑⓒⓓⓔ

Max. Marks : 25   **No. of Qs. 25**   **Time : 20 min.**   **Date : ..../........./................**

1. Laser walls and smart sensors are soon to be launched at which of the given International borders of India to safeguard from terrorists attacks?
   (a) India-Myanmar International Borders
   (b) India-Bangladesh International Borders
   (c) India-Nepal International Borders
   (d) India-Sri Lanka International Borders
   (e) None of these

2. Which state's Power Corporation has been awarded with "Best Performing Power Distribution Utility in Power Sector" by Central Board of Irrigation & Power (CBIP)?
   (a) Uttar Pradesh Power Corporation Limited
   (b) Jammu and Kashmir State Power Development Corporation Limited
   (c) Telangana Power Generation Corporation Limited
   (d) Punjab State Power Corporation Limited
   (e) None of these

3. .... examine the behaviour of basic elements in the economy including individual agents and market and their interaction.
   (a) Macro Economics
   (b) Modern Economy
   (c) Micro Economics
   (d) Open Economy
   (e) None of these

4. India has signed a $375 million pact for loans and grants to develop 800 km Visakhapatnam-Chennai Industrial Corridor with which of the Regional Development Banks?
   (a) African Development Bank (AfDB)
   (b) Asian Development Bank (ADB)
   (c) European Bank for Reconstruction and Development (EBRD)
   (d) Inter-American Development Bank (IDB)
   (e) None of these

5. Which of the following state governments has set up an online system called sex ratio monitoring dashboard as part of the 'Beti Bachao, Beti Padhao' Scheme to monitor the sex ratio?
   (a) Uttar Pradesh   (b) Haryana
   (c) Bihar   (d) Tamil Nadu
   (e) None of these

6. With the launch of project Rajasthan Heart Attack Treatment programme (RAHAT) to provide people timely treatment in heart attacks, Rajasthan became the second state in the country. Which is the first?
   (a) Tamil Nadu   (b) Kerala
   (c) Jharkhand   (d) Madhya Pradesh
   (e) None of these

7. Which of the following agreements was not signed by India and Rwanda during Vice-president Mohd Hamid Ansari's recent visit to Rwanda?
   (a) Bilateral air service agreement
   (b) Agreement for exemption of visa requirements for diplomatic and service passports
   (c) Agreement for establishment of an Entrepreneurship Development Centre
   (d) Agreements on redressal of trade grievances
   (e) None of these

8. Maharashtra Government has approved a Rs. 250 crore Cloud Seeding Programme during 2017. What is it all about?
   (a) To check cyber threats
   (b) To check border infiltrations
   (c) To produce sufficient rain
   (d) To check the piracy of various apps
   (e) None of these

9. Which of the following sets of associate/subsidiary banks has merged with the State Bank of India (SBI) recently?
   (a) State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore
   (b) State Bank of Patiala, State Bank of Mysore, Bharatiya Mahila Bank, State Bank of Saurashtra, State Bank of Indore
   (c) State Bank of Bikaner and Jaipur, Bharatiya Mahila Bank, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore
   (d) State Bank of Bikaner and Jaipur, State Bank of Saurashtra, State Bank of Mysore, State Bank of Patiala and State Bank of Travancore
   (e) None of these

| **RESPONSE GRID** | **1.** ⓐⓑⓒⓓⓔ | **2.** ⓐⓑⓒⓓⓔ | **3.** ⓐⓑⓒⓓⓔ | **4.** ⓐⓑⓒⓓⓔ | **5.** ⓐⓑⓒⓓⓔ |
| | **6.** ⓐⓑⓒⓓⓔ | **7.** ⓐⓑⓒⓓⓔ | **8.** ⓐⓑⓒⓓⓔ | **9.** ⓐⓑⓒⓓⓔ | |

10. The National Action Plan for Children, 2016 (NPAC) has been developed by which Ministry?
    (a) Ministry of Youth Affairs and Sports
    (b) Ministry of Law and Justice
    (c) Ministry of Health and Family Welfare
    (d) Ministry of Women & Child Development
    (e) None of these

11. Which state has launched a special scheme 'Dulari Kanya' on January 26, 2017 to check infant mortality in the state?
    (a) Goa   (b) Assam
    (c) Manipur   (d) Arunachal Pradesh
    (e) None of these

12. Who has been appointed as the interim CEO of India Post Payment Bank (IPPB)?
    (a) Sunita Sharma   (b) A P Singh
    (c) Shashi Arora   (d) Shinjini Kumar
    (e) None of these

13. Which ministries have signed an MoU in 2016 to boost the skill initiatives in the Hydrocarbon Sector?
    (a) Ministry of Heavy Industries and Public Enterprises, Ministry of Skill Development and Entrepreneurship
    (b) Ministry of Skill Development and Entrepreneurship, Ministry of Petroleum and Natural Gas
    (c) Ministry of Chemical and Fertilizer, Ministry of Petroleum and Natural Gas
    (d) Ministry of Petroleum and Natural Gas, Ministry of Human Resource
    (e) None of these

14. The largest uniformed youth organization National Cadet Corps (NCC) on November 27, 2016, celebrated its _____ raising day in New Delhi.
    (a) 68   (b) 64
    (c) 65   (d) 66
    (e) None of these

15. Global Citizen Festival was organised in which city?
    (a) Jaipur   (b) New Delhi
    (c) Pune   (d) Mumbai
    (e) None of these

16. The 2017 Global Investors' Summit (GIS) was held in which city of Jharkhand on February 16-17, 2017?
    (a) Jamshedpur   (b) Dhanbad
    (c) Ranchi   (d) Bokaro Steel City
    (e) None of these

17. 9th BRICS Summit's first Sherpas meeting was in _____
    (a) Nanjing   (b) Xinjiang
    (c) Shanghai   (d) Beijing
    (e) None of these

18. Which global investors summit in Jharkhand was held in Khelgaon, Ranchi?
    (a) Momentum Jharkhand
    (b) Go Jharkhand
    (c) Move Jharkhand
    (d) Change Jharkhand
    (e) None of these

19. South Asian Speakers Summit 2017 was held at?
    (a) Indore   (b) Bhopal
    (c) Jabalpur   (d) Mumbai
    (e) None of these

20. Where was the first Indian Seed Congress held?
    (a) Kolkata   (b) Mumbai
    (c) Delhi   (d) Chennai
    (e) None of these

21. What is NxGnMiFu-2017?
    (a) An international conference on next gen technologies
    (b) A global mining and fuel industries conference
    (c) Both of the above
    (d) Neither of the above

22. 1st NE Investors Summit was held in which city?
    (a) Shillong   (b) Jorhat
    (c) Dispur   (d) Aizawl
    (e) None of these

23. Heart of Asia Ministerial Conference adopted which declaration recognising terrorism as the biggest threat?
    (a) Amritsar Declaration
    (b) Istanbul Declaration
    (c) Kabul Declaration
    (d) Kashmir Declaration
    (e) None of these

24. Where will 1st International Agrobiodiversity Congress be held?
    (a) Patiala   (b) New Delhi
    (c) Ludhiana   (d) Chennai
    (e) None of these

25. BRICS Nations inked three agreements during which summit held in Goa, India on 16th Oct, 2016?
    (a) 8th   (b) 9th
    (c) 10th   (d) 11th
    (e) None of these

RESPONSE GRID					
10. ⓐⓑⓒⓓⓔ	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ
15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ
20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ
25. ⓐⓑⓒⓓⓔ				

AWARDS AND HONOURS

Max. Marks : 22   **No. of Qs. 22**   **Time : 20 min.**   Date : ..../......../................

1. Dr Sonam Wangchuk who won Rolex Global Enterprise Award belongs to which state?
   (a) Meghalaya   (b) Himachal Pradesh
   (c) Jammu & Kashmir (d) Arunachal Pradesh
   (e) None of these
2. The best Album of the year award has been won by _____ at the 59th Annual Grammy Awards on February 12, 2017.
   (a) "25" - Adele
   (b) "Lemonade" - Beyoncé
   (c) "A Sailor's Guide to Earth" - Sturgill Simpson
   (d) "Purpose" - Justin Bieber
   (e) None of these
3. Name the female singer and scriptwriter who has won the most number of awards at the 59th Annual Grammy Awards?
   (a) Kate Bush   (b) Leona Lewis
   (c) Lilly Alen   (d) Adele
   (e) None of these
4. Which movie has won the Best Film award at the 2017 BAFTA awards?
   (a) La La Land
   (b) Fences
   (c) Lion
   (d) Manchester by the Sea
   (e) None of these
5. Who has been honoured with the Candidate Master (CM) title by the World Chess Federation body, FIDE on February 14, 2017?
   (a) Paul Motwani   (b) Harshad S
   (c) Kush Bhagat   (d) Sathish Chandra
   (e) None of these
6. Who has been honoured with the 'Sportsman of the Year' award at the 2017 Laureus World Awards on February 14, 2017?
   (a) Tyson Gay   (b) Asafa Powell
   (c) Maurice Greene   (d) Usain Bolt
   (e) None of these
7. Which health institution has won the Kayakalp Award under the central government hospitals category on February 15, 2017 for maintaining high standards of sanitation and hygiene?
   (a) All India Institutes of Medical Sciences, New Delhi
   (b) Regional Institute of Health and Medical Sciences, Shillong
   (c) National Institute of Tuberculosis and Respiratory Diseases, Delhi
   (d) North Eastern Indira Gandhi Postgraduate Institute of Medical Education and Research, Chandigarh
   (e) None of these
8. Which company has been placed at the top position in the list of 2017 World's Most Admired Companies by FORTUNE?
   (a) Amazon.com   (b) Apple
   (c) Flipkart   (d) Berkshire Hathaway
   (e) None of these
9. Which bank has won the 2017 National MSME Excellence Award on February 10, 2017?
   (a) Canara Bank   (b) HDFC Bank
   (c) Corporation Bank (d) ICICI Bank
   (e) None of these
10. Which renowned Hindi scholar has been named for the 2016 Vyas Samman?
    (a) Vishwanath Tripathi
    (b) Kamal Kishore Goyenka
    (c) Surendra Verma
    (d) Sunita Jain
    (e) None of these
11. Who has been conferred with the 2017 Legendary Award by the Brand Laureate?
    (a) Marck Zuckerburg
    (b) Ratan Tata
    (c) Shah Rukh Khan
    (d) Lata Mangeshkar
    (e) None of these
12. Which Indian cricketer has been inducted into the Legends Club 'Hall of Fame' on January 17, 2017?
    (a) Mohammad Azharuddin
    (b) Sachin Tendulkar
    (c) Kapil Dev
    (d) Ravi Shastri
    (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. Which among the following personalities got the India's highest civilian awards 2016 ?
    (a) Madan Mohan Malaviya
    (b) Manmohan Singh
    (c) Deendayal Upadhyaya
    (d) L.K. Advani
    (e) None of these

14. Manoj Kumar Panday who was the recipient of Param Vir Chakra 2016 belongs to which of the following military regiment or rifles?
    (a) Rajputana Rifles   (b) 1/11 Gorkha Rifles
    (c) 18 Grenadiers   (d) 13 JAK Rifles
    (e) None of these

15. Who among the following personality awarded the Dronacharya award 2016?
    (a) P. Gopichand
    (b) Jitu Rai
    (c) Mahavir Singh Phogat
    (d) Ravi Shastri
    (e) None of these

16. Name the recipient of Bharat Ratna 2015 who was also awarded the "Best Parliamentarian" in 1994?
    (a) Madan Mohan Malaviya
    (b) Manmohan Singh
    (c) Deendayal Upadhyaya
    (d) Atal Bihari Vajpayee
    (e) None of these

17. Which of the following the Padam Vibhushan 2016 recipient who is renowned Indian classical singer of the Seniya and Banaras gharanas?
    (a) V. K. Aatre   (b) Girija Devi
    (c) Avinash Dixit   (d) Jagmohan
    (e) None of these

18. In which field Sundar Menon given Padam Shri 2016 award?
    (a) Public Affair   (b) Social Work
    (c) Medicine   (d) Arts
    (e) None of these

19. Shri Shiva Thapa who was Arjun award recipient of 2016 belongs to which game?
    (a) Football   (b) Cricket
    (c) Athletics   (d) Boxing
    (e) None of these

20. What is the field of contribution of Dipa karmakar who was the recipient of the Rajiv Gandhi Khel Ratna 2016?
    (a) Badminton   (b) Gymnastics
    (c) Shooting   (d) Wrestling
    (e) None of these

21. Who among the following sports person from Para-Athletics given Arjuna award 2016?
    (a) Ms. Vinesh
    (b) Shri Amit Kumar
    (c) Shri Sandeep Singh Mann
    (d) Shri Virender Singh
    (e) None of these

22. Find out the recipient of Dhyan Chand Award 2016?
    (a) Ms. Satti Geetha
    (b) Shri Sylvanus Dung Dung
    (c) Shri Raghunath V.R.
    (d) Both A & B
    (e) None of these

| **RESPONSE GRID** | **13.** ⓐⓑⓒⓓⓔ | **14.** ⓐⓑⓒⓓⓔ | **15.** ⓐⓑⓒⓓⓔ | **16.** ⓐⓑⓒⓓⓔ | **17.** ⓐⓑⓒⓓⓔ |
| | **18.** ⓐⓑⓒⓓⓔ | **19.** ⓐⓑⓒⓓⓔ | **20.** ⓐⓑⓒⓓⓔ | **21.** ⓐⓑⓒⓓⓔ | **22.** ⓐⓑⓒⓓⓔ |

BOOKS AND AUTHORS

Max. Marks : 49   **No. of Qs. 49**   **Time : 20 min.**   **Date : ..../........./...............**

1. The novel of Jhumpa Lahiri which has been longlisted for Man Booker Prize 2013?
   - (a) The Highland
   - (b) The Lowland
   - (c) The Midland
   - (d) The Island
   - (e) The Wetland

2. Pax Indica is recently authored book by?
   - (a) Narendra Modi
   - (b) Aral Bihai Vajpayee
   - (c) Shashi Tharoor
   - (d) A P J Abdul Kalam
   - (e) None of these

3. Name the author who was conferred with Saraswati Samman for her collection of poems in Malayalam,
   - (a) Sugatha Kumari
   - (b) Sangam Kumari
   - (c) Monali Kumari
   - (d) Vishakha Kumari
   - (e) Krishna Kumari

4. Which American author has won Man Booker International Prize 2013?
   - (a) Lydia Davis
   - (b) Laura Paul
   - (c) Maria Freeman
   - (d) Dave Smith
   - (e) Cary Jones

5. Who is the author of "The Outsider"?
   - (a) Jimmy Connors
   - (b) Amartya Sen
   - (c) Jean Dreze
   - (d) Zeenat Shaukat
   - (e) Salman Rushdie

6. Who is the author of "A Garland of Memories"?
   - (a) Michael Bush
   - (b) Ruskin Bond
   - (c) Salman Rushdie
   - (d) Phil Smith
   - (e) None of these

7. Name the book authored by Garima Sanjay which was released by Hamid Ansari. The book highlights how a man blames the luck or someone for his failures?
   - (a) Yaadein
   - (b) Smritiyan
   - (c) Divine Journey
   - (d) Lucky Me
   - (e) Man by Nature

8. Who is the author of "Women of Vision"?
   - (a) Amish Tripathi
   - (b) Preeti Shenoy
   - (c) Durjoy Dutta
   - (d) Alam Srinivas
   - (e) Ravinder Singh

9. Who among the following is the author of the book "An Uncertain Glory: India and its contradictions"?
   - (a) Amartya Sen
   - (b) Arundhati Roy
   - (c) A.P.J. Kalam
   - (d) Ramachandra Guha
   - (e) None of these

10. Who is the author of "Understanding Bhagat Singh"?
    - (a) Pritish
    - (b) Chamanlal
    - (c) Zeenat Shaukat
    - (d) Raghuvendra
    - (e) None of these

11. Which among the following book written by Dan Brown Irked authorities of Manila?
    - (a) Inferno
    - (b) Iterno
    - (c) Divinity
    - (d) Divine Nation
    - (e) My Nation

12. Name The book compiled by Kumar Deepak das and recently released by Vice President
    - (a) Patriotic India
    - (b) Heroes of India
    - (c) Looking back
    - (d) Ardent Patriot-Dinesh Goswami
    - (e) None of these

13. Who among the following is the author of "Orphan Master's son"?
    - (a) Adam Johnson
    - (b) Michael Johnson
    - (c) Jim Herley
    - (d) Nick Fergusan
    - (e) None of these

14. Who among the following is the author of "Religion, Law & Society - Across the Globe"?
    - (a) Salman Rushdie
    - (b) Tahir Mahmood
    - (c) Jim Herley
    - (d) Mohd.Raza
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. Who among the following is the author of "How to Get Filthy Rich in Rising Asia"?
    (a) Mohsin Hamid   (b) Tahir Mahmood
    (c) Mohd Hamid   (d) Mohd.Qazi
    (e) Mohamed Yusuf

16. Who has written the book "Walking with Lions: Tales from a Diplomatic Past"?
    (a) P.Chidambaram   (b) K.Natwar Singh
    (c) Sashwant Sinha   (d) Jaswant Singh
    (e) Manmohan Singh

17. Which among the following books is written by Sugatha Kumari which means The Writing on the Sand in English?
    (a) Mazalenhu   (b) Manalezhuthu
    (c) Panalhuthu   (d) Kanalpunthu
    (e) None of these

18. Name the Minister who has Released Book Titled Indian Saga of Steel
    (a) Digvijay Singh   (b) Akhilesh Yadav
    (c) Beni Prasad Verma (d) Narayan Swamy
    (e) Kapil Sibbal

19. Who is the author of the book 'Nineteen Eighty Four'?
    (a) Thomas Hardy   (b) Emile Zola
    (c) George Orwell   (d) Walter Scott
    (e) None of these

20. Which of the following books has been written by Vikram Seth?
    (a) My God Died Young
    (b) Islamic Bomb
    (c) Look Back in Anger
    (d) A Suitable Boy
    (e) None of these

21. Who has written the book 'My Frozen Turbulence in Kashmir'?
    (a) Anees Jung   (b) Jagmohan
    (c) M.J.Akbar   (d) Nissim Ezekiel
    (e) None of these

22. 'A Voice for Freedom' is a book written by
    (a) Corazon Aquino
    (b) Nayantara Sahgal
    (c) Aung San Suu Kyi
    (d) Benazir Bhutto
    (e) None of these

23. Who wrote 'War and Peace'?
    (a) Leo Tolstoy   (b) Mahatma Gandhi
    (c) Charles Dickens   (d) Kipling
    (e) None of these

24. Which of the book was written by Graham Greene?
    (a) O' Jerusalem   (b) The Power and Glory
    (c) Crisis in India   (d) Of Human Bondage
    (e) None of these

25. The famous book 'Anandmath' was authored by
    (a) Sarojini Naidu
    (b) Bankim Chandra Chottapadhya
    (c) Sri Aurobindo
    (d) Rabindrnath Tagore
    (e) None of these

26. Who wrote the book 'Reminiscences of the Nehru Age'?
    (a) C.D.Deshmukh
    (b) Dr. P.C.Alexander
    (c) M.O.Mathai
    (d) S.C.Rajagopalachari
    (e) None of these

27. Which of the following is a biography of the Lady Mountbatten?
    (a) Edwina Mountbatten - A Life of Her Own.
    (b) Edwina Mountbatten - Her relationship with Nehru
    (c) Mountbatten
    (d) Edwina Mountbattten
    (e) None of these

28. Who is the author of the book 'My Experiments with Truth'?
    (a) Mahatma Gandhi
    (b) Michael Anderson
    (c) Winston Churchill
    (d) Jarnes Morris
    (e) None of these

29. Who is the writer of 'Swamy and Friends'?
    (a) Munshi Premchand
    (b) Raman
    (c) Max Muller
    (d) R. K. Narayan
    (e) None of these

RESPONSE GRID					
15. ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ	
20. ⓐⓑⓒⓓⓔ	**21.** ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ	
25. ⓐⓑⓒⓓⓔ	**26.** ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ	

30. 'The Naked Face', a very popular book is written by
    (a) Dominique Lapierre
    (b) Larry Collins
    (c) Sidney Sheldon
    (d) Juan Benet
    (e) None of these

31. 'A Secular Agenda' is a book written by
    (a) Arun Shourie
    (b) Mani Shankar Aiyar
    (c) Prem Shankar Jha
    (d) M.J. Akbar
    (e) None of these

32. The book named 'Three Decades in Parliament' is a collection of the speeches of
    (a) A. B. Vajpayee   (b) Somnath Chatterjee
    (c) L. K. Advani   (d) N. G. Ranga
    (e) None of these

33. The famous character 'Pickwick' was created by
    (a) Steven Spielberg   (b) Leo Tolstoy
    (c) Walt Disney   (d) Charles dickens
    (e) None of these

34. The creator of 'Sherlock Holmes' was
    (a) Arthur Conan Doyle
    (b) Ian Fleming
    (c) Dr. Watson
    (d) Shakespeare
    (e) None of these

35. Who is the author of book 'We Indians'?
    (a) Nirad C. Choudry   (b) Subramaniya Swamy
    (c) Khushwant Singh   (d) Muluk Raj Anand
    (e) None of these

36. 'India of our Dreams' is a book written by
    (a) Dr. S. Radhakrishnan
    (b) Dr. C. Subramanian
    (c) M.V. Kamath
    (d) Dr. Rajendra Prasad
    (e) None of these

37. Who is the author of the book - 'Preparing for the Twenty - First Century'?
    (a) Larry Collins   (b) V.S. Naipul
    (c) V.R. Krishna Iyer   (d) Paul Kennedy
    (e) None of these

38. Who is the author of famous book 'The Judgement'?
    (a) Anthony Mascarenhasa
    (b) R. Vankataraman
    (c) Kuldip Nayar
    (d) Janardhan Turkur
    (e) None of these

39. Who is the author of the book 'No Full Stops in India'?
    (a) Raj Mohan Gandhi
    (b) Shyam lal
    (c) E.M. Forster
    (d) Mark Tully
    (e) None of these

40. Who has written the book 'Kashmir - Behind the Vale'?
    (a) L. Ramdas
    (b) Lt. Gen. Dipendra Singh
    (c) M. J. Akbar
    (d) Lt. Gen. S. C. Sardeshpande
    (e) None of these

41. 'Eight Lives' is a book written by
    (a) Raja Ramana
    (b) Savita Ambedkar
    (c) Mahesh Yogi
    (d) Raj Mohan Gandhi
    (e) None of these

42. Who is the author of the book 'Freedom Behind Bars'?
    (a) Kiran Bedi   (b) Jawaharlal Nehru
    (c) Sheikh Abdullah   (d) Nelson Mandela
    (e) None of these

43. The book 'A Farewell to Arms' was written by
    (a) Charles Dickens   (b) Ernest Hemingway
    (c) Thomas Hardy   (d) Huxley
    (e) None of these

44. Who has won the Gyan Peeth Award for her book 'Yama'?
    (a) Maheswari Devi
    (b) Asha Poorna Devi
    (c) Amrita Preetam
    (d) Mahadevi Verma
    (e) None of these

RESPONSE GRID	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ
	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ
	40. ⓐⓑⓒⓓⓔ	41. ⓐⓑⓒⓓⓔ	42. ⓐⓑⓒⓓⓔ	43. ⓐⓑⓒⓓⓔ	44. ⓐⓑⓒⓓⓔ

45. Who is the author of the novel 'Les Miserable'?
    (a) Victor Hugo   (b) ALium tofler
    (c) G.Wynne   (d) Fedric
    (e) None of these

46. The original name of 'Mahabharata' is
    (a) Katha Saritsagar (b) Jai Samhita
    (c) Vrahat Katha   (d) Rajatarangini
    (e) None of these

47. Who has written the famous book 'Mankind and Mother Earth'?
    (a) Arnold Toynbee   (b) Leo Tolstoy
    (c) John Ruskin   (d) Bertrand Russel
    (e) None of these

48. Who is the author of the book 'Naked Triangle'?
    (a) R.K.Narayan   (b) Amrita Pritam
    (c) Balwant Gargi   (d) Khushwant Singh
    (e) None of these

49. The controversial documentary 'Hell's Angel' broadcasted by Channel 4 on Independent British Television Station is based on who among the following?
    (a) Joseph Stalin   (b) Adolf Hitler
    (c) Mother Teresa   (d) Saddam Hussein
    (e) None of these

RESPONSE GRID	45. ⓐⓑⓒⓓⓔ	46. ⓐⓑⓒⓓⓔ	47. ⓐⓑⓒⓓⓔ	48. ⓐⓑⓒⓓⓔ	49. ⓐⓑⓒⓓⓔ

SPORTS

Max. Marks : 30   **No. of Qs. 30**   **Time : 20 min.**   **Date : ..../........./................**

1. Which country won the ICC under 19 world cup 2016?
   - (a) India
   - (b) Pakistan
   - (c) Australia
   - (d) West Indies
   - (e) None of these

2. Which of the following is not true about ICC under 19 world cup?
   - (a) Mehedi Hasan of Bangladesh declared the Man of The Series.
   - (b) Shimron Hetmyer was the skipper of west Indies
   - (c) Unmukt chand was the skipper of Indian team
   - (d) Final match was played at the Sher- e- Bangla National Stadium.
   - (e) None of these

3. Which of the following is Not Correct about Ranji Trophy 2016?
   - (a) Mumbai defeated Saurashtra in the final
   - (b) Mumbai won this trophy 44 times
   - (c) Karnataka won this trophy 8 times
   - (d) Aditya tare was the skipper of Mumbai team
   - (e) None of these

4. Which country won the badminton Asia team championship?
   - (a) Japan
   - (b) China
   - (c) Indonesia
   - (d) South Korea
   - (e) None of these

5. Where were South Asian Games held in February 2016?
   - (a) Pakistan
   - (b) Sri Lanka
   - (c) Bangladesh
   - (d) India
   - (e) None of these

6. Which of the following is not true about South Asian Games?
   - (a) These games are held in India
   - (b) Tikhor was the mascot for these games
   - (c) These games were 14th in the order
   - (d) India was the topper of table list
   - (e) None of these

7. Anirban lahiri is associated with the game of……………………
   - (a) POLO
   - (b) Golf
   - (c) Badminton
   - (d) Tennis
   - (e) None of these

8. Who is the author of the Book "Going for Gold"?
   - (a) Nanda Menon
   - (b) Shiv Kumar Verma
   - (c) Abhinav Bindra
   - (d) Shushil Kumar
   - (e) None of these

9. Who won the Hockey India League 2016?
   - (a) Punjab warriors
   - (b) Kalinga lancers
   - (c) Ranchi Rhinos
   - (d) None of these
   - (e) None of above

10. Who won the Dubai Tennis Championship?
    - (a) Rafel Nadal
    - (b) Roger Federar
    - (c) Novak Djokovic
    - (d) Stan Wawrinka
    - (e) None of above

11. Which of the following trophy is not related to the cricket?
    - (a) Cooch-Behar Trophy
    - (b) Jawahar lal Nehru cup
    - (c) Wisden Trophy
    - (d) Rovers Cup
    - (e) None of these

12. When was the first world cup of cricket held?
    - (a) 1975
    - (b) 1953
    - (c) 1979
    - (d) 1928
    - (e) None of these

13. India won the cricket world cup (50 over format) in…….
    - (a) 1971
    - (b) 1973
    - (c) 1983
    - (d) 1991
    - (e) None of these

14. Where was the first cricket world cup (50 over format) held?
    - (a) Australia
    - (b) West indies
    - (c) England
    - (d) England and Australia (Combined)
    - (e) None of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	

15. Which of the following term is not related to the cricket?

    (a) Pitch   (b) Wide

    (c) Popping Crease   (d) Dribbling

    (e) None of these

16. Who was the winner of first T-20 Cricket world cup?

    (a) Australia   (b) West Indies   (c) India

    (d) Pakistan   (e) None of these

17. What is the length of cricket crease?

    (a) 3 feet   (b) 4 feet   (c) 5 feet

    (d) 3.5 feet   (e) None of these

18. Whose autobiography is "Playing it my way"?

    (a) Vinod kambli   (b) Sachin Tendulkar

    (c) Kapil Dev   (d) Ravi Shashtri

    (e) None of these

19. Who is the author of the book "OPEN"?

    (a) Andre Agassi   (b) Rafel Nadal

    (c) Martina Hingis   (d) Serena Williams

    (e) None of these

20. Who is the author of the book "Day of Grace"?

    (a) Tiger Woods   (b) M. Navratilova

    (c) Arthur Ashe   (d) Michael Holding

    (e) None of these

21. When was IPL started?

    (a) 2008   (b) 2009   (c) 2007

    (d) 2006   (e) None of these

22. Which player has made highest numbers of runs in IPL history?

    (a) Suresh Raina   (b) Virat Kohli

    (c) Chris Gayle   (d) Murli Vijay

    (e) None of these

23. Which player has taken most numbers of wickets in IPL so far?

    (a) Lasith Malinga   (b) Ravindra Jadeja

    (c) Zaheer Khan   (d) None of the above

    (e) None of these

24. Which team has never won the IPL tournament?

    (a) Deccan Chargers

    (b) Sunrisers Hyderabad

    (c) Rajasthan Royals

    (d) Royal Challengers Bangalore

    (e) None of these

25. Maximum how many foreign players can play in the playing eleven of the IPL match?

    (a) 3

    (b) 5

    (c) 4

    (d) Not fixed, depends on the decision of captain of the team

    (e) None of these

26. Who has hit most sixes in all the IPL tournaments?

    (a) Rohit Sharma   (b) Suresh Raina

    (c) Chris Gayle   (d) AB de Villiers

    (e) None of these

27. Which team has won highest numbers of IPL matches so far?

    (a) Chennai Super Kings

    (b) Mumbai Indians

    (c) Royal Challengers Bangalore

    (d) Kolkata Knight Riders

    (e) None of these

28. Which player has taken most numbers of hat-tricks in the IPL so far?

    (a) Yuvraj Singh   (b) Praveen Kumar

    (c) Amit Mishra   (d) Shane Watson

    (e) None of these

29. Who has taken most catches in the IPL history so far?

    (a) Suresh Raina   (b) AB de Villiers

    (c) Rohit Sharma   (d) Dwayne Bravo

    (e) None of these

30. What will be the prize money for IPL 2017 tournament?

    (a) ₹ 11 crore   (b) ₹ 7.5 crore

    (c) ₹ 20 crore   (d) ₹ 15 crore

    (e) None of these

RESPONSE GRID	**15.** ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ	**18.** ⓐⓑⓒⓓⓔ	**19.** ⓐⓑⓒⓓⓔ
	20. ⓐⓑⓒⓓⓔ	**21.** ⓐⓑⓒⓓⓔ	**22.** ⓐⓑⓒⓓⓔ	**23.** ⓐⓑⓒⓓⓔ	**24.** ⓐⓑⓒⓓⓔ
	25. ⓐⓑⓒⓓⓔ	**26.** ⓐⓑⓒⓓⓔ	**27.** ⓐⓑⓒⓓⓔ	**28.** ⓐⓑⓒⓓⓔ	**29.** ⓐⓑⓒⓓⓔ
	30. ⓐⓑⓒⓓⓔ				

95

SOCIO-ECO-POLITICAL ENVIRONMENT OF INDIA

Max. Marks : 38   **No. of Qs. 38**   **Time : 20 min.**   **Date : ..../......../................**

1. Swabhiman scheme launched in India is associated with
   (a) Rural women rights   (b) Rural old people care
   (c) Rural banking   (d) Rural food security
   (e) None of these

2. In which one of the following years the unorganised workers social security Act was passed ?
   (a) 2004   (b) 2006   (c) 2008
   (d) 2010   (e) None of these

3. Tendulkar Committee has estimated that in India the percentage of the population below poverty line is-
   (a) 27.2   (b) 37.2   (c) 22.2
   (d) 32.7   (e) None of these

4. Swadhar is the scheme for
   (a) unique identification
   (b) self employment for males
   (c) women in difficult circumstances
   (d) common home of senior citizens.
   (e) None of these

5. The aim of Pradhan Mantri Gramodaya Yojana is
   (a) Meeting rural needs like primary education, health care, drinking water, housing, rural roads.
   (b) Alleviating poverty through microenterprises.
   (c) Generating employment in rural areas.
   (d) Strengthening Panchayati Raj system in rural areas.
   (e) None of these

6. Twenty Point Economic Programme was first launched in the year
   (a) 1969   (b) 1975   (c) 1977
   (d) 1980   (e) None of these

7. In India disguised unemployment is a prominent feature mainly of
   (a) Primary sector   (b) Secondary sector
   (c) Tertiary sector   (d) Social sector
   (e) None of these

8. Golden Quadrangle project is associated with the development of
   (a) Highways   (b) Ports
   (c) Power Grids   (d) Tourism Network
   (e) None of these

9. Which one of the following is the objective of National Food Security Mission ?
   (a) To increase production of rice
   (b) To increase production of wheat
   (c) To increase production of pulses
   (d) All the above
   (e) None of these

10. Mid day Meal scheme is financed and managed by-
    (a) Food and civil supply department of state governments
    (b) Department of consumer affairs and welfare.
    (c) Ministry of Programme implementation
    (d) Ministry of Human Resource development
    (e) None of these

11. Which of the following is not a measure of reducing inequalities ?
    (a) Minimum needs programme
    (b) Liberalization of economy
    (c) Taxation
    (d) Land reforms
    (e) None of these

12. Which one of the following scheme subsumed the Valmiki Awas Yojana ?
    (a) Integrated Housing and slum development Programme.
    (b) Sampoorna Grameen Swarozgar Yojana
    (c) Rajiv Awas Yojana
    (d) Integrated Rural development Programme
    (e) None of these

13. Poverty level in India is established on the basis of-
    (a) Per capita income in different states
    (b) House hold average income
    (c) House hold consumer expenditure
    (d) Slum population in the country.
    (e) None of these

14. Nirmal Bharat Abhiyan Yojana is associated with-
    (a) Development of villages
    (b) Community toilets in slum areas
    (c) Construction of house for low income groups
    (d) Development of roads
    (e) None of these

15. Which of the following scheme is not for rural development ?
    (a) PMGSY   (b) SGSY   (c) RGGVY
    (d) SJSRY   (e) None of these

16. Who is the chairman of 20th law commission ?
    (a) Justice A.R. Lakshmanan
    (b) Justice P.V. Reddy
    (c) Justice D.K. Jain
    (d) Justice J.L. Kapoor.
    (e) None of these

17. Under which project India is developing guided missile destroyers?
    (a) Project 20B   (b) Project 15B
    (c) Project 75B   (d) Project 40A
    (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ			

18. E-Samiksha is an online project monitoring system launched by _____?
    (a) Indian Railways   (b) NHAI   (c) RBI
    (d) FIPB   (e) None of these

19. Name the campaign launched by Bengaluru based NGO, Association for Promoting Social Action (APSA) to create awareness against child trafficking and missing children in the city.
    (a) Every 5 Minutes   (b) Every 1 Minutes
    (c) Every 8 Minutes   (d) Every 5 Seconds
    (e) None of these

20. When is the World Toilet Day celebrated?
    (a) November 19   (b) March 21
    (c) April 18   (d) February 20
    (e) None of these

21. Who is the head of the committee formed to verify the availability of night shelters?
    (a) Justice M. Patanjali Sastri
    (b) Justice Kailash Gambhir
    (c) Justice Kailas Nath Wanchoo
    (d) Justice Amal Kumar Sarkar
    (e) None of these

22. The twenty-second session of the Conference of the Parties (COP 22) is held in which country?
    (a) Russia   (b) Egypt   (c) Morocco
    (d) Sudan   (e) None of these

23. According to the World Health Organization (WHO), which virus is not an emergency any more?
    (a) Zika   (b) Sindbis Fever
    (c) Tanapox   (d) Oropouche Fever
    (e) None of these

24. When is Qaumi Ekta Week observed in India?
    (a) December 25 to December 31
    (b) November 19 to November 25
    (c) March 20 to March 26
    (d) April 1 to April 7
    (e) None of these

25. 'Parippida Mission' is launched by which state to ensure housing for all?
    (a) Bihar   (b) Haryana
    (c) Uttar Pradesh   (d) Kerala
    (e) None of these

26. The National Career Service (NCS) facility for youth and Jeevan Praman facility to EPFO pensioners through Post Offices has been launched in which state on February 12, 2017?
    (a) Indore, Madhya Pradesh
    (b) Guwahati, Assam
    (c) Chennai, Tamil Nadu
    (d) Hyderabad, Telangana
    (e) None of these

27. The first floating elementary school for drop outs has been inaugurated in which state of India?
    (a) Assam   (b) West Bengal
    (c) Manipur   (d) Goa
    (e) None of these

28. Which of the following villages in Maharashtra has been adopted by cricketer Sachin Tendulkar for transformation under Sansad Adarsh Gram Yojna?

    (a) Donja village   (b) Gardi village
    (c) Dhasai village   (d) Gondala village
    (e) None of these

29. Which of the following states organised the two-day UNESCO Natural Heritage Festival 2017?
    (a) Assam   (b) Himachal Pradesh
    (c) Goa   (d) Uttarakhand
    (e) None of these

30. The E-Prison project has been launched in which state on February 13, 2017 to digitalize the record of the jail inmates?
    (a) Haryana   (b) Gujarat
    (c) Andhra Pradesh   (d) Jammu & Kashmir
    (e) None of these

31. The West Bengal government has carved out which town as a separate district from Darjeeling on February 14, 2017?
    (a) Pedong   (b) Kalimpong
    (c) Sonada   (d) Kurseong
    (e) None of these

32. As per the 2017 State of Global Air report, India has the world's highest air pollution related deaths only after which country?
    (a) Russia   (b) China   (c) France
    (d) Bangladesh   (e) None of these

33. The Union Cabinet on February 15, 2017, has approved setting up Food Legumes Research Platform (FLRP) in which state?
    (a) West Bengal   (b) Haryana
    (c) Madhya Pradesh   (d) Gujarat
    (e) None of these

34. The three day International Conference on NexGen Technologies for Mining and Fuel Industries 2017 was organized in which Indian city?
    (a) New Delhi   (b) Jaipur
    (c) Hyderabad   (d) Bhopal
    (e) None of these

35. Which state inaugurated the campaign against Drug Addiction on February 15, 2017 to make the state completely drug free?
    (a) Bihar   (b) West Bengal
    (c) Himachal Pradesh   (d) Punjab
    (e) None of these

36. When is the World Radio Day observed?
    (a) February 10   (b) February 13
    (c) February 12   (d) February 11
    (e) None of these

37. The National Pension System (NPS) has been launched by which bank on February 16, 2017 to provide financial security in the form of pension to senior citizens?
    (a) Karnataka Bank Limited
    (b) South Indian Bank
    (c) Federal Bank
    (d) Catholic Syrian Bank
    (e) None of these

38. What is the rank of India in the Global Talent Competitiveness Index (GTCI) 2017?
    (a) 29   (b) 63
    (c) 92   (d) 96
    (e) None of these

RESPONSE GRID

18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ
28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ
33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ
38. ⓐⓑⓒⓓⓔ				

FUNDAMENTALS OF MARKETING, PRODUCT AND BRANDING

Max. Marks : 50   **No. of Qs. 50**   **Time : 30 min.**   **Date : ..../........./...............**

1. Marketing is:
   (a) Only selling
   (b) meeting human & social needs while earning profits
   (c) focus on customer
   (d) focus on producing goods/ service
   (e) Both (b) and (c)

2. Long term objective of marketing is
   (a) customer satisfaction
   (b) profit maximisation
   (c) cost cutting
   (d) profit maximisation with customer
   (e) None of these

3. Market information means
   (a) knowledge of companies
   (b) cross-country information
   (c) knowledge of related markets
   (d) knowledge of current customers
   (e) None of these

4. Marketing and Selling are
   (a) not required if profit is high
   (b) not required if sales are high
   (c) not required in monopolistic conditions
   (d) All of the above
   (e) None of these

5. Direct Marketing is neccessary for
   (a) having a focussed approach
   (b) boosting sales
   (c) better customer contacts
   (d) All of the above
   (e) None of these

6. Marketing is required for
   (a) boosting production
   (b) reducing costs
   (c) boosting profits
   (d) improving customer service
   (e) All of the above

7. Marketing is successful when
   (a) demand exceeds supply
   (b) supply exceeds demand
   (c) exports are heavy and costly
   (d) salesmen are effective
   (e) All the above

8. In marketing the benefits of selling extend to
   (a) Only products and services
   (b) Only after sales services
   (c) Lifelong relationship with the buyer
   (d) All of these
   (e) None of these

9. A Market Plan is _____.
   (a) company's prospectus
   (b) Memorandum of Association
   (c) document for marketing strategies
   (d) business goals
   (e) action plan for better production

10. Marketing helps in _____.
    (a) boosting production
    (b) getting new clients
    (c) interacting with strangers
    (d) All of these
    (e) None of these

11. Marketing is the art of _____.
    (a) buying more   (b) paying more
    (c) selling more   (d) talking more
    (e) only (a) & (b)

12. Selling is _____.
    (a) different from Marketing
    (b) a sub-function of marketing
    (c) same as Marketing
    (d) more than Marketing
    (e) All of these

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ			

13. Social Marketing is _____.
    (a) Share market prices
    (b) Marketing by the entire society
    (c) Internet Marketing
    (d) Marketing for a social cause
    (e) Society bye-laws

14. Marketing is the combined study of
    (a) Buyer's behaviour and consumer tasks
    (b) Product demand and Product supply
    (c) Brand building and Publicity
    (d) Sales force abilities and customer response
    (e) All of the above

15. The sales process begins with
    (a) customer identification
    (b) lead generation
    (c) sales presentation
    (d) sales closure
    (e) sales meet

16. XXX is selecting and analyzing a target market and developing a marketing mix to gain long-run competitive advantages. XXX is creating a.
    (a) Corporate strategy   (b) Target design
    (c) Mix strategy   (d) Marketing strategy
    (e) None of these

17. Critical success factors for a firm includes _____.
    (a) Changing lifestyles and attitudes
    (b) Low-cost production efficiency
    (c) Both (a) and (b)
    (d) Marketing strategy
    (e) None of the above

18. A differentiated product may be unique by itself but it will only be successful only _____ .
    (a) if it satisfies customers' needs
    (b) if price differential is minimal
    (c) if brand can be classed as aspirational
    (d) differentiated products will always be successful
    (e) None of these

19. Establishing and maintaining a distinctive place in the market for an organization/product is _____.
    (a) Profiling   (b) Profiling segmentation
    (c) Segmentation   (d) Positioning
    (e) None of these

20. _____ of ad means how frequently you should expose your target group to your message.
    (a) Frequency   (b) Copy

(c) Copy strategy   (d) Media
    (e) None of these

21. Market is divided into groups on the basis of age, family size, gender, income, occupation, education, religion, race, generation, nationality, or social class is the best description of _____ .
    (a) Demographics   (b) Psychographics
    (c) Behavioral   (d) Geographic
    (e) None of these

22. What approach should a brand manager adopt to know the status of a brand in terms of consumer perceptions?
    (a) Compare two or three brands
    (b) Analyze market segmentations
    (b) Select potential target markets
    (c) Understand customer's needs
    (e) None of these

23. Introducing additional items in the same product category by adding new flavors, forms, colors, ingredients or package sizes, under the same brand name, is _____.
    (a) Line extensions   (b) Product mix
    (c) Interactive marketing   (d) Service intangibility
    (e) None of these

24. To investigate new markets _____ management function is important.
    (a) Finance functions.   (b) Marketing.
    (c) Production.   (d) HRM.
    (e) None of these

25. _____ is a "category killer".
    (a) Products which stock must have products that need to be stocked by retailers due to consumer demand like Coca Cola & Kellogg's.
    (b) These are speciality stores with a deep product line to be sold in restricted shop space
    (c) These are retail outlets with a narrow product focus but sell products at low prices by bulk buying, low margins and selling high volumes
    (d) These are retail outlets with a wide product focus but with a wide width and depth to products
    (e) These are retail outlets with a narrow product focus but with wide width and depth

26. Product life cycle theory maximizes profit at.
    (a) Developed Stage   (b) Early Stage
    (c) Matured Stage   (d) Declined Stage
    (e) Cannot be predicted

RESPONSE GRID					
	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ
	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ
	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	26. ⓐⓑⓒⓓⓔ	

27. Marketing Plans are used for
    (a) doing Research by Marketing students
    (b) planning Departments
    (c) purchase of consumable items from retail outlets
    (d) All of the above
    (e) None of these

28. Product mix means
    (a) distributing mix products
    (b) collecting ideas to sell better
    (c) satisfying the customer
    (d) bundle of products required by the customer
    (e) products designed by the company

29. Buyer Resistance' means _____.
    (a) Buyer's interest in the product
    (b) Buyer being aggressive with the seller
    (c) Buyer's hesitation in buying the product
    (d) Buyer becoming a seller
    (e) Buyer purchasing the product

30. Direct Marketing is useful for _____ .
    (a) Designing Products
    (b) Sending e-mails
    (c) Increased production
    (d) Bigger job opportunities
    (e) None of these

31. Good marketing is no accident, but a result of careful planning and _____.
    (a) execution   (b) selling
    (c) strategies   (d) research
    (e) None of these

32. Marketing management is _____.
    (a) managing the marketing process
    (b) monitoring the profitability of the company's products and services
    (c) the art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering, and communicating superior customer value
    (d) developing marketing strategies to move the company forward
    (e) None of these

33. If a firm is practicing _____, the firm is training and effectively motivating its customer-contact employees and all of the supporting service people to work as a team to provide customer satisfaction.
    (a) double-up marketing
    (b) interactive marketing
    (c) service marketing
    (d) internal marketing
    (e) None of these

34. Adding new features to a product is advocated by which of the approaches?
    (a) Product Approach
    (b) Production Approach
    (c) Marketing Approach
    (d) Selling Approach
    (e) None of these

35. When a company distributes its products through a channel structure that includes one or more resellers, this is known as _____.
    (a) Indirect marketing
    (b) direct marketing
    (c) multi-level marketing
    (d) integrated marketing
    (e) None of these

36. In marketing theory, every contribution from the supply chain adds _____ to the product.
    (a) value   (b) costs
    (c) convenience   (d) ingredients
    (e) None of these

37. Anything that can be offered to a market for attention, acquisition, use, or consumption that might satisfy a want or need is called a(n):
    (a) idea   (b) demand
    (c) product   (d) service
    (e) None of these

38. Marketing is both an "art" and a "science" there is constant tension between the formulated side of marketing and the _____ side.
    (a) creative `   (b) selling
    (c) management   (d) behaviour
    (e) None of these

39. Holistic marketers achieve profitable growth by expanding customer share, _____, and capturing customer lifetime value.
    (a) undermining competitive competencies
    (b) building customer loyalty
    (c) milking the market for product desires
    (d) renewing a customer base
    (e) None of these

RESPONSE GRID	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ
	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ
	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ		

40. The act of trading a desired product or service to receive something of value in return is known as which key concept in marketing?
    (a) product
    (b) exchange
    (c) production
    (d) customer
    (e) None of these

41. The most basic level of a product is called the_____.
    (a) core product.
    (b) central product.
    (c) fundamental product.
    (d) augmented product.
    (e) None of these

42. Which one of the following statements by a company chairman BEST reflects the marketing concept?
    (a) We have organized our business to satisfy the customer needs
    (b) We believe that marketing department must organize to sell what we produce
    (c) We try to produce only high quality, technically efficient products
    (d) We try to encourage company growth in the market
    (e) None of these

43. Companies selling mass consumer goods and services such as soft drinks, cosmetics, air travel, and athletic shoes and equipment spend a great deal of time trying to establish a superior brand image in markets called _____.
    (a) business markets
    (b) global markets
    (c) consumer markets
    (d) nonprofit and governmental markets
    (e) service markets

44. Which of the following is the most recent stage of marketing evolution?
    (a) Marketing department era
    (b) Production era
    (c) Sales era
    (d) Marketing company era
    (e) None of these

45. The controllable variables a company puts together to satisfy a target group is called the _____.
    (a) Marketing strategy
    (b) Marketing mix

(c) Strategic planning
(d) Marketing concept
(e) None of these

46. Which of the following is not an element of the marketing mix?
    (a) Distribution.
    (b) Product.
    (c) Target market.
    (d) Pricing.
    (e) None of these

47. In relationship marketing firms focus on _____ relationships with _____.
    (a) short-term; customers and suppliers
    (b) long-term; customers and suppliers
    (c) short-term; customers
    (d) long-term; customers
    (e) None of these

48. Which of the following statements is correct?
    (a) Marketing is the term used to refer only to the sales function within a firm.
    (b) Marketing managers don't usually get involved in production or distribution decisions.
    (c) Marketing is an activity that considers only the needs of the organization; not the needs of society as a whole.
    (d) Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.
    (e) None of these

49. The term marketing refers to:
    (a) new product concepts and improvements.
    (b) advertising and promotion activities.
    (c) a philosophy that stresses customer value and satisfaction.
    (d) planning sales campaigns
    (e) None of these

50. Buying and selling of mass consumer goods and services comes under which of the following markets?
    (a) Business markets
    (b) Global markets
    (c) Consumer markets
    (d) Government markets
    (e) None of these

RESPONSE GRID					
40. ⓐ ⓑ ⓒ ⓓ ⓔ	41. ⓐ ⓑ ⓒ ⓓ ⓔ	42. ⓐ ⓑ ⓒ ⓓ ⓔ	43. ⓐ ⓑ ⓒ ⓓ ⓔ	44. ⓐ ⓑ ⓒ ⓓ ⓔ
45. ⓐ ⓑ ⓒ ⓓ ⓔ	46. ⓐ ⓑ ⓒ ⓓ ⓔ	47. ⓐ ⓑ ⓒ ⓓ ⓔ	48. ⓐ ⓑ ⓒ ⓓ ⓔ	49. ⓐ ⓑ ⓒ ⓓ ⓔ
50. ⓐ ⓑ ⓒ ⓓ ⓔ				

MODERN MARKETING / MARKETING IN BANKING INDUSTRY

Max. Marks : 50   **No. of Qs. 50**   **Time : 30 min.**   **Date : ..../......./................**

1. Modern marketing includes
   (a) publicity on internet
   (b) advertisement on internet
   (c) Bulk emails
   (d) telemarketing
   (e) All of these

2. e-marketing is same as _____.
   (a) virtual marketing
   (b) digital marketing
   (c) real time marketing
   (d) All of these
   (e) None of these

3. Digital marketing is selling _____.
   (a) digital goods
   (b) calculators
   (c) through internet
   (d) All of these
   (e) None of these

4. Online Marketing is useful for _____.
   (a) Selling Old Products
   (b) Sending e-mails
   (c) Increasing production
   (d) Additional job opportunities
   (e) Higher expenses

5. Online value proposition should _____.
   (a) Be communicated to site visitors and in all marketing communications
   (b) Be a clear differentiator from online competitors
   (c) Target market segment(s) that the proposition will appeal to
   (d) Given financial back up
   (e) All of the above

6. Achieving marketing objectives through use of electronic communications technology is _____.
   (a) E-marketing
   (b) E-business
   (c) Internet marketing
   (d) E-commerce
   (e) None of the above

7. Direct online contribution effectiveness is the _____.
   (a) Reach of audience volume of a site
   (b) Proportion of sales influenced by the web site
   (c) Proportion of business turnover achieved by e-commerce transactions
   (d) First and third option above
   (e) None of the above

8. Modern marketing EXCLUDES _____.
   (a) Digital marketing
   (b) Tele-marketing
   (c) Door-to-door marketing
   (d) E-mail solicitation
   (e) None of these

9. Web marketing involves
   (a) Selling web cameras
   (b) Web advertisements
   (c) e-mail chatting
   (d) Browsing the web
   (e) Door-to-door canvassing

10. Online Marketing is mostly useful for marketing of
    (a) saving accounts
    (b) credit cards
    (c) home loans
    (d) NRI deposits
    (e) business accounts

11. The best promotional tool in any marketing is _____
    (a) Pamphlets
    (b) Newsletters
    (c) Word of mouth publicity
    (d) Regional Advertisement
    (e) Viral marketing

RESPONSE GRID					
	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
	11. ⓐⓑⓒⓓⓔ				

12. Internet marketers are using _____ as a form of word of mouth, or word of mouse, to draw attention to their sites.
    (a) event marketing
    (b) subliminal marketing
    (c) viral marketing
    (d) place marketing
    (e) public relations

13. The major marketing developments as we enter the new millennium can be summed up in a single theme:
    (a) innovation   (b) the Internet
    (c) virtuality   (d) connectedness
    (e) None of these

14. Today marketing is:
    (a) Product driven
    (b) Services driven
    (c) Improvement of bottom line (Profitability)
    (d) Cost conscious
    (e) Customer driven market

15. Modern marketing calls for more than developing a good product, pricing it attractively, and making it accessible. Companies must also _____ with present and potential stakeholders, and the general public.
    (a) attract   (b) reach
    (c) relate to   (d) advertise to
    (e) communicate

16. In today's changing banking scenario, aggressive promotion of business is necessary where the competition exists on
    (a) branch up-keep
    (b) expeditious service
    (c) use of advanced digital technology
    (d) good customer service
    (e) All of these

17. Bank marketing means
    (a) selling by banks
    (b) buying by banks
    (c) merger of banks
    (d) selling bank's products and services
    (e) selling products in banks

18. Marketing is not required in _____.
    (a) Selling Credit/ Debit Cards
    (b) Net Banking   (c) Corporate Loans
    (d) Retail Loans   (e) All of these

19. Marketing of Internet Banking means
    (a) meeting of Banks on the net
    (b) net practice

    (c) marketing usage of Banking transactions through internet
    (d) transactions with foreign banks
    (e) All of the above

20. Marketing in banks is
    (a) a one-day function
    (b) a one-man function
    (c) a one-off affair
    (d) All of these
    (e) None of these

21. Target group for marketing Internet Banking is _____.
    (a) all customers
    (b) all literate customers
    (c) all computer literate customers
    (d) only borrowers
    (e) All of these

22. Digital Banking is available through _____.
    (a) Mobile phones
    (b) Internet
    (c) Telephones
    (d) All of these
    (e) None of these

23. Bancassurance can be sold to _____.
    (a) Banks
    (b) Insurance companies
    (c) Insurance agents
    (d) Bank customers
    (e) All of the above

24. Difference between Direct and indirect Bank Marketing is
    (a) Direct Marketing is to Bank's employees. Indirect is to outsiders
    (b) Direct Marketing is to outsiders. Indirect is to employees
    (c) Direct Marketing is to Bank's owners. Indirect is to outsiders
    (d) Direct Marketing is to other Bank's employees. Indirect is to outsiders
    (e) None of these

25. Target market for Home Loans is
    (a) builders
    (b) housing societies
    (c) agriculturists
    (d) All of these
    (e) None of these

RESPONSE GRID	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ	16. ⓐⓑⓒⓓⓔ
	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ	21. ⓐⓑⓒⓓⓔ
	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ	

26. The USP of a Credit Card is
    (a) cashless operations
    (b) only for HNIs
    (c) only for men
    (d) only for employed persons
    (e) transactions through cheque book

27. EMI can be a marketing tool if
    (a) EMI is increasing
    (b) It is very high
    (c) It is very low
    (d) EMI has no impact on marketing
    (e) EMI is a flat rate

28. Banks sell insurance for
    (a) increasing deposits
    (b) increasing loans
    (c) increasing clients
    (d) earning more profits
    (e) taking over insurance companies

29. Savings Accounts can be opened by _____
    (a) All individuals fulfilling KYC norms
    (b) All tax payers only
    (c) All individuals above the age of 18
    (d) All businessmen only
    (e) All students below the age of 18

30. A short term loan is repayable within _____
    (a) 20 years
    (b) 3 years
    (c) As per the borrowers' wish
    (d) As per the guarantor's wish
    (e) There is no need to repay short term loans

31. The purchase of customer information from outside firms and vendors is classified as
    (a) marketing intelligence system
    (b) market information system
    (c) market development system
    (d) market record system
    (e) None of these

32. The public blogs and customer complaint sites are examples of
    (a) marketing management
    (b) building marketing records
    (c) field work
    (d) marketing intelligence on internet
    (e) None of these

33. The combo sites for product reviews and expert opinions are classified as
    (a) marketing intelligence on internet
    (b) field work
    (c) marketing management
    (d) building marketing records
    (e) None of these

34. The company's order-to-payment cycle is part of
    (a) internal records
    (b) external records
    (c) private records
    (d) public records
    (e) None of these

35. Motivating retailers and collection of intelligence by hiring external experts are part of
    (a) market development system
    (b) market record system
    (c) marketing intelligence system
    (d) market information system
    (e) None of these

36. Internet Banking can be popularized by way of:
    (a) Reduced prices
    (b) Higher prices
    (c) Wide Area Network
    (d) Better technology
    (e) More ATMs

37. The modern marketing concept asserts that 'marketing' starts with the product idea and ends with:
    (a) Production of Quality Product
    (b) Advertisement Campaign
    (c) Customer Satisfaction
    (d) Sale of the Product
    (e) Exchange of Money

38. Online Marketing is mostly useful for marketing of
    (a) saving accounts
    (b) credit cards
    (c) home loans
    (d) NRI deposits
    (e) business accounts

RESPONSE GRID					
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ
	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ		

39. Digitial Marketing is similar to
    (a) online marketing
    (b) cold calling
    (c) web designing
    (d) market fore-cast
    (e) outdoor marketing

40. Telemarketing involves—.
    (a) good communication skills
    (b) high level of motivation
    (c) door-to-door campaigns
    (d) event management
    (e) All of these

41. Online marketing is—.
    (a) same as face-to-face marketing
    (b) easier than traditional marketing
    (c) boring as customers are not visible
    (d) voluminous task
    (e) None of these

42. In modern day marketing, the benefits of selling extend to————
    (a) Only products and services
    (b) Only after sales services
    (c) Lifelong relationship with the buyer
    (d) All of the above
    (e) None of the above

43. Networking makes marketing
    (a) very difficult
    (b) very cumbersome
    (c) easy to handle
    (d) has no role in marketing
    (e) None of these

44. The target group for marketing of internet banking is
    (a) all customers
    (b) all literate customers
    (c) all computer literate customers
    (d) only borrowers
    (e) All of these

45. Web marketing involves–
    (a) Selling web cameras
    (b) We advertisements
    (c) e-mail chatting
    (d) Browing the web
    (e) None of these

46. The process of discovering patterns and relationships using the available customers data to reveal what customers want and how they act is known as
    (a) Data ware housing
    (b) Data base
    (c) Data Mining
    (d) Data Building
    (e) Data Matching

47. KYC means–
    (a) keep your customers tool
    (b) keep your credit card
    (c) know your credits
    (d) Know your customers
    (d) None of these

48. E-Marketing is the same as
    (a) virtual marketing
    (b) digital marketing
    (c) real time marketing
    (d) all of these
    (e) None of these

49. Modern method of marketing include?
    (a) Publicity on the net
    (b) Advertisement on the net
    (c) Soliciting business through e-mails
    (d) Both 1 and 2
    (e) All of the above

50. What is M-marketing?
    (a) Mobile Marketing
    (b) Management Marketing
    (c) Model Marketing
    (d) Modern Marketing
    (d) Mind Marketing

RESPONSE GRID					
39. ⓐⓑⓒⓓⓔ	**40.** ⓐⓑⓒⓓⓔ	**41.** ⓐⓑⓒⓓⓔ	**42.** ⓐⓑⓒⓓⓔ	**43.** ⓐⓑⓒⓓⓔ
44. ⓐⓑⓒⓓⓔ	**45.** ⓐⓑⓒⓓⓔ	**46.** ⓐⓑⓒⓓⓔ	**47.** ⓐⓑⓒⓓⓔ	**48.** ⓐⓑⓒⓓⓔ
49. ⓐⓑⓒⓓⓔ	**50.** ⓐⓑⓒⓓⓔ			
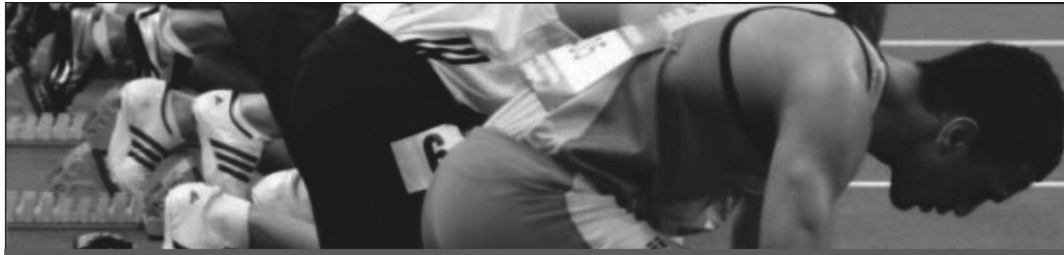
PRELIMINARY EXAM FULL TEST -1

Max. Marks : 100   **No. of Qs. 100**   **Time : 60 min.**   **Date : ..../........./................**

QUANTITATIVE APTITUDE

DIRECTIONS (Qs. 1-10) : What will come in place of question mark (?) in the following questions ?

1. 48% of 525 + ?% of 350 = 399
   - (a) 42
   - (b) 46
   - (c) 28
   - (d) 26
   - (e) None of these

2. $2\frac{5}{9} \times 3\frac{4}{5} + ? = 12\frac{1}{5}$
   - (a) $2\frac{13}{45}$
   - (b) $2\frac{4}{5}$
   - (c) $2\frac{22}{45}$
   - (d) $3\frac{5}{9}$
   - (e) None of these

3. $\sqrt{?} + 17^2 = 335$
   - (a) 46
   - (b) 42
   - (c) 1764
   - (d) 2116
   - (e) None of these

4. $\dfrac{28 \times 5 - 15 \times 6}{7^2 \quad \sqrt{256} \quad (13)^2}$?
   - (a) $\dfrac{27}{115}$
   - (b) $\dfrac{22}{117}$
   - (c) $\dfrac{25}{117}$
   - (d) $\dfrac{22}{115}$
   - (e) None of these

5. $13\frac{4}{7} + 5\frac{2}{7} \times 2\frac{1}{2} = ?$
   - (a) $25\frac{11}{14}$
   - (b) $25\frac{3}{7}$
   - (c) $26\frac{3}{7}$
   - (d) $26\frac{5}{14}$
   - (e) None of these

6. $784 \div 16 \div 7 = ?$
   - (a) 49
   - (b) 14
   - (c) 21
   - (d) 7
   - (e) None of these

7. $\dfrac{3}{2}$ of 455 + $\dfrac{5}{8}$ of 456 = ?
   - (a) 448
   - (b) 476
   - (c) 480
   - (d) 464
   - (e) None of these

8. $6425 \div 125 \times 8 = ?$
   - (a) 411.2
   - (b) 41.12
   - (c) 64.25
   - (d) 421.25
   - (e) None of these

9. 1.05% of 2500 + 2.5% of 440 = ?
   - (a) 37.50
   - (b) 37.25
   - (c) 370.25
   - (d) 372.50
   - (e) None of these

10. $4900 \div 28 \times 444 \div 12 = ?$
   - (a) 6575
   - (b) 6475
   - (c) 6455
   - (d) 6745
   - (e) None of these

DIRECTIONS (Qs. 11-15): Study the following graph carefully and answer the questions that follow:

Percentage of employees in different departments of a company
Total No. of employees = 4500
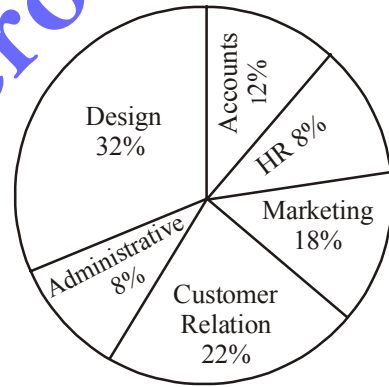
Percentage of females in each department in the same company Total No. of females in the organisation = 2000

RESPONSE GRID	1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
	6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ

11. What is the total number of males from Design, Customer Relation and HR departments together ?
 (a) 1550   (b) 1510   (c) 1540
 (d) 1580   (e) None of these

12. What is the ratio of number of males in HR department to the number of males in Accounts department respectively ?
 (a) 3 : 17   (b) 4 : 15   (c) 2 : 15
 (d) 2 : 13   (e) None of these

13. The number of females in the Marketing department are approximately what per cent of the total employees in Marketing and Customer Relation Departments together?
 (a) 26   (b) 36   (c) 6
 (d) 46   (e) 16

14. What is the respective ratio of number of employees in Administrative department to the number of males in the same department ?
 (a) 9 : 4   (b) 8 : 3   (c) 7 : 2
 (d) 8 : 5   (e) None of these

15. The total number of females are what per cent of the total number of males in the organisation ?
 (a) 90   (b) 70   (c) 80
 (d) 60   (e) None of these

DIRECTIONS (Qs. 16–20) : What will come in place of the question mark (?) in the following number series?

16. 7 9 12 16 ?
 (a) 22   (b) 19   (c) 20
 (d) 21   (e) None of these

17. 384 192 96 48 ?
 (a) 36   (b) 28   (c) 24
 (d) 32   (e) None of these

18. 5 6 14 45 ?
 (a) 183   (b) 185   (c) 138
 (d) 139   (e) None of these

19. 8 9 13 22 ?
 (a) 30   (b) 31   (c) 34
 (d) 36   (e) None of these

20. 6 11 21 41 ?
 (a) 81   (b) 61   (c) 71
 (d) 91   (e) None of these

21. Number of students studying in colleges A and B are in the ratio of 3 : 4 respectively. If 50 more students join college A and there is no change in the number of students in college B, the respective ratio becomes 5 : 6. What is the number of students in college B ?
 (a) 450   (b) 500   (c) 400
 (d) 600   (e) None of these

22. Cost of 12 belts and 30 wallets is ₹ 8940. What is the cost of 4 belts and 10 wallets?
 (a) ₹ 2890   (b) ₹ 2980   (c) ₹ 2780
 (d) ₹ 2870   (e) None of these

23. 80% of a number is equal to three-fifth of another number. What is the ratio between the first and the second number respectively?
 (a) 3 : 4   (b) 4 : 3   (c) 4 : 5
 (d) 5 : 4   (e) None of these

24. Ghanshyam purchased an article for ₹1850. At what price should he sell it so that 30% profit is earned?
 (a) ₹2450   (b) ₹2245   (c) ₹2405
 (d) ₹2425   (e) None of the above

25. What is the compound interest accrued on an amount of ₹ 8500 in two years @ interest 10% per annum?
 (a) ₹1875   (b) ₹1885   (c) ₹1775
 (d) ₹1765   (e) None of these

26. A train running at the speed of 60 kmph crosses a 200 m long platform in 27 s. What is the length of the train ?
 (a) 250 m   (b) 200 m   (c) 240 m
 (d) 450 m   (e) None of these

27. Which of the following has the fractions in ascending order?
 (a) $\dfrac{5}{11}, \dfrac{3}{8}, \dfrac{4}{9}, \dfrac{2}{7}$ (b) $\dfrac{5}{11}, \dfrac{4}{9}, \dfrac{3}{8}, \dfrac{2}{7}$ (c) $\dfrac{2}{7}, \dfrac{3}{8}, \dfrac{4}{9}, \dfrac{5}{11}$
 (d) $\dfrac{2}{7}, \dfrac{4}{9}, \dfrac{3}{8}, \dfrac{5}{11}$ (e) None of these

28. Sum of the digits of a two digit number is 8 and the digit in the ten's place is three times the digit in the unit's place. What is the number?
 (a) 26   (b) 36   (c) 71
 (d) 62   (e) None of these

29. 10 men can complete a piece of work in 8 days. In how many days can 16 men complete that work?
 (a) 4 days   (b) 5 days   (c) 6 days
 (d) 3 days   (e) None of these

30. 71% of a number is more than its 46% by 120. What is 30% of that number?
 (a) 160   (b) 150   (c) 140
 (d) 148   (e) None of these

31. Average of five consecutive odd numbers is 95. What is the fourth number in descending order?
 (a) 91   (b) 95   (c) 99
 (d) 97   (e) None of these

32. Latika spends 45% of her monthly income on food and 30% of the monthly income on transport. Remaining amount of ₹4500 she saves. What is her monthly income?
 (a) ₹16000   (b) ₹18000   (c) ₹16500
 (d) ₹18500   (e) None of these

33. Amount of simple interest accrued on an amount of Rs 28500 in seven years is Rs 23940 what is the rate of interest % per annum?
 (a) 10.5   (b) 12.5   (c) 11
 (d) 12   (e) None of these

34. A and B started a business investing amounts of ₹150000 and ₹250000 respectively. What will be B's share in the profit of ₹160000 ?
 (a) ₹100000   (b) ₹60000   (c) ₹80000
 (d) ₹110000   (e) None of these

35. The average age of 60 boys in a class was calculated as 12 years. It was later realised that the actual age of one of the boys in the class was 12.5 years but it was calculated as 14 years. What is the actual average age of the boys in the class?
 (a) 11 years   (b) 11.275 years   (c) 11.50 years
 (d) 11.975 years   (e) None of these

RESPONSE GRID

11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ
16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ

REASONING ABILITY

36. B is the father of Q. B has only two children. Q is the brother of R. R is the daughter of P. A is the granddaughter of P and S is the father of A. How is S related to Q?
   - (a) Son
   - (b) Son-in-law
   - (c) Brother
   - (d) Brother-in-law
   - (e) None of these

37. Unscramble the letters in the given words and find the odd one out.
   - (a) UMRSME
   - (b) EIWNTR
   - (c) PIGRSN
   - (d) LCUOD
   - (e) None of these

38. If the first and second letters in the word DEPRESSION were interchanged, also the third and the fourth letters, the fifth and the sixth letters and so on, which of the following would be the seventh letter from the right ?
   - (a) R
   - (b) O
   - (c) S
   - (d) P
   - (e) None of these

39. In P, Q, R, S, T and U, R is taller than only P and U. S is shorter than only T and Q. If each has different heights. then who will be at the third place when they are standing in descending order of their height and the counting is done in the same order (tallest to shortest)?
   - (a) R
   - (b) P
   - (c) S
   - (d) Q
   - (e) None of these

40. City D is to the West of city M. City R is to the South of City D. If city K is to the East of city R, then in which direction is city K located in respect of city D?
   - (a) North
   - (b) East
   - (c) North-East
   - (d) South-East
   - (e) None of these

DIRECTIONS (Qs. 41-45) : In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and decide which of the given conclusion(s) logically follow(s) from the three given statements.

Give answer
- (a) if only Conclusion I follows
- (b) if only Conclusion II follows
- (c) if either Conclusion I or II follows
- (d) if neither Conclusion I nor II follows
- (e) if both Conclusions I and II follow

41. **Statements:** All pens are papers.
   Some papers are blades.
   All blades are knives.
   Conclusions: I. Some knives are papers.
   II. Some blades are pens.

42. **Statements:** All fans are televisions.
   Some televisions are channels.
   Some channels are radios.
   Conclusions: I. Some fans are channels.
   II. Some radios are televisions.

43. **Statements:** Some roots are stems.
   All stems are branches.
   All branches are leaves.
   Conclusions: I. Some leaves are roots.
   II. Some branches are stems.

44. **Statements:** Some computers are machines.
   Some machines are boards.
   All boards are chalks.
   Conclusions: I. Some chalks are computers.
   II. No chalk is computer.

45. **Statements:** Some locks are keys.
   All keys are metals.
   Some metals are cards.
   Conclusions: I. Some cards are keys.
   II. Some metals are locks.

DIRECTIONS (Qs. 46-50) : Read the following information carefully to answer the given questions.

V, U and T are sitting around a circle. A, B and C are also sitting around the same circle but two of them are not facing centre (they are facing the direction opposite to centre). Y is second to the left of C. U is second to the right of A. B is third to the left of T. C is second to the right of T. A is seated next to V.

46. Which of the following are not facing centre?
   - (a) BA
   - (b) CA
   - (c) BC
   - (c) Cannot be determined
   - (e) None of these

47. Which of the following is the position of T in respect of B?
   - (a) Third to the right
   - (b) Second to the right
   - (c) Third to the left
   - (d) Third to the left or right
   - (e) None of these

48. What is the position of V in respect of C?
   - (a) Second to the right
   - (b) Third to the left
   - (c) Fourth to the right
   - (d) Fourth to the left
   - (e) Cannot be determined

49. Which of the following statement is correct?
   - (a) A, B and C are sitting together.
   - (b) V, U and T are sitting together
   - (c) Sitting arrangement of two persons cannot be determined
   - (d) Those who are not facing centre are sitting together
   - (e) Only two people are sitting between V and T

50. What is the position of A in respect of U?
   - (a) Second to the left
   - (b) Second to the right
   - (c) Third to the right
   - (b) Cannot be determined
   - (e) None of these

DIRECTIONS (Qs. 51-55) : Study the following information carefully to answer the given questions.

A, B, C, D, E, F, G, and H are seated in straight line facing North. C sits fourth to left of G. D sits second to right of G. Only two people sit between D and A. B and F are immediate neighbours of each other. B is not an immediate neighbour of A. H is not an immediate neighbour of D.

51. Who amongst the following sits exactly in the middle of the persons who sit fifth from the left and the person who sits sixth from the right?
   - (a) C
   - (b) H
   - (c) E
   - (d) F

52. Who amongst the following sits third to the right of C?
   - (a) B
   - (b) F
   - (c) A
   - (d) E

RESPONSE GRID					
	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ
	41. ⓐⓑⓒⓓⓔ	42. ⓐⓑⓒⓓⓔ	43. ⓐⓑⓒⓓⓔ	44. ⓐⓑⓒⓓⓔ	45. ⓐⓑⓒⓓⓔ
	46. ⓐⓑⓒⓓⓔ	47. ⓐⓑⓒⓓⓔ	48. ⓐⓑⓒⓓⓔ	49. ⓐⓑⓒⓓⓔ	50. ⓐⓑⓒⓓⓔ
	51. ⓐⓑⓒⓓⓔ	52. ⓐⓑⓒⓓⓔ			

53. Which of the following represents persons seated at the two extreme ends of the line?
    (a) C, D   (b) A, B   (c) B, G
    (d) D, H   (e) None of these
54. What is the position of H with respect to F?
    (a) Third to the left   (b) Immediate right
    (c) Second to right   (d) Fourth to left
55. How many persons are seated between A and E?
    (a) One   (b) Two   (c) Three
    (d) Four   (e) None of these

DIRECTIONS (Qs. 56- 60) : In these questions symbols #, @, $, *, % are to be used with different meanings as follows:

'A # B' means 'A is neither smaller than nor equal to B'.
'A @ B' means 'A is neither greater than nor equal than to B'.
'A $ B' means 'A is not greater than B'.
'A * B' means ' A is not smaller than B'.
'A % B' means 'A is neither smaller than nor greater than B'.
In each question, three statements showing relationships have been given, which are followed by two conclusions I & II. Assuming that the given statements are true, find out which conclusion(s) is/are definitely true. Mark answer
    (a) if only conclusion I is true;
    (b) if only conclusion II is true;
    (c) if either conclusion I or II is true;
    (d) if neither conclusion I nor II is true and
    (e) if both conculsions I and II are true.
56. **Statements:** T @ J, J * M, M $ B
    Conclusions: I. T # M
                     II. J $ B
57. **Statements:** R# F, F @ K, K $ V
    Conclusions : I. R # V
                      II. V # F
58. **Statements:** E @ A, A % F, F $ Q
    Conclusions : I. E @ Q
                      II. Q * A
59. **Statements:** L # M, M % D, D * Q
    Conclusions: I. M # Q
                     II. Q @ L
60. **Statements:** W $ F, F @ H, H # R
    Conclusions: I. W # R
                     II. W $ R

DIRECTIONS (Qs. 61-65): Answer these questions referring to the letter sequence given below:

N O P Q Y B Z A R S H I J K I L M T U V G E F W X D C

61. If letters of the above given series are written in reverse order then which letter will be third to the left of eighteenth letter from your right?
    (a) Z   (b) G   (c) I
    (d) L   (e) None of these
62. What will come in place of question mark (?) in the following series ?
    NDP, QWB, ZER, ?
    (a) SVJ   (b) AFS   (c) IVS
    (d) SFA   (e) None of these
63. Which of the following is the fifth to the right of thirteenth letter from you left ?

    (a) T   (b) J   (c) S
    (d) Z   (e) None of these
64. If every alternate letter starting from O is replaced with odd numbers starting from 1, which letter or number will be third to the left of tenth letter from your right ?
    (a) 15   (b) L   (c) K
    (d) I   (e) None of these
65. If it is possible to make a meaningful word from the eighth, sixteenth, seventeenth and twenty-second letters from your left in the given series, which will be th first letter of that word? If no such word can be formed, your answer would be X, and if more than one such word can be formed, answer is P.
    (a) M   (b) T   (c) X
    (d) E   (e) P

DIRECTIONS (Qs. 66-70) : In each of the questions below, a group of numerals is given followed by four groups of symbols/ letter combinations lettered (a), (b), (c) and (d). Numerals are to be coded as per the codes and conditions given below. You have to find out which of the combinations (a), (b), (c) and (d) is correct and indicate your answer accordingly. If none of the four combinations represents the correct code, mark (e) as your answer.

Numerals	3	5	7	4	2	6	8	1	0	9
Letter/Symbol Code	*	B	E	A	@	F	K	%	R	M

Following conditions apply
(i) if the first digit as well as the last digits is odd, both are to be coded as 'x'.
(ii) if the first digit as well as the last digit is even, both are to be coded as $.
(iii) if the last digit is 'zero', it is to be coded as #.

66. 487692
    (a) $KEFM@   (b) AKEFM@   (c) AKEFM$
    (d) $KEFM$ (e) None of these
67. 713540
    (a) X%★BA   (b) E%★BA#   (c) E%★BAR
    (d) X%★BAR   (e) None of these
68. 765082
    (a) EFB#K@   (b) XFBRK@   (c) EFBRK@
    (d) EFBR#K   (e) None of these
69. 364819
    (a) XFAK%X   (b) XFAK&M   (c) XFAK%M
    (d) XEAK%X   (e) None of these
70. 546839
    (a) XAFK★X   (b) XAFK★M   (c) BAFK★X
    (d) BAFK★M   (e) None of these

ENGLISH LANGUAGE

DIRECTIONS (Qs. 71-80) : Read the following passage carefully and answer the questions given below it.

Once upon a time a dishonest king had a man called the Valuer in his court. The Valuer set the price which ought to be paid for horses and elephants and the other animals. He also set the price on jewellery and gold, and things of that kind. This man was honest and just, and set the proper price to be paid to the owners

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RESPONSE GRID						
	53. ⓐⓑⓒⓓⓔ	54. ⓐⓑⓒⓓⓔ	55. ⓐⓑⓒⓓⓔ	56. ⓐⓑⓒⓓⓔ	57. ⓐⓑⓒⓓⓔ	
	58. ⓐⓑⓒⓓⓔ	59. ⓐⓑⓒⓓⓔ	60. ⓐⓑⓒⓓⓔ	61. ⓐⓑⓒⓓⓔ	62. ⓐⓑⓒⓓⓔ	
	63. ⓐⓑⓒⓓⓔ	64. ⓐⓑⓒⓓⓔ	65. ⓐⓑⓒⓓⓔ	66. ⓐⓑⓒⓓⓔ	67. ⓐⓑⓒⓓⓔ	
	68. ⓐⓑⓒⓓⓔ	69. ⓐⓑⓒⓓⓔ	70. ⓐⓑⓒⓓⓔ			

of the goods. The king, however, was not pleased with this Valuer, because he was honest. "If I had another sort of a man as Valuer, I might gain more riches," he thought.

One day the king saw a stupid, miserly peasant come into the palace yard. The king sent for the fellow and asked him if he would like to be the Valuer. The peasant said he would like the position. So the king had him made Valuer. He sent the honest Valuer away from the palace.

Then the peasant began to set the prices on horses and elephants, upon gold and jewels. He did not know their value, so he would say anything he chose. As the king had made him Valuer, the people had to sell their goods for the price he set. By and by a horse-dealer brought five hundred horses to the court of this king. The Valuer came and said they were worth a mere measure of rice. So the king ordered the horse-dealer to be given the measure of rice, and the horses to be put in the palace stables.

The horse-dealer then went to see the honest man who had been the Valuer, and told him what had happened. "What shall I do?" asked the horse-dealer. "I think you can give a present to the Valuer which will make him do and say what you want him to do and say," said the man. "Go to him and give him a fine present, then say to him: "You said the horses are worth a measure of rice but now tell what a measure of rice is worth! Can you value that standing in your place by the king?" If the says he can, go wth him to the king, and I will be there, too."

The horse-dealer thought this was a good idea. So he gave a fine present to the Valuer, and said what the other man had told him to say., The stupid Valuer took the present, and said: "Yes, I can go before the king with you and tell what a measure of rice is worth. I can value that now." Well, let us go at once," said the horse-dealer. So they went before the king and his ministers in the palace.

The horse-dealer bowed down before the king, and said: "O King, I have learned that a measure of rice is the value of my five hundred horses. But will the king be pleased to ask the Valuer what is the valuer of the measure of rice". The king, not knowing what had happened, asked, "How now, Valuer, what are five hundred horses worth?" "A measure of rice, O King!" said he. "Very good, then! If five hundred horses are worth a measure of rice, what is the measure of rice worth?" "The measure of rice is worth your whole city," replied the foolish fellow.

The ministers clapped their hands, laughing, and saying, "What a foolish Valuer! How can such a man hold that office? We used to think this great city was beyond price, but this man says it is worth only a measure of rice, "Then the king was ashamed, and drove out the foolish fellow. "I tried to please the king by setting a low price on the horses, and now see what has happened to me!" said the Valuer, as he ran away from the laughing crowd.

71. Who did the king appoint as the new Valuer?
   (a) A minsister   (b) A horse merchant
   (c) Himself   (d) A stingy peasant
   (e) None of these

72. Why was the king not happy with the old Valuer?
   (a) As the Valuer was not good at his work
   (b) As he had dishonoured the king
   (c) As the Valuer had been dishonest with the king about the prices that he set for goods

   (d) As the king believed that he was not earning much because of the Valuer's honesty
   (e) None of these

73. Which of the following words can be used to describe the king?
   (1) Smart   (2) Dishonest
   (3) Cheat
   (a) Only (1)   (b) Only (2)
   (c) Only (2) and (3) (d) Only (1) and (3)
   (e) All the three (1), (2) and (3)

74. What can possibly be the moral of the story?
   (a) Slow and steady wins the race
   (b) Change is the only permanent thing in life
   (c) An honest answer is the sign of true friendship
   (d) Haste makes waste
   (e) No legacy is so rich as honesty

75. Why did the Ministers laugh at the new Valuer?
   (a) As he had sold the king's city at a very low price
   (b) As he had displayed his stupidity by quoting an abysmally low price on the king's city
   (c) As he had cheated the horse dealer
   (d) As he had not claculated the price of the five hundred horses correctly
   (e) None of these

76. What did the new Valuer do when he got the present from the horse dealer?
   (a) He accepted the present and resigned from his post as was requested by the horse-dealer
   (b) He accepted the present and agreed to state the worth of a measure of rice in the presence of the King
   (c) He accepted the present and immediately returned the horse-dealer's horses
   (d) He refused to accept the present from the horse-dealer and asked him to leave the premises
   (e) None of these

77. Which of the following can be said about the old Valuer?
   (1) He was honest.   (2) He was intelligent.
   (3) He was revengeful.
   (a) Only (1)   (b) Only (3)
   (c) Only (1) and (2)   (d) Only (1) and (3)
   (e) All the three (1), (2) and (3)

78. What was the worth of a measure of rice according to the new Valuer?
   (a) The king's entire city
   (b) The king's life
   (c) Two horses
   (d) Not mentioned in the passage
   (e) None of these

79. Why did the horse-dealer go to meet the old Valuer?
   (a) As the new Valuer had set a very inappropriate price for his five hundred horses
   (b) As his five hundred horses were stolen from him by the king
   (c) As he was a very good friend of the old Valuer
   (d) As the king head requested him to do so
   (e) None of these

RESPONSE GRID					
71. ⓐⓑⓒⓓⓔ	72. ⓐⓑⓒⓓⓔ	73. ⓐⓑⓒⓓⓔ	74. ⓐⓑⓒⓓⓔ	75. ⓐⓑⓒⓓⓔ
76. ⓐⓑⓒⓓⓔ	77. ⓐⓑⓒⓓⓔ	78. ⓐⓑⓒⓓⓔ	79. ⓐⓑⓒⓓⓔ	

80. What advice did the old Valuer give to the horse-dealer?
   (a) He asked the horse-dealer to inquire with the king about the worth of a measure of rice
   (b) He asked the horse-dealer to bribe the new Valuer and get his horses back
   (c) He asked the horse-dealer to forget about his horses and go on with his life
   (d) He asked the horse-dealer to publicize his plight and thus get his horses back
   (e) None of these

DIRECTIONS (Qs. 81-85) : Which of the phrases (a), (b), (c) and (d) given below each sentence should replace the phrase printed in bold in the sentence to make it grammatically correct? If the sentence is correct as it is given and no correction is required, mark (e) as the answer.

81. As it was already afternoon, Rohan decided **to check out** of the hotel and go home.
   (a) for checking out   (b) to checking out
   (c) to check outing   (d) to checked out
   (e) No correction required
82. Five people **which ignored an** evacuation order were trapped in a mountain region encircled by a wildfire.
   (a) who ignored an   (b) those ignoring an
   (c) who ignores a   (d) that ignored a
   (e) No correction required
83. Since she was the most popular model on the ramp, she thought **no end to herself.**
   (a) no ending to herself (b) no ends of herself
   (c) no end of herself   (d) no end with herself
   (e) No correction required
84. The actress says that she is not comfortable **walk into** the ramp in designer-wear.
   (a) to walks on   (b) walking down
   (c) walking with   (d) walks to
   (e) No correction required
85. Not many bank on the power of realism and comedy to make an impression and so, when one does, it **makes head truns.**
   (a) making heads turn
   (b) make head turnings
   (c) making heads turining
   (d) makes heads turn
   (e) No correction required

DIRECTIONS (Qs. 86-90) : In each question below, a sentence with four words printed in bold type is given. These are numbered as (a), (b), (c) and (d). One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. The number of that word is your answer. If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark (e) i.e., All correct' as your answer.

86. The city's fashion-conscious **ladies** (a)/ came together at a city hotel to check out an **exibition** (b)/ by **various** (c)/ **designers** (d)/ and labels. All correct (e)

87. The ministry's **proposal** (a)/ for an **autonomous** (b)/ overarching **authority** (c)/ for higher education and research was finally **approval.** (d)/ All correct (e)
88. **Silense** (a)/ is to **retreat** (b)/ in wordless prayer, **gazing** (c)/ out the window of your heart, and going for slow **meandering** (d)/ walks in a garden. All correct (e)
89. A majority of Army tanks continue to **grope** (a)/ in the dark, **stricken** (b)/ as they are with an **ecute** (c) case of night **blindness.** (d)/ All correct (e)
90. Back home, the ever affable (a)/ Bollywood singer shares the **excitement** (b) of **having** (c)/ **performed** (d)/ at the Royal Hall in London. All correct (e)

DIRECTIONS (Qs. 91-100) : In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

There was once a gardener who **(91)** care of the king's garden. In the garden, lived a family of monkeys. Seeing the gardener at work, the monkeys soon **(92)** to imitate him. As the gardener tended the plants and weeded and watered the garden, he was amused to see that the monkeys also did **(93)** what he did. The gardener was happy that he had so much unpaid help.

One day the gardener wanted to **(94)** a fair in the city. He had an idea. He called the chief of the monkeys and said to him, "I have to go out for the day. Can you and your family water my plants like you **(95)** do? I promise you that if you help me I will **(96)** sweets for you from the fair.: The monkeys agreed. But after the gardener had left, they had a **(97)**. How much water were they to pour for each plant? then one of them said. "For plants with big roots, we must pour **(98)** of water and for the ones with small roots, we pour only a litle water." So, the monkeys **(99)** out each plant and then pushed it back again after looking at the root. As a result, many plants **(100)** and died. On his return, the gardener realized that he had been very foolish to trust a bunch of mere monkeys to do his job.

91. (a) took   (b) was   (c) great
    (d) handle   (e) mended
92. (a) try   (b) told   (c) were
    (d) bent   (e) learnt
93. (a) main   (b) exactly   (c) many
    (d) because   (e) too
94. (a) call   (b) make   (c) stall
    (d) go   (e) visit
95. (a) forcefully (b) hardly   (c) usually
    (d) costly   (e) truly
96. (a) ask   (b) bring   (c) got
    (d) throw   (e) create
97. (a) party   (b) time   (c) answer
    (d) doubt   (e) water
98. (a) body   (b) many   (c) lots
    (d) weight   (e) quantity
99. (a) thrashed   (b) saw   (c) stick
    (d) pulled   (e) splashed
100. (a) withered   (b) crushed   (c) killed
    (d) grew   (e) smiled

RESPONSE GRID	80. ⓐⓑⓒⓓⓔ	81. ⓐⓑⓒⓓⓔ	82. ⓐⓑⓒⓓⓔ	83. ⓐⓑⓒⓓⓔ	84. ⓐⓑⓒⓓⓔ
	85. ⓐⓑⓒⓓⓔ	86. ⓐⓑⓒⓓⓔ	87. ⓐⓑⓒⓓⓔ	88. ⓐⓑⓒⓓⓔ	89. ⓐⓑⓒⓓⓔ
	90. ⓐⓑⓒⓓⓔ	91. ⓐⓑⓒⓓⓔ	92. ⓐⓑⓒⓓⓔ	93. ⓐⓑⓒⓓⓔ	94. ⓐⓑⓒⓓⓔ
	95. ⓐⓑⓒⓓⓔ	96. ⓐⓑⓒⓓⓔ	97. ⓐⓑⓒⓓⓔ	98. ⓐⓑⓒⓓⓔ	99. ⓐⓑⓒⓓⓔ
	100. ⓐⓑⓒⓓⓔ				

99

MAIN EXAM FULL TEST- 1

Max. Marks : 200 **No. of Qs. 155** **Time : 2.5 hours** **Date : ..../......./................**

REASONING AND COMPUTER APTITUDE

DIRECTIONS (Qs. 1-5) : In each question below are two/three statements followed by two conclusions numbered I and II. You have to take the two/three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer (a) if only conclusion I follows

Give answer (b) if only conclusion II follows.

Give answer (c) if either conclusion I or conclusion II follows.

Give answer (d) if neither conclusion I nor conclusion II follows.

Give answer (e) if both conclusion I and conclusion II follow.

(Qs. 1-5) :

Statements : All gliders are parachutes.
No parachute is an airplane.
All airplanes are helicopters.

1. Conclusions : I. No glider is an airplane.
II. All gliders being helicopters is a possibility.

2. Conclusions : I. No helicopter is a glider.
II. All parachutes being helicopters is a possibility.

3. Statements : Some mails are chats.
All updates are chats.
Conclusions : I. All mails being updates is a possibility.
II. No update is a mail.

(Qs. 4-5) :

Statement : No stone is metal.
Some metals are papers.
All papers are glass.

4. Conclusions : I. All stones being glass is a possibility.
II. No stone is a paper.

5. Conclusions : I. No glass is a metal.
II. Atleast some glass is metal.

DIRECTION (Qs. 6-8) : A word arrangement machine, when given a particular input, rearranges it following a particular rule. The following is the illustration of the input and the steps of arrangement.

Input: pull the cover and then push into
Step I: pull the then and cover push into
Step II: then the pull into push cover and
Step III: into pull the then and cover push
Step IV: into pull and then the cover push and so on.

6. **Input:** Try your best until you get goal
Which of the following steps would be 'get goal try until you your best'?
(a) Step II (b) Step III
(c) Step IV (d) Step V
(e) None of these

7. If Step VI of an input is
'deep gutter ball into the has fallen'
which of the following would definitely be the input?
(a) has the ball fallen into deep gutter
(b) ball has fallen into the deep gutter
(c) deep gutter has fallen into the ball
(d) gutter has deep ball fallen into the
(e) None of these

8. If Step IV of an input is
'we can't measure the depth without scale',
what would be step VII?
(a) scale we the measure can't depth without
(b) the we scale without depth can't measure
(c) without we scale the can't measure depth
(d) the we depth without scale can't measure
(e) None of these

DIRECTIONS (Q. 9) : In each question below is given a statement followed by three courses of action numbered (A), (B) and (C). A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

9. **Statement:** A heavy unseasonal downpour during the last two days has paralysed the normal life in the state in which five persons were killed but this has provided a huge relief to the problem of acute water crisis in the state.
Courses of action:
(A) The state government should set up a committee to review the alarming situation.
(B) The state government should immediately remove all the restrictions on use of potable water in all the major cities in the state.
(C) The state government should send relief supplies to all the affected areas in the state.
(a) None (b) Only (A)
(c) Only (B) and (C) (d) Only (C)
(e) All (A), (B) and (C)

RESPONSE GRID					
1. ⓐⓑⓒⓓⓔ	**2.** ⓐⓑⓒⓓⓔ	**3.** ⓐⓑⓒⓓⓔ	**4.** ⓐⓑⓒⓓⓔ	**5.** ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	**7.** ⓐⓑⓒⓓⓔ	**8.** ⓐⓑⓒⓓⓔ	**9.** ⓐⓑⓒⓓⓔ	

10. Farmers found using chemical fertilizers in the organic-farming area of their farms would be heavily fined.
Which of the following statements is an assumption implicit in the given statement ? (An assumption is something supposed or taken for granted.)
(a) Chemical fertilisers harm the crop.
(b) A farm's area for organic and chemical farming is different.
(c) Farmers who do not use chemical fertilizers in the chemical farming area would be penalized as well.
(d) All farmers undertake both these kinds of farming (chemical as well as organic) in their farms.
(e) Organic fertilizers are banned in the area for chemical farming.

11. Small brands are now looking beyond local grocery stores and are tying up with Supermarkets such as Big Bazaar to pull their business out of troubled waters.
Which of the following can be inferred from the given information ? *(An inference is something that is not directly stated but can be inferred from the given information)*
(a) Merchandise of smaller brands would not be available at local grocery stores in the near future.
(b) Smaller brands cannot compete with bigger ones in a supermarket set-up.
(c) There is a perception among small brands that sale in a supermarket is higher than that of small grocery stores.
(d) Supermarkets generate more revenue by selling products of bigger brands as compared to the smaller ones.
(e) Smaller brands have always had more tie-ups with supermarkets as compared to small grocery stores.

DIRECTIONS (Qs. 12-15) : These questions are based on the information given above and the sentences labeled (A), (B), (C), (D), (E) and (F) as given below.

(A) A smaller brand manufacturing a certain product of quality comparable with that of a bigger brand. makes much more profit from the local grocery stores than from the supermarkets.
(B) As the supermarkets have been set up only in bigger cities at present, this step would fail to deliver results in the smaller cities.
(C) Supermarkets help the smaller brands to break into newer markets without investing substantially in distribution.
(D) Supermarkets charge the smaller brands 10% higher than the amount charged to the bigger brands.
(E) Being outnumbered by the bigger brands, visibility of the smaller brands at local grocery stores is much lower as compared to the supermarkets.
(F) Smaller brands are currently making substantial losses in their businesses.

12. Which of the statements numbered (A), (B), (C), (D), (E) and (F) can be assumed from the facts/ information given in the statement ? (An assumption is something supposed or taken for granted)
(a) Only (A)   (b) Only (B)
(c) Both (B) and (C) (d) Both (D) and (E)
(e) Only (F)

13. Which of the statements numbered (A), (B), (C), (E) and (F) represents a disadvantage of the small grocery stores over the Supermarkets from the perspective of a smaller brand ?
(a) Only (A)   (b) Only (C)
(c) Only (E)   (d) Only (F)
(e) Both (B) and (C)

14. Which of the statements (A), (B), (C), (D) and (E) mentioned above represents a reason for the shift from local grocery stores to supermarkets by the smaller brands ?
(a) Only (A)   (b) Only (B)
(c) Only (D)   (d) Both (A) and (D)
(e) Both (C) and (E)

15. Which of the statements numbered (A), (B), (C), (E) and (F) mentioned above would prove that the step taken by the smaller brands (of moving to supermarkets) may not necessarily be correct ?
(a) Only (A)   (b) Only (C)
(c) Only (E)   (d) Only (F)
(e) Both (B) and (E)

16. A very large number of technically qualified young Indians are coming out of colleges every year, though there are not enough opportunities for them to get gainful employment. Which of the following contradicts the views expressed in the above statement?
(a) Technically qualified persons are far superior to those with standard degrees like B.A./B.Sc./B.Com. etc.
(b) The Govt. has not done effective -perspective planning for engaging technically qualified personnel while authorising the setting up of technical colleges.
(c) A huge gap exists between the level of competence of technically qualified graduates and requirement of the industry.
(d) Majority of the technically qualified persons are migrating from India to developed countries for better opportunities.
(e) None of these

17. The govt. has appealed to all citizens to use potable water judiciously as there is an acute shortage in supply. Excessive use may lead to huge scarcity in future months.
Which of the assumptions is implicit in the above statement?
(An assumption is something supposed or taken for granted)
(a) People may ignore the appeal and continue using water as per their consideration.
(b) Govt. may be able to tap those who do not respond to the appeal.
(c) Govt. may be able to put in place alternate sources of water in the event of a crisis situation.
(d) Large number of people may positively respond to the govt.'s appeal and help tide over the crisis.
(e) Only poor are going to suffer from this shortage of water supply.

RESPONSE GRID					
10. ⓐⓑⓒⓓⓔ	**11.** ⓐⓑⓒⓓⓔ	**12.** ⓐⓑⓒⓓⓔ	**13.** ⓐⓑⓒⓓⓔ	**14.** ⓐⓑⓒⓓⓔ
15. ⓐⓑⓒⓓⓔ	**16.** ⓐⓑⓒⓓⓔ	**17.** ⓐⓑⓒⓓⓔ		

18. A few travellers were severely beaten up by villagers recently in a remote rural part of the state as the villagers found the movement of the travellers suspicious. The district authority has sent a police team to nab the culprits.
Which of the following inferences can be drawn from the above statement?
(An inference is something which is not directly stated but can be inferred from the given facts)
(a) The villagers dislike presence of strangers in their vicinity.
(b) Villagers are generally suspicious in nature.
(c) Travellers prefer to visit countryside.
(d) The Govt. generally provides protection to travellers across the country.
(e) None of these

19. There has been a considerable drop in sales of four wheelers during the past six months when compared to the number of four wheelers sold during this period last year.
Which of the following can be the probable cause of the above phenomenon?
(A) The govt. has imposed higher excise duty on four wheelers at the beginning of this year.
(B) The petrol prices have risen considerably during the past eight months.
(C) The rate of interest on home and car loans have been rising for the past seven months.
(a) All (A), (B) and (C) (b) (A) and (C) Only
(c) (B) and (C) Only (d) (B) Only
(e) (A) Only

20. There is an alarming trend of skewed sex ratio against women in India during the past decade and situation may get out of hand if adequate steps are not taken to stop female foeticide.
Which of the following can be an effective step to reverse the trend?
(A) The Govt. should immediately completely ban the use of scanners / sonography on expectant mothers at all health centres.
(B) The Govt. should announce a substantial incentive scheme for couples who have at least one girl child.
(C) The Govt. should launch a nationwide campaign to create awareness against female foeticide.
(a) (A) only (b) (A) and (B) Only
(c) (B) and (C) Only (d) All (A), (B) and (C)
(e) None of these

DIRECTIONS (Qs. 21-25) : In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.

Give answer (a) if only Conclusion I is true
Give answer (b) if only Conclusion II is true
Give answer (c) if either Conclusion I or II is true
Give answer (d) if neither Conclusion I nor II is true
Give answer (e) if both Conclusions I and II are true.

21. **Statement :** $F \geq G = H; G > J \geq K$
Conclusions :
I. $F \geq K$ II. $K < H$

22. **Statement :** $P < Q = R \geq S \geq T$
Conclusions :
I. $T \leq Q$
II. $R > P$

23. **Statement :** $A \leq B < C; A \geq D; C \leq F$
Conclusions :
I. $D < C$
II. $F \geq D$

24. **Statement :** $U > A = I \leq O < E$
Conclusions :
I. $I \leq E$
II. $O > U$

25. **Statement :** $L = M \geq N; M > P; L < K$
Conclusions :
I. $K > P$
II. $N < K$

DIRECTIONS (Qs. 26-30) : Study the following information carefully to answer the given questions :

Eight persons from different banks viz. UCO bank, Syndicate bank, Canara bank, PNB, Dena Bank, Oriental Bank of Commerce, Indian bank and Bank of Maharashtra are sitting in two parallel rows containing four people each, in such a way that there is an equal distance between adjacent persons. In row-1 A, B, C and D are seated and all of them are facing south. In row-2 P, Q, R and S are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. (All the information given above does not necessarily represent the order of seating as in the final arrangement)
- C sits second to right of the person from Bank of Maharashtra. R is an immediate neighbour of the person who faces the person from Bank of Maharashtra.
- Only one person sits between R and the person for PNB. Immediate neighbour of the person from PNB faces the person from Canara Bank.
- The person from UCO bank faces the person from Oriental Bank of Commerce. R is not from Oriental Bank of Commerce. P is not from PNB. P does not face the person from Bank of Maharashtra.
- Q faces the person from Dena bank. The one who faces S sits to the immediate left of A.
- B does not sit at any of the extreme ends of the line. The person from Bank of Maharashtra does not face the person from Syndicate bank.

26. Which of the following is true regarding A ?
(a) The person from UCO bank faces A
(b) The person from Bank of Maharashtra is an immediate neighbour of A
(c) A faces the person who sits second to right of R
(d) A is from Oriental Bank of Commerce
(e) A sits at one of the extreme ends of the line

27. Who is seated between R and the person from PNB ?
(a) The person from Oriental Bank of Commerce
(b) P
(c) Q
(d) The person from Syndicate bank
(e) S

28. Who amongst the following sit at extreme ends of the rows?
    (a) D and the person from PNB.
    (b) The person from Indian bank and UCO bank.
    (c) The person from Dena bank and P.
    (d) The persons from Syndicate bank and D.
    (e) C, Q

29. Who amongst the following faces the person from Bank of Maharashtra ?
    (a) The person from Indian bank
    (b) P
    (c) R
    (d) The person from Syndicate bank
    (e) The person from Canara bank

30. P is related to Dena bank in the same way as B is related to PNB based on the given arrangement. To who amongst the following is D related to, following the same pattern ?
    (a) Syndicate bank   (b) Canara bank
    (c) Bank of Maharashtra   (d) Indian bank
    (e) Oriental Bank of Commerce

DIRECTIONS (Qs. 31-35) : Read the following information carefully and answer the questions.

Seven people- A, B, C, D, E, F and G were appointed to a company on seven different days of the same week starting from Monday to Sunday (but not necessarily in the same order). Each person also plays a different game namely-Cricket, Hockey, Football, Squash, Volleyball, Tennis and Kho-Kho, but not necessarily in the same order. Only two people were appointed after the one who plays Hockey. E was appointed on one of the days after the one who plays Hockey. Only three people were appointed between E and G. Only one person was appointed between G and the one who plays Volleyball. A was appointed immediately after the one who plays Volleyball. Only three people were appointed after the one who plays Kho-Kho. C was appointed immediately after F, but not on Friday. Only one person was appointed between F and the one who plays Cricket. B was appointed immediately after the one who plays cricket. More than two people were appointed between D and the one who plays Tennis. A does not play squash. E does not play tennis.

31. Who amongst the following was appointed on Wednesday?
    (a) The one who plays Kho-Kho
    (b) A
    (c) B
    (d) The one who plays Cricket
    (e) F

32. Which of the following statements is true as per the given arrangement ?
    (a) Only one person was appointed between F and the one who plays Squash.
    (b) Only three people were appointed before C.
    (c) A plays Tennis.
    (d) B was appointed on Saturday.
    (e) None of the given options is true

33. The person who plays Tennis was appointed on which of the following days ?
    (a) Thursday   (b) Tuesday
    (c) Sunday   (d) Monday
    (e) Saturday

34. Which of the following combinations will be definitely true as per the given arrangement ?
    (a) C-Squash   (b) Thursday-C
    (c) Saturday-Cricket   (d) Monday-Volleyball
    (e) F-Kho-Kho

35. How many people were appointed before G?
    (a) Two   (b) One
    (c) Three   (d) Four
    (e) None, as G was appointed on Monday.

36. When entering text within a document, the Enter key is normally pressed at the end of every _____.
    (a) Line   (b) Sentence
    (c) Paragraph   (d) word
    (e) file

37. When a real-time telephone call between people is made over the Internet using computers, it is called _____.
    (a) a chat session   (b) an e-mail
    (c) an instant message (d) Internet telephony
    (e) None of these

38. Which of the following is the first step in sizing a window ?
    (a) Point to the title bar
    (b) Pull down the View menu to display the toolbar
    (c) Point lo any corner or border
    (d) Pull down the View menu and change to large icons
    (e) None of these

39. Which of the following software could assist someone who cannot use their hands for computer input ?
    (a) Video conferencing (b) Speech recognition
    (c) Audio digitizer   (d) Synthesizer
    (e) None of these

40. _____ a document means the file is transferred from another computer to your computer.
    (a) Uploading
    (b) Really Simple Syndication (RSS)
    (c) Accessing
    (d) Downloading
    (e) Upgrading

41. Which computer memory is used for storing programs and data currently being processed by the CPU ?
    (a) Mass memory   (b) Internal memory
    (c) Non-volatile memory (d) PROM
    (e) None of these

42. Computers that control processes accept data in a continuous _____.
    (a) data traffic pattern (b) data highway
    (c) infinite loop   (d) feedback loop
    (e) slot

RESPONSE GRID					
	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ
	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ
	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ	41. ⓐⓑⓒⓓⓔ	42. ⓐⓑⓒⓓⓔ

43. What refers to a set of characters of a particular design ?
    (a) keyface   (b) formation
    (c) calligraph   (d) stencil
    (e) typeface

44. _____ is used by public and private enterprises to publish and share financial information with each other and industry analysts across all computer platforms and the Internet.
    (a) Extensible Markup Language (EML)
    (b) Extensible Business Reporting Language (XBRL)
    (c) Enterprise Application Integration (EAI)
    (d) Sales Force Automation (SFA) software
    (e) None of these

45. The method of Internet access that requires a phone line, but offers faster access speeds than dial-up is the _____ connection.
    (a) cable access   (b) satellite access
    (c) fiber-optic service
    (d) Digital Subscriber Line (DSL)
    (e) modem

DIRECTIONS (Qs. 46-50) : Study the pie-chart carefully to answer the following questions.

Percentage of Students Studying
Different Specialisations in a Management Institute
Total number of students = 4500

71. (d) 72. (d) 73. (c) 74. (e) 75. (b)
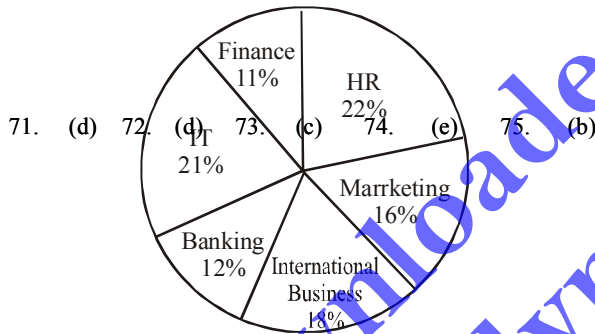
Ratio of men to women in each specialisation

Specialisation	Men	Women
HR	2	3
Marketing	7	5
International Business	5	1
Banking	17	10
IT	1	2
Finance	5	4

46. What is the total number of men studying in the institute?
    (a) 1665   (b) 2421
    (c) 2025   (d) 1954
    (e) None of these

47. The number of women studying Marketing is approximately what per cent of the total number of students in the institute?
    (a) 5   (b) 12
    (c) 15   (d) 7
    (e) None of these

48. What is the total number of men studying Banking and International Business?
    (a) 1125   (b) 297
    (c) 1015   (d) 594
    (e) None of these

49. The number of women studying Finance is what per cent of the number of men studying the same?
    (a) 80   (b) 65
    (c) 95   (d) 70
    (e) None of these

50. In which specialisation do the maximum number of women study?
    (a) HR   (b) IT
    (c) Marketing   (d) Finance
    (e) None of these

DIRECTIONS (Qs. 51-55) : These questions are based on the following pie charts.

Classification of appeared candidates in a competitive test from different stats and qualified candidates from those states.
Appeared candidates = 45,000.
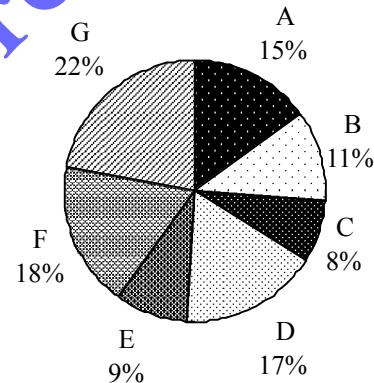
Qualified candidates = 9000.
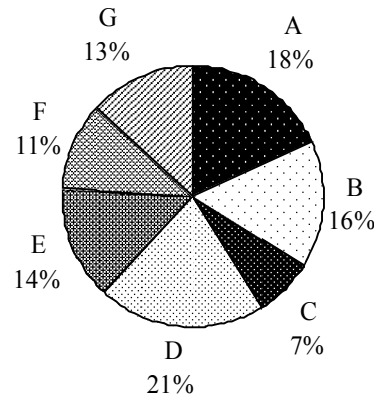
RESPONSE GRID					
43. (a)(b)(c)(d)(e)	**44.** (a)(b)(c)(d)(e)	**45.** (a)(b)(c)(d)(e)	**46.** (a)(b)(c)(d)(e)	**47.** (a)(b)(c)(d)(e)	
48. (a)(b)(c)(d)(e)	**49.** (a)(b)(c)(d)(e)	**50.** (a)(b)(c)(d)(e)			

51. What is the ratio of the number of appeared candidates from States C and E together to that of the appeared candidates from States A and F together ?
    (a) 17 : 33   (b) 11 : 13
    (c) 13 : 27   (d) 17 : 27
    (e) None of these

52. In which state, the percentage of qualified candidates with respect to that of appeared candidates is minimum ?
    (a) C   (b) F
    (c) D   (d) G
    (e) None of these

53. What is the difference between the number of qualified candidates of States D and those of G ?
    (a) 690   (b) 670
    (c) 780   (d) 720
    (e) None of these

54. What is the percentage of qualified candidates with respect to appeared candidates from States B and C taken together? (rounded to two decimal places)
    (a) 23.11   (b) 24.21
    (c) 21.24   (d) 23
    (e) None of these

55. What is the ratio between the number of candidates qualified from Staes B and D together to the number of candidates appeared from State 'C' respectively ?
    (a) 8 : 37   (b) 11 : 12
    (c) 37 : 40   (d) 7 : 37
    (e) None of these

DIRECTIONS (Qs. 56-60): Study the following graph carefully and answer the questions given below it.

Marks obtained by two students in six subjects in an examination

Maximum Marks					
Physics	Chemistry	English	History	Geography	Hindi
200	200	200	150	150	150
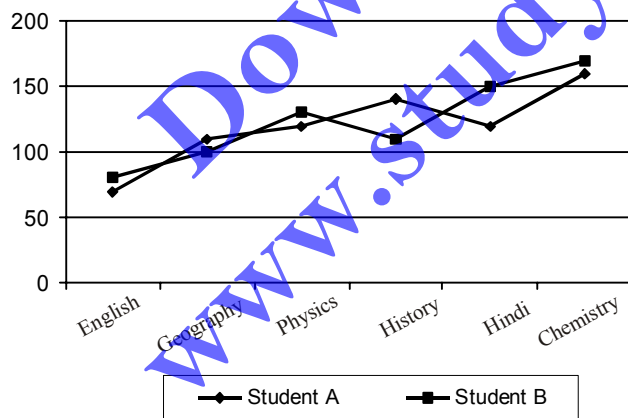
56. Marks obtained by student B in Hindi was what percentage of the marks obtained by student B in physics ?
    (a) 25   (b) 150   (c) 125   (d) 115.38
    (e) None of these

57. Approximately what was the average percentage of makrs obtained by A in all the subjects ?
    (a) 70   (b) 60   (c) 80   (d) 85
    (e) None of these

58. Approximately what was the average marks obtained by B in Geography, History and Hindi ?
    (a) 120   (b) 80   (c) 140   (d) 110
    (e) None of these

59. In how many subjects did student B obtain more then 70 percentage of makrs ?
    (a) 1   (b) 2   (c) 3   (d) 4
    (e) None of these

60. What was the difference in percentage of marks between A and B in History ?
    (a) 30   (b) 25   (c) 40   (d) 20
    (e) None of these

DIRECTIONS (Qs. 61-65) : Study the following graph and answer the questions given below it :

Number of Children pursuing various Hobby classes in various States (Number in thousands)
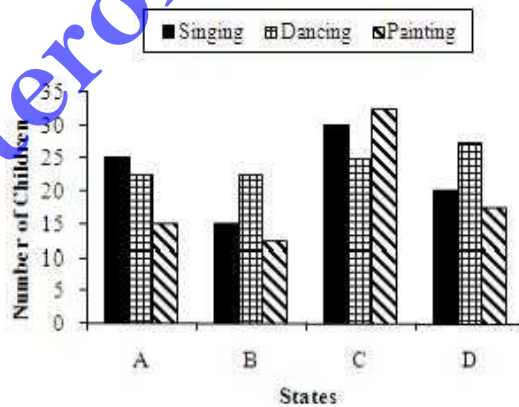
61. What is the average number of children pursuing painting classes from all the States together ?
    (a) 19735   (b) 17395
    (c) 19725   (d) 18385
    (e) None of these

62. The children pursuing singing classes in State A are what percent of the total number of children pursuing all the three classes from the same State ?
    (a) 30   (b) 35   (c) 40   (d) 45
    (e) None of these

63. What is the difference between the total number of children pursuing dancing and the total number of children pursuing painting form all the States together?
    (a) 20000 (b) 15000 (c) 25000 (d) 10000
    (e) None of these

64. What is the respective ratio of the number of children pursuing dancing from State B to the number of children pursuing dancing from State D?
    (a) 7 : 9 (b) 11 : 9 (c) 11 : 7 (d) 9 : 11
    (e) None of these

65. What is the average number of children pursuing singing, dancing and painting from State C ?
    (Rounded off to the nearest integer)
    (a) 28859   (b) 29167
    (c) 291216   (d) 28765
    (e) None of these

DIRECTIONS (Qs. 66-70) : These questions are based on the information and two graphs given below.

Figure 1 shows the amount of work distribution , in man - hours for a software company between offshore and onsite activities. Figure 2 shows the estimated and actual work effort involved in the different offshore activities in the same company during the same period. [Note : onsite refers to work performed at the customer's premise and offshore refers to work performed at the developer's premise.]
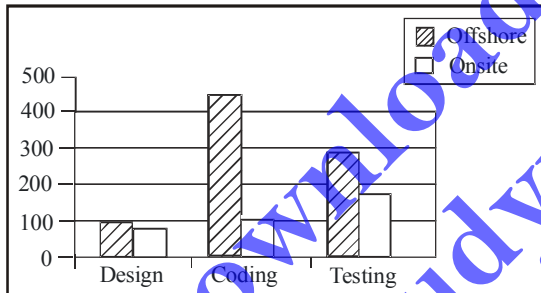
Figure 1
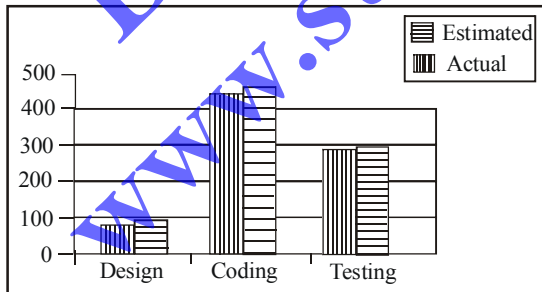
Figure 2

66. Which of the work requires as many man- hours as that spent in coding?
    (a) Offshore, design and coding
    (b) Offshore coding.
    (c) Testing
    (d) Offshore, testing and coding.
    (e) None of these

67. Roughly what percentage of the total work is carried out onsite?
    (a) 40 percent   (b) 20 percent   (c) 30 percent
    (d) 50 percent   (e) None of these

68. The total effort in man- hours spent onsite is nearest to which of the following?
    (a) The sum of the estimated and actual effort for offshore design
    (b) The estimated man-hours of offshore coding
    (c) The actual man-hours of offshore testing
    (d) Half of the man-hours of estimated offshore coding
    (e) None of these

69. If the total working hours were 100 which of the following tasks will account for approximately 50 hours?
    (a) Coding   (b) Design
    (c) Offshore testing (d) Offshore testing plus design
    (e) None of these

70. If 50 percent of the offshore work were to be carried out onsite, with the distribution of effort between the tasks remaining the same, the proportion of testing carried out offshore would be
    (a) 40 Percent   (b) 30 Percent   (c) 50 Percent
    (d) 70 Percent   (e) None of these

71. Prakash, Sunil and Anil started a business jointly investing ₹11 lakhs, ₹ 16.5 lakhs and ₹ 8.25 lakhs respectively. The profit earned by them in the business at the end of three years was ₹ 19.5 lakhs. What will be the 50% of Anil's share in the profit?
    (a) ₹4.5 lakhs   (b) ₹2.25 lakhs   (c) ₹2.5 lakhs
    (d) ₹3.75 lakhs   (e) None of these

72. Naresh purchased a TV set for ₹11,250 after getting discount of 10% on the labelled price. He spent ₹150 on transport and ₹800 on installation. At what price should it be sold so that the profit earned would be 15% if no discount was offered?
    (a) ₹12,937.50   (b) ₹14,030   (c) ₹13,450
    (d) ₹15,467.50   (e) None of these

73. Mr Duggal invested ₹20,000 with rate of interest @ 20 pcpa. The interest was compounded half-yearly for the first one year and in the next year it was compounded yearly. What will be the total interest earned at the end of two years?
    (a) ₹8,800   (b) ₹9,040
    (c) ₹8,040   (d) ₹9,800
    (e) None of these

74. In how many different ways can the letters of the word DESIGN be arranged so that the vowels are at the two ends?
    (a) 48   (b) 72
    (c) 36   (d) 24
    (e) None of these

RESPONSE GRID	63. ⓐⓑⓒⓓⓔ	64. ⓐⓑⓒⓓⓔ	65. ⓐⓑⓒⓓⓔ	66. ⓐⓑⓒⓓⓔ	67. ⓐⓑⓒⓓⓔ
	68. ⓐⓑⓒⓓⓔ	69. ⓐⓑⓒⓓⓔ	70. ⓐⓑⓒⓓⓔ	71. ⓐⓑⓒⓓⓔ	72. ⓐⓑⓒⓓⓔ
	73. ⓐⓑⓒⓓⓔ	74. ⓐⓑⓒⓓⓔ			

75. A 180 -metre long train crosses another 270-metre long train running in the opposite direction in 10.8 seconds. If the speed of the first train is 60 kmph, what is the speed of the second train in kmph?
   (a) 80   (b) 90
   (c) 150   (d) Cannot be determined
   (e) None of these

76. Three digits numbers are formed using the digits 0, 2, 4, 6, 8. A number is chosen at random out of these numbers. What is the probability that this number has the same digits?

   (a) $\dfrac{1}{16}$ (b) $\dfrac{16}{25}$

   (c) $\dfrac{1}{645}$ (d) $\dfrac{1}{25}$

   (e) None of these

77. Two person Ravi and Shyam can do a work in 60 days and 40 days respectively. They began the work together but Ravi left after some time and Shyam finished the remaining work in 10 days. After how many days did Ravi leave?
   (a) 8 days   (b) 12 days
   (c) 15 days   (d) 18 days
   (e) 20 days

78. The ratio of A's age to B's is 6 : 7. The product of their ages is 672. What is the ratio of their ages after 6 years?
   (a) 6 : 7   (b) 5 : 7
   (c) 7 : 8   (d) 8 : 9
   (e) None of these

79. An amount of money is to be divided among P, Q and R in the ratio of 3 : 5 : 7 respectively. If the amount received by R is ₹ 4,000 more than the amount received by O, what will be the total amount received by P and Q together?
   (a) ₹ 8,000   (b) ₹ 12,000
   (c) ₹ 16,000   (d) Cannot be determined
   (e) None of these

80. Arun invested a sum of money at a certain rate of simple interest for a period of four years. Had he invested the same sum for a period of six years, the total interest earned by him would have been fifty per cent more than the earlier interest amount. What was the rate of interest per cent per annum?
   (a) 4   (b) 8
   (c) 5   (d) Cannot be determined
   (e) None of these

ENGLISH LANGUAGE

DIRECCTIONS. (Qs. 81-90) : Read the following passage carefully and answer the questions given below it. Certain words in the passage have been printed in bold to help you locate them when answering some of the questions.

"Rivers should link, not divide us," said the Indian Prime Minister expressing concern over interstate disputes and urged state governments to show "understanding and consideration, statesmanship and an appreciation of the other point of view."

Water conflicts in **India now** reach every level, divide every segment of our society, political parties, states, regions and sub-regions within states, districts, castes and groups and individual farmers. Water conflicts within and between many developing countries are also taking a serious turn. Fortunately, the "water wars", forecast by so many, have not yet **materialized**. War has taken place, but over oil, not water. Water is **radically** altering and affecting political boundaries all over the world, between as well as within countries. In India, water conflicts are likely to **worsen** before they begin to be resolved. Till then they pose a significant threat to economic growth, security and health of the ecosystem and the victims are likely to be the poorest of the poor as well as the very sources of water - rivers, wetlands and aquifers.

Conflicts might sound bad or negative, but they are logical developments in the absence of proper democratic, legal and administrative mechanisms to handle issues at the root of water conflicts. Part of the problem stems from the specific nature of water, namely that water is divisible and amenable to sharing; one unit of water used by one is a unit **denied** to others; it has multiple uses and users and involves resultant trade-offs. Excludability is an **inherent** problem and very often exclusion costs involved are very high: it involves the issue of graded scales and boundaries and need for evolving a corresponding understanding around them. Finally, the way water is planned, used and managed causes externalities, both positive and negative, and many of them are unidirectional and **asymmetric**.

There is a relatively greater visibility as well as a greater body of experience in evolving policies, frameworks, legal set-ups and administrative mechanisms dealing with immobile natural resources, however contested the space may be. Reformists as well as revolutionary movements are rooted in issues related to land. Several political and legal interventions addressing the issue of equity and societal justice have been attempted. Most countries have gone through land reforms of one type or another. Issues related to forests have also generated a body of comprehensive literature on forest resources and rights. Though conflicts over them have not necessarily been effectively or adequately resolved, they have received much more serious attention, have been studied in their own right and practical as well as theoretical means of dealing with them have been sought. In contrast, water conflicts have not received the same kind of attention.

81. According to the author which of the following is/are consequences of water conflicts?
   (A) Trans-border conflicts between developing countries.
   (B) Water bodies will remain unused and unaffected till the conflict is resolved.
   (C) Water conflicts have altered the political boundaries within countries.
   (a) Only (A)   (b) Only (B)
   (c) Only (C)   (d) Both (A) & (C)
   (e) None of these

RESPONSE GRID

75. (a) (b) (c) (d) (e)   76. (a) (b) (c) (d) (e)   77. (a) (b) (c) (d) (e)   78. (a) (b) (c) (d) (e)   79. (a) (b) (c) (d) (e)
80. (a) (b) (c) (d) (e)   81. (a) (b) (c) (d) (e)

82. The author's main objective in writing the passage is to
    (a) showcase government commitment to solve the water distribution problem
    (b) make a strong case for war as the logical resolution for water conflicts
    (c) point out the seriousness of the threat posed by unresolved water conflicts
    (d) describe how the very nature of water contributes to water struggles
    (e) criticise governmental efforts for water conflict resolution.

83. What is the Prime Minister's advice to resolve water disputes?
    (a) Link all rivers to make national grid.
    (b) Politicians alone can solve the problem.
    (c) Bridges and dams can resolve water issues.
    (d) Make consensual and conscious efforts.
    (e) Create public awareness.

84. According to the author, which of the following factors aggravates water disputes?
    (a) Political interventions
    (b) Excessive analysis of the issue
    (c) Reformist movements by political parties
    (d) Inadequate administrative and legislative frameworks
    (e) None of these

85. Which of the following can be inferred about water conflicts?
    (a) Water management techniques like dams, linking rivers, etc have negative consequences.
    (b) There is no real solution to water conflicts.
    (c) Despite receiving much attention water conflicts remain unresolved.
    (d) Water conflicts threaten the livelihood of those who depend on water sources.
    (e) None of these

86. According to the passage, which of the following is a limitation of water resulting in disputes?
    (a) Water is not a divisible resource.
    (b) Manipulation of water distribution is easy.
    (c) Water is an interconnected resource.
    (d) Water is an immobile resource.
    (e) None of these

DIRECTIONS (Qs. 87 - 88) : Pick out the word which is the closest in meaning to the word printed in bold as used in the passage.

87. **radically**
    (a) suddenly   (b) equally   (c) completely
    (d) moderately   (e) concurrently

88. **inherent**
    (a) functional   (b) intense   (c) persistent
    (d) characteristic (e) genetic

DIRECTIONS (Qs. 89 - 90) : Pick out the word which is opposite in meaning to the word printed in bold as used in the passage.

89. **asymmetric**
    (a) unsteady   (b) equilibrium
    (c) discouraging   (d) superior
    (e) contradictory

90. **denied**
    (a) considered   (b) assigned   (c) concerned
    (d) fined   (e) acknowledged

DIRECTIONS (Qs. 91-95) : Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

(A) There are a number of items in the atomic energy programme which are being made indigenously.

(B) Given the overall energy situation in India, the use of nuclear power in some measure is inescapable even while thermal and hydro power continue to be the dominant elements.

(C) However, commercial aspects of exploiting nuclear capabilities, especially for power-generation programmes, have been recently given high priority.

(D) Atomic energy programmes have been subject to severe restrictions for very obvious reasons as the Department of Atomic Energy is becoming self-reliant in areas in which only a few countries have such capability.

(E) Even to meet these nuclear power requirements, India critically requires a commercial-level power-generation capability, with its commensurate safety and nuclear waste management arrangements.

(F) Thus, in the Indian context energy security is also crucial, perhaps much more than it is for the USA, because India imports a good part of its crude oil requirements, paying for it with precious foreign exchange.

91. Which of the following will be the FIFTH sentence after rearrangement?
    (a) A   (b) B   (c) C
    (d) D   (e) E

92. Which of the following will be the THIRD sentence after rearrangement?
    (a) A   (b) B   (c) C
    (d) D   (e) E

93. Which of the following will be the SECOND sentence after rearrangement?
    (a) A   (b) B   (c) C
    (d) D   (e) E

94. Which of the following will be the FIRST sentence after rearrangement?
    (a) A   (b) B   (c) C
    (d) D   (e) E

95. Which of the following will be the FOURTH sentence after rearrangement?
    (a) A   (b) B   (c) C
    (d) D   (e) E

RESPONSE GRID					
82. (a)(b)(c)(d)(e)	83. (a)(b)(c)(d)(e)	84. (a)(b)(c)(d)(e)	85. (a)(b)(c)(d)(e)	86. (a)(b)(c)(d)(e)	
87. (a)(b)(c)(d)(e)	88. (a)(b)(c)(d)(e)	89. (a)(b)(c)(d)(e)	90. (a)(b)(c)(d)(e)	91. (a)(b)(c)(d)(e)	
92. (a)(b)(c)(d)(e)	93. (a)(b)(c)(d)(e)	94. (a)(b)(c)(d)(e)	95. (a)(b)(c)(d)(e)		

DIRECTIONS (Qs. 96-105) : In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Since ___96___ times, people have ___97___ that human activity could affect the environment. The discovery of past ice ages shows that Earth's climate is in constant ___98___ and that ___99___ history, scientists have ___100___ for the cause of these changes. Though scientists discovered the greenhouse effect in the late 19th century, the theory of global warming wasn't ___101___ as a scientifically proven fact until 1992 when the United Nations held a Conference on Environment and Development. Today, global warming is a ___102___ accepted reality and ___103___ about its effects range from the hysteria to the acceptance. Newspapers chronicle the slowly changing climate and the actions that have ___104___ that change. From developing nations to industrial countries, global climate affects ___105___ .

96. (a) long   (b) great   (c) urgent
    (d) ancient   (e) stone-age
97. (a) believed   (b) succeeded   (c) wished
    (d) lost   (e) wanted
98. (a) hot   (b) flux   (c) fight
    (d) changes   (e) reality
99. (a) with   (b) for   (c) to
    (d) throughout   (e) as
100. (a) contribute (b) talked   (c) resigned
     (d) visited   (e) searched
101. (a) accepted   (b) false   (c) real
     (d) greeted   (e) expected
102. (a) rarely   (b) widely   (c) wrongly
     (d) leisurely   (e) faithfully
103. (a) principles (b) various
     (c) measurement (d) idea
     (e) speculation
104. (a) meaning   (b) worked   (c) affected
     (d) cause   (e) witness
105. (a) one   (b) much   (c) everyone
     (d) more   (e) singular

DIRECTIONS (Qs. 106-110) : The following questions consist of a single sentence with one blank only. You are given five as answer choices you have to pick up two correct answers, either of which will make the sentence meaningfully complete.

106. Out of the 6.5 million abortions ……………in 2010, 68% were performed by an unqualified person or in unsafe environment.
     (1) Recorded   (2) Registered   (3) Counted
     (4) Performed   (5) Conducted
     (a) Only 1   (b) 1 and 2   (c) 1 and 5
     (d) 4 and 5   (e) None of these
107. Mr. John has been ………for the top job at the ADB bank.
     (1) Shortlisted (2) Selected   (3) Appointed
     (4) Questioned   (5) Approved
     (a) 3 and 5   (b) 1 and 2   (c) 2 and 3
     (d) 1 and 4   (e) None of these

108. The procedure adopted by the bank authorities was totally ……………..as they did not follow the principles of natural justice.
     (1) Miscalculated (2) Flawed   (3) Irrational
     (4) Accurate   (5) In place
     (a) 2 and 3   (b) 1 and 2   (c) 3 and 4
     (d) 1and 5   (e) None of these
109. Delhi High Court directed RBI to respond to the plea of …………….commissioner of Income tax.
     (1) Appointed   (2) Sacked   (3) Removed
     (4) Selected   (5) Responsible
     (a) 1 and 2   (b) 2 and 3   (c) 1 and 5
     (d) 5 and 4   (e) None of these
110. The High Court withdrew a …..…approval that allowed him to make numerous trips to hospitals in last 4 years.
     (1) Ordered   (2) Pending   (3) Blanket
     (4) Prior   (5) False
     (a) 5 and 1   (b) 1 and 2   (c) 2 and 3
     (d) 3 and 4   (e) None of these

DIRECTIONS (Qs. 111-112): In each of the following questions four words are given of which two words are most nearly the same or opposite in meaning. Find the two words which are most nearly the same or opposite in meaning.

111. (A) Expanded   (B) Proclaimed
     (C) Shrunk   (D) Facilitated
     (a) A - D (b) B - D (c) C - D (d) B - C (e) A - C
112. (A) Indelible   (B) Erasable
     (C) Insignificant (D) Temporary
     (a) A - C (b) C - B (c) A - B (d) B - D (e) C - D

Directions (Qs. 113-115): Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is (e). (Ignore errors of punctuation, if any).

113. a) The driver of that car /b) is sounding horn for /c) the last ten minutes /d) but nobody tells him to stop. /e) No error
114. a) If you go on letting /b) your dog chase cars /c) he will end by being /d) run down one day. /e) No error
115. a) He heard the guard /b) blowing the whistle and knew /c) it is time for him /d) to enter the train. /e) No error

GENERAL/ ECONOMY/ BANKING AWARENESS

116. Mortgage is a
     (a) security on movable property for a loan given by a **bank.**
     (b) security on immovable property for a loan given by a bank.
     (c) concession on immovable property for a loan given by a **bank.**
     (d) facility on immovable property for a loan given by a **bank.**
     (e) security on immovable property for a deposit received by a bank.

RESPONSE GRID					
	96. ⓐⓑⓒⓓⓔ	97. ⓐⓑⓒⓓⓔ	98. ⓐⓑⓒⓓⓔ	99. ⓐⓑⓒⓓⓔ	100. ⓐⓑⓒⓓⓔ
	101. ⓐⓑⓒⓓⓔ	102. ⓐⓑⓒⓓⓔ	103. ⓐⓑⓒⓓⓔ	104. ⓐⓑⓒⓓⓔ	105. ⓐⓑⓒⓓⓔ
	106. ⓐⓑⓒⓓⓔ	107. ⓐⓑⓒⓓⓔ	108. ⓐⓑⓒⓓⓔ	109. ⓐⓑⓒⓓⓔ	110. ⓐⓑⓒⓓⓔ
	111. ⓐⓑⓒⓓⓔ	112. ⓐⓑⓒⓓⓔ	113. ⓐⓑⓒⓓⓔ	114. ⓐⓑⓒⓓⓔ	115. ⓐⓑⓒⓓⓔ
	116. ⓐⓑⓒⓓⓔ				

117. When the rate of inflation increases
    (a) purchasing power of money increases
    (b) purchasing power of money decreases
    (c) value of money increases
    (d) purchasing power of money remains unaffected
    (e) amount of money in circulation decreases

118. Banks in our country normally publicise that additional interest rate is allowed on retail domestic term deposits of
    (a) Minors   (b) Married women
    (c) Senior citizens   (d) Govt. employees
    (e) Rural residents

119. Which of the following is NOT decided by the Finance Minister while presenting Union Budget every year?
    (a) Rate of Income Tax
    (b) Expenditure of Defence Services
    (c) Relief packages to various sections of the society
    (d) Repo & Reverse Repo rates
    (e) Revenue Expected from various sources

120. GNP stands for:
    (a) Group Net Product
    (b) Gross National Product
    (c) Grand Nuclear Process
    (d) Group Networking Process
    (e) Grand National Product

121. Term 'Balance of Payment' for_____.
    (a) Diplomatic Relations
    (b) Exports & Imports
    (c) Annual production in a factory
    (d) Deficit in Union Budget
    (e) Credit given to consumers

122. World Kidney Day was observed on _____.
    (a) 14 March   (b) 13 March
    (c) 16 March   (d) 11 March
    (e) None of these

123. Which private airline of India signed a deal with Boeing worth 4.4 billion dollars to buy 42 Next Generation 737 MAX8 aircraft by 2018?
    (a) IndiGo   (b) Kingfisher Airlines
    (c) Spice Jet   (d) Go Airways
    (e) None of these

124. The USP of a Credit Card is
    (a) cashless operations (b) only for HNIs
    (c) only for men   (d) only for employed persons
    (e) transactions through cheque book

125. EMI can be a marketing tool if
    (a) EMI is increasing   (b) It is very high
    (c) It is very low
    (d) EMI has no impact on marketing
    (e) EMI is a flat rate

126. The USP of a Current Account is
    (a) high profitability   (b) liquidity
    (c) low rate of interest (d) costly transactions
    (e) friendly features

127. Debit Card can be issued to
    (a) Only Income Tax assesses
    (b) Only Professionals
    (c) Only women
    (d) All farmers
    (e) All Savings Account holders

128. Mutual Funds investments can be effectively canvassed among
    (a) only salaried persons
    (b) students availing education loans
    (c) HNI customers
    (d) sunrise industries
    (e) poor farmers

129. The target group for Personal Loans is
    (a) All Private Limited Companies
    (b) All Businessmen
    (c) All Salaried persons
    (d) Minor children
    (e) Newborn infants

130. The full form of E.E.F.C. is–
    (a) Export Earness Foreign Currency Account
    (b) Exchange Earness Foreign Currency Account
    (c) Export Earness Foreign Credit Account
    (d) Exchange Earness Foreign Credit Account
    (e) None of these

131. Durand Cup is associated with
    (a) Chess   (b) Golf   (c) Football
    (d) Cricket   (e) None of these

132. The term 'Fourth Estate' refers to
    (a) Under-Developed State
    (b) Parliament
    (c) Judiciary
    (d) Press
    (e) None of these

133. Which among the following in India is the second largest econmic activity after agriculture?
    (a) Handloom
    (b) Poultry   (c) Education and tuition
    (d) Carpentary   (e) None of these

134. Which of the following has been included in the list of Fundamental Rights to Indian citizen?
    (a) Job to each and every single woman who has obtained a post graduation Degree and is not more than 29 years of age
    (b) Equal opportunities to every woman wishing to join Indian Defence services at any level/position
    (c) Education to all children between 6-14 years of age
    (d) Social security to every person who has attained the age of 70 years but does not have regular income to support him/herself.
    (e) None of these

135. Which of the following items does not fall in the category of items being exported from India?
    (a) Tea   (b) Footwear   (c) Milk
    (d) Steel   (e) Garments

RESPONSE GRID					
117. ⓐⓑⓒⓓⓔ	118. ⓐⓑⓒⓓⓔ	119. ⓐⓑⓒⓓⓔ	120. ⓐⓑⓒⓓⓔ	121. ⓐⓑⓒⓓⓔ	
122. ⓐⓑⓒⓓⓔ	123. ⓐⓑⓒⓓⓔ	124. ⓐⓑⓒⓓⓔ	125. ⓐⓑⓒⓓⓔ	126. ⓐⓑⓒⓓⓔ	
127. ⓐⓑⓒⓓⓔ	128. ⓐⓑⓒⓓⓔ	129. ⓐⓑⓒⓓⓔ	130. ⓐⓑⓒⓓⓔ	131. ⓐⓑⓒⓓⓔ	
132. ⓐⓑⓒⓓⓔ	133. ⓐⓑⓒⓓⓔ	134. ⓐⓑⓒⓓⓔ	135. ⓐⓑⓒⓓⓔ		

136. Which of the following organizations is known as Market Regulator in India?
    (a) SEBI   (b) IBA   (c) AMFI
    (d) NSDL   (e) None of these

137. Black money is
    (a) Counterleit currency
    (b) Illegally earned money
    (c) Income on which payment of tax is evaded
    (d) Money earned through underhand deals
    (e) None of these

138. Capital Adequacy Ratio is a thermometer of Bank's health. It is the ratio of a bank's __:
    (a) capital to its risk   (b) risk to capital
    (c) capital to assets   (d) capital to liabilities
    (e) None of these

139. For the first time, in which year Basel Committee came up with Capital Accords for banks?
    (a) 1985   (b) 1988
    (c) 1990   (d) 1992
    (e) None of these

140. Which among the following is NOT a part of Tier-I capital?
    (a) Issued Capital   (b) Fully Paid-up Capital
    (c) Disclosed Reserves   (d) Undisclosed Reserves
    (e) None of these

141. A consumer fails to make a payment due on a mortgage loan. This is known as __:
    (a) Credit Risk   (b) Refinancing Risk
    (c) Liquidity Risk   (d) Settlement Risk
    (e) None of these

142. What is leverage ratio?
    (a) capital to total assets (risk-weighted).
    (b) capital to total assets (not risk-weighted).
    (c) capital to total liabilities
    (d) Tier-I capital to Tier-II capital
    (e) None of these

143. Which of the following is India's first Credit Rating Agency?
    (a) ICRA   (b) CRISIL
    (c) ONICRA   (d) CARE
    (e) None of these

144. RBI takes "Prompt Corrective Action" when a bank is faced to __:
    (a) Market Risk   (b) Credit Risk
    (c) Liquidity Risk   (d) Low Capital Adequacy
    (e) None of these

145. What is the current number of Local Area Banks in India?
    (a) Three   (b) Four   (c) Six
    (d) Eight   (e) None of these

146. SEBI has been imposed a restriction on money flow in equity through 'P-notes'. What is the full form of 'P-notes ?
    (a) permanent notes   (b) purchase notes
    (c) participatory notes   (d) private notes
    (e) None of these

147. DSCR indicates the ability of a company to-
    (a) Meet its current liabilities
    (b) Service its share holders
    (c) Meet its long term debt obligations
    (d) Raise further capital
    (e) None of these

148. NBFCs are an important part of the Indian financial system. What is meant by this term ?
    (a) New Banking Financial Companies
    (b) Non Banking Financial Companies
    (c) Neo Banking Financial Confederation
    (d) Non banking Fiscal Companies
    (e) None of these

149. Systematic investment Plans relates to :
    (a) Mutual Funds
    (b) Life Insurance Companies
    (c) Commercial Banks
    (d) Post office savings schemes
    (e) None of these

150. Euro money is the official currency of ?
    (a) NATO   (b) UN
    (c) European   (d) Germany and England
    (e) None of these

151. Which of the following types of accounts are known as "Demat Accounts"?
    (a) Zero Balance Accounts
    (b) Accounts which are opened to facilitate repayment of a loan taken from the bank. No other business can be conducted from there
    (c) Accounts in which shares of various companies are traded in electronic form
    (d) Accounts which are operated through internet banking facility
    (e) None of the above

152. Currency notes deposited in the currency chest are the property of ____?
    (a) Respective bank   (b) RBI
    (c) SBI   (d) Government of India
    (e) Respective state Government

153. Ustad Ali Ahmad Hussain Khan, who passed away recently, was exponent in which musical instrument?
    (a) Sarangi   (b) Shehnai   (c) Sitar
    (d) Tabla   (e) None of these

154. What is India's rank in the United Nations' World Happiness Index 2016?
    (a) 101   (b) 112   (c) 118
    (d) 129   (e) None of these

155. The Fulbright - Kalam Climate Fellowship has been launched by India and which country?
    (a) United States   (b) Australia
    (c) Russia   (d) Germany
    (e) None of these

RESPONSE GRID					
136. ⓐⓑⓒⓓⓔ	137. ⓐⓑⓒⓓⓔ	138. ⓐⓑⓒⓓⓔ	139. ⓐⓑⓒⓓⓔ	140. ⓐⓑⓒⓓⓔ
141. ⓐⓑⓒⓓⓔ	142. ⓐⓑⓒⓓⓔ	143. ⓐⓑⓒⓓⓔ	144. ⓐⓑⓒⓓⓔ	145. ⓐⓑⓒⓓⓔ
146. ⓐⓑⓒⓓⓔ	147. ⓐⓑⓒⓓⓔ	148. ⓐⓑⓒⓓⓔ	149. ⓐⓑⓒⓓⓔ	150. ⓐⓑⓒⓓⓔ
151. ⓐⓑⓒⓓⓔ	152. ⓐⓑⓒⓓⓔ	153. ⓐⓑⓒⓓⓔ	154. ⓐⓑⓒⓓⓔ	155. ⓐⓑⓒⓓⓔ
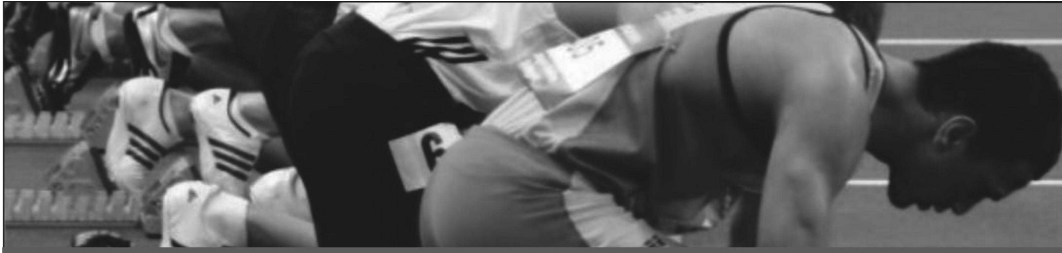
101 SPEED TEST

100

MAIN EXAM FULL TEST-2

Max. Marks : 200 **No. of Qs. 200** **Time : 2 hours** **Date : ..../........./...............**

QUANTITATIVE APTITUDE

DIRECTIONS (Qs. 1-5) : What approximate value should come in place of the question mark (?) in the following questions ? (Note : You are not expected to calculate the exact value.)

1. $839.999 \div 48.007 = ?$
(a) 9.5 (b) 23.5 (c) 11.5
(d) 28.5 (e) 17.5

2. $\sqrt{8000}$?
(a) 76 (b) 89 (c) 65
(d) 97 (e) 58

3. $18.001 \times 22.999 \times 9.998 = ?$
(a) 4560 (b) 6290 (c) 4140
(d) 5920 (e) 5080

4. $99999 \div 99 \div 9 = ?$
(a) 112 (b) 211 (c) 121
(d) 221 (e) 222

5. $7984.986 + 2541.005 + 127.996 = ?$
(a) 11280 (b) 15600 (c) 14650
(d) 10654 (e) 16500

DIRECTIONS (Qs. 6-10) : What value should come in place of the questions mark (?) in the following questions ?

6. $18.5 \times 21.4 \times ? = 6255.22$
(a) 15.8 (b) 14.6 (c) 17.4
(d) 17.2 (e) 16.4

7. $1.5 \times 78 \div 0.5 = ?$
(a) 238 (b) 234 (c) 243
(d) 216 (e) 261

8. $302.46 + 395.72 - 123.47 = ?$
(a) 576.77 (b) 547.17 (c) 547.77
(d) 574.71 (e) 577.71

9. $\sqrt[3]{4096} \div \sqrt[3]{64}$ $\sqrt[3]{?}$
(a) 16 (b) 8 (c) 64
(d) $\sqrt{4}$ (e) None of these

10. $? \% \text{ of } 800 = 293 - 22\% \text{ of } 750$
(a) 14 (b) 18 (c) 12
(d) 16 (e) 20

DIRECTIONS (Qs.11-16): In each of these questions a number series is given. Below the series one number is given followed by (1), (2), (3), (4) and (5). You have to complete this series following the same logic as in the original series and answer the question that follow.

11. 5   9   25   91   414   2282.5
3   (1)   (2)   (3)   (4)   (5)

What will come in place of (3)?
(a) 63.25 (b) 63.75 (c) 64.25
(d) 64.75 (e) None of these

12. 15   9   8   12   36   170
19   (1)   (2)   (3)   (4)   (5)
What will come in place of (2)?
(a) 18 (b) 16 (c) 22
(d) 24 (e) None of these

13. 7   6   10   27   104   515
9   (1)   (2)   (3)   (4)   (5)
What will come in place of (4)?
(a) 152 (b) 156 (c) 108
(d) 112 (e) None of these

14. 6   16   57   244   1245   7506
4   (1)   (2)   (3)   (4)   (5)
What will come in place of (4)?
(a) 985 (b) 980 (c) 1004
(d) 1015 (e) None of these

15. 8   9   20   63   256   1285
5   (1)   (2)   (3)   (4)   (5)
What will come in place of (5)?
(a) 945 (b) 895 (c) 925
(d) 845 (e) None of these

16. A sum of money is lent out at compound interest rate of 20% per annum for 2 years. It would fetch ₹361.50 more if the interest is compounded half-yearly. Find the sum.
(a) ₹10000 (b) ₹20000 (c) ₹18000
(d) ₹15000 (e) None of these

DIRECTIONS (Qs. 17-21) : Study the following tables carefully and answer the questions given below :

Number of Cars (in thousands) of Different Models and Colours sold in two Metro Cities in a year.

	Metro M					Metro H				
	Type Colour					Colour				
	Black	Red	Blue	White	Silver	Black	Red	Blue	White	Silver
A	40	25	55	75	15	45	32	40	60	20
B	20	35	60	80	20	30	37	39	81	35
C	35	30	50	90	35	40	42	41	86	37
D	45	40	45	85	40	35	39	37	90	42
E	50	35	35	60	30	50	44	43	77	22
F	55	42	40	75	52	47	34	45	87	17

17. The total number of silver coloured cars sold in Metro H is **approximately** what percentage to that of Metro M?
(a) 130   (b) 140   (c) 90
(d) 100   (e) 110

18. What is the difference between the numbers of blue colour cars model C sold in Metro M and number of red colour cars model F sold in Metro H?
(a) 8,000   (b) 10,000   (c) 12,000
(d) 15,000   (e) None of these

19. In Metro M the number of cars sold was maximum for which of the colour-model combinations ?
(a) White-C   (b) Blue-B   (c) Silver-B
(d) White-D   (e) None of these

20. The total number of blue coloured cars of Model E and D sold in Metro H is exactly equal to the number of white coloured cars of which model in Metro M ?
(a) B   (b) F   (c) C
(d) A   (e) None of these

21. The difference between the white coloured cars sold between the two metros of which of the following models is the minimum ?
(a) A   (b) C   (c) D
(d) F   (e) None of these

DIRECTIONS (Q. 21-22) : Study the following pie-chart carefully and answer the questions given below.

Percent of money spent on various items and savings by a family during 2000.
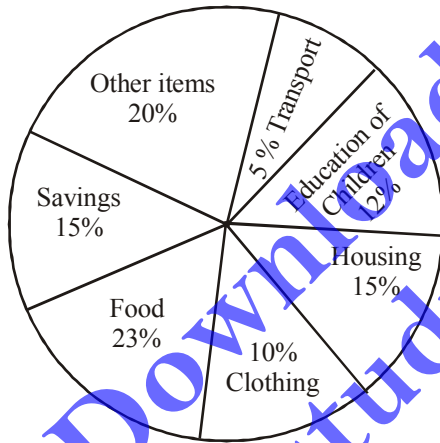
22. Maximum expenditure of the family was on
(a) Food   (b) Housing
(c) Education of children   (d) Savings
(e) None of these

23. The total savings of the family for the year, were equal to the expenditure on:
(a) Food   (b) Clothing   (c) Housing
(d) Transports   (e) None of these

24. What per cent of the income was spent on transport and other items together?
(a) 25%   (b) 20%   (c) 30%
(d) 32%   (e) None of these

25. If the total income of the family was ₹ 1,00,000. How much money was spent on the education?
(a) ₹10000   (b) ₹12000
(c) ₹15000   (d) ₹23000
(e) None of these

26. If the total income for the year was ₹100000 the difference of the expenses (in rupees) between housing and transport was.
(a) ₹15000   (b) ₹12000
(c) ₹7000   (d) ₹10000
(e) None of these

DIRECTIONS (Q. 27-31) Following line graph shows the per cent profit gained by two companies A and B. The table shows the expenditure in ₹lakh) of company A and income (in ₹lakh) of company B.
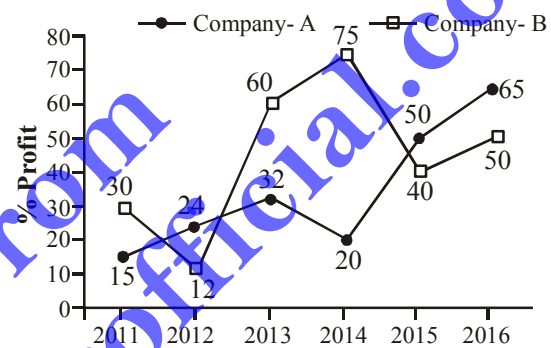
Year	Expenditure-A (in ₹lakh)	Income B (in ₹lakh)
2011	62.4	57.2
2012	75	67.2
2013	40	58.4
2014	80.5	71.4
2015	72.8	63
2016	64	84.6

27. What is the total income (in ₹) of company 'A' in all six years together?
(a) 472.8 lakh   (b) 528.96 lakh   (c) 551.12 lakh
(d) 566.84 lakh   (e) None of these

28. What is the total profit (in ₹) of company 'B' in all six years together?
(a) 111.4 lakh   (b) 113.6 lakh   (c) 116.8 lakh
(d) 18.4 lakh   (e) 119.1 lakh

29. What is the ratio of the expenditure of 'A' in 2011 to the income of 'B' in 2012 ?
(a) 7 : 8   (b) 11 : 13   (c) 13 : 14
(d) 15 : 17   (e) None of these

30. Expenditure of 'B' in 2015 is what % of expenditure of 'A' in 2012 ?
(a) 60%   (b) 75%   (c) 80%
(d) 90%   (e) 120%

RESPONSE

17. ⓐⓑⓒⓓⓔ   **18.** ⓐⓑⓒⓓⓔ   **19.** ⓐⓑⓒⓓⓔ   **20.** ⓐⓑⓒⓓⓔ   **21.** ⓐⓑⓒⓓⓔ
22. ⓐⓑⓒⓓⓔ   **23.** ⓐⓑⓒⓓⓔ   **24.** ⓐⓑⓒⓓⓔ   **25.** ⓐⓑⓒⓓⓔ   **26.** ⓐⓑⓒⓓⓔ
27. ⓐⓑⓒⓓⓔ   **28.** ⓐⓑⓒⓓⓔ   **29.** ⓐⓑⓒⓓⓔ   **30.** ⓐⓑⓒⓓⓔ

31. Income of company 'B' in 2015 is what % more than the expenditure of 'A' in 2013 ?
(a) 42.5%   (b) 47.5%
(c) 57.5%   (d) 62.5%
(e) 67.5%

DIRECTIONS (Qs. 32-36): Read the information carefully and answer the questions below to it.

Three dealers 'A', 'B' and 'C' sold a total number of 1200 computer systems (both laptop and desktop) in a month. The number of desktops sold by Dealer 'A' is 10% of the total number of systems sold by all three dealers and the total number of systems sold by Dealer 'B' is 415, which is 210 more than the number of laptops sold by Dealer 'A'. The number of laptops sold by Dealer 'B' is 200% of the number of desktops sold by Dealer 'A' number of laptops sold by Dealer-C is 125% of the number of laptops sold by Dealer-B.

32. What is the total number of desktops sold by Dealer C?
(a) 120   (b) 140   (c) 160
(d) 175   (e) 180

33. What is the total number of laptops sold by all three dealers?
(a) 645   (b) 725   (c) 730
(d) 745   (e) 750

34. The number of desktops sold by Dealer A is what percentage of the number of laptops sold by Dealer C?
(a) 40%   (b) 50%   (c) 60%
(d) 70%   (e) 80%

35. What is the ratio of the number of desktops sold by Dealer B to the number of laptops sold by Dealer C?
(a) 4:7   (b) 5:9   (c) 5:11
(d) 7:12   (e) 8:15

36. What is the difference between the number of desktops sold by Dealer 'B' and 'C' together and the number of total computer systems (both desktop and laptop) sold by Dealer A?
(a) 50   (b) 40   (c) 30
(d) 20   (e) 10

37. A and B are two alloys of diamond and silver, prepared by mixing metals in the ratio 7 : 2 and 7 : 11 respectively. If equal quantities of the alloys are melted to form a third alloy C, the ratio of diamond and silver in C will be
(a) 7 : 5   (b) 5 : 7   (c) 5 : 9
(d) 9 : 5   (e) None of these

38. In an MNC, 72% of the editorial staff like tea and 44% like coffee. If each of them like tea or coffee and 4 like both, the total number of editorial staff in the office is
(a) 28   (b) 24   (c) 22
(d) 20   (e) None of these

39. 12 men can complete a work in 8 days. 16 women can complete the same work in 12 days. 8 men and 8 women started working and worked for 6 days. How many more men are to be added to complete the remaining work in 1 day ?
(a) 8   (b) 6   (c) 12
(d) 16   (e) None of these

40. Namrata wants to visit four cities A, B, C and D on an official trip. The probability that she visits A just before B is
(a) 1/2   (b) 1/12   (c) 1/6
(d) 1/4   (e) 1/3

41. A, B and C enter into a partnership. A invests the whole of the capital amount of ₹60000 with the condition that he will take 5% of the capital as interest in a year. The rest amount will be divided equally among them and B will pay 15% of his profit to C for carrying on the concern. Find C's share out of a profit of ₹12000 in a year.
(a) ₹3050   (b) ₹2750   (c) ₹2550
(d) ₹3450   (e) None of these

42. Three partners A, B and C started a business by investing ₹4000, ₹6000 and ₹8000 respectively. A and B together invest for 8 months — A for a certain number of months and B for the remaining of the 8 months—whereas C for 4 months. The amount of profit of B at the end of the year is ₹2 more than that of C. For how many months did A invest the amount?
(a) 5   (b) 3   (c) 6
(d) Data inadequate   (e) None of these

43. A shopkeeper sells a shirt at a profit of 25% on the cost price. If the shopkeeper allows a discount of 10% on this selling price the sales volume of the shirts will double. What is the ratio of the new profit to the old profit ?
(a) 6 : 5   (b) 3 : 2   (c) 5 : 3
(d) 1 : 1   (e) Can't be determined

44. 7 men and 11 boys can earn ₹10480 in 8 day. 8 men and 6 boys can earn ₹12840 in 12 days. In how many days will 12 men and 9 boys earn ₹25680?
(a) 12   (b) 14   (c) 16
(d) 18   (e) None of these

45. The average age of a family of five members is 24. If the present age of the youngest member is 8 years, what was the average age of the family at the time of the birth of the youngest member?
(a) 20 years   (b) 16 years   (c) 12 years
(d) 18 years   (e) 21 years

46. Excluding the stoppages, the speed of a bus is 64 km/hr and including the stoppage the speed of he bus is 48 km/hr. For how many minutes does the bus stop per hour?
(a) 12.5 minutes   (b) 15 minutes   (c) 10 minutes
(d) 18 minutes   (e) None of these

DIRECTIONS (Qs. 47 - 50) : Each of the questions given below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements is sufficient to answer the question. Read both the statements and

Given answer (a) if the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question

Give answer (b) if the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question

Give answer (c) if the data in statement I alone or in statement II alone is sufficient to answer the question

Give answer (d) if the data in both the statements I and II is not sufficient to answer the question

Give answer (e) if the data in both the statements I and II together is necessary to answer the question

RESPONSE GRID					
31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	
36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ	
41. ⓐⓑⓒⓓⓔ	42. ⓐⓑⓒⓓⓔ	43. ⓐⓑⓒⓓⓔ	44. ⓐⓑⓒⓓⓔ	45. ⓐⓑⓒⓓⓔ	
46. ⓐⓑⓒⓓⓔ					

47. What is the salary of C, in a group of A, B, C, D and E whose average salary is ₹ 48250 ?
  I.   C's salary is 1.5 times B's salary.
  II.   Average salary of A and B is ₹ 23500.

48. What is the per cent profit earned by selling a car for ₹ 640000 ?
  I.   The amount of profit earned on selling the car was ₹320000.
  II.   The selling price of the car was twice the cost price.

49. What is the rate of interest per cent per annum ?
  I.   An amount of ₹14350 gives a simple interest of ₹11450 in four years.
  II.   The amount doubles itself in 5 years with simple interest.

50. What is the two digit number?
  I.   The difference between two digits at the number is 9.
  II.   The product at the two digits at the number is 0.

REASONING ABILITY

DIRECTIONS (Qs. 51–55) : In these questions relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer (1) if only Conclusion I is true.
Give answer (2) if only Conclusion II is true.
Give answer (3) if either Conclusion I or II is true.
Give answer (4) if neither Conclusion I nor II is true.
Give answer (5) if both Conclusions I and II are true.
(51–52) :
Statements : $R \geq T < M = Z$; $C > T \geq B$
51. **Conclusions:**
  I. $Z > C$ II. $B < Z$
52. **Conclusions:**
  I. $B < C$ II. $R \geq C$
(53–54) :
Statements : $P \geq Q > T$; $Q < R$; $T \geq A$
53. **Conclusions :**
  I. $A < Q$ II. $A \leq P$
54. **Conclusions :**
  I. $T < P$ II. $R > A$
55. **Statements** :
  $P > T = U \leq W$; $Q \geq R \geq W$
  Conclusions
  I. $T = R$ II. $U < R$

DIRECTIONS (Q. 56-60) : Study the following information carefully to answer these questions :

Seven candidates–Harish, Samir, Nilesh, Shailaja, Nikita, Laxman and Sujata are – to be interviewed for selection as Trainee Officers by different panels I to VII for different companies A, B, C, D, E, F and G not necessarily in the same order.

Nilesh is interviewed by panel IV for Company A. Samir is interviewed by panel III but not for company C or D. Harish is interviewed for company B but not by panel I or II . Nikita is interviewed by panel VI for company E. Panel VII conducts the interview for company F. Sheilaja is interview by panel I but not for company C. Panel II does not interview Laxman.

56. Shailaja is interviewed for which company ?
  (a)   A   (b) G   (c)   F
  (d)   D   (e) None of these

57. Panel II conducts interview for which company ?
  (a)   C   (b) F   (c)   G
  (d)   B   (e) None of these

58. Who among the following is interviewed for company G ?
  (a)   Nikita   (b) Samir   (c)   Shailaja
  (d)   Laxman   (e) None of these

59. Who among the following is interviewed for company F ?
  (a)   Shailaja   (b) Sujata
  (c)   Laxman   (d) Cannot be determined
  (e)   None of these

60. Which candidate is interviewed by panel V ?
  (a)   Harish   (b) Laxman   (c)   Sujata
  (d)   Shailaja   (e) None of these

DIRECTIONS (Qs. 61–62) : In each question below are two or three statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer (a) if only conclusion I follows.
Give answer (b) if only conclusion II follows.
Give answer (c) if either conclusion I or conclusion II follows.
Give answer (d) if neither conclusion I nor conclusion II follows.
Give answer (e) if both conclusion I and conclusion II follow.
(61-62) :
Statements : No cow is a bull.
              All bulls are animals.
              Some animals are mammals.
61. **Conclusions :**
  I.   At least some mammals are animals.
  II.   Some mammals being bulls is a possibility.
62. **Conclusions :**
  I.   At least some animals are bulls.
  II.   No animal is a cow.
63. **Statements :**
  Some pencils are pens.
  No pen is eraser.
  All sharpeners are erasers.
  Conclusions :
  I.   No eraser is a pencil.
  II.   All pencils can never be sharpeners.
(64-65) :
Statements : Some stars are planets.
              Some planets are moons.
              No moon is a sun.
64. **Conclusions :**
  I.   No star is a sun.
  II.   All planets being suns is a possibility.
65. **Conclusions :**
  I.   All suns being stars is a possibility.
  II.   Some stars are planets.

RESPONSE GRID	47. Ⓐ ⓑ ⓒ ⓓ ⓔ	48. Ⓐ ⓑ ⓒ ⓓ ⓔ	49. Ⓐ ⓑ ⓒ ⓓ ⓔ	50. Ⓐ ⓑ ⓒ ⓓ ⓔ	51. Ⓐ ⓑ ⓒ ⓓ ⓔ
	52. Ⓐ ⓑ ⓒ ⓓ ⓔ	53. Ⓐ ⓑ ⓒ ⓓ ⓔ	54. Ⓐ ⓑ ⓒ ⓓ ⓔ	55. Ⓐ ⓑ ⓒ ⓓ ⓔ	56. Ⓐ ⓑ ⓒ ⓓ ⓔ
	57. Ⓐ ⓑ ⓒ ⓓ ⓔ	58. Ⓐ ⓑ ⓒ ⓓ ⓔ	59. Ⓐ ⓑ ⓒ ⓓ ⓔ	60. Ⓐ ⓑ ⓒ ⓓ ⓔ	61. Ⓐ ⓑ ⓒ ⓓ ⓔ
	62. Ⓐ ⓑ ⓒ ⓓ ⓔ	63. Ⓐ ⓑ ⓒ ⓓ ⓔ	64. Ⓐ ⓑ ⓒ ⓓ ⓔ	65. Ⓐ ⓑ ⓒ ⓓ ⓔ	

DIRECTIONS (Q. 66-71) : Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and

Give answer (a) if the data in statement I alone are sufficient to answer the question, while the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

Give answer (b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

Give answer (c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.

Give answer (d) if the data given in both the statements I and II together are not sufficient to answer the question, and

Give answer (e) if the data in both the statements I and II together are necessary to answer the question.

66. How is 'sure' written in a code language ?
    I. 'he is sure' is written as 'ja ha ma' in that code language.
    II. 'is she sure' is written as 'ka ja ma' in that code language.

67. What is R's position from the left end in a row ?
    I. M is tenth from the left end of the row.
    II. There are sixteen children between M and R.

68. How is J related to M ?
    I. M has only one brother and two sisters.
    II. J is daughter of T who is wife of M.

69. Town P is towards which direction of town T ?
    I. Town T is towards South of town K which is towards West of to town P.
    II. Town R is towards South of town V and towards East of town T.

70. Among P, Q, R, S and T each having different age, who is the youngest among them ?
    I. Q is younger than only P.
    II. S is older than only R.

71. On which day of the week did Sourav visit Delhi ?
    I. Sourav visited Delhi after Monday but before Thursday but not on an odd day of the week.
    II. Sourav visited Delhi before Friday but after Monday.

DIRECTIONS (Q. 72-75) : In each question below given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing.

Give answer (a) if only course of action I follows.
Give answer (b) if only course of action II follows.
Give answer (c) if either course of action I or II follows.
Give answer (d) if neither course of action I nor II follows.
Give answer (e) if both coorses of action I and II follow.

72. **Statement :** Many pilgrims died in a stampede while boarding a private ferry to the holy place on the first day of the ten day long festival.

Courses of action:
I. The Government should immediately cancel the licenses of all the private ferry operators with immediate effect.
II. The Government should deploy an adequate number of its personnel to guide pilgrims on their journey to the holy place.

73. **Statement:**
Some students of the local college were caught travelling in the train without purchasing valid tickets.
Courses of action :
I. The parents of these students should be informed about the incident and requested to counsel their wards.
II. These students should be put behind bars for travelling without bonafide credentials.

74. **Statement :**
A large part of the locality was flooded as the main pipe supplying drinking water burst while the workers of a utility company were laying cables in the area.
Courses of action :
I. The civic authority should immediately arrange to repair the damage and stop loss of water.
II. The civic authority should seek an explanation and compensation from the utility company for the damage caused by them.

75. **Statement:**
Millions of pilgrims are expected to take a dip in the Ganges at the holy place during the next fortnight.
Courses of action :
I. The Government should restrict the number of pilgrims who can take dip each day during the fortnight.
II. The Government should deploy an adequate number of security personnel to maintain law and order during the next fortnight at the holy place.

DIRECTIONS (Qs. 76-80) Study the following information carefully and answer the given questions.

A word and number, arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an an illustration of input and rearrangement.

Input : 96 gain 63 forest 38 78 deep house
Step I : deep 96 gain 63 forest 38 78 house
Step II : deep 38 96 gain 63 forest 78 house
Step III : deep 38 forest gain 96 63 78 house
Step IV : deep 38 forest 63 gain 96 78 house
Step V : deep 38 forest 63 gain 78 96 house
Step VI : deep 38 forest 63 gain 78 house 96
and **Step VI** is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

76. **Input :** train 59 47 25 over burden 63 sky
    Which of the following steps will be the last but one?
    (a) VI   (b) V
    (c) IV   (d) VII
    (e) None of these

RESPONSE GRID					
66. ⓐⓑⓒⓓⓔ	**67.** ⓐⓑⓒⓓⓔ	**68.** ⓐⓑⓒⓓⓔ	**69.** ⓐⓑⓒⓓⓔ	**70.** ⓐⓑⓒⓓⓔ
71. ⓐⓑⓒⓓⓔ	**72.** ⓐⓑⓒⓓⓔ	**73.** ⓐⓑⓒⓓⓔ	**74.** ⓐⓑⓒⓓⓔ	**75.** ⓐⓑⓒⓓⓔ
76. ⓐⓑⓒⓓⓔ				

77. **Input :** service 46 58 96 over there desk 15
Which of the following will be step VI ?
(a) desk 15 over service 46 58 96 there
(b) desk 15 over 46 service there 58 96
(c) desk 15 over 46 service 58 there 96
(d) desk 15 over 46 service 58 96 there
(e) There will be no such step

78. **Step II of an input is :** below 12 93 house floor 69 57 task
Which of the following will definitely be the input?
(a) 93 house 69 57 below task floor 12
(b) 93 house below 69 57 task floor 12
(c) 93 house floor 69 57 task below 12
(d) Cannot be determined
(e) None of the above

79. **Step III of an input is :** art 24 day 83 71 54 star power
Which of the following steps will be the last?
(a) V   (b) VIII
(c) IX   (d) VII
(e) None of these

80. **Step II of an input is :** cold 17 wave 69 never desk 52 43
How many more steps will be required to complete the rearrangement?
(a) Six   (b) Five
(c) Four   (d) Three
(e) None of these

DIRECTIONS (Qs. 81-85): Study the following information carefully and answer the given questions.

(i) A, B, C, D, E, F, G and H are sitting around a circle facing the centre but not necessarily in the same order.
(ii) B sits second to left of H's husband. No female is an immediate neighbour of B.
(iii) D's daughter sits second to right of F, F is the sister of G. F is not an immediate neightbour of H's husband.
(iv) Only one person sits between A and F. A is the father of G. H's brother D sits to the immediate left of H's mother. Only one person sits between H's mother and E.
(v) Only one person sits between H and G. G is the mother of C. G is not an immediate neighbour of E.

81. What is position of A with respect of his mother-in-law?
(a) Immediate left   (b) Third to the right
(c) Third to the left   (d) Second to the right
(e) Fourth to the left

82. What is the position of A with respect to his mother-in-grandchild?
(a) Immediate Right   (b) Third to the right
(c) Third to the left   (d) Second to the right
(e) Fourth to the left

83. Four of the following five are alike in a certain way based on the given information and so form a group. Which is the one that **does not** belong to that group?
(a) F   (b) C
(c) E   (d) H
(e) G

84. Which of the following is true with respect to the given seating arrangement?
(a) C is the cousin of E

(b) H and H's husband are immediate neighbours of each other
(c) No female is an immediate neighbour of C
(d) H sits third to left of her daughter
(e) B is the mother of H

85. Who sits to the immediate left of C?
(a) F's grandmother   (b) G's son
(c) D's mother-in-law   (d) A
(e) G

DIRECTIONS (Q. 86-90) : Study the information and answer the following questions.

In a certain code language.
'economics is not money' is written as 'ka la ho ga'
'demand and supply economies' is written as 'mo ta pa ka'
'money makes only part' is written as 'zi la ne ki'
'demand makes supply economics' is written as 'zi mo ka ta'

86. What is the code for 'money' in the given code language?
(a) ga   (b) mo   (c) pa
(d) ta   (e) la

87. What is the code for 'supply' in the given code language ?
(a) Only ta   (b) Only mo   (c) Either pa or mo
(d) Only pa   (e) Either mo or ta

88. What may be the possible code for 'demand only more' in the given code language?
(a) xi ne mo   (b) mo zi ne   (c) ki ne mo
(d) mo zi ki   (e) xi ka ta

89. What may be the possible code for 'work and money' in the given code language ?
(a) pa ga la   (b) pa la lu   (c) mo la pa
(d) tu la ga   (e) pa la ne

90. What is the code for 'makes' in the given code language ?
(a) mo   (b) pa   (c) ne
(d) zi   (e) ho

DIRECTIONS (Qs. 91-92) : Study the following formation carefully to answer the given questions.

Point B is 12 m South of point A. Point C is 24 m East of point B. Point D is 8 m South of point C. Point D is 12 m East of point E and point F is 8 m North of point E.

91. If a man has to travel to point E from point A (through these points by the shortest distance), which of the following points will he pass through first?
(a) Point C   (b) Point D
(c) Point F   (d) Point B
(e) None of these

92. If is man is standing facing North at point C, how far and in which direction is point F?
(a) 12 m, West   (b) 24 m, East
(c) 12 m, East   (d) 24 m, West
(e) None of these

DIRECTIONS (Q. 93-95) : Read the following information carefully and answer the questions given below:

I. 'P × Q' means 'P is the father of Q'.
II. 'P – Q' means 'P is the sister of Q'.
III. 'P + Q' means 'P is the mother of Q'.
IV. 'P ÷ Q' means 'P is the brother of Q'.

RESPONSE GRID	77. ⓐⓑⓒⓓⓔ	78. ⓐⓑⓒⓓⓔ	79. ⓐⓑⓒⓓⓔ	80. ⓐⓑⓒⓓⓔ	81. ⓐⓑⓒⓓⓔ
	82. ⓐⓑⓒⓓⓔ	83. ⓐⓑⓒⓓⓔ	84. ⓐⓑⓒⓓⓔ	85. ⓐⓑⓒⓓⓔ	86. ⓐⓑⓒⓓⓔ
	87. ⓐⓑⓒⓓⓔ	88. ⓐⓑⓒⓓⓔ	89. ⓐⓑⓒⓓⓔ	90. ⓐⓑⓒⓓⓔ	91. ⓐⓑⓒⓓⓔ
	92. ⓐⓑⓒⓓⓔ				

93. In the expression B + D × M ÷ N, how is M related to B?
    (a) Granddaughter
    (b) Son
    (c) Grandson
    (d) Granddaughter or Grandson
    (e) None of these

94. Which of the following represent 'J is the son of F'?
    (a) J ÷ R – T × F   (b) J + R – T × F
    (c) J ÷ M – N × F   (d) Cannot be determined
    (e) None of these

95. Which of the following represents 'R is the niece of M'?
    (a) M ÷ K × T – R   (b) M – J + R – N
    (c) R – M × T ÷ W   (d) Cannot be determined
    (e) None of these

DIRECTIONS (Qs. 96-100) : Study the following information to answer the given questions.

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1, P, Q, R, S, T and V are seated and all of them are facing South. In row-2, A, B, C, D, E nd F are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.
A sits third to right of D. Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

96. Who amongst the following sit at extreme ends of the rows ?
    (a) B, E   (b) S, T   (c) P, R
    (d) B, F   (e) None of these

97. Who amongst the following faces A?
    (a) R   (b) T   (c) P
    (d) Q   (e) S

98. How many persons are seated between T and S?
    (a) One   (b) Two   (c) Three
    (d) Four   (e) None

99. P is related to V in the same way as C is related to F. To which of the followng is E related to, following the same pattern?
    (a) B   (b) D   (c) C
    (d) A   (e) None of these

100. Which of the following is true regarding F ?
    (a) F sits second to right of C
    (b) F is not an immediate neighbour of A
    (c) F sits third to left of D
    (d) F sits at one of the extreme ends of the lien
    (e) F faces V

ENGLISH LANGUAGE

DIRECTIONS (Qs. 101-105) : *In each of the following questions a short passage is given with one of the lines in the passage missing and represented by a blank. Select the best out of the five answer choices given, to make the passage complete and coherent.*

101. The fiscal position of the Indian Governments - both Centre and States-has been under stress since the mid -1980s. The stress stems from the inadequacy of receipts in meeting the growing expenditure requirements. Reflecting the fiscal stress, the expenditure for development activities, which

are directly related to growth, has suffered. On other hand expenditure on non developmental purposes, largely committed, has witnessed a steady rise. …… in favor of developmental expenditure in order to enable higher growth. That the state of finances of States is in disarray is beyond dispute. The state finances have not been properly managed not only by the states but also by the planning commission and the central Government, which include economists who do not see states as autonomous responsible organizations.
    (a) The crucial issue, therefore, is to bring about improvement in the finances with a view to restructuring expenditure
    (b) The crucial issue ,therefore ,is to analyze the finances with a view to see what can be done to expenditure
    (c) Hence, it can be said that management of finances is important vis-à-vis management of expenditures
    (d) Therefore ,Governments have to mend their way and balance the finances and the expenditures
    (e) What is expected in this scenario is a policy shift

102. In the planned economy of India, foreign capital has been assigned a significant role, although it has been changing over the time. In the earlier phase of planning………. Many concessions and incentives were given to foreign investors. Later on, however, the emphasis shifted to encouraging technological collaboration between Indian Entrepreneurs and foreign entrepreneurs. In more recent times, efforts are on inviting free flow of foreign capital. It would be instructive in this background to examine the Government's policy towards foreign capital.
    (a) Foreign capital was looked upon as a means to supplement domestic investment
    (b) Foreign capital was seen a as threat to Indian entrepreneurs
    (c) Foreign capital was not expected to come in so much huge amount
    (d) Foreign capital was infused to stabilize the Indian economy
    (e) Foreign capital was the only way out for the economy in crippling state

103. The thirteen Finance commissions cover a span of more than 60 years during which many conditions have changed. Correspondingly, the approach of the later commissions may be expected to be different in several respects from the earlier ones………….. which have come to evolve gradually what may by called 'the Indian Finance Commission's approach to federal finance. There are several inadequacies in the approach of the Finance Commissions. According to this approach, States' share of Central taxes is not allocated strictly on the basis of need.
    (a) Nevertheless, it is possible to discern certain common elements in the thinking of the successive Finance Commissions
    (b) And it happened to be in that way
    (c) Evolution is a long process and it is the same story for commissions
    (d) But they differ completely from them and each time new approach was looked for
    (e) This was based on the tax sharing basis principle of commissions

RESPONSE GRID					
	93. ⓐⓑⓒⓓⓔ	94. ⓐⓑⓒⓓⓔ	95. ⓐⓑⓒⓓⓔ	96. ⓐⓑⓒⓓⓔ	97. ⓐⓑⓒⓓⓔ
	98. ⓐⓑⓒⓓⓔ	99. ⓐⓑⓒⓓⓔ	100. ⓐⓑⓒⓓⓔ	101. ⓐⓑⓒⓓⓔ	102. ⓐⓑⓒⓓⓔ
	103. ⓐⓑⓒⓓⓔ				

104. Under taxation is at the roots of the Indian fiscal problems. The available evidence shows that the tax -GDP ratio in India is lower than the level it should have for its per capita GDP by at least 2.5 percent. It is, therefore important to focus reform efforts to increase the tax ratio. Of course, this does not mean that strategy to increase the tax ratio lies in increasing the tax rates. The strategy is to reiterate that tax administration is tax policy. All exemptions will not go. Politically, it is not possible. The world over, there was a time when we thought that equity in tax policy meant reducing the incomes of the rich. But today's tax philosophy is that equity in tax policy is increasing the incomes of the poor. The incomes of the poor can not be increased by reducing those of the rich……….

(a) As they are the central point of any economy their importance is preemptory

(b) As they have the real remote control in their hands and poor can not see that.

(c) As they have the capital for investment and give employment to the poor.

(d) As they have lobbying power to decide the fate of the poor.

(e) As they are capital rich and can not be compared with poor.

105. ………….Enterprises world wide are therefore, now putting in place an integrated framework for risk management, which is proactive, systematic and covers the entire organization. Banks in India are also moving from the individual silo system to an enterprise -wide risk management system. This is placing greater demands on the risk management skills in banks and has brought to the fore the need for capacity building. While the first mile-stone would be risk integration across the entity, banks would do well to aggregate risk across the group both in the specific risk areas as also across the risks.

(a) Banks are most risk prone of all the financial institutions.

(b) Banks were managing each risk independently ,in isolation ,which is no longer inadequate

(c) It is about risk level at which an enterprise is operating to have or not have risk management system

(d) Risk management in India is lagging for banks in comparison with other parts of world

(e) What, if risk becomes unmanageable and looks right in your face..?

DIRECTIONS (Qs. 106-110) : The following questions consist of a single sentence with one blank only. You are given five as answer choices you have to pick up two correct answers, either of which will make the sentence meaningfully complete.

106. Out of the 6.5 million abortions …………..in 2010, 68% were performed by an unqualified person or in unsafe environment.

(1) Recorded   (2) Registered
(3) Counted   (4) Performed
(5) Conducted
(a) Only 1   (b) 1and 2
(c) 1and 5   (d) 4 and 5
(e) None of these

107. Mr. John has been ……….for the top job at the ADB bank.

(1) Shortlisted   (2) Selected   (3) Appointed
(4) Questioned   (5) Approved
(a) 3 and 5   (b) 1 and 2   (c) 2 and 3
(d) 1 and 4   (e) None of these

108. The procedure adopted by the bank authorities was totally ……………..as they did not follow the principles of natural justice.

(1) Miscalculated (2) Flawed   (3) Irrational
(4) Accurate   (5) In place
(a) 2 and 3   (b) 1 and 2   (c) 3 and 4
(d) 1and 5   (e) None of these

109. Delhi High Court directed RBI to respond to the plea of …………….commissioner of Income tax.

(1) Appointed   (2) Sacked   (3) Removed
(4) Selected   (5) Responsible
(a) 1 and 2   (b) 2 and 3   (c) 1 and 5
(d) 5 and 4   (e) None of these

110. The High Court withdrew a ……………approval that allowed him to make numerous trips to hospitals in last 4 years.

(1) Ordered   (2) Pending   (3) Blanket
(4) Prior   (5) False
(a) 5 and 1   (b) 1 and 2   (c) 2 and 3
(d) 3 and 4   (e) None of these

DIRECTIONS (Qs. 111-115) : Read the jumbled sentences given below and then arrange them in a logical, coherent passage to answer the questions that follow the sentences.

(1) Strategic change requires transformation skills; the ability to shape a vision of the future, mobilize employees behind the vision and guide the company's different systems towards achievement of the vision.

(2) Managers successful at carrying out strategic change point to the significance of active participation, coalition building and up front communication.

(3) Both action and inaction by managers take on symbolic meaning and shape lower level employees interpretations about the key events and everything depends on it.

(4) A large body of evidence suggests that to fully involve employees is the surest way to produce a more mobilized work force, one willing to abandon established fiefdoms and hard won perks in the pursuit of their firms 'effectiveness.

(5) In contrast, isolation from decision making tends to breed emotional hostility and resistance, and sometimes active sabotage.

111. Which one of the following can be the **FIRST** sentence of the passage in the rearranged sentences?

(a) 1   (b) 3   (c) 4
(d) 5   (e) 6

112. Which one of following can be the **FOURTH** sentence of the passage in rearranged sentences?

(a) 1   (b) 3   (c) 2
(d) 5   (e) 6

113. Which one of the following can be the **LAST** sentence of the passage in the rearranged sentences?

(a) 1   (b) 2   (c) 3
(d) 4   (e) 6

RESPONSE GRID					
104. ⓐⓑⓒⓓⓔ	105. ⓐⓑⓒⓓⓔ	106. ⓐⓑⓒⓓⓔ	107. ⓐⓑⓒⓓⓔ	108. ⓐⓑⓒⓓⓔ
109. ⓐⓑⓒⓓⓔ	110. ⓐⓑⓒⓓⓔ	111. ⓐⓑⓒⓓⓔ	112. ⓐⓑⓒⓓⓔ	113. ⓐⓑⓒⓓⓔ

114. Which one of the following can be the **SECOND** sentence of the passage in the rearranged sentences?
   (a) 1   (b) 2   (c) 3
   (d) 4   (e) 5

115. Which one of the following can be the **THIRD** sentence of the passage?
   (a) 1   (b) 5   (c) 4
   (d) 3   (e) 2

DIRECTIONS (Qs. 116-121) : Read the following passages carefully and answer the questions given below it. Certain words/ phrases have been printed in **bold** to help you to locate them while answering some of the questions.

Desipte the economic crunch worldwide that saw **pulverization** of some of the largest banking and finance giants, Indian banking houses have managed to show positive growth this quarter. Some of India's leading national banks have posted a net profit rise of more than 40% over the last quarter amid global turmoil. This would come as a big shot in the arm for the investors and consumers of these banks even though apprehension is mounting on other banking and broking firms worldwide. One of the main reasons behind the success of these banks this quarter, would be their direct backing by the Government of India. People take solace in their investments in public sector watching the bailout packages being cashed out by governments all over the world to save big business houses.

    Other private banks in India have also reported a substantial net profit over the last quarter. Given the international and domestic scenario one cannot put this down as a mundane achievement. While others are on a cost cutting spree and firing employees, Indian Companies are actually working on boosting staffing in banking and broking sectors. This can be seen as a big boon in the days to come when the current recession eases and the economy gradually comes back on to the fast track. The finance minister has assured Indian public about the sound health of all Indian banks. This could also be evident from the fact that there have been no mergers and takeovers in Indian Banking sector in a contrast to world scenario where finance houses are looking for mergers to cut costs on operations. We definitely are not looking to thrive; rather we are looking for growth. It is just that the pace of growth is a little slow not as compared to a year or two before. These are hard times to test the hard. The weak in business and career will be weeded out and it is sometimes very beneficial for business on the long run.

116. What according to the author, is the reason for the success of Indian national banks in this quarter?
   (a) Indian national banks do not have any commitments in troubled foreign markets.
   (b) These banks can never face financial crisis because of their sheer size.
   (c) These banks are ready to give loans at a very low rate of interest
   (d) The public is ready to give loans at a very low rate of interest
   (e) None of the above

117. Which of the following statements is definitely true in the context of the passage ?
   (A) India has not been affected by the economic slowdown.
   (B) Indian Banks are showing growth in this quarter despite the recession.
   (C) While banking industry in the West was severely affected by recession in the past, it is now gradually recovering and showing a positive growth.
   (a) Only (A)   (b) Only (B)
   (c) Only (C)   (d) (A) and (B)
   (e) (B) and (C)

118. What, according to the author, will be a big boon in the days to come ?
   (a) The economy coming back on the fast track
   (b) The slowing down of the economy
   (c) Increased hiring in Indian financial sector in times of economic slowdown
   (d) The cost cutting carried out by all the companies
   (e) None of the above

119. Which of the following strengthens the finance minister's statement about the sound health of Indian Bank with respect to the passage ?
   (A) There have been no acquisitions and mergers of Indian Banks.
   (B) The Indian Banks are recording a positive growth.
   (C) layoffs have been recording a positive growth.
   (a) Only (A) and (B)   (b) (A) and (C)
   (c) Only (A)   (d) Only (B)
   (e) None of these

120. How, according to the author, is the current recession beneficial ?
   (a) Worldwide, companies have realized that India is a strong power to reckon with
   (b) India is surging ahead of the other companies will turn to India for investment
   (c) After the recession is over international companies will turn of India for investment
   (d) Recession is bringing down the prices of essential commodities
   (e) None of the above

121. What does the phrase **'shot in the arm'** as used in the passage mean ?
   (a) Shock   (b) Fear   (c) Encouragment
   (d) Anxiety   (e) None of the above

DIRECTIONS (Qs 122-123) : Choose the word/group of words which is Most Similar in meaning to the word/group of words printed in bold as used in the passage.

122. Pulverization
   (a) Polarisation   (b) Mashing   (c) Debasement
   (d) Fall   (e) Crushing

123. Turmoil
   (a) Danger   (b) Shock   (c) Sadness
   (d) Fear   (e) Chaos

DIRECTIONS (Qs. 124-125) : Choose the word/group of words which is Most Opposite in meaning to the word/group of words printed in bold as used in the passage.

124. Mundane
   (a) Extraordinary   (b) Regular   (c) Severe
   (d) Visionary   (e) Routine

RESPONSE GRID	**114.** ⓐⓑⓒⓓⓔ	**115.** ⓐⓑⓒⓓⓔ	**116.** ⓐⓑⓒⓓⓔ	**117.** ⓐⓑⓒⓓⓔ	**118.** ⓐⓑⓒⓓⓔ
	119. ⓐⓑⓒⓓⓔ	**120.** ⓐⓑⓒⓓⓔ	**121.** ⓐⓑⓒⓓⓔ	**122.** ⓐⓑⓒⓓⓔ	**123.** ⓐⓑⓒⓓⓔ
	124. ⓐⓑⓒⓓⓔ				

125. Thrive
- (a) Succeed
- (b) Deteriorate
- (c) Worry
- (d) Tremble
- (e) Strive

DIRECTIONS (Qs. 126-135) : Read the following passage carefully and answer the questions given below it. Certain words have been printed in bold to help you to locate them while answering some of the questions.

The great fear in Asia a short while ago was that the region would suffer through the wealth destruction already taking place in the U.S. as a result of the financial crisis. Stock markets tumbled as exports plunged and economic growth deteriorated. Lofty property prices in China and elsewhere looked set to bust as credit tightened and buyers evaporated. But with surprising speed, fear in Asia swung back to greed as the region shows signs of recovery and property and stock prices are soaring in many parts of Asia.

Why should this sharp Asian turnaround be greeted with skepticism? Higher asset prices mean households feel wealthier and better able to spend, which could further fuel the region's nascent rebound. But just as easily, Asia could soon find itself saddled with overheated markets similar to the U.S. housing market. In short the world has not changed. It has just moved places.

The incipient bubble is being created by government policy. In response to the global credit crunch of 2008. Policy makers in Asia slashed interest rates and flooded financial sectors with cash n frantic attempts to keep loans flowing and economies growing. These steps were logical for central bankers striving to reverse a deepening economic crisis. But there is evidence that there is too much easy money around. It's winding up in stocks and real estage, pushing prices up too far and too fast for the underlying economic fundamentals. Much of the concern is focused on China where government stimulus efforts have been large and effective. Money in China has been especially easy to find. Agregate new bank lending surged 201% in the first half of 2009 form the same period a year earlier, to nearly 51.1 turn on. Exuberance over a quick recovery - which was given a boost by China's surprisingly strong 7.9% GDP growth in the second quarter–has byoyed investor sentiment not just for stocks but also for real estate.

Former U.S. Federal Reserve Chairman Alan Greenspan argued that bubbles could only be recognised in hand sight. But investor — who have been well schooled in the dangers of bubbles over the past decade are increasingly wary that prices have risen too far and that the slightest bit of negative, economic news could knock markets for a loop. These fears are compounded by the possibility that Asia's central bankers will begin taking steps to shut off the money. Rumours that Beijing was on the verge of tightening credit led to Shanghai stocks plunging 5%. Yet many economists believe that, there is close to a zero possibility that the Chinese government will do anything this year that constitutes tightening. And without a major shift in thinking, the easy-money conditions will stay in place. In a global economy that has produced more dramatic ups and downs than anyone though possible over the past two years. Asia may be neading for another disheartening plunge.

126. To which of the following has the author attributed the 2008 Asian financial crisis?
- (A) Reluctance or Asian governments to taper off the economic stimulus

- (B) Greed of Asian investors causing them to trade stocks of American companies at high prices
- (C) Inflated real estate prices in Asian countries
- (a) None
- (b) Only (A)
- (c) Only (C)
- (d) (A) and (B)
- (e) Only (B)

127. What doe sthe authro want to convey through the phrase "The would has not changed it has just moved places"?
- (a) At present countries are more dependent on Asian economies than on the US economy
- (b) Economies have become interlinked on account of globalisation
- (c) Asian governments are implementing the same economic reforms as developed countries
- (d) All economies are susceptible to recession because of the state of the US economy
- (e) None of the above

128. Which of the following can be said about the Chinese government's efforts to revive the economy?
- (a) These were largely unsuccessful as only the housing market improved
- (b) The governments only concern was to boost investor confidence in stock
- (c) These efforts were ineffectual as the economy recovered owing to the US market stabilising
- (d) These were appropriate and accomplished the goal of economic revival
- (e) They blindly imitated the economic reforms adopted by the US

129. Why do experts predict that Asian policymakers will not withdraw fiscal stimulus?
- (A) The US economy is not likely to recover for a long time.
- (B) Stock markets are yet to regain their former levels.
- (C) Fear of revolt by greedy citizens.
- (a) None
- (b) Only (C)
- (c) (A) and (C)
- (d) Only (B)
- (e) (B) and (C)

130. What do the statistics about loans given by Chinese banks in 2009 indicate ?
- (a) There was hardly any demand for loans in 2008.
- (b) The Chinese government has borrowed funds from the US
- (c) China will take longer than the US to recover from the economic crisis.
- (d) The GDP of China was below expectations
- (e) None of the above

131. Why has investor confidence in the Chinese stock market been restored?
- (A) Existing property prices which are stable and affordable.
- (B) The government has decided to tighten credit.
- (C) Healthy growth of the economy indicated by GDP figures.
- (a) Only (C)
- (b) (A) and (B)
- (c) All (A), (B) and (C)
- (d) Only (B)
- (e) None of these

RESPONSE GRID	125. ⓐⓑⓒⓓⓔ	126. ⓐⓑⓒⓓⓔ	127. ⓐⓑⓒⓓⓔ	128. ⓐⓑⓒⓓⓔ	129. ⓐⓑⓒⓓⓔ
	130. ⓐⓑⓒⓓⓔ	131. ⓐⓑⓒⓓⓔ			

132. What is the author's main objective in writing the passage?
  (a) Illustrating that Asian economies are financially more sound than those of developed countries.
  (b) Disputing financial theories about how recessions can be predicted and avoided
  (c) Warning Asian countries about the dangers of favouring fast growth and profits over sound economic-principles
  (d) Extolling China's incredible growth and urging other countries to emulate it
  (e) Advising governments about the changes in policy to strengthen economic fundamentals

133. Why does the author doubt the current resurgence of Asian economy which is yet to recover
  (a) Their economies are too heavily reliant on the American economy which is yet to recover
  (b) Central banks have slashed interest rates too abruptly which is likely to cause stock markets to crash
  (c) With their prevailing economic conditions they are at risk for a financial crisis
  (d) Their GDP has not grown significantly during the last financial year
  (e) None of the above

134. Which of the following can be inferred from the passage ?
  (A) All Asian economies are recovering at the same pace.
  (B) Experts are apprehensive about the state of Asian economies despite their recovery.
  (C) Developed countries should implement the same economies reforms as Asian ones
  (a) Only (A)   (b) (B) and (C)
  (c) (A) and (B)   (d) Only (B)
  (e) None of these

135. According to the passage, which of the following factor (s) has/have had a negative impact on the Asian stock markets?
  (A) Abrupt drop in exports by Asian countries.
  (B) Extravagant disbursement of housing loans in 2009.
  (C) Raising of interest rates by the Central Bank.
  (a) None   (b) (A) and (B)
  (c) Only (A)   (d) (A) and (C)
  (e) All of the above

DIRECTIONS (Q. 136-140) : Fill the gaps in the passage below with most appropriate word from the options given for each gap. The right words are the ones used by the author. Be guided by the author's overall style and meaning when you choose the answer.

……. **(136)** Burgeoning domestic demand, rising prices for commodities, especially food and fuels, are exerting …….**(137)**. pressure on the inflation rate. The region's central banks are once again facing a **(138)**……. in this respect. On the one hand, they need to maintain price stability. On the other, they must try to keep their export sectors (or those producing import-substitution goods) competitive amid heavy upward pressure on the region's exchange rates. Currency appreciation is being **(139)**……… by a combination of highly liquid external conditions, the solidity of some Asian economies and, in several cases, **(140)**. ……….. inflows of foreign exchange resulting from high export commodity prices and foreign investors' renewed vigor for emerging cocentry assets.

136. (a) Among   (b) As
      (c) Amid   (d) In spite of
      (e) With
137. (a) downward   (b) Low
      (c) Unbearable   (d) Upward
      (e) All around
138. (a) Attack   (b) Criticism
      (c) Dilemma   (d) Force
      (e) Tanter hooks
139. (a) driven   (b) Inspired
      (c) Caused   (d) Followed
      (e) Envisaged
140. (a) Uncounted   (b) Un stoppable
      (c) Massive   (d) Major
      (e) Unimpressive

COMPUTER KNOWLEDGE

141. Which of the following groups consist of only output devices?
  (a) Scanner, Printer, Monitor
  (b) Keyboard, Printer, Monitor
  (c) Mouse, Printer, Monitor
  (d) Plotter, Printer, Monitor
  (e) None of these
142. IT stands for _____
  (a) Information Technology
  (b) Integrated Technology
  (c) Intelligent Technology
  (d) Interesting Technology
  (e) None of these
143. A collection of related information sorted and dealt with as a unit of a –
  (a) disk   (b) data   (c) file
  (d) floppy   (e) None of these
144. An error in computer program is also known as –
  (a) bug   (b) debug   (c) cursor
  (d) icon   (e) None of these
145. Which part of a computer helps to store information?
  (a) Disk drive (b) Keyboard   (c) Monitor
  (d) Printer   (e) None of these
146. The process of a computer receiving information from a server on the Internet is known as
  (a) pulling   (b) pushing   (c) downloading
  (d) transferring (e) None of these
147. _____ is the process of carrying out commands.
  (a) Fetching   (b) Storing   (c) Execution
  (d) Decoding   (e) None of these
148. A series of instructions that tells a computer what to do and how to do is called a
  (a) program   (b) command   (c) user response
  (d) processor (e) None of these
149. Which part of the computer displays the work done?
  (a) RAM   (b) Printer   (c) Monitor
  (d) ROM   (e) None of these
150. Microsoft Word is an example of
  (a) an operating system (b) a processing device
  (c) application software (d) an input device
  (e) None of these

RESPONSE GRID	132. ⓐⓑⓒⓓⓔ	133. ⓐⓑⓒⓓⓔ	134. ⓐⓑⓒⓓⓔ	135. ⓐⓑⓒⓓⓔ	136. ⓐⓑⓒⓓⓔ
	137. ⓐⓑⓒⓓⓔ	138. ⓐⓑⓒⓓⓔ	139. ⓐⓑⓒⓓⓔ	140. ⓐⓑⓒⓓⓔ	141. ⓐⓑⓒⓓⓔ
	142. ⓐⓑⓒⓓⓔ	143. ⓐⓑⓒⓓⓔ	144. ⓐⓑⓒⓓⓔ	145. ⓐⓑⓒⓓⓔ	146. ⓐⓑⓒⓓⓔ
	147. ⓐⓑⓒⓓⓔ	148. ⓐⓑⓒⓓⓔ	149. ⓐⓑⓒⓓⓔ	150. ⓐⓑⓒⓓⓔ	

GENERAL KNOWLEDGE

151. Digital Banking can be resorted through
   (a) Mobile phones   (b) Internet
   (c) Telephones   (d) All of these
   (e) None of these

152. A compiler translates a program written in a high-level language into ____.
   (a) Machine language   (b) an algorithm
   (c) a debugged program   (d) Java
   (e) None of these

153. Back up of the data files will help to prevent _____ .
   (a) loss of confidentially
   (b) duplication of data
   (c) virus infection
   (d) loss of data
   (e) None of these

154. The background of any Word document _____ .
   (a) is always white colour
   (b) is the colour you present under the option menu
   (c) is always the same for the entire document
   (d) can have any colour you choose
   (e) None of these

155. In order to save an existing document with a different name you need to ____ .
   (a) Retype the document and give it a different name.
   (b) Use the Save as .... command
   (c) Copy and paste the original document to a new document and then save
   (d) Use Windows Explorer to copy the document to a different location and then rename it.
   (e) None of these

156. A ____ contains specific rules and words that express the logical steps of an algorithm.
   (a) programming language
   (b) syntax
   (c) programming structure
   (d) logic chart
   (e) None of these

157. What is the default file extension for all Word documents?
   (a) txt   (b) wrd
   (c) fil   (d) doc
   (e) None of these

158. Changing an existing document is called _____ the document.
   (a) creating   (b) deleting
   (c) editing   (d) adjusting
   (e) None of these

159. To move to the beginning of a line of text, press the ____ key.
   (a) pageup   (b) alt
   (c) home   (d) enter
   (e) None of these

160. What is the permanent memory built into your computer called?
   (a) RAM   (b) ROM
   (c) CPU   (d) CD-ROM
   (e) None of these

161. When the loan is granted by a bank for purchase of white goods it is called
   (a) Consumption loan   (b) White goods loan
   (c) Consumer durable loan   (d) All of these
   (e) None of these

162. Which method is adopted by Banks for calculating and applying interest on Savings Bank accounts?
   (a) On monthly products based on minimum balance between 10th and last working day of the month.
   (b) Daily balance is calculated
   (c) On average quarterly balance.
   (d) On average half yearly balance.
   (e) None of the above.

163. Which is not a part of the scheduled banking structure in India?
   (a) Moneylenders   (b) Public sector banks
   (c) Private sector banks   (d) Regional rural banks
   (e) State cooperative banks

164. The rate of interest on savings bank account is fixed by
   (a) Concerned bank
   (b) RBI
   (c) Indian Banks Association
   (d) GOI
   (e) Banking Codes and Standards Board of India

165. The term 'CBS' is used in banking operation. What is the full form of the letter 'C' in the term 'CBS'?
   (a) Core   (b) Credit
   (c) Continuous   (d) Complete
   (e) None of these

166. RBI reviews its credit and monetary policy regularly and also in between. What is the purpose of the revision? Is it to ensure that?
   A. inflation does not cross the limit.
   B. banks have enough liquidity.
   C. cost of the fund is not very high.
   (a) Only A   (b) Only B
   (c) All A, B and C   (d) Only B and C
   (e) None of these

167. Credit rating is
   (a) used to rate the borrowers for giving advances
   (b) used to estimate efficiency of employees
   (c) used to calculate the number of audit rated branches
   (d) not used by any bank
   (e) necessary for promotion to employees

168. RTGS stands for
   (a) Real Time Gross Settlements
   (b) Reduced Time Gross Settlements
   (c) Relative Time Gross Settlements
   (d) Real Total Gross Securities
   (e) None of the above

169. Banks have to maintain a certain ratio between cash in the hand and totals assets. This is called
   (a) Statutory Bank Ratio (SBR)
   (b) Statutory Liquid Ratio (SLR)
   (c) Central Bank Reserve (CBR)
   (d) Central Liquid Reserve (CLR)
   (e) None of these

RESPONSE GRID	151. ⓐⓑⓒⓓⓔ	152. ⓐⓑⓒⓓⓔ	153. ⓐⓑⓒⓓⓔ	154. ⓐⓑⓒⓓⓔ	155. ⓐⓑⓒⓓⓔ
	156. ⓐⓑⓒⓓⓔ	157. ⓐⓑⓒⓓⓔ	158. ⓐⓑⓒⓓⓔ	159. ⓐⓑⓒⓓⓔ	160. ⓐⓑⓒⓓⓔ
	161. ⓐⓑⓒⓓⓔ	162. ⓐⓑⓒⓓⓔ	163. ⓐⓑⓒⓓⓔ	164. ⓐⓑⓒⓓⓔ	165. ⓐⓑⓒⓓⓔ
	166. ⓐⓑⓒⓓⓔ	167. ⓐⓑⓒⓓⓔ	168. ⓐⓑⓒⓓⓔ	169. ⓐⓑⓒⓓⓔ	

170. Accounting year of RBI is_____ .
   (a) April-March   (b) July-June
   (c) October-September   (d) January-December
   (e) None of these

171. If RBI adopts an expansionist open market policy, it means that it will _____ .
   (a) Buy securities from non-government holders
   (b) Sell securities in the open market
   (c) Offer commercial banks more credit in the open market
   (d) announce to the market that it will expand credit
   (e) None of these

172. Which of the following is NOT a multinational bank?
   (a) BNP Paribas
   (b) British Bank of Middle East
   (c) Standard Chartered Bank
   (d) HSBC
   (e) Cathay Pacific

173. To avoid crowd of customers wanting to withdraw cash, banks have created additional delivery channels. Which has become the most popular channels for withdrawing cash?
   (a) Core Banking Solution
   (b) Pay Orders
   (c) Demand Drafts
   (d) Automated Teller Machines
   (e) None of these

174. When we deposit a cheque issued in our name in the bank, the bank always checks if the cheque has been crossed or not. Why is this done?
   (a) It ensures that the money is deposited only in the account of the person in whose name the cheque has been drawn.
   (b) It is a process by which the person who has issued the cheque comes to know whether the cheque is encashed or not.
   (c) Bank insists on it only when the party wants the payment immediately and that too in cash only.
   (d) This is the instruction of RBI that all cheques of the amount of 10,000 should be accepted only if they are crossed.
   (e) None of these

175. NCHER stands for
   (a) National Capital for Higher Education and Research
   (b) National Committee for Higher Education and Research
   (c) Non Capitalisation of Higher Education and Research
   (d) National Commission for Higher Education and Research
   (e) None of these

176. Income Declaration Scheme 2016 / 4 month window for declaration of domestic black money (Dhan Wapsi), effective from 1st June 2016. It provides an opportunity to all persons who have not declared income correctly in earlier years to declare their undisclosed incomes, to be taxed at rate of _____ ?
   (a) 15%   (b) 35%   (c) 65%
   (d) 55%   (e) 45%

177. SBI's Overseas subsidiary, _____ SBI Bank launched payment gateway to facilitate transactions between _____ and India. ?
   (a) Germany   (b) Bangladesh   (c) Nepal
   (d) Pakistan   (e) None of These

178. The third permanent research centre being built by India in Antarctica is named-
   (a) Parikrama   (b) Rohini   (c) Bharati
   (d) Himalaya   (e) Indira

179. When a country decide to conduct trade on favorable terms with another country for mutual benefits, this is called?
   (a) FTA System   (b) MFN Status
   (c) Bilateral Trade   (d) Counter Trade
   (e) None of these

180. If an agent tells an investor to invest without telling him about the risk factors, the situation will be of :
   (a) mis-telling   (b) Undertaking
   (c) cross telling   (d) Misappropriation
   (e) None of the above

181. The main function of International Monetary Fund is (IMF)
   (a) To provide credit to developing countries
   (b) To give loans to private sector undertakings
   (c) To solve BOP problem of developing nations
   (d) To recieve foreign currency deposits form the banks
   (e) None of the above

182. The Union Govt., in an ambitious initiative, has proposed merging the Bharatiya Mahila Bank (BMB) with the Rashtriya Mahila Kosh (RMK). Women and Child Development Maneka Gandhi said the performance of BMB and RMK was not satisfactory and that is why government was mulling merger of the two to strengthen the lending facility to women. When was the Rashtriya Mahila Kosh established?
   (a) In 1990   (b) In 1993   (c) In 1994
   (d) In 1995   (e) None of these

183. The book "Rediscovery of India" was written by _____ .
   (a) Meghnad Desai   (b) Romila Thapar
   (c) Mulk Raj Anand   (d) Amit Chaudhri
   (e) Jawahar Lal Nehru

184. RBI which is a corporation can be subject to :
   (a) Wealth tax as it is deemed company
   (b) There is no exemption in RBI Act.
   (c) There is no exemption in wealth tax Act.
   (d) All of the above
   (e) None of these

185. State Bank of India decided to merge its five associate public sector banks (PSBs) and Bharatiya Mahila Bank (BMB) with itself. 5 subsidiary banks are - State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala and State Bank of _____ ?
   (a) Travancore   (b) Delhi
   (c) Chennai   (d) Ahmedabad
   (e) None of These

186. Which of the following amendments in the Banking Regulation Act 1949 has the Reserve Bank of India (RBI) asked for finalising guidelines for new banking licences?
   (a) Any acquisition of 5% or more of the share capital of a bank should be subject to the Central Bank's approval
   (b) RBI should have the authority to supersede the board of directors of a banking company and appoint an administrator during the period of supersession
   (c) RBI should have the authority to call for information or inspection of any associate enterprise of a banking company.
   (d) All the above
   (e) None of the above

RESPONSE GRID

170. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   171. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   172. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   173. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   174. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
175. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   176. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   177. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   178. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   179. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
180. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   181. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   182. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   183. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   184. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ
185. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ   186. Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

187. Government constituted IEPF (_____) Authority, to strengthen framework for safeguarding interest of investors. This is a step closer to setting up IEPF, which will be utilized for multiple purposes for protecting investors ?
    (a) International Education and Protection Fund
    (b) Institution Education and Protection Fund
    (c) Investor Education and Protection Fund
    (d) Institution Education and Provocation Fund
    (e) None of These

188. RBI's open market operation transactions are carried out with a view to regulate
    (a) Liquidity in the economy
    (b) Prices of essential commodities
    (c) Inflation
    (d) Borrowing power of the banks
    (e) All of the these

189. Which of the following organisations / agencies frame the Monetary and Credit Policy which is followed by all banks in India?
    (a) Indian Bank's Association
    (b) Reserve Bank of India
    (c) Securities and Exchange Board of India
    (d) Government of India
    (e) None of these

190. Who is the author of the book "Exploring Marxist Bengal"?
    (a) Suman Panda   (b) Debraj Bhattacharya
    (c) Swati Bose   (d) Chandres Banerjee
    (e) None of these

191. Which of the following is **NOT** a public sector bank?
    (a) Corporation Bank
    (b) United Bank of India
    (c) Vijaya Bank
    (d) Bank of Maharashtra
    (e) Axis Bank

192. A worldwide financial messaging network which exchanges messages between banks and financial institutions is known as _____ .
    (a) CHAPS   (b) SWIFT
    (c) NEFT   (d) SFMS
    (e) CHIPS

193. The term 'Smart Money' refers to _____.
    (a) Foreign Currency   (b) Internet Banking
    (c) US Dollars   (d) Travelers' cheques
    (e) Credit Cards

194. Which one of the following is a retail banking product ?
    (a) Home Loans   (b) Working capital finance
    (c) Corporate term loans (d) Infrastructure financing
    (e) Export Credit

195. The Reserve Bank of India takes which of the following measures when it intends to ease the liquidity crunch in the country?
    (A) It prints and supplies additional currency notes in the market.
    (B) It takes steps to increase the flow of foreign direct investment.

(C) It reduces Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR).
    (a) Only (A)   (b) Only (B)
    (c) Only (C)   (d) Only (A) and (B)
    (e) All (A), (B) and (C)

196. The World Bank launched an account, called Green Bank Accounts, for the developing countries. Choose the correct answer related to this.
    (a) This is an initiative to monitor the climate change activities into national accounts.
    (b) It is an initiative to integrate the values of biological diversities into national account.
    (c) It is an account that records the impact of unsustainable activities of agriculture.
    (d) It is an account that records the impact of important pollutants on major water resources.
    (e) It is an initiative to start the expansion of rural banks.

197. Which of the following rates is/are NOT decided by RBI?
    (a) Bank Rate   (b) Repo rate
    (c) Prime Lending Rate (d) Cash Reserve Ratio
    (e) None of these

198. _____ became 189th member of the International Monetary Fund (IMF) and World Bank. Its initial subscription quota for IMF will be of SDR (Special Drawing rights) 2 million or about $2.81 million. It will be the second smallest member of IMF after Tuvalu. ?
    (a) Niger   (b) Chad
    (c) Gabon   (d) Vetican City
    (e) Nauru

199. Which Central Bank has imposed negative interest rate in its monetary policy statement in 2016?
    (a) Bank of England   (b) People's Bank of China
    (c) Bank of Japan   (d) European Central bank
    (e) None of these

200. Insurance Regulatory and Development Authority (IRDA) is an autonomous apex statutory body which regulates and develops the insurance industry in India. Which of the following statements is/are correct about IRDA?
    (a) It was constituted by a Parliament of India act called Insurance Regulatory and Development Authority Act, 1999
    (b) The agency operates from its headquarters at Hyderabad in Andhra Pradesh where it shifted from Delhi in 2001.
    (c) It works to bring about speedy and orderly growth of the insurance industry, protect the interest of policyholders and put in place effective grievance redressal machinery.
    (d) Only (a) and (b)
    (e) All (a), (b) and (c)

RESPONSE GRID	187. ⓐⓑⓒⓓⓔ	188. ⓐⓑⓒⓓⓔ	189. ⓐⓑⓒⓓⓔ	190. ⓐⓑⓒⓓⓔ	191. ⓐⓑⓒⓓⓔ
	192. ⓐⓑⓒⓓⓔ	193. ⓐⓑⓒⓓⓔ	194. ⓐⓑⓒⓓⓔ	195. ⓐⓑⓒⓓⓔ	196. ⓐⓑⓒⓓⓔ
	197. ⓐⓑⓒⓓⓔ	198. ⓐⓑⓒⓓⓔ	199. ⓐⓑⓒⓓⓔ	200. ⓐⓑⓒⓓⓔ	

GENERAL KNOWLEDGE & CURRENT AFFAIRS

Max. Marks : 80   **No. of Qs. 80**   **Time : 30 min.**   **Date : ..../......../................**

1. Suvidha Prepaid Card service has been launched by which bank?
   - (a) Vijaya Bank
   - (b) Dena Bank
   - (c) Canara Bank
   - (d) UCO Bank
   - (e) None of these

2. How much amount has been announced by the Reserve Bank of India to provide to Nepal Rastra Bank in Rs 100 denomination note ?
   - (a) ₹ 75 million
   - (b) ₹ 1 billion
   - (c) ₹ 1.5 billion
   - (d) ₹ 90 million
   - (e) None of these

3. Which bank has tied up with Life Insurance Corporation of India (LIC) to boost venture capital investment in MSME Sector?
   - (a) Reserve Bank of India (RBI)
   - (b) Securities and Exchange Board of India (SEBI)
   - (c) National Bank for Agriculture and Rural Development (NABARD)
   - (d) Small Industries Development Bank of India (SIDBI)
   - (e) None of these

4. Which state has recently launched its own e-wallet Tokapoisa.in to enable the residents perform digital transaction?
   - (a) Arunachal Pradesh
   - (b) West Bengal
   - (c) Sikkim
   - (d) Assam
   - (e) None of these

5. Which bank has recently introduced a humanoid robot IRA for easy service to customers?
   - (a) Citi Bank
   - (b) HDFC Bank
   - (c) ICICI Bank
   - (d) Andhra Bank
   - (e) None of these

6. The India Post Payment Bank has started its pilot services in which of the given cities from January 30, 2017?
   - (a) Raipur and Ranchi
   - (b) Mysore and Gandhinagar
   - (c) Pune and Indore
   - (d) Chennai and Kochi
   - (e) None of these

7. What is the revised GDP growth estimate for India by the World Bank for 2016-17 fiscal ending March 31, 2017?
   - (a) 7.4 Percent
   - (b) 6.8 Percent
   - (c) 7 Percent
   - (d) 7.6 Percent
   - (e) None of these

8. Government Policy Think Tank NITI Aayog has estimated the GDP growth rate of India to _____ for 2016-17?
   - (a) 6.8 percent
   - (b) 8 percent
   - (c) 7.6 percent
   - (d) 7 percent
   - (e) None of these

9. Which Indian bank has signed a pact with the State General Reserve Fund of Oman (SGRF) to fund $50 million in Oman's private equity fund, Oman India Joint Investment Fund (OIJIF)?
   - (a) State Bank of India
   - (b) Asian Development bank
   - (c) ICICI Bank
   - (d) Reserve Bank of India
   - (e) None of these

10. The International Monetary Fund (IMF) has revised the GDP growth estimate of India for the current fiscal year to _____ percent from the previous 7.6 percent on January 16, 2017.
    - (a) 6 percent
    - (b) 6.6 percent
    - (c) 7.1 percent
    - (d) 6.3 percent
    - (e) None of these

11. Which state has launched the Entrepreneurship Development Scheme (EDS) on January 19, 2017 under the New Economic Development Policy (NEDP)?
    - (a) Uttar Pradesh
    - (b) Mizoram
    - (c) Maharashtra
    - (d) Haryana
    - (e) None of these

12. Which bank has signed an MoU with India Post Payments Bank(IPPB) on January 17, 2017 to provide technology platform for pilot launch of IPPB?
    - (a) ICICI Bank
    - (b) Punjab National Bank
    - (c) State Bank of India
    - (d) HDFC Bank
    - (e) None of these

13. Which bank has launched a contactless credit card facility Wave N Pay on January 21, 2017?
    - (a) ICICI Bank
    - (b) Bank of Baroda
    - (c) Punjab National Bank
    - (d) State Bank of India
    - (e) None of these

14. The Reserve bank of India has announced the restructuring of _____ loan will not be treated as Non Performing Asset.
    - (a) Auto Loan
    - (b) Home Loan
    - (c) Education Loan
    - (d) Start-Up Loan
    - (e) None of these

15. Under the Varishtha Pension Bima Yojana 2017, approved by the government on January 24, 2017, a guaranteed rate of return of _____ per annum would be provided for a period of ten years.
    - (a) 6 Percent
    - (b) 5 Percent
    - (c) 7 Percent
    - (d) 8 Percent
    - (e) None of these

RESPONSE GRID

1. ⓐⓑⓒⓓⓔ	2. ⓐⓑⓒⓓⓔ	3. ⓐⓑⓒⓓⓔ	4. ⓐⓑⓒⓓⓔ	5. ⓐⓑⓒⓓⓔ
6. ⓐⓑⓒⓓⓔ	7. ⓐⓑⓒⓓⓔ	8. ⓐⓑⓒⓓⓔ	9. ⓐⓑⓒⓓⓔ	10. ⓐⓑⓒⓓⓔ
11. ⓐⓑⓒⓓⓔ	12. ⓐⓑⓒⓓⓔ	13. ⓐⓑⓒⓓⓔ	14. ⓐⓑⓒⓓⓔ	15. ⓐⓑⓒⓓⓔ

16. Which bank has launched a new digital transaction service named SIMsePAY, that allows customers of the bank to do money transfers, pay bills and other mobile banking services, without the need for smart phones or internet ?
    (a) RBL Banl   (b) ICICI Bank   (c) Yes Bank
    (d) HDFC Bank   (e) None of these

17. According to the Central Statistics Office (CSO) the Gross Domestic Product (GDP) of Indian economy has grown at the rate of _____ in the second quarter of FY17.
    (a) 7.1%   (b) 7.3%   (c) 7.6%
    (d) 7.5%   (e) None of these

18. The Reserve Bank of India (RBI) has decided to extend the time for installment of Aadhaar-enabled PoS devices till which date?
    (a) March 29, 2017   (b) February 1, 2017
    (c) January 30, 2017 (d) June 30, 2017
    (e) None of these

19. The Women and Child Development Ministry has tied up with _____ and _____ to offer wider payment option to buyers to buy products from "Mahila E-haat".
    (a) Punjab National Bank and State Bank of India
    (b) India Post and State Bank of India
    (c) ICICI Bank and Punjab National bank
    (d) India Post and Yes Bank
    (e) None of these

20. Which bank has won the The Best MSME Bank Award 2016 by ASSOCHAM at the fourth SMEs Excellence Award function held in New Delhi ?
    (a) Corporation Bank (b) UCO Bank
    (c) Syndicate Bank   (d) Vijaya Bank
    (e) None of these

21. Who has been appointed as Non-Executive Chairperson of Mumbai based IDFC Bank with effect from December 9, 2016 up to July 26, 2018?
    (a) Rajiv Lall   (b) Anil Baijal   (c) Vinod Rai
    (d) Veena Mankar   (e) None of these

22. The Reserve Bank of India is issuing a new batch of ₹ 500 notes in Mahatma Gandhi (New) series with which inset letter?
    (a) R   (b) S   (c) P
    (d) L   (e) None of these

23. Who has been appointed as the new Chairman of Life Insurance Corporation (LIC), on December 14, 2016?
    (a) S K Roy   (b) Sunita Sharma
    (c) D K Mehrotra   (d) V K Sharma
    (e) None of these

24. The 'Aadhaar Payment App' of government of India has been developed by which bank along with UIDAI and NPCI?
    (a) HDFC Bank   (b) IDFC Bank   (c) Yes Bank
    (d) Axis Bank   (e) None of these

25. ICICI Bank has launched a payments collection app for merchants and retailers which will allow customers to pay any mode of payment. Name the App.

    (a) DigiPay   (b) EazyPay
    (c) PayZapp   (d) CitrusPay
    (e) None of these

26. The Government of India has achieved its target of distributing _____ crore LPG connections to the BPL households in less than 8 months for the year 2016-2017 under Pradhan Mantri Ujjwala Yojana (PMUY).
    (a) 1.5 Crore   (b) 2 Crore
    (c) 2.5 Crore   (d) 5 Crore
    (e) None of these

27. Which bank on 14 January 2016 became the first public sector bank to launch wealth management services?
    (a) SBI   (b) Allahabad Bank
    (c) UCO Bank   (d) Canara Bank
    (e) None of these

28. Which private sector bank during January 2016 claimed to have become the first private sector bank in India to cross ₹ 1 lakh crore mark in mortgage disbursals?
    (a) HDFC Bank   (b) Indus-Ind Bank
    (c) ICICI Bank   (d) Axis Bank
    (e) None of these

29. Asian Infrastructure Investment Bank (AIIB), the new international finance institution that aims to support the building of infrastructure in the Asia-Pacific region, was formally launched during January 2016. Which Indian was elected to the 12-member board of this bank?
    (a) Ramesh Damani   (b) Dinesh Sharma
    (c) Arun Jaitley   (d) Prakash Hegde
    (e) None of these

30. What is the proposed tax-holiday to be provided to "Start-ups" coming into existence after 1 April 2016, as announced by Prime Minister Narendra Modi at the inaugural session of the Start-Up India programme during January 2016?
    (a) 10 years   (b) 5 years   (c) 3 years
    (d) 2 years   (e) None of these

31. Name the two new Hindi writers who have been conferred with the 2016 Bharatiya Jnanpith Navlekhan Award ?
    (a) Tasneem Khan and Upasana
    (b) Vishnu Nagar and Govind Prasad
    (c) Shraddha and Ghyansham Devansh
    (d) Madhusudan Anan and Om Nischal
    (e) None of these

32. Petronet, India's largest LNG importer, has signed an agreement with which country on December 30 to set up $950 million Liquefied Natural Gas import project in that country?
    (a) Kyrgyzstan   (b) Afghanistan   (c) Pakistan
    (d) Bangladesh   (e) None of these

33. How much financial benefit would be provided to the pregnant women in rural areas as announced by PM Modi?
    (a) ₹ 2500   (b) ₹ 4000   (c) ₹ 5500
    (d) ₹ 6000   (e) None of these

RESPONSE	16. ⓐⓑⓒⓓⓔ	17. ⓐⓑⓒⓓⓔ	18. ⓐⓑⓒⓓⓔ	19. ⓐⓑⓒⓓⓔ	20. ⓐⓑⓒⓓⓔ
	21. ⓐⓑⓒⓓⓔ	22. ⓐⓑⓒⓓⓔ	23. ⓐⓑⓒⓓⓔ	24. ⓐⓑⓒⓓⓔ	25. ⓐⓑⓒⓓⓔ
	26. ⓐⓑⓒⓓⓔ	27. ⓐⓑⓒⓓⓔ	28. ⓐⓑⓒⓓⓔ	29. ⓐⓑⓒⓓⓔ	30. ⓐⓑⓒⓓⓔ
	31. ⓐⓑⓒⓓⓔ	32. ⓐⓑⓒⓓⓔ	33. ⓐⓑⓒⓓⓔ		

34. Name the new health scheme launched by Andhra Pradesh Government for the Above Poverty Line families of the state on January 1, 2017?
    (a) Arogya Swasthiya Bima Yojana
    (b) Suraksha Bima Yojana
    (c) Arogya Raksha Scheme
    (d) State Government Health Scheme
    (e) None of these

35. Who has been appointed as the new Chairman of Union Public Service Commission with effect from January 4, 2017?
    (a) R. M. Bathew   (b) David R. Syiemlieh
    (c) F. W. Robertson   (d) D P Agrawal
    (e) None of these

36. In which state is the world's largest 11-day Gala Festival "Bargarh Dhanua Jatra" organized?
    (a) Odisha   (b) Karnataka
    (c) Tamil Nadu   (d) Andhra Pradesh
    (e) None of these

37. Sports Ministry constituted a committee on January 2, 2017 to suggest improvements in the National Sports Development Code. Who will be the head of the Committee?
    (a) Mani Shankar Aiyar (b) Ajay Maken
    (c) Injeti Srinivas   (d) Mr Vijay Goel

38. India's first 700 MW Pressurized Heavy Water Reactor (PHWR) will have its trial run in which state?
    (a) Haryana   (b) Gujarat   (c) Punjab
    (d) Rajasthan   (e) None of these

39. Who has been appointed as the 9th UN Secretary General ?
    (a) Antonio Guterres
    (b) Kurt Waldheim
    (c) Javier Perez de Cuellar
    (d) Boutros Boutros-Ghali
    (e) None of these

40. Which state has launched first of its kind 24 × 7 call-center facility for the forest department of the state?
    (a) Maharashtra   (b) Tamil Nadu   (c) Kerala
    (d) West Bengal   (e) None of these

41. Who has been elected as the new president of Haiti?
    (a) Jovenel Moise   (b) Jean-Bertrand
    (c) Jacques Rousseau (d) Robert Labrousse
    (e) None of these

42. Which States/UT Government has recently launched Good Samaritan Policy for encouraging people to help accident victims ?
    (a) Puducherry   (b) New Delhi   (c) Gujarat
    (d) Andhra Pradesh   (e) None of these

43. Which country has decided to switch off its FM radio network and completely convert to digital signals ?
    (a) Sweden   (b) Finland   (c) Norway
    (d) Germany   (e) None of these

44. Who won the winner of 2017 Qatar Open title ?
    (a) Rafael Nadal   (b) Roger Federer
    (c) Andy Murray   (d) Novak Djokovic
    (e) None of these

45. Name the App launched by IRCTC to book tickets faster.
    (a) IRCTC Fast Book (b) IRCTC Rail Connect
    (c) IRCTC Rail Ticket (d) IRCTC Fast Ticket
    (e) None of these

46. Where was 350th Prakash Utsav organized to mark the birth anniversary of Guru Gobind Singh?
    (a) Patna   (b) Bhopal   (c) Mumbai
    (d) Amritsar   (e) None of these

47. Who has been nominated for the 4th Yash Chopra Memorial Award ?
    (a) Akshay Kumar   (b) Salman Khan (c) Kapil Sharma
    (d) Shah Rukh Khan (e) None of these

48. What was the theme of the 14th Pravasi Bhartiya Divas (PBD) Convention 2017?
    (a) Connecting For a Shared Future
    (b) Know India, Understand India
    (c) Engaging Diaspora: Connecting Across Generations
    (d) Redefining Engagement with the Indian Diaspora
    (e) None of these

49. Pakistan successfully test fired its first Submarine-Launched Cruise Missile (SLCM) on January 9. Name the missile.
    (a) Aurangzeb-2   (b) Abdali-I   (c) Babur-3
    (d) Babur-2   (e) None of these

50. Name the newly appointed Chairman of Tata Power Co Ltd in place of Cyrus Mistry.
    (a) Vikram Desai   (b) Aditya Choudhari
    (c) Mohan Sekhar   (d) S Padmanabhan
    (e) None of these

51. Where is the World's Largest Street Light Replacement Programme been launched by the Power Ministry?
    (a) Uttar Pradesh   (b) Haryana   (c) New Delhi
    (d) Chandigarh   (e) None of these

52. Who has been appointed as the new Chief Executive Officer of Flipkart on January 9, 2017?
    (a) Sanjeev Mohanty (b) Kalyan Krishnamurthy
    (c) Kunal Bahl   (d) Sanjeev Agarwal
    (e) None of these

53. The Ministry of Defence has planned to set up its Defence Unit in which of the following state at a cost of Rs. 1500 crore?
    (a) Goa   (b) Jammu & Kashmir
    (c) Himachal Pradesh (d) Madhya Pradesh
    (e) None of these

54. Who has been named as the new brand ambassador of Smartphone brand Gionee?
    (a) MS Dhoni   (b) Ranbir Kapoor (c) Virat Kohli
    (d) Kapil Sharma   (e) None of these

55. Name the eminent personality honoured by the US Embassy for contribution towards the India-US Partnership on Tuberculosis.
    (a) Vidya Balan   (b) Irfan Khan   (c) Amir Khan
    (d) Amitabh Bachchan (e) None of these

56. Akbar Hashemi Rafsanjani who passed away recently was the former President of which country?
    (a) Afghanistan   (b) Saudi Arabia   (c) Iran
    (d) Israel   (e) None of these

RESPONSE GRID					
	34. ⓐⓑⓒⓓⓔ	35. ⓐⓑⓒⓓⓔ	36. ⓐⓑⓒⓓⓔ	37. ⓐⓑⓒⓓⓔ	38. ⓐⓑⓒⓓⓔ
	39. ⓐⓑⓒⓓⓔ	40. ⓐⓑⓒⓓⓔ	41. ⓐⓑⓒⓓⓔ	42. ⓐⓑⓒⓓⓔ	43. ⓐⓑⓒⓓⓔ
	44. ⓐⓑⓒⓓⓔ	45. ⓐⓑⓒⓓⓔ	46. ⓐⓑⓒⓓⓔ	47. ⓐⓑⓒⓓⓔ	48. ⓐⓑⓒⓓⓔ
	49. ⓐⓑⓒⓓⓔ	50. ⓐⓑⓒⓓⓔ	51. ⓐⓑⓒⓓⓔ	52. ⓐⓑⓒⓓⓔ	53. ⓐⓑⓒⓓⓔ
	54. ⓐⓑⓒⓓⓔ	55. ⓐⓑⓒⓓⓔ	56. ⓐⓑⓒⓓⓔ		

57. Which state has recently launched India's first Student Startup and Innovation Policy?
 (a) Goa (b) Gujarat
 (c) Himachal Pradesh (d) Kerala
 (e) None of these

58. India's largest public wi-fi service has been launched recently in which Indian state?
 (a) Karnataka (b) Haryana (c) New Delhi
 (d) Maharashtra (e) None of these

59. The Indian space agency ISRO has signed a partnership pact with which country's space agency for satellite launch technology?
 (a) NASA, USA (b) JAXA, Japan (c) CNES, France
 (d) CNSA, China (e) None of these

60. Who has been crowned as the Miss Universe 2017?
 (a) Andrea Tovar (b) Raquel Pelissier
 (c) Iris Mittenaere (d) Roshmitha Harimurthy
 (e) None of these

61. The Biography "Akhada" is based on the life of which Indian Wrestler?
 (a) Mohammad Ali (b) Hawa Singh
 (c) Dara Singh (d) Mahavir Singh Phogat
 (e) None of these

62. Yana Kudryavtseva of Russia who recently announced her retirement was associated to which sports?
 (a) Gymnastics (b) Tennis (c) Badminton
 (d) Shooting (e) None of these

63. Who has been sworn in as the President of Nicaragua on January 10, 2017?
 (a) Trey Parker (b) Daniel Ortega
 (c) Danny Faure (d) Luis Guillermo Solís
 (e) None of these

64. Who is the author of the new cyber vocabulary book Cyber Pathshala that was relased by the HRD Minister Prakash Javadekar on January 10, 2017?
 (a) Amitabh Sinha (b) Ravikant Garg
 (c) Amit Shah (d) Tarun Vijay
 (e) None of these

65. When is the National Youth Day observed?
 (a) January 12 (b) January 13 (c) January 11
 (d) January 10 (e) None of these

66. The Supreme Court on January 10, 2017 directed which state to pay ₹500 crore as compensation to 5,000 victims of Endosulfan poisioning in the state?
 (a) Kerala (b) West Bengal
 (c) Andhra Pradesh (d) Assam
 (e) None of these

67. With which country India has signed an MoU on January 11, 2017 to provide Line of Credit for USD 100 million for agricultural mechanism?
 (a) Kenya (b) Portugal (c) Russia
 (d) Vietnam (e) None of these

68. In which city was the 2017 International Conference on Disability Communication (ICDC) held?
 (a) New Delhi (b) Indore (c) Chennai
 (d) Mumbai (e) None of these

69. Which state has introduced electoral roll printed in Urdu for the upcoming elections in February 2017 in its constituencies for the benefit of the Muslim community?
 (a) Goa (b) Uttarakhand
 (c) Uttar Pradesh (d) Punjab
 (e) None of these

70. Kerala has launched its first solar-powered boat on January 12, 2017. What is the name of that boat?
 (a) Dhruv (b) Bhim (c) Arjun
 (d) Aditya (e) None of these

71. Where is the Katasraj Hindu Temple situated?
 (a) Malaysia (b) Bangladesh (c) Pakistan
 (d) Nepal (e) None of these

72. Name the guided rocket system that was successfully test-fired by India on January 12, 2017 off Odisha coast?
 (a) Dhruv II (b) Shiva I (c) Pinaka II
 (d) Pinaka I (e) None of these

73. India's first multi-sports museum, Fanatic Sports Museum (FSM), has been inaugurated in which place on January 29, 2017?
 (a) Chennai (b) Pune (c) New Delhi
 (d) Kolkata (e) None of these

74. Who has been conferred with the highest US civilian honour, Presidential Medal of Freedom, on January 12, 2017 by President Barak Obama?
 (a) Paul Ryan (b) Joe Biden (c) Jacob Lew
 (d) John Kerry (e) None of these

75. Which Indian boxer has become the first female boxer to enter into professional boxing?
 (a) Pinki Rani (b) Kavita Goyat (c) Mary Kom
 (d) Sarita Devi (e) None of these

76. On January 13, 2017, which country has been appointed to chair the United Nations Group of 77 that looks after the interests of the 134 developing countries?
 (a) Norway (b) Thailand (c) Ecuador
 (d) Egypt (e) None of these

77. Gujarat defeated which state to win the Ranji Trophy 2017?
 (a) Chennai (b) Mumbai (c) Kolkata
 (d) Lucknow (e) None of these

78. Surjit Singh Barnala who died on January 14, 2017 at the age of 91 was the former Chief Minister of which state?
 (a) Madhya Pradesh (b) Punjab (c) Haryana
 (d) Uttar Pradesh (e) None of these

79. What was the theme of the 2017 Vibrant Gujarat Global Investors Summit?
 (a) Economic Development with Vibrant Gujarat
 (b) Discovering New Gujarat
 (c) Vibrant Gujarat: Connecting India to the World
 (d) Transforming Gujarat to Global Business Hub
 (e) None of these

80. Prime Minster Narendra Modi inaugurated India's first international exchange _____ at the IFSC of GIFT City in Gandhinagar on January 9, 2017.
 (a) IND-EX (b) Exchange IND (c) India VNX
 (d) India INX (e) None of these

RESPONSE GRID

57. ⓐⓑⓒⓓⓔ	58. ⓐⓑⓒⓓⓔ	59. ⓐⓑⓒⓓⓔ	60. ⓐⓑⓒⓓⓔ	61. ⓐⓑⓒⓓⓔ
62. ⓐⓑⓒⓓⓔ	63. ⓐⓑⓒⓓⓔ	64. ⓐⓑⓒⓓⓔ	65. ⓐⓑⓒⓓⓔ	66. ⓐⓑⓒⓓⓔ
67. ⓐⓑⓒⓓⓔ	68. ⓐⓑⓒⓓⓔ	69. ⓐⓑⓒⓓⓔ	70. ⓐⓑⓒⓓⓔ	71. ⓐⓑⓒⓓⓔ
72. ⓐⓑⓒⓓⓔ	73. ⓐⓑⓒⓓⓔ	74. ⓐⓑⓒⓓⓔ	75. ⓐⓑⓒⓓⓔ	76. ⓐⓑⓒⓓⓔ
77. ⓐⓑⓒⓓⓔ	78. ⓐⓑⓒⓓⓔ	79. ⓐⓑⓒⓓⓔ	80. ⓐⓑⓒⓓⓔ	

Hints & Solutions

SPEED TEST 1

1. **(b)** Average of Set A = $\dfrac{376}{8} = 47$

   Minimum number of second set = 47 + 15 = 62
   Hence, required sum = 62 + 63 + 64 + 65 + 66 = 320

2. **(c)** (H) Hens has one head and two feet.
   (G) Goats has one head and four feet.
   According to question,
   H + G = 90   ...... (i)
   2H + 4G = 248   ..... (ii)
   Multiplying by 2 in equation (i) and subtract
   2H   2G   180
   2H   4G   248
   ─────────────
   $-$ $-$
   ─────────────
   $-2G = -68$
   ∴ G = 34
   ∴ Number of goats = 34
   Put the value of G in equation (i)
   H + 34 = 90
   H = 56

3. **(e)** x + y = 15   .... (i)
   x − y = 3   .... (ii)
   Add eqs. (i) and (ii)
   x = 9, y = 6
   Product of two digits of the number = 9 × 6 = 54

4. **(e)** P + T = 858   .... (i)
   (Because both have one head)
   2P + 4T = 1746   .... (ii)
   (Because parrot has two legs and tiger has four legs)
   Multiply by 2 in Eq. (i) and subtract)
   2P + 2T = 1716
   ─────────────────
   $-2P$ 4T   1746
   ─────────────────
   $-2T = -30$
   ∴ T = 15   P = 843

5. **(c)** Suppose the number of sweets is = x

   ∴ $\dfrac{x}{450-150} - \dfrac{x}{450} = 3$

   $\dfrac{x}{300} - \dfrac{x}{450} = 3$ or $\dfrac{3x-2x}{900} = 3$

   x = 2700

   Number of sweets to each children = $\dfrac{2700}{300} = 9$

6. **(c)** Suppose the number is 10x + y.
   (When number at unit place is y and at tens place is x)
   (10x + y) − (10y + x) = 9
   x − y = 1   .... (i)   x + y = 15   .... (ii)
   Solving equation (i) and (ii) we get,   x = 8; y = 7
   Required number = 10 × 8 + 7 = 87

7. **(d)** Total consumption of electricity
   = (10 × 16 × 8 + 3 × 10 × 8) unit
   = (1280 + 240) unit = 1520 unit

8. **(b)** Suppose digit at tens place is 2x and unit place is x.
   So original number = 20x + x = 21x
   After interchanging the number
   = 10x + 2x = 12x
   21x − 12x = 27
   x = 3
   So, number = 63

9. **(c)** Suppose each child got x sweets.
   ∴ 112 × x = (112 − 32) × (x + 6)
   112 x = 80 × (x + 6)
   112 x = 80x + 480
   112 x − 80 x = 480
   x = 15

10. **(c)** Let the total number of packages be x.

    After uploading $\dfrac{2}{5}$ x packages remaining packages are

    $x - \dfrac{2}{5}x = \dfrac{3}{5}x$

    According to the question,
    When he uploaded another 3 packages then of original no. of packages remained.

    ∴ $\dfrac{3x}{5} - 3 = \dfrac{x}{2} \Rightarrow \dfrac{3}{5}x - \dfrac{1x}{2} = 3$

    ⇒ 6x − 5x = 30 ⇒ x = 30
    Hence, 30 packages were in the van before the first delivery.

11. **(a)** An army commander has 5180 men in the form of a solid square.
    If he get four more men and form the solid square then no. of men in the front row
    = $\sqrt{5180 + 4} = \sqrt{5184} = 72$

12. **(d)** First start with the option (d).
    1001 × 25 = 25025
    1001 × 67 = 67067 etc.
    Thus 1001 is the largest number which divides the numbers of the type 25025, 67067 etc.

13. **(c)** 1.65m = 165 cm
    Required length = LCM of 25 and 165
    = 825 cm = 8.25 m

14. **(a)** Let the number of students in each row is n and the number of row is r. Then the number of students in the class will be nr.
    According to the question,
    (n + 4) (r − 2) = nr   ....(1)
    and (n − 4) (r + 4) = nr   ....(2)
    on simplifying equations (1) and (2), we get the system of equations
    n − 2r + 4 = 0
    n − r − 4 = 0
    On solving this system, we obtain r = 8; n = 12
    Hence, nr = 96

15. **(a)** Let Heera and Mohan have respectively x and y cards.
    Also assume that they intend to exchange z no. of cards between themselves
    Now, (x + z) = 4 (y − z) ⇒ 5z = 4y − x
    Also, (x − z) = 3 (y + z)

    Putting $z = \dfrac{4y-x}{5}$, we get

    $x - \dfrac{4y-x}{5} = 3\left(y + \dfrac{4y-x}{5}\right)$

    ⇒ 5x − 4y + x = 3 (5y + 4y − x)
    ⇒ 6x − 4y = 27y − 3x ⇒ 9x = 31y

    ⇒ $y = \dfrac{9}{31}x \Rightarrow z = \dfrac{36x-31x}{31\times 5} = \dfrac{x}{31}$

    ⇒ $x : y : z = x : \dfrac{9}{31}x : \dfrac{x}{31} = 31 : 9 : 1$

    ⇒ Heera has 31 cards.

16. **(a)** Let the number be x. Then, as per the operation undertook by the student, we have

    $\dfrac{x - 12}{6} = 112 \Rightarrow x = 660$

    Hence, the correct answer = $\dfrac{660}{6} - 12 = 122$

17. **(c)** 1FT + 1HT + 2B.C. = 1440   ....(i)
    2FT + 1HT + 3B.C. = 2220   ....(ii)

$1 \text{ HT} = \frac{3}{4} \text{FT}$ ....(iii)

From (i) and (ii),

$1\text{FT} + 1\text{B.C} = 780$ ....(iv)

$\Rightarrow 1.75 \text{ FT} + 2\text{B.C.} = 1440$ ....(v)

From (iv) and (v)

$1\text{FT} = ₹ 480$ and $1 \text{ B.C.} = ₹ 300$.

18. **(a)** Let initial number of friends to attend picnic = x.

$\therefore \frac{96}{x} = 4 + \frac{96}{x-4}$ ....(1)

where (x – 4) attended the picnic.

On solving with the help of options from (a) to (d) we find x = 12 suits the equation (1).

Hence the no. of friends who attended the picnic is 8.

19. **(b)** 4-legged chairs = 4 legged tables = no. of workers.

3-legged stools = 4 legged almirahs

No. of stools = 1 + no. of workers.

Total no. of legs = 585

Let the no. of workers = x

$\therefore 2x + x \times 4 + x \times 4 + (x + 1) 3 + (x + 1)4 = 585$

$\Rightarrow 2x + 4x + 4x + 7x + 7 = 585 \Rightarrow 17x = 578 \Rightarrow x = 34$

Hence, the no. of workers are 34.

20. **(d)** $B + D = 50$ ....(i)

    $B + 8 = C \Rightarrow B = C - 8$ ....(ii)

    $A - 8 = C - 3 \Rightarrow A = C + 5$ ....(iii)

    $A + 6 = 2D \Rightarrow A + 6 = 2 (50 - B)$

$\Rightarrow A + 2B = 94$ ....(iv)

Putting the values of (ii) and (iii) in (iv) we get

$C + 5 + 2 (C - 8) = 94$

$\Rightarrow 3C - 11 = 94$

$\Rightarrow C = 105/3 = 35$

$A = 40, B = 27, C = 35, D = 23$.

21. **(b)** Let there are r rows and x students in each row.

According to question

$(x + 4) (r - 4) = x \times r$

$\Rightarrow -4x + 4r = 16$ ...(i)

$(x - 2) \times (r + 4) = x \times r$

$\Rightarrow 4x - 2r = 8$ ...(ii)

Adding equations (i) and (ii), we get

$2r = 24$

$\Rightarrow r = 12$

$\therefore 4x - 24 = 8$

$x = 8$

$\therefore$ Total number of students = 8 × 12 = 96

22. **(b)** Provisions for one student = 250 × 35 = 8750

250 students used provisions for 5 days.

Total provisions used by 250 student in 5 days

= 250 × 5 = 1250

Remaining provision = 8750 – 1250 = 7500

After 5 days total number of student = 250 + 25 = 275

Total provisions used by 275 student in 10 days

275 × 10 = 2750

Now Remaining = 7500 – 2750 = 4750

After 15 days no. of student = 275 – 25 = 250

4750 = 250 × no. of extra days

No. of extra days $= \frac{4750}{250} = 19$ days

23. **(d)** Let the number of boys be x

$\therefore$ Number of girls = 160 – x

$\therefore 4.5 \times x + 3.7 (160 - x) = 640$

$\Rightarrow 4.5x + 592 - 3.7x = 640$

$4.5x - 3.7x = 640 - 592$

$0.8x = 48$

$\Rightarrow x = \frac{48}{0.8} = 60$

$\therefore$ Number of girls = 160 – 60 = 100

24. **(d)** Let the original number be 'a'

Let the divisor be 'd'

Let the quotient of the division of a by d be 'x'

Therefore, we can write the relation as a/d = x and the remainder is 24.

i.e., a = dx+24

When twice the original number is divided by d,2a is divided by d.

We know that a = dx+24. Therefore, 2a = 2dx+48

The problem states that (2dx+48)/d leaves a remainder of 11.

2dx is perfectly divisible by d and will therefore, not leave a remainder.

The remainder of 11 was obtained by dividing 48 by d.

When 48 is divided by 37, the remainder that one will obtain is 11.

Hence, the divisor is 37.

25. **(c)** Let the divisor be d.

When 242 is divided by the divisor, let the quotient be 'x' and we know that the remainder is 8.

Therefore, 242 = xd+8

Similarly, let y be the quotient when 698 is divided by d.

Then, 698 = yd+9.

242 + 698 = 940 = xd + yd + 8+9

940 = xd + yd + 17

As xd and yd are divisible by d, the remainder when 940 is divided by d should have been 17.

However, as the question states that the remainder is 4, it would be possible only when 17/d leaves a remainder of 4.

If the remainder obtained is 4 when 17 is divided by d, then d has to be 13.

26. **(d)** L.C.M. of 252, 308 and 198 = 2772.

So, A, B and C will again meet at the starting point in 2772 sec. i.e., 46 min. 12 sec.

27. **(a)** Let Arun's weight by X kg.

According to Arun, 65 < X < 72

According to Arun's brother, 60 < X < 70

According to Arun's mother, X <= 68

The values satisfying all the above conditions are 66, 67 and 68.

Required average = (66 + 67 + 68)/3 = 201/3 = 67 kg.

28. **(b)** (10x - y) - (10y + x) = 27

x - y = 3

x + y = 15

So, x = 9

y = 6

Number = 96

29. **(c)** Let the number of floors be x and rooms per floor be y

So, xy = 500

After the change,

(x-5) × (y+5) = 450

xy – 5y + 5x – 25 = 450

500 – 5(y–x) – 25 = 450 (As, xy = 500)

5(y–x) = 25

y–x = 5 (Only option c satisfies this condition)

30. **(b)** Let the man works overtime for x hours

Now, working hours in 8 weeks

= 8 × 6 × 7 = 336 hours

336 × 80 + x × 100 = 30880

100x = 30880 - 26880 = 4000

x = 40

Total hours = 336 + 40 = 376 hours

SPEED TEST 2

1. **(c)** Let the age of Ram = x and Rakesh = y

then $\frac{x}{y} = \frac{6}{11}$

$\therefore x = \frac{6y}{11}$

According to question, $\dfrac{x-4}{y-4} = \dfrac{1}{2}$

$2x - 8 = y - 4$

$2 \times \dfrac{6y}{11} - 8 = y - 4$ or $\dfrac{12y}{11} - y = -4 + 8$ or $\dfrac{y}{11} = 4$

$\therefore$ y = 44 yr.

$\therefore$ Age of Rakesh after 5 yr = 44 + 5 = 49 yr.

2.   (c) $\dfrac{x + 1.5x}{y + 3.5y} = \dfrac{25}{51}$

$\dfrac{2.5x}{4.5y} = \dfrac{25}{51}$

$\dfrac{x}{y} = \dfrac{25 \times 45}{51 \times 25} = \dfrac{15}{17}$

3.   (e)   Suppose first number is x and second number is y.

$y - 0.3x = \dfrac{4}{5}y$

$y - 0.8y = 0.3x$

$0.2y = 0.3x$

$\dfrac{x}{y} = \dfrac{2}{3}$

4.   (e)   Suppose the original fraction is $\dfrac{x}{y}$.

According to question,

$\dfrac{x + x \times \dfrac{400}{100}}{y + y \times \dfrac{500}{100}} = \dfrac{20}{27} \Rightarrow \dfrac{x + 4x}{y + 5y} = \dfrac{20}{27}$

$\Rightarrow \dfrac{5x}{6y} = \dfrac{20}{27} \Rightarrow \dfrac{x}{y} = \dfrac{20 \times 6}{27 \times 5} \Rightarrow \dfrac{x}{y} = \dfrac{8}{9}$

5.   (b)   Suppose number is x.

$\therefore$ $x \times \dfrac{4}{5} \times \dfrac{3}{4} - x \times \dfrac{2}{5} \times \dfrac{1}{6} = 648$

$\dfrac{12x}{20} - \dfrac{2x}{30} = 648 \Rightarrow \dfrac{36x - 4x}{60} = 648$

$\Rightarrow \dfrac{32x}{60} = 648 \Rightarrow x = \dfrac{648 \times 60}{32} = 81 \times 15$

$\Rightarrow x = 1215$

6.   (d) $\left(6\dfrac{3}{5} - 3\dfrac{4}{5}\right) \times 355 = \left(\dfrac{33}{5} - \dfrac{19}{5}\right) \times 355$

$= \left(\dfrac{33 - 19}{5}\right) \times 355 = \dfrac{14 \times 355}{5} = 994$

7.   (c)   Suppose original fraction is $= \dfrac{x}{y}$

$\therefore$ $\dfrac{x + \dfrac{240}{100}x}{y - \dfrac{50}{100}y} = 2\dfrac{5}{6} \Rightarrow \dfrac{x + 2.4x}{y - 0.5y} = \dfrac{17}{6}$

$\dfrac{3.4x}{0.5y} = \dfrac{17}{6}$

$\therefore$ $\dfrac{x}{y} = \dfrac{17}{6} \times \dfrac{0.5}{3.4}$

$\dfrac{x}{y} = \dfrac{5}{12}$

8.   (d)   Suppose the fraction is $\dfrac{x}{y}$

$\therefore$ $\dfrac{x + 2x}{y + 3y} = \dfrac{15}{26} \Rightarrow \dfrac{3x}{4y} = \dfrac{15}{26}$

$\therefore$ $\dfrac{x}{y} = \dfrac{15}{26} \times \dfrac{4}{3} = \dfrac{60}{78}$

$\therefore$ $\dfrac{x}{y} = \dfrac{10}{13}$

9.   (c)   The LCM of 18, 22, 30 is 990.

So, they will meet each other after 990, ie, 16 min and 30 sec.

10.   (b)   Time taken

$\begin{array}{r|l}
2 & 18, 24, 32 \\ \hline
2 & 9, 12, 16 \\ \hline
2 & 9, 6, 8 \\ \hline
3 & 9, 3, 4 \\ \hline
 & 3, 1, 4
\end{array}$

$2 \times 2 \times 2 \times 3 \times 3 \times 4 = 288$ sec

11.   (d)   The required number must be a factor of (11284 – 7655) or 3629.

Now, $3629 = 19 \times 191$

$\therefore$ 191 is the required number.

12.   (c)   The required number $= \dfrac{\text{LCM} \times \text{HCF}}{\text{First number}} = \dfrac{2079 \times 27}{189} = 297$

13.   (a)   Clearly, the required number must be greater than the LCM of 18, 24, 30 and 42 by 1.

Now, $18 = 2 \times 3^2$

$24 = 2^3 \times 3$

$30 = 2 \times 3 \times 5$

$42 = 2 \times 3 \times 7$

$\therefore$ LCM $= 3^2 \times 2^3 \times 5 \times 7 = 2520$

$\therefore$ the required number = 2520 + 1 = 2521

14.   (a)   The LCM of 6, 7, 8, 9 and 10 = 2520

The greatest number of 6 digits = 999999

Dividing 999999 by 2520, we get 2079 as remainder. Hence, the 6-digit number divisible by 2520, is (999999 – 2079), or 997920.

Since 6 – 4 = 2, 7 – 5 = 2, 8 – 6 = 2, 9 – 7 = 2, 10 – 8 = 2, the remainder in each case is less than the divisor by 2.

$\therefore$ the required number = 997920 – 2 = 997918

15.   (b)   The LCM of 9, 10 and 15 = 90

On dividing 1936 by 90, the remainder = 46

But 7 is also a part of this remainder.

$\therefore$ the required number = 46 – 7 = 39

16.   (a)   LCM of 32, 36, 48, 54 = 864

$\therefore$ the required greatest number = 10,000 – 864 = 9,136

17.   (b)   The least number which, when divided by 8, 12 and 16, leaves 3 as remainder = (LCM of 8, 12, 16) + 3 = 48 + 3 = 51

Other such numbers are 48 × 2 + 3 = 99, 48 × 3 + 3 = 147,

$\therefore$ the required number which is divisible by 7 is 147.

18.   (b)   Let x be the remainder, then the numbers (55 – x), (127 – x) and (175 – x) are exactly divisible by the required number.

Now, we know that if two numbers are divisible by a certain number, then their difference is also divisible by the number. Hence the numbers (127 – x) – (55 – x), (175 – x) – (127 – x) and (175 – x) – (55 – x) or, 72, 48 and 120 are divisible by the required number. HCF of 48, 72 and 120 = 24, therefore the required number = 24.

19.   (d)   LCM of 42, 49, 56, 63 = 3528; therefore, the required least number = 3528 – 3500 = 28

20.   (a)   72 – 52 = 20, 80 – 60 = 20, 88 – 68 = 20. We see that in each case, the remainder is less than the divisor by 20. The LCM of 72, 80 and 88 = 7920, therefore, the required number 7920 – 20 = 7900

21.   (a)   The greatest number of 4 digits = 9999. LCM of 2, 3, 4, 5, 6, 7 = 420

On dividing 9999 by 420, we get 339 as remainder.
∴ the greatest number of 4 digits which is divisible by 2, 3, 4, 5, 6 and 7 = 9999 – 339 = 9660
∴ the required number = 9660 + 1= 9661

22. (b) LCM of 48, 72, 108 = 432
the traffic lights will change simultaneously after 432 seconds or 7 min 12 secs.
∴ they will change simultaneously at 8 : 27 : 12 hrs.

23. (d) The first number = 2 × 44 = 88
∴ The second number = $\dfrac{HCF \times LCM}{88} = \dfrac{44 \times 264}{88} = 132$

24. (b) HCF = 12. Then let the numbrs be 12x and 12y.
Now 12x × 12y = 2160 ∴ xy = 15
Possible values of x and y are (1, 15); (3, 5); (5, 3); (15, 1)
∴ the possible pairs of numbers (12, 180) and (36, 60)

25. (a) The required numbers should be multiples of 144. We have the greatest number of 4 digits = 9999. On dividing 9999 by 144, we get 63 as the remainder.
∴ Required greatest number of 4 digits = 9999 – 63 = 9936
Again, we have the least number of 5 digits = 10000
On dividing 10,000 by 144, we get 64 as the remainder.
∴ the required least number of 5 digits
= 10,000 + (144 – 64) = 10,080

26. (a) LCM of 32, 36 and 40 = 1440, therefore, the required number = 1440 – 8 = 1432

27. (c) Bells will toll together again at a time, which is obtained by taking L.C.M. of their individual tolling intervals.
L.C.M. of 9, 12 and 15 = 180 min
They will toll together again after 180 min, i.e. 3 hours.
Time = 8 + 3 = 11 a.m.

28. (b) Since each rod must be cut into parts of equal length and each part must be as long as possible, so HCF should be taken.
HCF of 78, 104, 117 and 169 = 13.

No. of parts from 78cm. rod = $\dfrac{78}{13}$ = 6

No. of parts from 104 cm. rod = $\dfrac{104}{13}$ = 8

No. of parts from 117 cm. rol = $\dfrac{117}{13}$ = 9

No. of parts from 169 cm. rod = $\dfrac{169}{13}$ = 13.

∴ Maximum no. of pieces = 6 + 8 + 9 + 13 = 36.

29. (a) LCM of (80 cm, 85 cm, 90 cm)
= 12240 cm = $\dfrac{12240}{100}$ m
= 122.40 m = 122 m 40 cm

30. (b) HCF = $2^2 \times 3^2$
LCM = $2^4 \times 3^5 \times 5^2 \times 7^2$
Ist number = $2^3 \times 3^4 \times 5$
2nd number = $2^4 \times 3^2 \times 5^2$
observing the above situation, we conclude that the third number must be
$x = 2^2 \times 2^2 \times 3^3 \times 7^2 = 2^2 \times 3^5 \times 7^2$

SPEED TEST 3

1. (b) ⇒ $\sqrt{1681} + \sqrt{3481} \div \sqrt{100}$
⇒ (41 + 59) ÷ 10
⇒ 10

2. (c) $(59)^2 + (11)^3 + \sqrt{7744}$ = ?
⇒ 3481 + 1331 + 88
⇒ 4900

3. (a) $\sqrt{13225} \times \sqrt{7225} \div \sqrt{625}$?
⇒ 115 × 85 ÷ 25
⇒ 391

4. (c) $\sqrt{\dfrac{625}{225} \times \dfrac{3375}{15625} \times 15}$?
= 3

5. (c) $\sqrt{665 \sqrt{112} \sqrt{75} \sqrt{36}}$?
⇒ ? = 26

6. (c) $\left[\sqrt{15625} \times \sqrt{18225} \times \sqrt{21025}\right] \div \sqrt{5625}$?
⇒ 125 × 135 × 145 ÷ 75
⇒ 32625

7. (d) $[(58)^2 + 12^3 + \sqrt{187489}] \div \sqrt{7225}] = ?$
⇒ (3364 + 1728 + 433) ÷ 85
⇒ 65

8. (c) $\left[\sqrt[3]{4913} \times \sqrt{12167} + 409\right] \div \sqrt[3]{4096}$?
⇒ 17 × 23 + 409 ÷ 16
⇒ 800 ÷ 16
⇒ 50

9. (b) $\sqrt{11449} \times \sqrt{6241} - 54^2 \sqrt{?} 74^2$
⇒ 107 × 79 – 2916 = $(\sqrt{?}) + (74)^2$
⇒ ? = 3721

10. (c) $\sqrt[3]{4096} \div \sqrt[3]{64} \sqrt[3]{?}$
⇒ ? = 64

11. (d) $\sqrt[3]{3.375}$ = 1.5 and $\sqrt[3]{15.625}$ = 2.5 then, find the value of
$\sqrt[3]{0.003375} \times \sqrt[3]{0.015625}$
⇒ 0.15 × 0.25
⇒ 0.0375

12. (c) Money collected = (62.41 × 100) paise = 6241 paise.
Number of members = $\sqrt{6241}$ = 79.

13. (a) Let n be the number of rows
Then n × n = 104976
So n = 324

14. (a) If $\sqrt{6}$ = 2.449, then the value of $\dfrac{\sqrt{6}}{2} - \dfrac{12}{\sqrt{6}} \sqrt{216}$ is equal to
⇒ 1.224 – 4.899 + 14.696
⇒ 11.021

15. (d) Let the number be x
Then, $x + x^2 = 182$
⇒ $x + x^2 - 182 = 0$
⇒ (x–13)(x+14)
⇒ x = 13

16. (e) If $\sqrt{21025}$ = 145, then value of $\sqrt{210.25} + \sqrt{2.1025}$
+ $\sqrt{0.021025} + \sqrt{0.00021025}$
⇒ 14.5 + 1.45 + 0.145 + 0.0145 = 16.1095

17. (a) Equation $\dfrac{?}{\sqrt{128}} \dfrac{\sqrt{162}}{?}$
⇒ $?^2 = 144$
⇒ ? = 12

18. (a) $\sqrt{(x-2)(y 3)}$ 9
⇒ $(x–2)(y+3) = 9^2$
⇒ (x–2) = 9 and (y+3) = 9
So x = 11 and y = 6.

19. (b) We have, 9408 = 2×2×2 ×2×2 ×2×3 ×7× 7
If we divide 9408 by the factor 3, then
9408 ÷ 3 = 3136 = 2×2×2 ×2×2 ×2 ×7× 7, which is a perfect square.
Therefore, the required smallest number is 3.
And $\sqrt{3136} = 56$

20. (d) Let the number of rows be x
So, the number of columns = x
Therefore, number of students = x × x = x²
Thus, x² = 2401
So x = 49
The number of rows = 49.

SPEED TEST 4

1. (a) 125% of 12850 + 85% of 45200 + 850 = 350% of ?+ 175% of 1450
⇒ 16062.5 + 38420 + 850 = 350% of ? + 2537.5
⇒ 350% of ? = 52795
⇒ ? = 15085

2. (c) 125.5% of 8500 - 85.95% of 5200 + 1850 = 35% of 4520 + 17.5% of 450 + ?
⇒ 10667.5 - 4472 + 1850 = 1582 + 78.75 + ?
⇒ ? = 6384.75 = 6385

3. (a) $\frac{-}{3}$ of 36750 + 145% of 2850 + 15% of ? = 48650
⇒ 12250 + 4132.5 + 15% of ? = 48650
⇒ 16382.5 + 15% of ? = 48650
⇒ 15% of ? = 48650 - 16382.5
⇒ ? = 215116 ≅ 215100

4. (e) $5\frac{1}{3}\times15\frac{1}{5}\times15\frac{1}{2}\times35\frac{1}{3} - ? = 25.25\%$ of 14500
⇒ $\frac{16}{3}\times\frac{76}{5}\times\frac{31}{2}\times\frac{106}{3} - ? = 3661.25$
⇒ 44398 − ? = 3661.25
⇒ ? = 40737 = 40740

5. (c) (115% of 3450 + 12.5% of 1450) - (85% of 1250 + 12.5% of 450) = 2150 + ?
⇒ (3967.5 + 181.25) - (1062.5 + 56.25) = 2150 + ?
⇒ 4148.75 - 1118.75 = 2150 + ?
⇒ ? = 880

6. (d) 13.50% of 234500 + 35% of 12500 - 5.25% of 3400 = ? + 1125
⇒ 31657.5 + 4375 - 178.5 = ? + 1125
⇒ ? = 34729

7. (d)

8. (d)

9. (d) 85% of 225 + 34.91 × 15.01 = ? ⇒ 716.25

10. (e) (25.96)² + 75% of 1285 + 125 = ?
⇒ 676 + 963.75 + 125
⇒ 1764.75

11. (d) Let no of men = x & total population be 100
Total women = (100 – x)
Married man = 45x/100 … (i)
& married women = 25/100 (100 – x) … (ii)
From (i) & (ii)
x = 500/14
So, married man = 225 /14
Married woman = 225/14
Total married population = men + women = 450/14
Required % = (450/14)/100 ×100 = 450/14% = 32.14%

12. (c) Let total no of candidates = 1000
So, 1000 – (50 + 50 + 900 × 1/4+900*1/5) = 396
495 = 396
1000 = 396/495 × 1000 = 800

13. (c) 65 students 4 teachers
Each students sweets = $65 \times \frac{1}{5} = 13$

14. (b) Each teacher sweets = $65 \times \frac{2}{5} = 26$
Total number of sweets = 13 × 65 + 26 × 4
= 845 + 104 = 949

14. (b) Let the price of sugar before increase be ₹ x
Consumption = 15 kg
Expenditure on sugar = 15x
After increase
Expenditure on sugar = 120% of 15x = 18x
Price of sugar = 128% of x = $\frac{32x}{25}$ per kg
New Consumption = $18x \times \frac{25}{32x} = 14\frac{1}{16}$ kg

15. (b) Suppose total candidates=200
Total appeared Candidates=200–25% of 200=150
30% of 200=60 students failed
Obtained marks by failed students=60 × 13=780
10% of 200=20 students passed
Obtained marks by passed students=20 × 33=660
35% of 200 students = 70, Score = 70×60 = 4200
Average of Class= $\frac{(Total\ Score)}{(Total\ appeared\ Candidates)}$
= $\frac{(780 + 660 + 4200)}{150} = 37.6$

16. (c) Percentage of people who were not Indian
= [((700 + 500 + 800) – (700 × 20 % + 500 × 40% + 800 × 10%))/2000)] × 100 = 79 %

17. (a) Let the investment by Raghu = x
then Mohit = x × $\frac{90}{100} = \frac{9x}{10}$
Pradeep = $\frac{9x}{10}\times\frac{120}{100} = \frac{108x}{100}$
According, to question, $x + \frac{9x}{10} + \frac{108x}{100} = 17880$
$\frac{100x + 90x + 108x}{100} = 17880$ or $\frac{298x}{100} = 17880$ or x = 6000

18. (d) Number of girls in a college = $2000\times\frac{36}{100} = 720$
Then, boys = 2000 – 720 = 128
Each girl's monthly fees = $480\times\frac{75}{100} = ₹ 360$
Hence, total amount of fees both boys and girls
= (1280 × 480 + 720 × 360) = ₹ 873600

19. (b) Ravi's annual salary = 1.44 lacs
∴ Monthly salary = $\frac{1.44\times100000}{12} = 12000$
Monthly salary of Raj = 12000 × $\frac{60}{100} = 7200$
Suppose annual salary of Anuj = x
then x × $\frac{20}{100} = 7200\times12\times\frac{75}{100}$
x = 324000
Anuj's monthly salary = 324000 ÷ 12 = 27000

20. (b) Suppose total student = 100
interested in playing = 100 × 12% = 12 students
interested in dancing = 100 × $\frac{3}{4}$ = 75 students
interested in singing = 100 × 10% = 10 students

Remaining = 100 – (12 + 75 + 10) = 3 students
Whereas remaining = 15 students

∴ Total students = $\frac{100}{3} \times 15$ = 500

21. (b) Suppose the expense of Vimal = ₹ 100
Expense of Aman = ₹ 130

Expense of Raman = $\frac{100}{90} \times 100$ = ₹ $\frac{1000}{9}$

∴ Ratio of the expense of Vimal, Aman and Raman

= $100 : 130 : \frac{1000}{9}$ = 90 : 117 : 100

So, the expense of Aman

= $\frac{117}{90+117+100} \times 6447 = \frac{117}{307} \times 6447$ = ₹ 2457

22. (c) Suppose maximum marks = x

then $x \times \frac{35}{100}$ = 40 + 30 $\Rightarrow x \times \frac{35}{100}$ = 70

$\Rightarrow$ x = $\frac{70 \times 100}{35}$ = 200 marks

23. (c) Suppose the monthly income of Natasha is ₹ x.

$x \times \frac{60}{100} \times \frac{45}{100}$ = 11475

$\Rightarrow$ x = $\frac{11475 \times 100 \times 100}{60 \times 45} = \frac{11475 \times 100 \times 100}{2700}$

x = ₹ 42500

24. (d) Suppose Income of B = ₹ x

Income of A = $\frac{150}{100} \times x$ = ₹ $\frac{3x}{2}$

Income of C = $\frac{120}{100} \times \frac{3x}{2}$

$\frac{6}{5} \times \frac{3x}{2} = \frac{9x}{5}$

∴ x + $\frac{3x}{2} + \frac{9x}{5}$ = 86000

$\frac{10x + 15x + 18x}{10}$ = 86000

43x = 860000
x = 20000

So, income of C = $\frac{9}{5} \times 20000$ = ₹ 36000

25. (e) Weight of water in the mixture of 60 g water = $60 \times \frac{75}{100}$ = 45g

weight of water in the new mixture of
= 45 + 15 = 60 g

∴ Percentage of water = $\frac{60 \times 100}{75}$ = 80%

SPEED TEST 5

1. (e) Working with options, we have

	Original number	New number	Difference
(a)	22	34	12
(b)	63	96	33
(c)	24	38	14
(d)	25		

Obviously, (e) is the correct option.

2. (c) Let the number of boys be x. Then, the number of girls = (x + 15)

New number of girls = $(x + 15) \times 1.1$

New number of boys = $x \times 1.16$

Then, $1.1(x + 15) - 1.16x$ = 9

$\Rightarrow$ $1.16x - 1.1x = 16.5 - 9$ = 7.5

or 0.06x = 7.5 or $x = \frac{7.5}{0.06}$ = 125

Number of boys = 125
Number of girls = 140
$\Rightarrow$ Number of students = 265

3. (d) Let the total no. of parts produced at initial stage be 100. Then after three successive percentage rejections of 10%, 5% and 2%, we have
100 × 0.9 × 0.95 × 0.98 = 83.79
Therefore, a single effective rejection rate.
= 100 – 83.79 = 16.21

4. (b) 15% of 40% = 6%

5. (d) Only option (d) has difference of 308 and only 2914 is divisible by 47.

6. (c) Let he should score in second paper be x
According to question
30% of 180 + x% of 150 = 50% of (180 + 150)
$\Rightarrow$ 54 + x % of 150 = 165
$\Rightarrow$ x % of 150 = 111
$\Rightarrow$ x = $\frac{111 \times 100}{150}$ = 74%

7. (c) Total Tractor = 29400
i.e., Mahindra + non Mahindra = 29400
Given : Mahindra tractor = 15000
∴ Non-Mahindra tractor = 29400 – 15000 = 14400
Now, 53% of 29400 = Red Mahindra + Red Non-Mahindra
$\Rightarrow$ $29400 \times \frac{53}{100}$ = 15582.
Thus, Red Mahindra + Red Non-Mahindra = 15582

Now, Non-Red Mahindra = 15582 – $\frac{98 \times 15000}{100}$
= 15582 – 14700 = 882.

∴ % non-Red Mahindra = $\frac{882}{14400} \times 100$ = 6.125%

8. (a) Let x% marks obtained by Rajesh.
Given: Sushant's marks = 1080.

Mohit's Marks = $1080 + 1080 \times \frac{1}{5}$ = 1296 ...(1)

Also , Mohit's marks = $x - \frac{x}{10} = \frac{9x}{10}$ ...(2)

From (1) and (2), we have, $\frac{9x}{10} = 1296 \Rightarrow x$ = 1440.

But given full marks are 2000

∴ x% = $\frac{1440}{2000}$ = 72%.

9. (d) Population after 1st year = $\frac{110}{100} \times 10,000$ = 11000

Population after 2nd year = $11000 \times \frac{120}{100}$ = 13200

Population after 3rd year = $13200 \times \frac{95}{100}$ = 12,540

Hence, population after 3rd year = 12, 540.

10. (b) His height was = 5 feet 5 inch = 5 + 60 = 65 inches.

Required % correction = $\frac{65 \times (1.25 - 1)}{65 \times 1.25} \times 100$ = 20

11. (a) Total votes = 6000
Invalid votes = 25% of 6000
∴ Valid votes = 75% of 6000 = 4500
Bhiku gets = 65% of 4500 = 2925 votes
∴ Mhatre gets = 4500 – 2925 = 1575 votes.

12. (c) Let in the beginning of the year, the population of the variety of bushes be x.
Now, x × 1.1 × 1.08 × 0.9 = 26730
$\Rightarrow x = \dfrac{26730}{1.1 \times 1.08 \times 0.9} = 25000$

13. (b) Seats in executive class = 50
Seats in chair cars = 450
Total booked seats = 425
Booked in executive class = 48
Therefore, seats booked in chair cars = (425 – 48) = 377
Empty seats in chair cars = 450 – 377 = 73

14. (a) Let us start with option (a).
Since, P + R = 210, P = 110 and R = 100 is correct.

15. (c) Let ₹ x be the face value of debentures. Then, 15% of x = 1500
$\Rightarrow$ x × 15% = 1500 or x = ₹ 10,000
Available value of debentures
$= \left(\dfrac{104}{100} \times 10000\right) = ₹10,400$
Brokerage = 1% of ₹ 10400 = ₹ 104
Sum of money invested
= ₹ (10400 + 104) = ₹ 10,504.

16. (b) Total no. of machine parts in both the shipments = (120 + 80) = 200
Total defective machine parts in both the shipments = 120 × 5% + 80 × 10% = 6 + 8 = 14
Therefore, required % = $\dfrac{14}{200} \times 100 = 7\%$

17. (d) Let the max. marks be x.
Then, according to question,
x × 30% + 10 = x × 40% – 15
$\Rightarrow$ x × 10% = 25 or x = 250
Therefore, passing marks = $250 \times \dfrac{30}{100} + 10 = 85$

18. (b) Monthly saving of Mr. Yadav = $\dfrac{48456}{12} = $ Rs 4038
% of salary spent on consumable items = 60%
remaining % = 40%
% spent on clothes and transport = 50% of 40 = 20
Thus % monthly savings = 20%
Thus, % of saving
= % of salary spent on transport and clothes
Required amount = ₹ 4038.

19. (b) 10 arithmatic problem
30 algebra
35 geometry
70% of 10 = $\dfrac{70 \times 10}{100} = 7$
40% of 30 = 12
60% of 35 = 21
total answered question = 40
To earn 60 % = $\dfrac{75 \times 60}{100} = 45$
So he has to answer 5 more question

20. (b) Pages in X = 120
Pages in Y = $\dfrac{120 \times 110}{100} = 132$

Pages in Z = $\dfrac{120 \times 90}{100} = 108$
Pages torn from X = 6
Pages torn from Y = $\dfrac{132 \times 10}{100} = 13.2$
Pages torn from Z = $\dfrac{108 \times 15}{100} = 16.2$
Number of pages torn out = 35.4
Total pages = 120 + 132 + 108 = 360
Required per cent = $\dfrac{35.4}{360} \times 100 = 10$

SPEED TEST 6

1. (c) 12959.998 ÷ 18.010 + 124.95 × 34.925 = ?
$\Rightarrow$ 720 + 4375
$\Rightarrow$ 5095

2. (e) 60.005% of 1439.998 + ?% of 1655.011 = 1448.5
$\Rightarrow$ 864 + ?% of 1655.011 = 1448.5
$\Rightarrow$?% of 1655.011 = 584.5
$\Rightarrow$? = 35.31 ≈ 35

3. (c) 6494.986 + 5425.005 + 680.020 – (2625 ÷ $\sqrt{224}$) = ?
$\Rightarrow$ 12600 – 175
$\Rightarrow$ 12425

4. (d) 131.999 × 15.001 × 17.5001 + 124.955 + 250.015 = ?
$\Rightarrow$ 33660 + 125 + 250
$\Rightarrow$ 34035

5. (c) $(10.998)^3 + (124.95)^2 – 158.95 + 12.125$ = ?
$\Rightarrow$ 1331 + 15625 – 158.95 + 12.125
$\Rightarrow$ 16809

6. (b) $\sqrt{624.85} + (10.998)^3 + (24.95)^2 – 250.155 + 124.925$ = ?
$\Rightarrow$ 25 + 1331 + 625 – 250.155 + 124.925
$\Rightarrow$ 1856

7. (a) $[(1119.998 + 124.95) – \sqrt{3010}] + (9.915)^3 + (121.125)^2$ = ?
$\Rightarrow$ 1190 + 1000 + 14641
$\Rightarrow$ 16831

8. (b) $[(3101.198 + 1399.95) ÷ \sqrt{8090}] + (19.975)^2 – (14.925)^2$ = ?
$\Rightarrow$ 50 + 400 – 225
$\Rightarrow$ 225

9. (d) $[(\{14.95^2\} + \{35.125^2\}) ÷ 4.95) + 110]$ = ?
$\Rightarrow$ 290 + 110 = 400

10. (c) 123.001 × 19.999 × 14.025 + 1959.85 ÷ $\sqrt{195.999}$
$\Rightarrow$ 34440 + 140
$\Rightarrow$ 34580

11. (b) 3371 ÷ 6 + (43 × 14.35) = ?
$\Rightarrow$ 562 + 617 = 1180

12. (b) $\sqrt{6760} + \sqrt{2600}$ = ?
$\Rightarrow$ 82 + 51 = 133

13. (d) $(14.989)^2 + (121.012)^3 + 2090$ = ?
$\Rightarrow$ 225 + 1771561 + 2090 = 1773876

14. (c) 17020 ÷ 14.99 × $\dfrac{23}{49}$ = ?
$\Rightarrow$ 1135 × 0.5 = 570

15. (d) 1124.99% of 1501 – 1265.01% of 399 = ?
$\Rightarrow$ 12 × 1500 – 13 × 400
$\Rightarrow$ 18000 – 5200 = 12800

16. (d) $(14.5)^2 + (15.5)^2 + (2432 + 1587 + 1415) ÷ 1275$ = ?
= 210.25 + 240.25 + 5434 ÷ 1275
= 454

17. (c) 1740.75 + 1535.25 × 16.91 + (2587 + 415) ÷ 275 = ?
= 1740.75 + 26095 + 3002 ÷ 275 = 27845

18. (a) $1525 \times 1375 \div 12.5 + 1740.75 + 1535 = ?$
= 171025

19. (c) $1125 \times 1375 \div 12.5$ of $450 + 12250$
$= 1125 \times 1375 \div 5625 + 12250$
= 12525

20. (e) $85250 \div 1750 \div 125 + 2560 + 3525 = ?$
= 6085

Sol. (21-25) :

21. (a) $3225.095 \times 134.98 \div 15.002 + 49.98 = ?$
$\Rightarrow 29025 + 50 = 29075$

22. (c) 79.009% of $799.995 + 26.99\%$ of $499.999 = ?$
$\Rightarrow 640 + 135$
$\Rightarrow 775$

23. (d) $(45399 + 12549 - 3506) + 2498 \div 19.75$
$\Rightarrow 54566$

24. (b) $(19.99\%$ of $8599 + 35.06\%$ of $9005) = ?$
$\Rightarrow 1720 + 3150$
$\Rightarrow 4870$

25. (b) $(14.98\%$ of $1251.25 + \sqrt[3]{728.25}) = ?$
$\Rightarrow 187.5 + 9 = 196.5$

26. (a) 125% of $3560 - 85\%$ of $? = 425$
$\Rightarrow 4450 - 425 = 85\%$ of $?$
$\Rightarrow 4025 = ? \times \dfrac{85}{100}$
$\Rightarrow ? = 4025 \times \dfrac{100}{85} = 4735$

27. (b) $14565 \div 1125 \times 125.5 = ?$
$\Rightarrow 1625$

28. (c) $13894 \div (12.6 \times 16.9) = ?$
$\Rightarrow 13894 \div 213$
$\Rightarrow 65$

29. (d) 74% of $1366 + 12.6\%$ of $2317 = ?$
$\Rightarrow 1011 + 292$
$\Rightarrow 1303$

30. (e) 62.5% of $18920 + ?\%$ of $5325 = 16827$
$\Rightarrow 11825 + ?\%$ of $5325 = 16827$
$\Rightarrow ? \times \dfrac{5325}{100} = 5002$
$\Rightarrow ? = 94\%$

SPEED TEST 7

1. (a) 16% of $1350 + 12\%$ of $1750 = ?\%$ of 3400
$\Rightarrow 216 + 210 = ?\%$ of 3400
$\Rightarrow 426 = ?\%$ of 3400
$\Rightarrow ? = 12.5\%$

2. (b) $1637.28 + 1781.47 + 1257.25 = ?$
$\Rightarrow 4676$

3. (c) 14% of $1850 + ?\%$ of $1380 = 463$
$\Rightarrow 259 + ?\%$ of $1380 = 463$
$\Rightarrow 204 = ?\%$ of 1380
$\Rightarrow ? = 14.78\%$

4. (d) $(165)^2 + (145)^2 - (155)^2 = ? \div 25$
$\Rightarrow 27225 + 21025 - 24025 = ? \div 25$
$\Rightarrow 24225 = ? \div 25$
$\Rightarrow ? = 605625$

5. (c) $270 \times 29 + 512 = (105)^2 - ?$
$\Rightarrow 7830 + 512 = 11025 - ?$
$\Rightarrow ? = 2683$

6. (a) 112% of $1250 + 2.4\%$ of $1320 \times 2560 - 350 = ?$
$\Rightarrow 1400 + 31.68 \times 2560 - 350$
$\Rightarrow 82150.8$

7. (b) $(39260 + 27980 + 22050) + 96048 \div 48 = ?$
$\Rightarrow 89290 + 96048 \div 48 = 91291$

8. (c) $(81\%$ of $1950) + (9560 + 7280 + 2850) \div 15 = ?$
$\Rightarrow 1579.5 + 19690 \div 15 = 2892.16$

9. (d) $(24.35)^2 + (34.25)^2 + (?) = 1832.29 + (15.25)^2$
$\Rightarrow 592.92 + 1173.06 + ? = 2064.85$
$\Rightarrow 298.87$

10. (e) $(1537 - 526 - 266) \div (972 - 528 - 312) + (20.25)^2 + (30.25)^2 = ?$
$\Rightarrow 745 \div 132 + 410 + 915$
$\Rightarrow 1330$

11. (c) 85% of $485.60 = 50\%$ of $?$
$\Rightarrow 412.76 = 50\%$ of $?$
$\Rightarrow ? = 825.52$

12. (b) $2\dfrac{4}{5} \quad 5\dfrac{3}{5} \quad 3\dfrac{3}{15} - 12\dfrac{2}{5} \quad 7\dfrac{4}{5}$
$\Rightarrow \dfrac{14}{5} \quad \dfrac{28}{5} \quad \dfrac{48}{5} - \dfrac{62}{5} \quad \dfrac{39}{5}$
$\Rightarrow \dfrac{67}{5} \quad 13\dfrac{2}{5}$

13. (d) $\sqrt[3]{?} = (35\%$ of $120 + 125 - 55)$
$\Rightarrow ? = 1404928$

14. (c) $(84 \times 458) \div (9261)^{\frac{1}{3}} = ?$
$\Rightarrow 38472 \div 21$
$\Rightarrow 1832$

15. (b) $\dfrac{(55)^2 \times (35)^2 \times (15)^2}{(125)^2 - (115)^2} \quad ?$
$\Rightarrow \dfrac{3025 \times 1225 \times 225}{15625 - 13225}$
$\Rightarrow 347402$

16. (a) $167.69 + 122.33 = ? + 148.38$
$\Rightarrow 290.02 = ? + 148.38$
$\Rightarrow ? = 141.64$

17. (d) $(7256 + 1286) - 1234 + 189 = ?$
$\Rightarrow 8542 - 1234 + 189 = 7497$

18. (c) $1256 + 1321 - ? + 163 = 551$
$\Rightarrow 2740 - ? = 551$
$\Rightarrow ? = 2189$

19. (d) $? \times 1246 \div 89 = 2240$
$\Rightarrow ? \times 14 = 2240$
$\Rightarrow ? = 160$

20. (a) $129 \times ? + 1783 = 3306$
$\Rightarrow ? = \dfrac{1523}{129} = 11.80$

21. (a) $212.5 \times 42.5 - 128.5 \times 33.2 = ?$
$\Rightarrow 9031.25 - 4266.2$
$\Rightarrow 4765.05$

22. (a) 35% of $1430 + 45\%$ of $1360 = 276.5 + ?$
$\Rightarrow 500.5 + 612 = 276.5 + ?$
$\Rightarrow ? = 836$

23. (a) $13\dfrac{3}{4} \times 42\dfrac{5}{6} - ? \quad 53\dfrac{3}{4}$
$\Rightarrow \dfrac{55}{4} \times \dfrac{257}{6} - ? \quad \dfrac{215}{4}$
$\Rightarrow \dfrac{14135}{24} - \dfrac{215}{4} \quad ?$
$\Rightarrow \dfrac{12845}{24} \quad 535\dfrac{5}{24}$

24. (a) $\dfrac{34 \times 4 - 12 \times 8}{6^2 \quad \sqrt{196} \quad (11)^2} \quad ?$
$\Rightarrow \dfrac{136 - 96}{36 \quad 14 \quad 121} \quad \dfrac{40}{171}$

25. (a) $7935 - 3245 + 4485 = ? + 2570$
$\Rightarrow ? = 6605$

26. (a) $218.5 \times 215.4 \times ? = 62550.22$
    $\Rightarrow 47064.9 \times ? = 62550.22$
    $\Rightarrow ? = 1.32$

27. (c) $1235 + 21.5 \times 78 \div 2.5 = ?$
    $\Rightarrow 1905.8$

28. (d) $1302.46 + 1395.72 - 1123.47 = ?$
    $\Rightarrow 1574.71$

29. (d) $3409 + 1101 + 1340 = 325 \times ?$
    $\Rightarrow 5850 = 325 \times ?$
    $\Rightarrow ? = 18$

30. (a) $? \%$ of $1600 = 884 - 44\%$ of 1500
    $\Rightarrow ? = 14$

SPEED TEST 8

1. (a) Average age of the remaining boys
   $$= \frac{80 \times 15 - 15 \times 16 + 25 \times 14}{40} = \frac{1200 - 590}{40} = 15.25$$

2. (e) $$= \frac{35 \times 160 - 144 + 104}{35} = \frac{5600 - 144 + 104}{35} = \frac{5560}{35}$$
   $= 158.85$ cm

   Shortcut : $160 - \frac{144 - 104}{35} = 158.85$

3. (b) Total age of the family of five members $= 24 \times 5 = 120$
   Total age of the family of five members before 8 years
   $= 120 - 5 \times 8 = 120 - 40 = 80$

   So, Required average age $= \frac{80}{5} = 16$ yr

4. (b) Average age of the whole class
   $$= \frac{32 \times 14 + 28 \times 13}{32 + 28} = \frac{448 + 364}{60} = \frac{812}{60} = 13.53 \text{yr}$$

5. (b) Actual average marks
   $$= \frac{65 \times 150 + 152 - 142}{65} = \frac{9750 + 10}{65} = 150.15$$

6. (c) Average age of the remaining girls.
   $$= \frac{1050 - 25 \times 12 + 25 \times 16}{25} = \frac{1050 - 300 + 400}{25}$$
   $$= \frac{1050 - 700}{25} = 14 \text{ years}$$

7. (b) Let the score of Ajay $= x$
   Rahul $= x - 15$
   Manish $= x - 25$
   According to question, $x = 63 + 30$
   $\therefore \qquad x = 93$
   $\therefore$ Score of Ajay $= 93$
   then Rahul $= 93 - 15 = 78$
   then Manish $= 93 - 25 = 68$
   Total marks of Rahul, Manish and Suresh
   $\qquad\qquad = 3 \times 63 = 189$
   $\therefore$ Suresh $= 189 - (78 + 68) = 43$
   $\therefore$ Manish + Suresh $= 68 + 43 = 111$

8. (a) Average $= \frac{45 \times 36 + 32 - 34 + 45 - 40}{45} = \frac{1620 + 3}{45}$
   $= 36.07$ kg

9. (c) Total speed of car, bus and train $= 72 \times 3 = 216$ km
   Speed of car and train $= \frac{5 + 9}{5 + 9 + 4} \times 216 = 168$ km
   Average $= \frac{168}{2} = 84$ km

10. (a) Suppose marks got in physics, chemistry and mathematics are P, C and M.
    $P + C + M = C + 120$
    $\therefore P + M = 120$
    $\frac{P + M}{2} = 60$

11. (b) Difference of marks $= 72 + 61 - 48 - 65 = 20$
    Correct average marks $= 68 + \frac{20}{20} = 68 + 1 = 69$

12. (b) $(7 \times 26) - (3 \times 19 + 3 \times 32) = 182 - (57 + 96)$
    $= 182 - 153 = 29$ yr

13. (a) Total age of 10 students $= 15 \times 10 = 150$ yrs
    Total age of 15 students $= 15 \times 16 = 240$ yrs
    $\therefore$ Average of new students $= \frac{240 - 150}{5} = 18$ yrs.

14. (e) $56 + 8 \times 2.5 = 76$ yrs

15. (c) $A + B + C = 3 \times 84 = 252$ kg
    $A + B + C + D = 4 \times 80 = 320$ kg
    $\therefore D = 320 - 252 = 68$ kg
    $\therefore E = 68 + 3 = 71$ kg
    Now, $\frac{320 - A + 71}{4} = 79$
    $\therefore A = 75$ kg

16. (a) Let the total no. of workers be x.
    Now, $8000 x = 7 \times 12000 + (x - 7) \times 6000$
    $\Rightarrow x = \frac{42000}{2000} = 21$

17. (c) Mean salary of the remaining 20 workers
    $$= \frac{75 \times 5680 - 25 \times 5400 - 30 \times 5700}{20}$$
    $$= \frac{15 \times 5680 - 5 \times 5400 - 6 \times 5700}{4}$$
    $= 15 \times 1420 - 5 \times 1350 - 6 \times 1425$
    $= 15 [1420 - 450 - 2 \times 285]$
    $= 15 [1420 - 450 - 570] = 15 \times 400 = 6000$

18. (c) Total annual income
    $= 3 \times 2200 + 4 \times 2250 + 5 \times 3120 + 1260$
    $= 6600 + 9000 + 15600 + 1260 = 32460$
    Average monthly income $= \frac{32460}{12} = ₹ 2705$

19. (c) Total score of 40 innings $= 40 \times 50 = 2000$
    Total score of 38 innings $= 38 \times 48 = 1824$
    Let the highest score be x and the lowest score be y.
    Sum of the highest and the lowest score
    $= x + y = 2000 - 1824$
    $\Rightarrow \quad x + y = 176$ ...(i)
    and by question, $x - y = 172$ ...(ii)
    Solving (i) and (ii), we get $x = 174$

20. (b) Let the no. of the boys and girls that appeared in the examination be x and y, respectively.
    Now, $71.8 = \frac{71x + 73y}{x + y}$
    $\Rightarrow 71.8x + 71.8y = 71x + 73y$
    $\Rightarrow (71.8 - 71) x = (73 - 71.8) y \Rightarrow 0.8 x = 1.2 y$
    $\Rightarrow \frac{x}{y} = \frac{1.2}{0.8} = \frac{3}{2}$

21. (a) Average monthly salary of employees $= 3000$
    Let the number of officer $= n_1$
    and the number of workers $= n_2$
    $10000 n_1 + 2000 n_2 = 400 \times 3000$
    $10n_1 + 2n_2 = 1200$
    $n_1 + n_2 = 400$
    $\Rightarrow 10n_1 + 2n_2 = 1200$
    $\underline{2n_1 + 2n_2 = 800}$
    $8n_1 = 400$
    $n_1 = \frac{400}{8} = 50$
    Number of officers $= 50$

22. (b) Total marks of 8 subjects = $87 \times 8 = 696$
Total marks of 6 subjects = $6 \times 85 = 510$
marks of two subjects = 186
$(n + n - 2) = 186$
$2n - 2 = 186$
$2n = 188$
$n = 94$

23. (b) Total number of rooms in first, second and third floor = 30, 20, 30
Occupied rooms in first, second and third floor = 15, 16, 12
Average income = $\dfrac{(15 \times 200 + 16 \times 250 + 12 \times 300)}{80} = ₹\,132.5$

24. (e) Acc. to question,
$54 \times (x - 1) - 46 \times x = 42$
$8x = 96$
$x = 12$
Original total expenditure:
$46 \times x = 46 \times 12 = ₹.552$

25. (d) Let Kiran's weight = x. Then
According to Kiran, $65 < x < 72$ ----(equation 1)
According to brother, $60 < x < 70$ ----(equation 2)
According to mother, $x \leq 68$ ----(equation 3)
Given that equation 1, equation 2 and equation 3 are correct. By combining these equations, we can write as
$65 < x \leq 68$
i.e., $x = 66$ or 67 or 68
Average of different probable weights of Kiran
$= \dfrac{66 + 67 + 68}{3} = 67$

26. (c) Let number of students in A, B, C, D be a, b, c, d respectively.
Total weight of students in A = 45a
Total weight of students in B = 50b
Total weight of students in C = 72c
Total weight of students in D = 80d
Total weight of students in A, B = 48(a + b)
Total weight of students in B, C = 60(b + c)
$45a + 50b = 48(a + b)$
$3a = 2b$
$b = \dfrac{3a}{2}$ ....(1)
$50b + 72c = 60(b+c)$
$10b = 12c$
$5b = 6c$
$5 \times \dfrac{3a}{2} = 6c$
$15a = 12c$
$5a = 4c$
$c = \dfrac{5a}{4}$ ......(2)
$45a + 50b + 72c + 80d = 60(a+b+c+d)$
$12c + 20d = 15a + 10b$
$12 \times \dfrac{5a}{4} + 20d = 15a + 10 \times \dfrac{3a}{2}$
$15a + 20d = 15a + 15a$
$20d = 15a$
$\dfrac{a}{d} = \dfrac{4}{3}$
Required ratio = 4:3

27. (b) Sum of temperatures on 1st, 2nd, 3rd and 4th days = $(58 \times 4) = 232$ degrees ... (1)
Sum of temperatures on 2nd, 3rd, 4th and 5th days - $(60 \times 4) = 240$ degrees ....(2)
Subtracting (1) From (2), we get ,
Temp, on 5th day - Temp on 1st day = 8 degrees.
Let the temperatures on 1st and 5th days be 7x and 8x degrees respectively.
Then, $8x - 7x = 8$ or $x = 8$.
Temperature on the 5th day = $8x = 64$ degrees.

28. (b) Total price of the two books = $₹ [(12 \times 10) - (11.75 \times 8)]$
$= ₹ (120 - 94) = ₹ 26$.
let the price of one book be $₹$ x
Then, the price of other book = $₹(x + 60\%$ of $x)$
$= ₹\left(x + \dfrac{3}{5}x\right) = ₹\,\dfrac{8}{5}x$
So, $x + \dfrac{8x}{5} = 26$
$\Rightarrow x = 10$
The prices of the two books are $₹\,10$ and $₹\,16$

29. (b) Let the initial number of persons be x. Then,
$16x + 20 \times 15 = 15.5 (x + 20)$
$\Rightarrow 0.5x = 10$
$\Rightarrow x = 20$.

30. (a) Required average = $\dfrac{(76 \times 16) - (75 \times 10)}{6}$
$= \dfrac{(1216 - 750)}{6} = \dfrac{466}{6} = \dfrac{233}{3}$.

SPEED TEST 9

1. (d) Total number of students in the school = 819
Number of girls = 364
∴ Number of boys = $819 - 364 = 455$
∴ Required ratio = $455 : 364 = 5 : 4$

2. (d) Share of Urmila in dividend = $\left(\dfrac{2}{6} \times 57834\right) = ₹\,19278$

3. (d)

4. (e) Let the number of girls = x
∴ Number of boys = 1.16 x
∴ Required ratio = $1.16 x : x = 116 : 100 = 29 : 25$

5. (d) According to the question, $\dfrac{A}{B} = \dfrac{4}{7}$ ... (i)
and $\dfrac{A\left(1 + \dfrac{50}{100}\right)}{B\left(1 - \dfrac{25}{100}\right)} = \dfrac{8}{7}$ ... (ii)
From equations (i) and (ii), we cannot find the earning of A and B.

6. (e) Ratio of the capital of Rinku and Pooja $= \dfrac{5100}{6600} = \dfrac{51}{66} = \dfrac{17}{22}$
∴ Rinku's share $= \dfrac{2730 \times 17}{17 + 22} = ₹\,1190$

7. (c) Let the number of girls be = x
∴ Number of the boys = $\dfrac{115x}{100}$
∴ Required ratio = $\dfrac{115x}{100} : x = 23 : 20$

8. **(c)** Ratio of equivalent capitals of A, B and C
   $= 35000 \times 12 : 20000 \times 5 : 15000 \times 7$
   $= 35 \times 12 : 20 \times 5 : 15 \times 7 = 84 : 20 : 21$
   Sum of the ratios $= 84 + 20 + 21 = 125$

   $\therefore$ B's share $= ₹\left(\dfrac{20}{125} \times 84125\right) = ₹13460$

9. **(b)** Ratio of profit $= 1 \times 12 : 2 \times 6 : 3 \times 4 = 1 : 1 : 1$

   $\therefore$ Manav's share $= 45000 \times \dfrac{1}{3} = ₹\,15000$

10. **(a)** Let number of students in Arts and Commerce were $4x$ and $5x$ respectively.

    Then, $\dfrac{4x}{5x} = \dfrac{8}{65} = \dfrac{}{11} \Rightarrow 44x - 40x = 520 \Rightarrow x = \dfrac{520}{4} = 130$

    $\therefore$ Number of students in Arts $= 4 \times 130 = 520$

11. **(d)** Ratio of capital $= 50000 \times 12 : 80000 \times 6 = 5 : 4$

    $\therefore$ Sarita's share $= \dfrac{18000 \times 5}{(5+4)} = ₹\,10000$

12. **(b)** Ratio of the salaries of Sumit and Rajan $= \dfrac{2}{5} : \dfrac{1}{2} = 4 : 5$

    Rajan's salary $= \dfrac{5}{9} \times 36000 = ₹20000$

13. **(b)** Total labourers $= 25$
    Ratio of male to female $= 2 : 3$

    $\therefore$ Number of males $= \dfrac{2}{5} \times 25 = 10$

    and Number of females $= \dfrac{3}{5} \times 25 = 15$

    20% amount he retains $\therefore$ he distribute 80% amount.
    $\therefore$ Amount distributed among males and females
    $= 275 \times 80\% = ₹\,220$
    Ratio of wages $= 5 : 4$
    $\therefore$ wage paid to a male be $₹\,5x$ and that to a female be $₹\,4x$.
    $\therefore 10 \times 5x + 15 \times 4x = 220 \Rightarrow 110\,x = 220$
    $\Rightarrow x = 2$
    Wage received by a female labourer $= 2 \times 4 = ₹\,8$

14. **(d)** Smallest angle $= (13 + 12) \times \dfrac{20}{100} = 5$

    $\therefore$ Ratio of angles $= 13 : 12 : 5$
    $\therefore$ Sum of smallest and second largest angles
    $= \dfrac{180 \times (12+5)}{(13+12+5)} = \dfrac{180 \times 17}{30} = 102°$

15. **(a)** Required number of gold coins
    $= \dfrac{\{950 - (25 + 15 + 30)\} \times 73}{(20 + 73 + 83)} + 15 = 365 + 15 = 380$

16. **(c)** Rita : Sita : Kavita
    7 : 15
        7 : 16
    49 : 105 : 240
    The ratio of money with Rita, Sita and Kavita is
    49 : 105 : 240
    We see that $49 \equiv ₹\,490$ $\therefore$ $240 \equiv ₹\,2400$

17. **(d)** A : B = 3 : 4
    B : C = 8 : 10
    C : D = 15 : 17
    A:B:C:D $= 3 \times 8 \times 15 : 4 \times 8 \times 15 : 4 \times 10 \times 15 : 4 \times 10 \times 17$
    $= 9 : 12 : 15 : 17$

18. **(c)** 4 leaps of hound = 5 leaps of hare

    $\therefore$ 5 leaps of hound $= \dfrac{25}{4}$ leaps of hare

    $\therefore$ the rate of hound : rate of hare $= \dfrac{25}{4} : 6 = 25 : 24$

Or, Ratio of | Hound | Hare
Leap frequency 5 ⤨ 6
Leap length 4 ⤨ 5
Then the required ratio of speed is the ratio of the cross product.
That is, speed of hound : speed of hare
$= 5 \times 5 : 6 \times 4 = 25 : 24$

19. **(c)** There are 12 mirrors in the carton. So, the sum of terms in the ratio must divide 12 exactly. We see that $2 + 1 = 3$ divides 12 exactly. $3 + 1 = 4$ also divides exactly.
    $3 + 2 = 5$ doesn't divide 12 exactly.
    Thus, our answer is (c).

20. **(d)** We should know that

    $a + b = \dfrac{6}{6+7+8}[(a+b) + (b+c) + (a+c)]$

    $= \dfrac{6}{21}[2(a+b+c)] = \dfrac{6}{21} \times 28 = 8$

    Similarly, $b + c = \dfrac{7}{6+7+8}[2(a+b+c)] = \dfrac{7}{21} \times 28 = \dfrac{28}{3}$

    and $a + c = \dfrac{8}{21} \times 28 = \dfrac{32}{3}$

    Now, $a = [(a + b + c) - (b + c)] = 14 - \dfrac{28}{3} = \dfrac{14}{3}$

    Similarly, $b = 14 - \dfrac{32}{3} = \dfrac{10}{3}$ and $c = 14 - 8 = 6$

    Thus, $a = \dfrac{14}{3}, b = \dfrac{10}{3}$ and $c = 6$

    $\therefore a : b : c = \dfrac{14}{3} : \dfrac{10}{3} : 6 = 14 : 10 : 18 = 7 : 5 : 9$

21. **(a)** Originally, let the number of seats for Mathematics, Physics and Biology be $5x$, $7x$ and $8x$ respectively.

    $i.e.\left(\dfrac{140}{100} \times 5x\right), \left(\dfrac{150}{100} \times 7x\right)$ and $\left(\dfrac{175}{100} \times 8x\right) i.e.\,7x, \dfrac{21x}{2}$ and $14x$.

    $\therefore$ Required ratio $= 7x : \dfrac{21x}{2} : 14x = 14x : 21x : 28x$

    $= 2 : 3 : 4$.

22. **(c)** Originally, let the number of boys and girls in the college be $7x$ and $8x$ respectively. Their increased number is (120% of $7x$) and (110% of $8x$).

    $i.e\left(\dfrac{120}{100} \times 7x\right)$ and $\left(\dfrac{110}{100} \times 8x\right) i.e.\,\dfrac{42x}{5}$ and $\dfrac{44x}{5}$.

    $\therefore$ Required ratio $= \dfrac{42x}{4} : \dfrac{44x}{5} = 21 : 22$.

23. **(c)** Let the shares of A, B, C and D be $₹\,5x, ₹\,2x, ₹\,4x$ and $₹\,3x$ respectively.
    $\therefore$ B's share $= ₹\,2x = ₹\,(2 \times 1000) = ₹\,2000$.

24. **(b)** Let the fixed amount be $₹\,x$ and cost of each unit be $₹\,y$. Then, $540y + x = 1800$ ....(i)
    and $620y + x = 2040$ ...(ii)
    On subtracting (i) from (ii), we get $80y = 240 \Leftrightarrow y = 3$.
    Putting $y = 3$ in (i), we get:
    $540 \times 3 + x = 1800 \Leftrightarrow x = (1800 - 1620) = 180$.
    $\therefore$ Fixed charges $= ₹\,180$,
    Charge per unit $= ₹\,3$.
    Total charges for consuming 500 units $= ₹\,(180 + 500 \times 3) = ₹\,1680$.

25. **(a)** Let the ratio be $x : (x + 40)$. Then,

    $\dfrac{x}{(x+40)} = \dfrac{2}{7} \Leftrightarrow 7x = 2x + 80 \Leftrightarrow 5x = 80 \Leftrightarrow x = 16$.

    $\therefore$ Required ratio $= 16 : 56$.

26. (d) Fare after reduction.

	1st	*2nd*	*3rd*
	$8 - \dfrac{8}{6}$	$6 - \dfrac{6}{12}$	3
$\Rightarrow$	$\dfrac{20}{3}$	$\dfrac{11}{2}$	3
$\Rightarrow$	40	33	18

Ratio of revenue

	1st	*2nd*	*3rd*
	9×40	12×33	26×18

Ratio of revenue of all three classes = 10 : 11 : 13

$\therefore$ Collection for 1st class $\dfrac{1088 \times 10}{34}$ ₹ 320

27. (a)

	Iron		*Copper*	
Alloy I	8	:	6	14 kg.
Alloy II	36	:	6	42 kg.
	44	:	12	56 kg

28. (c) Ratio of the amount is

$$\frac{P\left(1 \;\dfrac{r}{100}\right)^2}{\left(P \;\dfrac{Pr}{100}\right)} = \frac{6}{5} \Rightarrow \left(1 \;\dfrac{r}{100}\right) \; \frac{6}{5} \Rightarrow r \; 20\%$$

29. (c) Let the number of Mechanical engineering graduates be M and Electronic engineering graduates be E. Then

$$\frac{2.45M \; 3.56E}{M \; E} \; 3.12 \Rightarrow 2.45M + 3.56E = 3.12M + 3.12E$$

$$\Rightarrow 0.44E = 0.67M \Rightarrow E \; \frac{0.67}{0.44}M \; \frac{67}{44}M$$

For E to be an integer, the least value will be 67.

30. (b) Weight of dry grapes without water $= 250 \times \dfrac{90}{100}$ 225 kg

Let weight of fresh grapes be x kg.
According to question,

$$x \times \frac{20}{100} = 225 \Rightarrow x \; \frac{225 \times 100}{20} \; 1125 \text{ kg}$$

SPEED TEST 10

1. (b) According to the above theorem,
a : b = 3 : 2 (Income)
c : d = 5 : 3 (Expenditure)
X = 2000 (Savings)

Therefore, A's income $= \dfrac{Xa(d-c)}{ad-bc} = \dfrac{2000 \times 3 \times (3-5)}{3 \times 3 - 2 \times 5}$
$= ₹ 12,000$

and B's income $= \dfrac{Xb(d-c)}{ad-bc}$ $\dfrac{2000 \times 2 \times (3-5)}{3 \times 3 - 2 \times 5} = ₹ 8,000$

2. (a) Let initially, the number of males and females in the bus be 3x and x, respectively.
$\therefore$ Total no. of passengers = 4x
At the first stop, the number of male passengers

$$= (4x - 16) \times \frac{3}{4} = 3x - 12$$

and female passengers $= (4x - 16) \times \dfrac{1}{4}$ 6 x 2

Now, $\dfrac{3x - 12}{x \; 2}$ $\dfrac{2}{1}$ $\Rightarrow 3x - 12$ 2x 4 $\Rightarrow$ x = 16

Hence, the total numbers of passengers, initially
$= 16 \times 4 = 64$

3. (a) 9 : 8
14 : 15
We know that the total bill = wage per person × no. of total employees.
Therefore, the ratio of change in bill
$= 9 \times 14 : 8 \times 15 = 126 : 120 = 21 : 20$
The ratio shows that there is a decrease in the bill.

4. (a) 2m = 5b
2w = 3b
Combining the two relations : (Follow the rule)
2m = 5b
3b = 2w
$2 \times 3m = 5 \times 3b = 5 \times 2w \Rightarrow 6m = 15b = 10w$
Now, to find the ratio of wages of a man, a woman and a boy,
let 6m = 15b = 10 w = k (say)

$$\therefore \quad m = \frac{k}{6}; b \quad \frac{k}{15}; w \quad \frac{k}{10}$$

$$\therefore \quad m : w : b = \frac{1}{6} : \frac{1}{10} : \frac{1}{15} = 5 : 3 : 2$$

The ratio of wages of 6 men, 12 women and 17 boys
$= 6 \times 5 : 12 \times 3 : 17 \times 2 = 30 : 36 : 34$

$\therefore$ 17 boys get $\dfrac{50}{30 \; 36 \; 34} \times 34 = ₹ 17$

$\therefore$ 1 boy gets ₹ 1

5. (a) A's share : B's share : C's share

$$= \frac{1}{4} \times \frac{1}{4} \; \frac{1}{5} \times \frac{1}{2}\left\{1 \left(\frac{1}{4} + \frac{1}{5}\right)\right\} \times 1 \quad \frac{1}{16} : \frac{1}{10} : \frac{11}{20}$$

Multiplying each fraction by LCM of 16, 10 and 20, i.e., 80.
We have 5 : 8 : 44

$\therefore$ A's share $= \dfrac{1140}{57} \times 5 = ₹ 100$

B's share $= \dfrac{1140}{57} \times 8 = ₹ 160$

C's share $= \dfrac{1140}{57} \times 44 = ₹ 880$

6. (c) Ratio of milk in the containers are,

$$5 \times \frac{1}{6} : 4 \times \frac{3}{8} : 5 \times \frac{5}{12} \quad \frac{5}{6} : \frac{3}{2} : \frac{25}{12}$$

and the ratio of water in the containers are,

$$5 \times \frac{5}{6} : 4 \times \frac{5}{8} : 5 \times \frac{7}{12} \quad \frac{25}{6} : \frac{5}{2} : \frac{35}{12}$$

Ratio of mixture of milk and water in the containers

$$= \left(\frac{1}{6} \times 5 \quad \frac{3}{8} \times 4 \quad \frac{5}{12} \times 5\right) \left(\frac{5}{6} \times 5 \quad \frac{5}{8} \times 4 \quad \frac{7}{12} \times 5\right)$$
$$= 106 : 230 = 53 : 115$$

7. (b) Suppose B puts in x cows. The ratio of A's and B's rents

$$= 1 : 1 \; \frac{1}{2} \quad 1 : \frac{3}{2} \quad 2 : 3$$

Then, $\dfrac{100 \times 8}{x \times 2}$ $\dfrac{2}{3}$ or, x $= \dfrac{100 \times 8 \times 3}{2 \times 2} = 600$ cows.

8. (d) For A's share : (10% − 8%) ≡ ₹ 220

$$\therefore \quad 100\% = \frac{220}{2} \times 100 = ₹ 11000$$

$\therefore$ A's capital $= ₹ 11000$

For B's and C's share : $\dfrac{2}{5} \equiv 11000$

$$\therefore \quad \frac{3}{5} \equiv \frac{11000}{2} \times 3 = ₹ 16500$$

$\therefore$ B's and C's capitals are ₹ 8250 each.

9. (e) Amount received by each son = ₹ 48000
∴ Amount received by her daughter = ₹ 24000
and amount received by the wife = ₹ 96000
∴ Total amount distributed by Shri Ramlal
= ₹ (96000 + 2 × 48000 + 24000) = ₹ 216000

10. (b) Let x gallons of first mixture be mixed with y gallons of second mixture.

	Milk	Water
x gallons (1st)	$\frac{8}{9}$ x	$\frac{1}{9}$ x
y gallons (2nd)	$\frac{1}{6}$ y	$\frac{5}{6}$ y
Third vessel	$\frac{8}{9}$ x $\frac{1}{6}$ y	$\frac{1}{9}$ x $\frac{5}{6}$ y

Since the third vessel contains half milk and half water,

$\frac{8}{9}$x $\frac{1}{6}$y $\frac{1}{9}$x $\frac{5}{6}$y ⟹ 16x + 3y = 2x + 15y

⟹ 16x − 2x = 15y − 3y ⟹ $\frac{x}{y}$ $\frac{12}{14}$ $\frac{6}{7}$.

Hence $y = \frac{7}{13} \times 26 = 14$ gallons

11. (c) Total no. of boys in the school = $\frac{25}{54} \times 270$ 125

Total no. of girls in the school = $\frac{29}{54} \times 270$ 145

After inclusion of 15 boys and 15 girls, the ratio of boys to girls in the school
= (125 + 15) : (145 + 15) = 140 : 160 = 7 : 8

12. (c) Let the first number be x and the second number be y.
According to the question,
2x + 3y = 141   ...(i)
3x + 2y = 174   ...(ii)
By equation (i) × 3 − (ii) × 2, we have
6x + 9y − 6x − 4y = 423 − 348

⟹ 5y = 75 ⟹ y $\frac{75}{5}$ 15
From equation (i), 2x + 3 × 15 = 141

⟹ 2x = 141 − 45 = 96 ⟹ x $\frac{96}{2}$ 48
∴ Larger number = 48

13. (d) According to the question,
46x + 30 + 41x + 30 + 34x + 25 = 2505

⟹ 121x = 2505 − 85 = 2420 ⟹ x $\frac{2420}{121}$ 20
∴ Number of coins received by Parat
= 41x + 30 = 41 × 20 + 30 = 850

14. (e) Total cost = $\left(\frac{264}{11} \times 24 + \frac{252}{14} \times 21 + \frac{544}{17} \times 25\right)$
= ₹ (576 + 378 + 800) = ₹ 1754

15. (a) Let the population of the village X be 5x.
and that of village Y = 7x.

According to the question, $\frac{5x}{7x}$ 25000 $\frac{25}{36}$

⟹ 180x = 175x + 25 × 25000 ⟹ 5x = 625000
∴ village x = 625000 population.

16. (d) Let the number of students in colleges A and B be 3x and 4x respectively.

According to the question. $\frac{3x}{4x}$ $\frac{50}{}$ $\frac{5}{6}$

⟹ 20x = 18x + 300 ⟹ 2x = 300 ⟹ x $\frac{300}{2}$ 150
∴ Number of students in college, B = 4x
4 × 150 = 600

17. (a) 1105 = 11x + 10 + 18x + 20 + 24x + 15
1105 = 53x + 45
x = 20
Amount with Champa = 24x + 15
= 24 × 20 + 15 = ₹ 495

18. (b) In first cask,

Quantity of water = $\frac{7}{20} \times 48$ 16.8L

Quantity of wine = $\frac{13}{20} \times 48$ 31.2L

In second cask,

Quantity of water = $\frac{17}{35} \times 42$ 20.4L

Quantity of wine = $\frac{18}{35} \times 42$ 21.6L

Now after mixing:
Total quantity of wine = 52.8 L
Quantity of water = 57.2 L

Ratio after mixing = $\frac{52.8}{57.2}$ $\frac{528}{572}$ $\frac{12}{13}$
= 12 : 13.

19. (c) Ratio of equivalent capitals for 1 month
= 40000 × 8 : 30000 × 9
= 32 : 27 = Ratio of profit

20. (d) Let A = 2x, B = 3x and C = 4x. Then $\frac{A}{B}$ $\frac{2x}{3x}$ $\frac{2}{3}$,

$\frac{B}{C}$ $\frac{3x}{4x}$ $\frac{3}{4}$ and $\frac{C}{A}$ $\frac{4x}{2x}$ $\frac{2}{1}$

⟹ $\frac{A}{B}:\frac{B}{C}:\frac{C}{A}$ $\frac{2}{3}:\frac{3}{4}:\frac{2}{1}$ = 8 : 9 : 24

21. (b) Let P = 2x and Q = 3x. Then $\frac{Q}{R}$ $\frac{2}{3}$ ⟹ R $\frac{3}{2}$Q

= $\left(\frac{3}{2} \times 3x\right)$ $\frac{9x}{2}$

Also, $\frac{R}{S}$ $\frac{2}{3}$ ⟹ S $\frac{3}{2}$R = $\left(\frac{3}{2} \times \frac{9x}{2}\right)$ $\frac{27x}{4}$.

Thus, P = 2x, Q = 3x, R $\frac{9x}{2}$ and S $\frac{27x}{4}$.

Now, P + Q + R + S = 1300

⟺ $\left(2x\ 3x\ \frac{9x}{2}\ \frac{27x}{4}\right)$ = 1300

⟺ (8x + 12x + 18x + 27x) = 5200

⟺ 65x = 5200 ⟺ x $\frac{5200}{65}$ = 80.
∴ P's share = ₹ (2 × 80) = ₹ 160

22. (b) Quantity of milk in 16 litres of mix. = $\left(16 \times \frac{5}{8}\right)$

litres = 10 litres.
Quantity of milk in 20 litres of new mix. = (10 + 4) litres
Quantity of water in it = (20 − 14) litres = 6 litres.
∴ Ratio of milk and water in the new mix. = 14 : 6 = 7 : 3

23. (c) Let the three containers contain 3x, 4x and 5x litres of mixtures respectively,

Milk in 1st mix. $= \left(3x \times \dfrac{4}{5}\right)$ litres $= \dfrac{12x}{5}$ litres.

Water in 1st mix. $= \left(3x - \dfrac{12x}{5}\right)$ litres $= \dfrac{3x}{5}$ litres.

Milk in 2nd mix. $= \left(4x \times \dfrac{3}{4}\right)$ litres $= 3x$ litres.

Water in 2nd mix. $= (4x - 3x)$ litres $= x$ litres.

Milk in 3rd mix. $= \left(5x \times \dfrac{5}{7}\right)$ litres $= \dfrac{25x}{7}$ litres.

Water in 3rd mix. $= \left(5x - \dfrac{25x}{7}\right)$ litres $= \dfrac{10x}{7}$ litres.

Total milk in final mix. $= \left(\dfrac{12x}{5} + 3x + \dfrac{25x}{7}\right)$ litres

$= \dfrac{314x}{35}$ litres.

Total water in final mix. $= \left(\dfrac{3x}{5} + x + \dfrac{10x}{7}\right)$ litres

$= \dfrac{106x}{35}$ litres.

Required ratio of milk and water $= \dfrac{314x}{35} : \dfrac{106x}{35} = 157 : 53$.

24. (b) Let the third proportional to 12 and 30 be x.
Then, $12 : 30 :: 30 : x \Leftrightarrow 12x = 30 \times 30$

$\Leftrightarrow x = \dfrac{30 \times 30}{12} = 75$

∴ Third proportional to 12 and 30 = 75.

Mean proportional between 9 and 25 $= \sqrt{9 \times 25} = 15$
∴ Required ratio $= 75 : 15 = 5 : 1$

25. (b) Ratio of sides $= \dfrac{1}{2} : \dfrac{1}{3} : \dfrac{1}{4} = 6 : 4 : 3$

Largest side $= \left(104 \times \dfrac{6}{13}\right)$ cm $= 48$ cm

26. (b) Let the numbers be 600, 800 and 1500.
Then the new numbers are 2400, 3000 and 3000.
∴ Ratio $= 24 : 30 : 30 \Rightarrow 4 : 5 : 5$

27. (b) Ratio of X, Y and Z $= 1.2 \times 6.5 : 1.5 \times 5 : 2.8 \times 3 = 26 : 25 : 28$

∴ X's share $= \dfrac{108941}{79} \times 26 = 35854$

Z's share $= \dfrac{108941 \times 28}{79} = 38612$

∴ Diff $= 38612 - 35854 = 2758$

28. (d) Let the numbers be x and y.

∴ $\dfrac{x}{y} = \dfrac{4}{7}$

∴ $7x = 4y$ ... (a)

$\dfrac{x + 30}{y + 30} = \dfrac{5}{8}$

∴ $8x - 5y = -90$ ...(b)
From eqn (b), $32x - 20y = -360$
From eqn (a), $35x = 20y$
∴ $32x - 35x = -360$

∴ $x = \dfrac{360}{3} = 120$

$y = 210$

∴ Avg $= \dfrac{330}{2} = 165$

29. (a) Shalini's equivalent $= ₹ (80000 \times 12 + 100000 \times 12)$
$= ₹ (960000 + 1200000) = ₹ 2160000$
Nalini's equivalent capital for 1 month
$= ₹ (80000 \times 12 + 50000 \times 12)$
$= ₹ (960000 + 600000) = ₹ 1560000$
∴ Ratio of the profit $= 2160000 : 1560000$
$= 216 : 156 = 18 : 13$

∴ Nalini's share $= ₹ \left(\dfrac{13}{13 + 18}\right) \times 93000$

$= ₹ \left(\dfrac{13}{31} \times 93000\right) = ₹ 39000$

30. (e) Let Y's salary $= ₹ 100$
∴ X's salary $= ₹ 80$

and Z's salary $= \left(\dfrac{80 \times 120}{100}\right) = ₹ 96$

∴ Required ratio $= 80 : 100 : 96 = 20 : 25 : 24$

SPEED TEST 11

1. (c) The mean value is 90 P and the price of water is 0 P.

Milk 108   Water 0

90

$90 - 0$ $108 - 90$
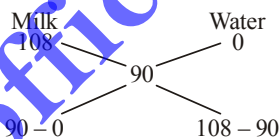
By the Alligation Rule, Milk and water are in the ratio of 5 : 1.
∴ quantity of milk in the mixture $= 5 \times 16 = 80$ litres.

2. (b) Cost price of mixture $= 40 \times \dfrac{100}{125} P = 32P$ per kg

By the rule of fraction

42   24

32

8   10
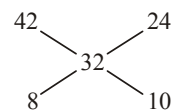
Ratio $= 4 : 5$
Thus, for every 5 kg of salt at 24 P, 4 kg of salt at 42P is used.

∴ the required no. of kg $= 25 \times \dfrac{4}{5} = 20$.

3. (c) The existing solution has 40% sugar. And sugar is to be mixed; so the other solution has 100% sugar. So, by alligation method:

40%   100%

50%

50%   10%
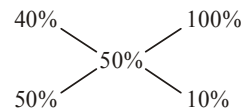
∴ The two mixtures should be added in the ratio 5 : 1.

Therefore, required sugar $= \dfrac{300}{5} \times 1 = 60$ gm

4. (c) Here, alligation is applicable for 'money per boy or girl'.

Mean value of money per student $= \dfrac{3900}{65} = 60 P$

Boys 80   Girls 30

60

30   20
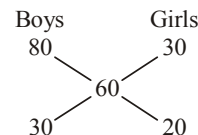
∴ Boys : Girls $= 3 : 2$

∴ Number of boys $= \dfrac{65}{3 + 2} \times 3 = 39$

and number of girls $= 65 - 39 = 26$

SOLUTIONS

5. (c) In this question, the alligation method is applicable on prices, so we should get the average price of mixture.

SP of mixture = ₹ 20/litre; profit = 25%

∴ average price = $20 \times \dfrac{100}{125}$ = ₹ 16/litre

By rules

∴ Ratio = 16 : 9
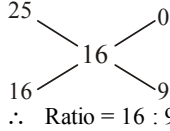
6. (b) Short-Cut-Method : In such questions the ratio is

water : milk = $16\dfrac{2}{3} : 100$ = 1 : 6

7. (c)

I Part   II Part

(as there is a loss on the whole)
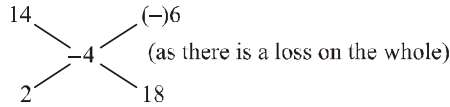
∴ ratio of quantities sold at 14% profit and 6% loss
= 2 : 18 = 1 : 9.

∴ quantity sold at 14% profit = $\dfrac{50}{1+9} \times 1 = 5$ kg and sold at

6% loss = 50 – 5 = 45 kg.

8. (c) Here, the % values of milk and water that is taken from the vessel should be taken into consideration.
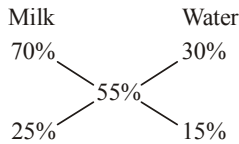
⟹ 5 : 3

Ratio of milk to water = 5 : 3

∴ quantity of milk = $\dfrac{80}{5+3} \times 5 = 50$ litres

and quantity of water = $\dfrac{80}{5+3} \times 3 = 30$ litres

9. (c) Amount of liquid left after n operations, when the container originally contains x units of liquid from which y units in taken out each time is $x\left(\dfrac{x-y}{x}\right)^n$ units.

Thus, in the above case, amount of milk left

= $80\left[\dfrac{80-8}{80}\right]^3$ kg = 58.32 kg

10. (b)

Gold   Copper
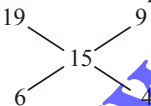
∴ Gold : Copper = 6 : 4 = 3 : 2

11. (b) The first type of alloy does not contain tin. Second type alloy contains tin. Therefore, quantity of tin in 2 units of the resulting alloy = $\dfrac{5}{13}$

⟹ Quantity of tin in 1 unit of the resulting alloy

= $\dfrac{\frac{5}{13}}{2} = \dfrac{5}{26}$

12. (d) We will apply aligaton on % profit. If he sells the milk at CP, he gains 0%. But if he sells water at CP, he gains 100%.
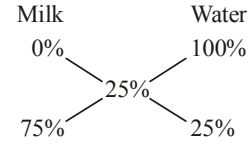
Ratio of milk to water in the mixture should be 3 : 1

∴ % of water in mixture = $\dfrac{1}{3+1} \times 100$ = 25%

13. (d) Apply alligation on fraction of A in each mixture.

Original mixture   B
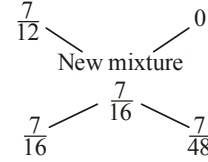
Ratio of original mixture to B = $\dfrac{7}{16} : \dfrac{7}{48}$ = 3 : 1

When 9 litres of B is mixed, original mixture should be $\dfrac{9}{1} \times 3$
= 27 litres.

Therefore, initial quantity in can = 27 + 9 = 36 litres.

14. (c) Apply the alligation on fraction of milk in each mixture.
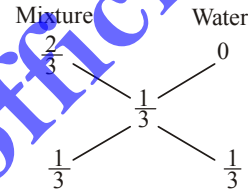
Mixture   Water

Ratio of mixture to water = 1 : 1
Therefore, if there is 60 litres of solution, 60 litres of water should be added.

15. (c) Let the capacity of the vessel be x litres.
Since 4 litres liquid is drawn out from the vessel and replaced by water.

∴ $\dfrac{x-4}{4} = \dfrac{1}{2}$ ⟹ x = 6 litres

16. (c) By the above theorem the required ratio is

$\left(\dfrac{2}{2+1} + \dfrac{3}{3+1} + \dfrac{3}{3+2}\right) : \left(\dfrac{1}{2+1} + \dfrac{1}{3+1} + \dfrac{2}{3+2}\right)$

= $\left(\dfrac{2}{3} + \dfrac{3}{4} + \dfrac{3}{5}\right) : \left(\dfrac{1}{3} + \dfrac{1}{4} + \dfrac{2}{5}\right)$

= $\dfrac{40+45+36}{3 \times 4 \times 5} : \dfrac{20+15+24}{3 \times 4 \times 5}$ = 121 : 59

17. (c) In vessel A, milk = $\dfrac{5}{7}$ of the weight of mixture

In vessel B, milk = $\dfrac{8}{13}$ of the weight of mixture. Now, we

want to form a mixture in which milk will be $\dfrac{9}{13}$ of the

weight of this mixture.
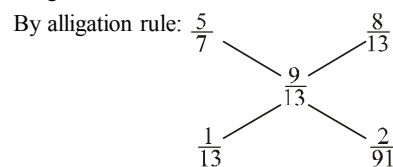
By alligation rule:

∴ required proportion is $\dfrac{1}{13} : \dfrac{2}{91}$ = 7 : 2

18. (c) By the alligation rule, we find that wine containg 30% of spirit and wine containing 12% of spirit should be mixed in the ratio 1 : 2 to produce a mixture containing 18% of spirit.

$$
\begin{array}{ccc}
30\% & & 12\% \\
& 18\% & \\
6\% & & 12\%
\end{array}
$$
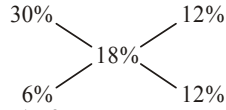
Ratio = 6 : 12 = 1 : 2

This means that $\frac{1}{3}$rd of the butt of sherry was left, i.e. to

say, the butler drew out $\frac{2}{3}$rd of the butt.

∴ $\frac{2}{3}$rd of the butt was stolen.

19. (b) Selling price of 150 kg wheat at 20% profit

$$= 150 \times 7\left(\frac{120}{100}\right) = ₹\,1260$$

Selling price of 50 kg wheat at 10% profit

$$= 50 \times 7\left(\frac{110}{100}\right) = ₹\,385$$

∴ Selling price per kg of remaining 100 kg wheat

$$= \frac{1260 - 385}{100} = ₹\,8.75$$

20. (d) In original mixture, % of liquid B = $\frac{1}{4\;1} \times 100$ 20%

In the resultant mixture, % of liquid B = $\frac{3}{2\;3} \times 100$ 60%

Replacement is made by the liquid B, so the % of B in second mixture = 100%

Then, by the method of Alligation :

$$
\begin{array}{ccc}
20\% & & 100\% \\
& 60\% & \\
40\% & & 40\%
\end{array}
$$
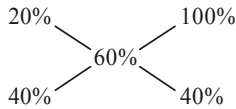
∴ Ratio in which first and second mixtures should be added is 1 : 1. What does it imply? It simply implies that the reduced quantity of the first mixture and the quantity of mixture B which is to be added are the same.

∴ Total mixture = 10 + 10 = 20 litres

and liquid A = $\frac{20}{5} \times 4 = 16$ litres

21. (e) Initially water (weight) = 45 gm & milk 15 gm. After added 15 gm

water the percentage of water = $\dfrac{\text{weight of water}}{\text{total weight of mixture}} \times 100$

$$= \frac{60}{75} \times 100 = 80\%$$

22. (b) Let x and y be two containers.

Ratio of milk to water in container x = 5: 1

and ratio of milk to water in container y = 7 : 2

It is given that quantity of milk should be 80% in new mixture. This means that quantity of water will be 20%.

∴ Ratio of milk to water in new mixture =80 : 20 = 4:1.

$$\therefore \frac{5}{6}x \quad \frac{7}{9}y : \frac{1}{6}x \quad \frac{2y}{9} \quad 4:1$$

$$\Rightarrow \frac{\dfrac{5x}{6} \quad \dfrac{7y}{9}}{\dfrac{x}{6} \quad \dfrac{2y}{9}} \quad \frac{4}{1}$$

$$\Rightarrow \frac{15x \quad 14y}{3x \quad 4y} \quad \frac{4}{1} \Rightarrow 15x \quad 14y \quad 12x \quad 16y$$

$$\Rightarrow 3x = 2y \Rightarrow x : y \quad 2 : 3$$

23. (c) In first container,

Quantity of milk = $20 \times \dfrac{90}{100}$ 18L

Quantity of water = 2L

In second container,

Quantity of milk = $5 \times \dfrac{80}{100}$ 4L

Quantity of water = 1 L

In third container,

Quantity of milk = $9 \times \dfrac{70}{100}$ 6.3L

Quantity of water = 2.7 L

After mixing :

total milk = 18 + 4 + 6.3 = 28.3 L

total water = 2 + 1 + 2.7 = 5.7 L

Ratio milk and water after

mixing = 28. 3 L : 5.7 L = 5 : 1 (approx)

24. (b) Let the both glasses have 'n'L of mixture

Ratio in first glasses 2 : 1 ≡ Alcohol : Water

Alcohol in first glasses $\dfrac{2}{3}$nL

Water in first glasses $\dfrac{1}{3}$nL

Ratio in second glasses, Alcohol : Water ≡ 1 : 1

Alcohol in second glasses $\dfrac{1}{2}$nL

Water in second glasses $\dfrac{1}{2}$nL

Ratio in third glass $\dfrac{\text{Total alcohol}}{\text{Total water}}$

$$\frac{\dfrac{2}{3}n \quad \dfrac{1}{2}n}{\dfrac{1}{3}n \quad \dfrac{1}{2}n} \quad \frac{\dfrac{7n}{6}}{\dfrac{5n}{6}} \quad 7 : 5$$

25. (a) C.P. of 5 kg of mixture

= ₹ (3 × 20 + 2 × 28) = ₹ 116

Its S.P. = 5 × 24 = ₹ 120

∴ Gain % = $\dfrac{4}{116} \times 100$ 3.44%

26. (a) S.P. of 1 kg of the mixture = ₹ 68.20, Gain = 10%

C.P. of 1 kg of the mixture = ₹ $\left(\dfrac{100}{110} \times 68.20\right)$ = ₹ 62.

By the rule of alligation, we have
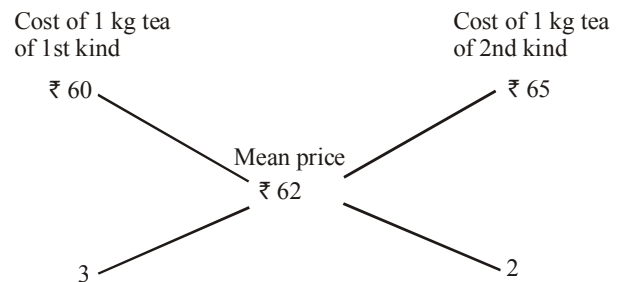
Cost of 1 kg tea of 1st kind .... Cost of 1 kg tea of 2nd kind

$$
\begin{array}{ccc}
₹\,60 & & ₹\,65 \\
& \text{Mean price} & \\
& ₹\,62 & \\
3 & & 2
\end{array}
$$

∴ Required ratio = 3 : 2

27. (b) By the rule of alligation, we have:

Strength of ?rst jar   Strength of 2nd jar
40%   19%

Mean strength
₹ 26

7   14
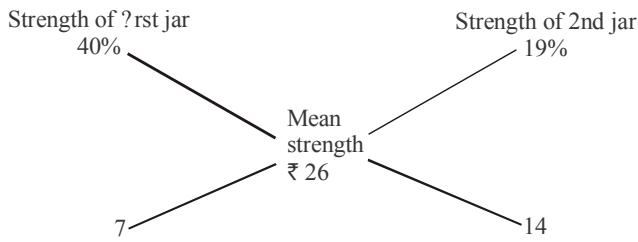
∴ So , Ratio of 1st and 2nd quantities = 7 : 14 = 1 : 2

∴ Required quantity replaced = $\frac{2}{3}$

28. (d) Let the C.P. of spirit be Re. 1 per litre.

Spirit in 1 litre mix. of A = $\frac{5}{7}$ litre; C.p. of a litre mix. in A = Re. $\frac{5}{7}$.

Spirit in 1 litre mix. of B = $\frac{7}{13}$ litre; C.P. of 1 litre mix. in B = Re. $\frac{5}{13}$.

Spirit in 1 litre mix. of C = $\frac{8}{13}$ litre; Mean price = Re. $\frac{8}{13}$.

By the rule of alligation, we have :

C.P. of 1 litre mixture in A   C.P. of 1 litre mixture in B

$\left(\frac{5}{7}\right)$ $\left(\frac{7}{13}\right)$

Mean price $\left(\frac{8}{13}\right)$
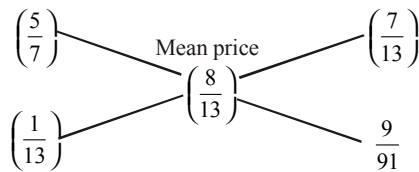
$\left(\frac{1}{13}\right)$ $\frac{9}{91}$

∴ Required ratio $\frac{1}{13} : \frac{9}{13}$ 7 : 9.

29. (a) Let cost of 1 litre milk be Re. 1.

Mlk in 1 litre mix. in A $\frac{8}{13}$ litre, C.P. of a litre mix. in B = Re. $\frac{5}{7}$.

Milk in 1 litre mix. in B = $\frac{5}{7}$ litre, C.P. of 1 litre mix. in B = Re. $\frac{5}{7}$.

Milik in 1 litre of final mix. $= \left(\frac{900}{13} \times \frac{1}{100} \times 1\right)$ $\frac{9}{13}$ litre; mean price = Re. $\frac{9}{13}$.

By the rule of alligation, we have:

C.P. of 1 litre mixture in A   C.P. of 1 litre mixture in B

$\frac{8}{13}$ $\frac{5}{7}$

Mean price $\frac{9}{13}$
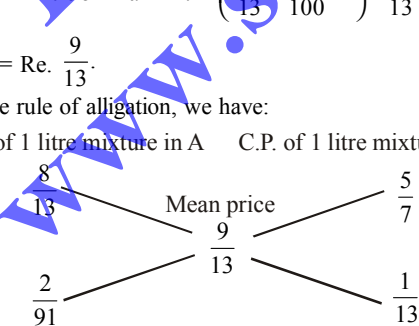
$\frac{2}{91}$ $\frac{1}{13}$

∴ Required ratio $\frac{2}{91} : \frac{1}{13}$ 2 : 7.

30. (c) Suppose the can initially contains 7x and 5x litres of mixtures A and B respectively.

Quantity of A mixture left $= \left(7x - \frac{7}{12} \times 9\right)$ litres $\left(7x - \frac{21}{4}\right)$ litres.

Quantity of B in mixture left $= \left(5x - \frac{5}{12} \times 9\right)$ litres

$\left(5x - \frac{15}{4}\right)$ litres.

∴ $\frac{\left(7x - \frac{21}{4}\right)}{\left(5x - \frac{15}{4}\right)} = \frac{7}{9} \Rightarrow \frac{28x - 21}{20x} \quad \frac{21}{9} \quad \frac{7}{9}$

⇒ 252x − 189 = 140x + 147
⇒ 112 x = 336 ⇒ x = 3.
So, the can contained 21 litre.

<div style="text-align:center">**SPEED TEST 12**</div>

1. (b) Work done by (A + B) in 1 day = $\frac{1}{12}$

Work done by (B + C) in 1 day = $\frac{1}{16}$

Let C finishes the work in x days.

Then, work done by C in 1 day = $\frac{1}{x}$

We have, A's 5 days' work + B's 7 days' work + C's 13 days' work = 1

or [(A + B)'s 5 days' + (B + C)' s 2 days' + C's 11 days'] work = 1

or $\frac{5}{12}$ $\frac{2}{16}$ $\frac{11}{x}$ 1 or   x = 24 days

2. (b) Let Sunil finishes the job in x hours.

Then, Ramesh will finish the job in $\frac{x}{2}$ hours.

We have, $x - \frac{x}{2}$ 3 ⇒ x   6

Therefore, Sunil finishes the job in 6 hours and Ramesh in 3 hours.

Work done by both of them in 1 hour = $\frac{1}{6}$ $\frac{1}{3}$ $\frac{1}{2}$

They together finish the piece of work in 2 hours.

3. (d) (Mother + Daughter)'s one day's work = $\frac{1}{4}$

Remaining work = $\frac{3}{4}$

Mother's one day's work = $\frac{1}{6}$

Daughter's one day's work = $\frac{1}{4} - \frac{1}{6}$ $\frac{1}{12}$

$\frac{1}{12}$ work is done by the daughter in 1 day.

Therefore, $\frac{3}{4}$ work will be done by the daughter in

$\frac{12 \times 3}{4}$ 9 days

4. (a) 15 W = 10 M

Now, 5W + 4M = 5W $\frac{4 \times 15}{10}$ W   5W   6W = 11 W

Now, 15 women can complete the project in 55 days, then 11 women can complete the same project in

$\frac{55 \times 15}{11}$ 75 days

5. (b) $m_1 \times d_1 \times t_1 \times w_2 = m_2 \times d_2 \times t_2 \times w_1$
24 × 10 × 8 × 1 = m_2 × 6 × 10 × 1

⇒ m_2 $\frac{24 \times 10 \times 8}{6 \times 10}$ 32 men

6. **(b)** (A + B)'s 2 day's work = $2\left(\dfrac{1}{18}+\dfrac{1}{9}\right)=\dfrac{2}{6}=\dfrac{1}{3}$

   Remaining work = $1-\dfrac{1}{3}=\dfrac{2}{3}$

   (A + B + C)'s one day's work = $\left(\dfrac{1}{18}+\dfrac{1}{9}+\dfrac{1}{6}\right)=\dfrac{1}{3}$

   1/3 work in one day is completed if all of them work together. Hence, 2/3 work will be completed by A, B and C in 2 days. Total number of days taken to finish the work is 2 + 2 = 4 days.

7. **(b)** Let the worker worked for (40 + x) hours.

   Now, $\dfrac{56}{35}\times40+\dfrac{x\times1.5\times56}{35}=88$ or $2.4x = 24$

   $\Rightarrow$ x = 10 hours
   The worker worked for (40 + 10) = 50 hours

8. **(b)** B's one day work = $\dfrac{1}{6}-\dfrac{1}{10}=\dfrac{1}{15}$

   Hence, B can do the work alone in 15 days.

9. **(b)** (A + B)'s one days' work = $\dfrac{1}{10}+\dfrac{1}{15}=\dfrac{1}{6}$

   (A + B)'s two days' work = $\dfrac{2}{6}=\dfrac{1}{3}$

   Remaining work = $1-\dfrac{1}{3}=\dfrac{2}{3}$

   $\dfrac{1}{10}$ work is done by A in 1 day.

   $\dfrac{2}{3}$ work is done by A in $10\times\dfrac{2}{3}=6\dfrac{2}{3}$ days

10. **(b)** (A + B)'s 5 days' work = $5\left(\dfrac{1}{25}+\dfrac{1}{20}\right)=\dfrac{45}{100}=\dfrac{9}{20}$

    Remaining work = $\left(1-\dfrac{9}{20}\right)=\dfrac{11}{20}$

    $\dfrac{11}{20}$ of the work would be finished by B in $\dfrac{\frac{11}{20}}{\frac{1}{20}}=11$ days.

11. **(b)** (2M + 7C)'s 1 day's work = $\dfrac{1}{4}$

    $\Rightarrow$ work will be completed by 4 (2M + 7C) = 8 M + 28 C

    Again, (4M + 4C)'s 1 day's work = $\dfrac{1}{3}$

    i.e. 12M + 12C will complete the work.
    $\Rightarrow$ 8M + 28C = 12M + 12C   or M = 4C
    Therefore, 4M + 4C = 5M
    Since 5M complete a work in 3 days,
    1 M will complete it in 15 days.

12. **(c)** Units of work done by A in 1 day = $\dfrac{1}{9}$

    Units of work done by B in 1 day = $\dfrac{15}{90}=\dfrac{1}{6}$

    Hence, B alone will complete the work in 6 days.

13. **(a)** Work done by A and B in 5 days = $\left(\dfrac{1}{10}+\dfrac{1}{15}\right)\times5=\dfrac{5}{6}$

    Work remaining = $1-\dfrac{5}{6}=\dfrac{1}{6}$

    $\therefore$ C alone can do the work in 6 × 2 = 12 days

    Ratio of their share work = $\dfrac{5}{10}:\dfrac{5}{15}:\dfrac{2}{12}=3:2:1$

    Share of wages = ₹ 225, ₹ 150, ₹ 75.

14. **(b)** In one hr. B finishes $\dfrac{1}{20}$ of the work.

    In one hr. A finishes $\dfrac{1}{20}\times\dfrac{3}{2}=\dfrac{3}{40}$ of the work.

    A+B finish $\dfrac{2+3}{40}=\dfrac{1}{8}$ of the work in 1 hr.
    Both of them will take 8 hrs. to finish the work.

15. **(b)**

Men	Working hours	Days	Work
15	8	12	1
$x+\dfrac{15}{2}+\dfrac{5}{2}$	6	30	$\dfrac{9}{4}$

Using $M_1T_1W_2 = M_2T_2W_1$, we get

$15\times(8\times12)\times\dfrac{9}{4}=(x+10)(6\times30)\times1$

$\Rightarrow x + 10 = \dfrac{8\times12\times9}{2\times6\times4}=18$

$\Rightarrow$ x = 18 – 10 = 8
Hence, 8 men must be associated

16. **(a)** Let originally there were x men in the group. Therefore, (x – 12) men did the job in 32 days.
    $\Rightarrow$ 20x = 32 (x – 12)   or   x = 32

17. **(a)** Let the daily wages of the worker be ₹ x. Then,

    $18x+\dfrac{8\times x}{2}-15\times4=1700$

    or 22 x = 1760
    or x = 80
    Total salary for the month = 80 × 30 = ₹ 2400

18. **(d)** Let Rohit, Harish and Sanjeev type a, b and c pages per hour respectively, then,

    $a + b + c = \dfrac{216}{4}=54$ .... (i)

    and c – b = b – a   .... (ii)
    again, 5c = 7a (given)   .... (iii)
    Solving (i), (ii) and (iii), we have, a = 15, b = 18 and c = 21

19. **(a)** 50 men complete 0.4 work in 25 days.

    Applying the work rule, $m_1\times d_1\times w_2 = m_2\times d_2\times w_1$

    we have, $50\times25\times0.6 = m_2\times25\times0.4$

    or $m_2 = \dfrac{50\times25\times0.6}{25\times0.4}=75\,\text{men}$

    Number of additional men required = (75 – 50) = 25

20. **(c)** Let C completes the work in x days.

    Work done by (A + B) in 1 day = $\dfrac{1}{10}$

    Work done by (B +C) in 1 day = $\dfrac{1}{18}$

    A's 5 days' work + B's 10 days' work + C's 15 days' work = 1

    or   (A + B)'s 5 days' work + (B + C)'s 5 days' work + C's 10 days' work = 1

    or $\dfrac{5}{10}+\dfrac{5}{18}+\dfrac{10}{x}=1$ or x = 45 days

21. (b) Remaining work $1 - \left(\dfrac{1}{3} + \dfrac{2}{9}\right) = \dfrac{9-(3+2)}{9} = \dfrac{4}{9}$

4 men + 10 women do 1 work in 12 days.
6 men + 12 women do 1 work in 9 days.
48 men + 120 women = 54 men + 108 women
$\Rightarrow$ 6 men = 12 women
$\Rightarrow$ 1 men = 2 women

∴ In 12 days 1 work requires 9 men
∴ In 1 day 1 work requires 9 × 12 men

∴ In 3 days 1 work requires $\dfrac{9 \times 12}{3}$ men

∴ In 3 days $\dfrac{4}{9}$ work requires $\dfrac{9 \times 12 \times 4}{3 \times 9} = 16$ men

There are 6 men and 12 women or (12 men equivalent)
So, 4 men equivalent is required additionally
∴ 8 women are needed to finish the work.

22. (c) A takes 12 days to finish the work.
C takes 6 days
B takes 18 days

1 day's work of A $= \dfrac{1}{12}$ part; B $= \dfrac{1}{18}$ part; C $= \dfrac{1}{6}$ part

In three days AB, BC & CA will do

$\dfrac{12+18}{12 \times 18} + \dfrac{18+6}{6 \times 18} + \dfrac{12+6}{6 \times 12} = \dfrac{11}{18}$ part

So, in 6 days they will finish $\dfrac{22}{18}$ part of work which is more

than 1.

Difference $= \dfrac{4}{18} = \dfrac{2}{9}$

Last pair is A + C , who do $\dfrac{1}{4}$ work in 1 day.

So, they will do $\dfrac{2}{9}$ work in $\dfrac{8}{9}$ days

$6 - \dfrac{8}{9} = \dfrac{46}{9} = 5\dfrac{1}{9}$ days

Hence, no. of days taken to finish the work $= 5\dfrac{1}{9}$

23. (d) Work done by a woman in 1hr = 1/8
Work done by a man in 1hr = 1/6
Work done by a boy in 1hr = 1/12
Total work done by 9 men in 6 days, 6 hrs each
= 9 × 6 × 6 × 1/6 = 54 units.
∴ No. of days to finish the total work by 12 M, 12 W and 12 B

$$\dfrac{54}{8\left[\left(12 \times \dfrac{1}{6}\right) + \left(12 \times \dfrac{1}{8}\right) + 12 \times \dfrac{1}{12}\right]}$$

$= \dfrac{3}{2}$ days $= 1\dfrac{1}{2}$ days .

24. (a) Let the original schedule be x days.

Number of pieces per day $= \dfrac{360}{x}$.

If job have to be finished in x – 1 days, then no.of pieces per day should be increases by 4. Thus,

$\dfrac{360}{x-1} - \dfrac{360}{x} = 4$

$\Rightarrow 360x - 360x + 360 = 4(x-1)x \Rightarrow 360 = 4x^2 - 4x$

$\Rightarrow 4x^2 - 4x - 360 = 0 \Rightarrow (x-10)(x+9) = 0$

$\Rightarrow x = 10, -9; x = 10$ (–9 is not possible)
Hence the job originally completed in 10 days.

25. (d) Given, 8 children and 12 men complete a work in 9 days.
Also, given each child takes twice the time taken by a man to finish the work.
$\Rightarrow$ Time taken by a man = Time taken by two children
∴ Time taken by 8 children = Time taken by 4 men.
Total 16 men complete a work in 9 days

Thus, 12 men finish the same work in $\dfrac{16 \times 9}{12}$ days

i.e., in 12 days

26. (b) A, B and C's 1 day's work $= \dfrac{1}{10}$

i.e. $\dfrac{1}{A} + \dfrac{1}{B} + \dfrac{1}{C} = \dfrac{1}{10}$ ....(1)

Also, only C's 1 day's work $= \dfrac{3}{100} \times \dfrac{1}{3}$

i.e. $\dfrac{1}{C} = \dfrac{1}{100}$ .... (2)

From the given condition, $\dfrac{5}{A} = \dfrac{4}{B} \Rightarrow B = \dfrac{4}{5}A$ .... (3)

By comparing the ratio given in equ (1) and (2),
We can say C is the lowest worker.
Also, from equation (1) and (3), B is the fastest worker.

∴ We have, $\dfrac{4}{5B} + \dfrac{1}{B} + \dfrac{1}{100} = \dfrac{1}{10}$ {from (1), (2), (3)}

$\Rightarrow \dfrac{9}{5B} = \dfrac{9}{100} \Rightarrow 5B = 100 \Rightarrow B = 20.$

Hence, B completes the entire work in 20 days.

27. (a) Accordingly.

$\Rightarrow \dfrac{1}{8} + \dfrac{1}{6} + \dfrac{1}{x} = \dfrac{1}{3}$

$\Rightarrow \dfrac{1}{x} = \dfrac{1}{3} - \dfrac{1}{8} - \dfrac{1}{6} = \dfrac{8-3-4}{24} = \dfrac{1}{24}$

$x = 24$ day
Boy can finish the job in 24 days.
Now ratio of their share.

$\dfrac{1}{24} : \dfrac{1}{8} : \dfrac{1}{6} = 1 : 3 : 4$

Boy's share $= 600 \times \dfrac{1}{4+3+1} = 600 \times \dfrac{1}{8} = ₹ 75$

28. (a) 3e = 4E

$e = \dfrac{4}{3}E$

$\Rightarrow \dfrac{M_1 H_1}{W_2} = \dfrac{M_2 H_2}{W_2}$

$\Rightarrow \dfrac{8 \times 9}{15} = \dfrac{8 \times 12}{W2}$

$\Rightarrow W2 = 20$

29. (a) C = 2B
B = 2A
A : B = 1 : 2
B : C = 1 : 2
Now, A : B : C
1 : 2 : 4
A + B + C = 5h
7 = 5 h
1 = 35 hr
A = 35 hr

30. (b) Ratio of 1 day work of Kumar and Dinesh, $= \frac{1}{3} : \frac{1}{2} = 2 : 3$

Share of Kumar in wages $= \frac{2}{(2+3)} \times 150 = 2 \times 30 = ₹60$

SPEED TEST 13

1. (d) Part of the tank filled by the three pipes working simultaneously in one hour is $= \frac{1}{5} + \frac{1}{6} - \frac{1}{12} = \frac{17}{60}$

i.e. it takes $\frac{60}{17}$ hours to fill up the tank completely.

Now, $\frac{1}{2}$ of the tank is filled with all the pipes open, simultaneously together in $\frac{60}{17} \times \frac{1}{2} = 1\frac{13}{17}$ hours

2. (d) Let the exhaust tap empties the tank in x minutes.

Then, $\frac{1}{12} + \frac{1}{15} - \frac{1}{x} = \frac{1}{20}$ or $\frac{1}{x} = \frac{1}{12} + \frac{1}{15} - \frac{1}{20}$

or $\frac{1}{x} = \frac{5+4-3}{60} = \frac{6}{60} = \frac{1}{10}$ or x = 10 min

3. (c) Let leakage pipe emplies the tank in x hours.

then, $\frac{1}{5} - \frac{1}{x} = \frac{1}{16}$

$\frac{1}{x} = \frac{1}{5} - \frac{1}{6} = \frac{1}{30}$

∴ x = 30 hours

4. (c) Let pipe A fills the cistern in x minutes.
Therefore, pipe B will fill the cistern in (x + 5) minutes.

Now, $\frac{1}{x} + \frac{1}{x+5} = \frac{1}{6} \Rightarrow x = 10$

Thus, the pipes A and B can fill the cistern respectively in 10 minutes and 15 minutes.

5. (a) Portion of the tank filled by all the pipes together in 1 hour =
$\frac{1}{10} + \frac{1}{12} - \frac{1}{20} = \frac{6+5-3}{60} = \frac{8}{60} = \frac{2}{15}$

Hence, the tank will be filled in $\frac{15}{2}$ hours or $7\frac{1}{2}$ hours.

6. (a) Part of the capacity of the cistern emptied by the leak in one hour $= \left(\frac{1}{6} - \frac{1}{7}\right) = \frac{1}{42}$ of the cistern.

The whole cistern will be emptied in 42 hours.

7. (a) Let it takes t minutes to completely fill the tank.

Now, $\frac{t}{6} + \frac{t}{8} + \frac{t-6}{12} = 1$

or $\frac{4t+3t+2t-12}{24} = 1$ or 9t – 12 = 24

or 9t = 36 or t $= \frac{36}{9} = 4$ min .

8. (a) Work done by 3rd tap in 1 min
$= \frac{1}{15} - \left(\frac{1}{10} + \frac{1}{12}\right) = \frac{-7}{60}$ part

–ve sign denotes that 3rd tap empty the tank.

Since, 3rd tap empty $\frac{7}{60}$ part of the tank in 1 min.

∴ 3rd tap empty the full tank in $\frac{60}{7}$ min . or $8\frac{4}{7}$ min .

≈ 8 min. 34 seconds

9. (e) Let the waste pipe can empty the cistern in x minutes.

∴ $\frac{1}{24} + \frac{1}{30} - \frac{1}{x} = \frac{1}{40}$

$\Rightarrow \frac{1}{x} = \frac{1}{24} + \frac{1}{30} - \frac{1}{40} = \frac{5+4-3}{120}$

Thus, the waste pipe take 20 minutes to empty the full cistern.

10. (a) The two filler tap can fill the $\left(\frac{1}{20} + \frac{1}{30}\right)$ or $\frac{1}{12}$ part of tank in 1 min.

∴ The two filler tap can fill the tank in 12 min.
∴ Half of the tank will be filled in 6 min.
Hence, it took (24 – 6 = 18 min.) to fill the remaining half of the tank when the outlet pump is opened. Thus, the total time required to empty half of the tank

$= \frac{18 \times 6}{18-6} = \frac{18 \times 6}{12} = 9$ minutes

Thus, capacity of the tank $= 100 \times 9 \times 2 = 1800$ litres

11. (c) Time taken by one tap to fill the cistern $= \frac{1}{10}$ hr

and second tap fills the cistern $= \frac{1}{15}$ hr

The time taken by the both tap to fill the cistern

$= \frac{1}{10} + \frac{1}{15} = \frac{3+2}{30} = \frac{5}{30} = \frac{1}{6}$

Thus, both tap fill the cistern in 6 minutes. Now, given when

waste pipe is open, both can fill the cistern in $\frac{1}{18}$ hr .

Time taken by waste pipe to empty the cistern

$= \frac{1}{6} - \frac{1}{18}$ hrs $= \frac{3-1}{18} = \frac{2}{18} = \frac{1}{9}$ minutes

Hence, in 9 minutes waste pipe can empty the cistern.

12. (b) Work of pipe P in 16 minutes $= \frac{1}{24} \times 16 = \frac{2}{3}$

Similarly, work of pipe Q in 16 minutes $= \frac{1}{32} \times 16 = \frac{1}{2}$

∴ Remaining work of pipe Q = $1 - \frac{1}{2} = \frac{1}{2}$

Now, Time taken by pipe P $= \frac{1}{2} \times 24 = 12$ minutes.

Hence, first pipe (ie P) should be turned off after 12 minutes.

13. (b) Work of both tap for 1 hour $= \frac{1}{2} - \frac{1}{3} = \frac{1}{6}$

Hence, both tap will fill the cistern in 6 hours.

14. (c) In 1 hour, empty part $= \frac{1}{8}$ th.

When tap is turned on, then

empty part in 1 hour $= \frac{1}{12}$ th .

∴ Part of cistern emptied, due to leakage in

1 hour $= \frac{1}{8} - \frac{1}{12} = \frac{3-2}{24} = \frac{1}{24}$th

Now, In 1 min, cistern fill = 6 lit

∴ In $\frac{1}{60}$ hr, cistern fill = 6 lit.

∴ Cistern can hold = 6 × 60 × 24 litre = 8640 litre.

15. (c) Part of the tank filled in one hour $= \frac{1}{8} - \frac{1}{16} = \frac{1}{16}$

Hence, the tank will be filled in 16 hours.

16. (c) If both the pumps are opened together, then the tank will be emptied because the working efficiency of pump empting is more than that of the pump filling it. Thus in 1 min net work done

$= \left(\frac{1}{8} - \frac{1}{16} \right) = \frac{1}{16}$ parts

or the tank will be emptied in 16 min

⇒ $\frac{1}{2}$ tank will be emptied in 8 min.

17. (c) Proportion of the volume of the tank filled by both the

pipes in 4 min $= 4 \left(\frac{1}{15} + \frac{1}{10} \right) = \frac{2}{3}$ rd of the tank.

Volume of the tank filled by all the pipes working

together $= \frac{1}{15} + \frac{1}{10} - \frac{1}{5} = \frac{-1}{30}$ i.e. $\frac{1}{30}$ tank is emptied

in 1 min.

∴ $\frac{2}{3}$ rd of the tank can be emptied in $\frac{2 \times 30}{3} = 20$ min

18. (b) Part of tank filled in one minute in given condition

$\frac{1}{60} + \frac{1}{48} - \frac{1}{80} = \frac{4+5-3}{240} = \frac{6}{240} = \frac{1}{40}$

∴ Tank will be completely filled in 40 min.

19. (d) Work of 2 pipes for 1 minute $= \frac{1}{20} + \frac{1}{30} = \frac{1}{12}$

Let x be the time taken by waste pipe to empty the bath tub.

∴ 12 minute's work of 3 pipes $= 12 \left[\frac{1}{20} + \frac{1}{30} - \frac{1}{x} \right]$

Now, according to the question

$12 \left[\frac{1}{20} + \frac{1}{30} - \frac{1}{x} \right] = 3 \left[\frac{1}{20} + \frac{1}{30} \right] = 1$

⇒ $\frac{15}{20} + \frac{15}{30} - 1 = \frac{12}{x}$ ⇒ $\frac{15}{60} = \frac{12}{x}$

⇒ $x = \frac{12 \times 60}{15} = 48$ min

20. (a) Filling done by all 3 pipes in 3 minutes

$\frac{3}{20} + \frac{3}{10} + \frac{3}{30} = \frac{11}{20}$

Filling done by 2nd pipe in 3 minutes $= \frac{3}{10}$

So, required ratio $= \frac{\frac{3}{10}}{\frac{11}{20}} = \frac{6}{11}$

21. (b) Filling done by pipe A and B in 1 hour $= \frac{1}{12} + \frac{1}{15} = \frac{3}{20}$

Filling done by pipe A and C in 1 hour $= \frac{1}{12} + \frac{1}{20} = \frac{2}{15}$

Filling done in first 2 hour $= \frac{3}{20} + \frac{2}{15} = \frac{17}{60}$

Filling done in 6 hour $= \frac{17}{60} \times 3 = \frac{51}{60}$

Remaining filling $= 1 - \frac{51}{60} = \frac{3}{20}$

Now in 7th hour, filling done by A and B, $= \frac{\frac{3}{20}}{\frac{3}{20}} = 1$ h

So total time = 7 hours

22. (c) Capacity of tank = 2400 m³.
Let the emptying capacity of pump = x m³/min
then filling capacity of pump = (x – 10) m³/min.
then according to problem.

$\frac{2400}{x-10} - \frac{2400}{x} = 8$

2400 x – 2400 (x – 10) = 8 (x) (x – 10)
⇒ 2400x – 2400x + 24000 = 8x² – 80x
⇒ 8x² – 80x – 24000 = 0
⇒ x² – 10x – 3000 = 0
⇒ (x – 60) (x + 50) = 0
x = 60
x ≠ – 50
Filling capacity of pump = 60 – 10 = 50 m³/min.

23. (c) Part of cistern filled by A and B in 5 min.

$= 5 \times \left(\frac{1}{12} + \frac{1}{15} \right) = \frac{45}{60} = \frac{3}{4}$

part of cistern emptied by A. B. C in 1 min.

$= \frac{1}{6} - \frac{1}{12} - \frac{1}{15} = \frac{1}{60}$

Now required time

$60 \times \frac{3}{4} = 45$ min

24. (d) Let the no. of pipe filling the tank = n
and no. of pipe empty the tank = 8 – n
Part fo tank fills by one filling pipe in 1 h = 1/8
Part of tank empty by one empty pipe in 1 h = 1/6
then according to question.

$\frac{8-n}{6} - \frac{n}{8} = \frac{1}{6}$

⇒ 8 (8 – n) – 6n = 8
⇒ 64 – 8n – 6n = 8
⇒ 14n = 56
n = 4

25. (b) Let the inlet pipe can fills the tank in t h
According to question.

$$\frac{1}{6} - \frac{1}{t} = \frac{1}{8}$$

$$\frac{1}{t} = \frac{1}{6} - \frac{1}{8} = \frac{2}{6 \times 8} = \frac{1}{24}$$

$t = 24$ h

Inlet pipe fill the 4 L in one minute
∴ 1 minute — 4 L

∴ $\frac{1}{60}$ h — 4 L

∴ 24 h — $60 \times 4 \times 24 = 5760$ L

26. (c) Part of the tank drained out in an hour $= \frac{1}{3} - \frac{1}{\frac{7}{2}}$

$$= \frac{1}{3} - \frac{2}{7} = \frac{7-6}{21} = \frac{1}{21}$$

∴ Leak will drain the tank in 21 hours.

27. (b) Ratio of time taken

$$= \frac{1}{1^2} \cdot \frac{1}{\left(\frac{4}{3}\right)^2} : \frac{1}{2^2} = 1 : \frac{9}{16} : \frac{1}{4} = 16 : 9 : 4$$

∴ Time taken by largest pipe $= \frac{3660}{60} = 61$ minutes

Time taken by smallest pipe

$$= \frac{16 \times 61}{4} = (4 \times 61) \text{ minutes}$$

Time taken by larger pipe $= \frac{9 \times 61}{4}$ minutes

∴ Part of the tank filled in 1 minutes

$$= \frac{1}{61} + \frac{1}{4 \times 61} + \frac{4}{9 \times 61} = \frac{36 + 9 + 16}{36 \times 61} = \frac{1}{36}$$

∴ Time taken = 36 minutes

28. (b) Work of inlet pipe in an hour $= \frac{1}{8} - \frac{1}{12} = \frac{1}{24}$

Without leak, the inlet pipe will fill in the tank in 24 hours.
∴ Capacity of the tank $= 4 \times 24 \times 60 = 5760$ litres

29. (d) Part of the tank filled in 2 hours $= \frac{1}{2} - \frac{1}{5} = \frac{7}{10}$

Part of the tank emptied in an hour when all three are

opened $= \frac{1}{4} + \frac{1}{5} - \frac{1}{2} = -\frac{1}{20}$

∴ Time taken $= \frac{7}{10} \times 20 = 14$ hours

It means 5 p.m.

SPEED TEST 14

1. (d) Cost price of 30 kg wheat = 30 × 45 = ₹ 1350
Cost price of 30 kg wheat + 25% profit = Selling Price
= 1350 × 1.25 = ₹ 1687.50
40% of 30 kg wheat = 30 × 0.40 = 12 kg
Selling price of 12 kg wheat = 12 × 50 = ₹ 600

Remaining 18 kg wheat's selling price
= 1687.50 – 600 = ₹ 1087.50

∴ Selling price of 1 kg wheat = $\frac{1087.50}{18}$ = ₹ 60

2. (e) Cost of one apple = ₹ 25
∴ Cost of 12 apples = 25 × 12 = ₹ 300
Amount paid = ₹ 250
Discount = 300 – 250 = ₹ 50

% Discount = $\frac{50 \times 100}{300}$ = 17% (approx.)

3. (a) Suppose cost price = ₹ x
90% of 15000 = 108% of x

$$15000 \times \frac{90}{100} = x \times \frac{108}{100}$$

$$150 \times 90 = x \times \frac{108}{100}$$

$$x = \frac{150 \times 90 \times 100}{108} = ₹ 12500$$

4. (b) Total cost price = 11250 + 150 + 800 = ₹ 12200

Selling price = $12200 \times \frac{115}{100}$ = ₹ 14030

5. (d) Cost price of watch = $\frac{4080 + 3650}{2} = \frac{7730}{2} = 3865$

6. (c) The cost price of an article = $\frac{996 + 894}{2} = \frac{1890}{2} = ₹ 945$

7. (d) Let the CP of the horse be ₹ x, then CP of the carriage = ₹ (8000 – x)
SP of horse = 1.1 x
SP of carriage = 0.9(8000 – x)

Now, $1.1x + 0.9(8000 - x) = 8000 \times 1.025 = 8200$

⇒ $1.1x + 7200 - 0.9x = 8200$

⇒ $0.2x = 1000$ ⇒ x = ₹ 5000

8. (c) Let he sells first grade cycle at a rate of ₹ z per bicycle.

Then, $8z + \frac{22 \times 3}{4}z = 3150 \times 1.4$

⇒ 32z + 66z = 17640

⇒ 98z = 17640 ⇒ z = 180

He should sell the first grade bicycles at a rate of ₹ 180.

9. (b) Let the original price of a screw driver and a hammer be ₹ 100 each.
Then, price of 3 screw drivers and 3 hammers = ₹ 600
Now, after increase of 5%, the price of 3 screw drivers
= ₹ 315
And after 3% increase the price of 3 hammers = ₹ 309
Increased price of 3 hammers and 3 screw drivers
= ₹ 624

Therefore, % increase in price

$$= \frac{624 - 600}{600} \times 100 = \frac{24}{600} \times 100 = 4\%$$

10. (c) Let the C.P. for the manufacturer be ₹ 100.
Then, C.P. for the wholesaler = ₹ 118

C.P. for the retailer = $118 \times \frac{120}{100}$ = ₹ 141.60

C.P. for the customer = $141.60 \times \frac{125}{100}$ = ₹ 177

∴ If the C.P. for the customer is ₹ 177, then the C.P. for the manufacturer is ₹ 100.

If the C.P. for the customer is ₹ 30.09, then the C.P. for

manufacturer is $\dfrac{100}{177} \times 30.09 = ₹ 17$

11. **(d)** $750 \times (180\% \text{ of } ₹ 9) + 125 \times (120\% \text{ of } ₹ 9)$
$= 750 \times 16.20 + 125 \times 10.80 = 12150 + 1350 = ₹ 13500$

12. **(a)** Let the cost of 1 computer = ₹ x
∴ cost of 60 computers = ₹ $60x$
Given : 1 computer's cost = 3 (1 printer's cost)

∴ 1 printer's cost = $\dfrac{x}{3}$

Thus, cost of 20 printers = $\dfrac{20x}{3}$

∴ Total cost = $60x + \dfrac{20x}{3} = \dfrac{200x}{3}$

Let % of total cost = Total cost of printer

$\Rightarrow \dfrac{20x}{3} \% = \dfrac{200x}{3} \Rightarrow 10\%$

13. **(c)** Let the quantity of two varieties of tea be 5x kg and 4x kg, respectively.
Now, SP = 23 × 9x = 207x
and CP = 20 × 5x + 25 × 4x = 200x

Profit % = $\dfrac{7x}{200x} \times 100 = 3.5\%$

14. **(a)** Let the CP of the sunglasses be ₹ 100.
Now, SP = ₹ 125
New CP = ₹ 75
New SP = 75 × 1.4 = ₹ 105
Thus, if he sells for ₹ (125 – 105) = 20 less, then CP = 100
If he sells for ₹ 10 less, then

CP = $\dfrac{100}{20} \times 10 = $ Rs 50

15. **(b)** Price of the article after first discount, $65 - \left(65 \times \dfrac{10}{100}\right)$

= ₹ 58.5
Therefore, the second discount

= $\dfrac{58.5 - 56.16}{58.5} \times 100 = 4\%$

16. **(b)** Suppose he has x litre of milk in total.
Thus, we have 5x + 200 = 6x – 150
or, $x (6 – 5) = 200 + 150$
∴ $x = 350$ litres.
∴ each vessel contains = 35 litres

17. **(a)** Let the cost price of both the motor cycle = ₹ x
First is sold at 15% profit
∴ S.P. of first motorcycle = 1.15x
Since, Net profit is 20% on one motor cycle
∴ Net profit = 40% (on both the cycle)
∴ S.P of second motorcycle = 1.25x
But according to the question
1.25x = 4800 + 1.15x
∴ .1x = 4800 ⇒ x = 48000.

18. **(d)** Let marked price = ₹ 100
According to question,
List price = ₹ 75
Then, selling price = 100 + 25 = ₹ 125

Percent Profit = $\dfrac{125 - 75}{75} \times 100 = 66.67$

19. **(d)** Let the rice sold at 10% profit be x kg
Since, trader has 50 kg rice.
and (50 – x) kg rice sold at 5% loss.

∴ $\left[x \times \dfrac{100 + 10}{100} \right] + \left[(50 - x) \times \dfrac{100 - 5}{100} \right]$

since, trader gains 7% on the whole

∴ $\dfrac{110x}{100} + (50 - x) \times \dfrac{95}{100} = (100 + 7) \times \dfrac{50}{100}$

$\Rightarrow \dfrac{11x}{10} + 47.5 - .95x = \dfrac{107}{2}$

$\Rightarrow 1.1x + 47.5 - 0.95x = 53.5$
$\Rightarrow 0.15x = 53.5 - 47.5$
$\Rightarrow 0.15x = 6$

$\Rightarrow x = \dfrac{6}{0.15} = 40 \text{ kg}$

Rice sold at 10% gain was 40 kg and 5% loss was 10 kg

20. **(a)** In 1st case the amount is ₹ 12000
In 2nd case, let the present value of money be x

$\dfrac{x \times 18 \times 8}{12 \times 100} + x = 12880$

$0.12x + x = 12880$

$x = \dfrac{12880}{1.12} = \text{Rs } 11500$

∴ ₹ 12000 in cash is the better offer.

21. **(a)** Cost price of transistor = 320

selling price = $320 + 320 \times \dfrac{15}{100} = 368$

then marked price = 368 + 32 = 400
If the transistor is sold at marked price.

profit % = $\dfrac{400 - 320}{320} \times 100\% = 25\%$

22. **(a)** Let the number of toffees in each packet = n
total number of toffees = 2n

Total cost of both packets = $5n + \dfrac{13n}{3} = \dfrac{28n}{3}$

and selling price of total toffees = $\dfrac{70}{12} \times 2n = \dfrac{35n}{3}$

Gain = $\dfrac{35n}{3} - \dfrac{28n}{3} = \dfrac{7n}{3}$

Gain % = $\dfrac{\dfrac{7n}{3} \times 100}{\dfrac{28n}{3}} = 25\%$

23. **(a)** Let the CP be = ₹ 100
Actual SP = 100 + 20% of 100 = ₹ 120

∴ Marked Price = $120 \times \dfrac{100}{100 - 4} = \dfrac{120 \times 100}{96} = ₹125$

Marked Price is $\dfrac{125 - 100}{100} \times 100$

= 25% more than the cost price.

24. **(a)** Suppose the cost price of the goods is ₹ 100.

Then, selling price in the first case = $100 \left(\dfrac{120}{100}\right) = ₹ 120$

10. (a)

	Speed	Starting time
A	3 km	1 o'clock
B	4 km	2 o'clock
C	5 km	3 o'clock

A takes a lead of 3 km from B.
Relative speed of A and B = 4 – 3 = 1 km/hr
Thus, A and C are 12 – 10 = 2 apart at 5 o'clock.

∴ B catches A after $\frac{3}{1}$ = 3 hrs, i.e., at 2 + 3 = 5 o'clock.

∴ A returns at 5 o'clock and from a distance of 3 × 4 = 12 km from Poona.
In the mean time C covers a distance of 5 × 2 = 10 km from Poona.
Thus, A and C are 12 – 10 = 2 km apart at 5 O'clock.
Relative speed of A and C = 3 + 5 = 8 km/hr.

Thus, they meet after $\frac{2}{8}$ $\frac{1}{4}$ hr = 15 min.

Thus, C will get the message at 5.15 o'clock.

11. (b) Distance = $\dfrac{\text{Time difference} \times S_1 \times S_2}{S_1 - S_2}$

Where, S_1 and S_2 are the speeds of the two persons.

∴ distance = $\dfrac{\frac{1}{2} \times 3 \times \frac{15}{4}}{\frac{15}{4} - 3}$ $\frac{15}{2}$ 7.5 km

12. (d) Let the speed of the faster train be x km/h.
⇒ speed of the slower train = (x – 16) km/h

Now, $\dfrac{192}{x}$ $\dfrac{192}{x-16} - 2$ or x = 48 km/h

13. (b) Let the speed of train be x km/hr.

Then, speed of horse transit = $\dfrac{x}{3}$ km/hr

and speed of steamer = $\dfrac{2x}{3}$ km/hr

Now, total time = $\dfrac{120 \times 3}{2x}$ $\dfrac{450}{x}$ $\dfrac{60 \times 3}{x}$ $13\frac{1}{2}$

or $\dfrac{1}{x}$ $\dfrac{27}{2 \times 810}$ $\dfrac{1}{60}$ ∴ $x = 60$ km/hr.

14. (b) Relative speed = 42 – 30 = 12 km/hr = $12 \times \frac{5}{18}$ $\frac{10}{3}$ m/s

Time = $\dfrac{\text{Total length of both the trains}}{\text{Relative speed}}$ $\dfrac{84 \ 60}{\frac{10}{3}}$

= $\dfrac{144 \times 3}{10}$ 43.2 seconds

15. (a) Relative speed of the train and first person

$\dfrac{75}{\frac{15}{2}}$ 10 m/s × $\dfrac{18}{5}$ 36 km/hr

∴ speed of the train = 36 + 6 = 42 km/hr
Now, relative speed of the train and 2nd person

= $\dfrac{75}{27} \times 4$ m/s = $\dfrac{300}{27} \times \dfrac{18}{5}$ 40 km/hr

Shortcut: Speed of 2nd peson = Relative speed of train with respect to 1st peson + Speed of first person – Relative speed of train with respect to 2nd peson

= $\left(\dfrac{75}{\frac{15}{2}} \times \dfrac{18}{5}\right) + 6 - \left(\dfrac{75}{27} \times 4 \times \dfrac{18}{5}\right)$ = 36 + 6 – 40 = 2 km/hr

16. (a) Relative speed of x and y = (500 + 700) = 1200 m/min

Time taken = $\dfrac{4200}{1200}$ 3.5 min

17. (c) Length of the train = Relative speed × time

= $(40 - 25)\left(\dfrac{5}{18}\right) \times 48$ = $\dfrac{15 \times 5 \times 48}{18}$ 200 m

18. (c) Let the speed of train C be x km/h.
At 9 p.m. the train A will have covered a distance of 180 km.
For trains A and B relative speed = (90 – 60) = 30 km/h
Distance between them = 180 km

Time after which they meet = $\dfrac{180}{30}$ 6 hrs
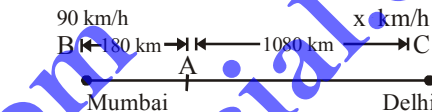
For trains A and C relative speeds = (60 + x) km/h
Distance between them = 1080 km.

Time after which they meet = $\dfrac{1080}{(60 \ x)}$ hrs

As the time of meeting of all the three trains is the same, we have $\dfrac{1080}{(60 \ x)}$ 6

or x = 120 km/h

19. (c) Let the length of train = x m.
We know that, when train and man are moving in the same direction relative speed = Speed o Train – Speed of Man
∴ Speed of train = Relative speed + Speed of man
Now,

Speed of train in two cases = $\dfrac{x}{9}$ $2\left(\dfrac{5}{18}\right)$ $\dfrac{x}{10}$ $4\left(\dfrac{5}{18}\right)$

or, $\dfrac{x}{9} - \dfrac{x}{10} = \dfrac{10}{9} - \dfrac{5}{9}$ or, $\dfrac{x}{90}$ $\dfrac{5}{9}$

∴ $x = \dfrac{5}{9} \times 90$ 50 m.

20. (b) Time taken by the boat during downstream

journey = $\dfrac{50}{60}$ $\dfrac{5}{6}$h

Time taken by the boat in upstream journey = $\dfrac{5}{4}$h

Average speed = $\dfrac{2 \times 50}{\frac{5}{6} \ \frac{5}{4}}$ $\dfrac{100 \times 24}{50}$ 48 mph

21. (a) Let the distance be x km.
Now, upstream speed = 9 – 3 = 6 km/hr.
and downstream speed = 9 + 3 = 12 km/hr.
Total time taken in upstream and downstream journey

= $\dfrac{x}{6}$ $\dfrac{x}{12}$ 3

or, $\dfrac{18x}{72}$ 3 ∴ $x = \dfrac{3 \times 72}{18}$ 12 km

22. (b) Let the distance between X and Y be x km. Then, the speed of A is $\frac{x}{4}$ km/h and that of B is $\frac{2x}{7}$ km/h.

$$\xleftarrow{\quad\text{x km}\quad}$$

$$X \xrightarrow{\frac{x}{4}\text{ km/h}} \quad \xleftarrow{\frac{2x}{7}\text{ km/h}} Y$$
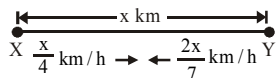
Relative speeds of the trains

$$= \left(\frac{x}{4} + \frac{2x}{7}\right) = \frac{15x}{28}\text{ km/h}$$

Therefore the distance between the trains at 7 a.m.

$$= x - \frac{x}{2} = \frac{x}{2}\text{ km}$$

Hence, time taken to cross each other

$$= \frac{\frac{x}{2}}{\frac{15x}{28}}hr = \frac{x}{2}\times\frac{28}{15x}hr = \frac{14}{15}\times 60\min = 56\min$$

Thus, both of them meet at 7.56 a.m.

23. (a) The Quicker formula given in Q.3 can be written in the form:

$$\text{Total time} = \frac{2\times\text{Distance}\times\text{Speed in still water}}{(\text{Speed in still water}) - (\text{Speed in current})^2}$$

$$= \frac{2\times 22.5\times 6}{(6)^2 - (1.5)^2} = 8\text{ hrs.}$$

24. (c) Let the speed of train be x km/h and actual time taken is t hrs.
In first case, distance = $(x+6)(t-4)$ km ...(i)
In second case, distance = $(x-6)(t+6)$ km ...(ii)
Also distance = xt from (i) and (ii)
$(x+6)(t-4) = (x-6)(t+6)$ ...(iii)

$$\Rightarrow \frac{x+6}{x-6} = \frac{t+6}{t-4} \Rightarrow \frac{x}{6} = \frac{2t+2}{10}$$

$$\Rightarrow \frac{x}{6} = \frac{t+1}{5}$$

$$\Rightarrow 5x = 6t + 6 \Rightarrow 5x - 6t = 6$$

$$\Rightarrow t = \frac{5x-6}{6}$$

Putting the value of 't' in eqn. (ii), we get
x = 30 km/hr
∴ t = 24 hr
Thus, distance = 30 × 24 = 720
Alternatively :
The speed difference between slow-speed and fast-speed train is 12 km/hr. and the time difference is 10 hrs. Speed difference of 12km/hr. hints that the distance should be divisible by 12. Only option (c) is divisible by 12.
By conventional method following equation will help solve the problem.

$$\frac{d}{s} - \frac{d}{s+12} = 10$$

Easier method is as follows. Speed difference of 12 km/hr hints that the distance should be divisible by 12. Only option (c) is divisible by 12.

$$\frac{720}{12} = 60\text{hrs.}, \frac{720}{24} = 30\text{hrs.}, \frac{720}{36} = 20\text{hrs.}$$

So, fastest speed is 36km/hr. slowest speed is 24km/hr.

25. (a) Speed of first train = 50 km/hr.

Speed of second train = $\frac{400}{7}$ km/hr.

At 8:00 AM distance between two trains is 100 kms. Relative velocity

$$= 50 + \frac{400}{7} = \frac{350 + 400}{7} = \frac{750}{7}\text{ km/h}$$

Time taken $= \frac{100\times 7}{750}\times 60 = 56\min$. Hence, the two trains meet each other at 8:56 AM.

26. (a) Let the speed of A in still water = x km/hr

Then, downstream speed = $\left(x + \frac{9}{4}\right)$km/hr

and upstream speed = $\left(x - \frac{9}{4}\right)$km/hr

Now, distance = $6\left(x + \frac{9}{4}\right) = 9\left(x - \frac{9}{4}\right)$

or, $6x + \frac{27}{2} = 9x - \frac{81}{4}$ or $3x = \frac{135}{4}$

$$\therefore x = \frac{135}{4\times 3} = \frac{45}{4} = 11\frac{1}{4}\text{ km/hr}$$

27. (c) Let the speed of boat in still water = x km/hr
Speed of current = 4 km/hr.
Speed upstream = $(x-4)$ km/hr
Speed downstream = $(x+4)$ km/hr

Now, $\frac{6}{x-4} - \frac{6}{x+4} = 2$

or, $\frac{6(x+4) - (x-4)}{x^2 - 16} = 2$

$2x^2 - 32 = 6x + 6x$
or, $x^2 - 6x - 16 = 0$
or, $(x-8)(x+2) = 0$
∴ $x = 8$ or -2.
We reject the negative value.
∴ Speed of boat in still water = 8 km/hr

28. (e)

29. (b) Let the distance it travelled at the speed of 160 kmh⁻¹ be 'x' km.

$$\therefore \frac{x}{160} + \frac{(560-x)}{40} = 9.5$$

$$\frac{x + 4(560-x)}{160} = 9.5$$

$x + 2240 - 4x = 1520$
∴ 3x = 720
∴ x = 240 km

30. (b) Let the speed of the train be S km/hr and distance travelled be D km.

Total time taken normally $= \frac{D}{S}$ hrs

1st case

$$\frac{150}{S} + \frac{(D-150)\times 5}{3S} = \frac{D}{S} + 8$$

$$\Rightarrow 450 + 5D - 750 = 3D + 24S$$

$$\Rightarrow 2D - 24S = 750 - 450 = 300 \quad .....(1)$$

2nd case

$$\frac{510}{S} + \frac{(D-510)\times 5}{3S} = \frac{D}{S} + 4$$

$\Rightarrow 1530 \quad 5D - 2550 \quad 3D \quad 12S$

$\Rightarrow 2D - 12S \quad 2550 - 1530 = 1020 \quad ....(2)$

From (1) and (2) we get

$12S = 720 \Rightarrow S = 60 \text{ km/hr.}$

$\Rightarrow 2D = 300 + 24S = 300 + 24 \times 60 = 1740$

$\Rightarrow D \quad \dfrac{1740}{2} \quad 870 \text{ km}$

31. (b) Let the Speed of faster train be x and speed of slower train be y.

Now, when both the train move in same direction their relative speed = x − y

Now, total distance covered = 130 + 110 = 240

Now, distance = speed × time

$\therefore 240 = (x - y) \times 60 \quad (\because 1 \min \quad 60 \sec)$

$\Rightarrow x - y = 4 \qquad \ldots(1)$

When the trains move in opposite direction then their relative speed = x + y

$\therefore 240 = (x + y) \times 3$

$\Rightarrow 80 = x + y \qquad \ldots(2)$

on solving eqⁿ (1) and (2), we get x = 42 m/sec and y = 38 m/sec

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SPEED TEST 16

1. (d) $2000 = \dfrac{P \times 4 \times 5}{100}$

$\therefore P = 10000$

Now, $CI = 10000\left[\left(1 + \dfrac{4}{100}\right)^2 - 1\right] = 10000 \times 0.0816 = 816$

2. (a) Amount $= 11200 + \dfrac{11200 \times 8.5 \times 3}{100} \quad 11200 \quad 2856 = 14056$

3. (d) In question principle and simple interests are not given.

4. (d) Principle $= \dfrac{8730 \times 100}{6 \times 3} \quad 48500$

Compound Interest $= 48500\left[\left(1 + \dfrac{6}{100}\right)^2 - 1\right]$

$= 48500 \times 0.1236 = ₹ 5994.60$

5. (c) $A \quad P\left(1 \quad \dfrac{r}{100}\right)^n \quad 4000\left(1 \quad \dfrac{5}{100}\right)^2$

$= 4000 \times \dfrac{21}{20} \times \dfrac{21}{20} = ₹ 4410$

6. (a) $R \quad \dfrac{S.I \times 100}{P \times T} \quad \dfrac{10230 \times 100}{27500 \times 3} \quad 12.4\% \text{ p.q.}$

$CI = P\left[\left(1 + \dfrac{r}{100}\right)^t - 1\right]$

$= 27500\left[\left(1 + \dfrac{12.4}{100}\right)^3 - 1\right] = 27500\left[\left(\dfrac{112.4}{100}\right)^3 - 1\right]$

$27500\left[\dfrac{\begin{array}{c}112.4 \times 112.4 \times 11.24 - 100 \\ \times 100 \times 100\end{array}}{100 \times 100 \times 100}\right]$

$27500\left[\dfrac{1420034.624 - 1000000}{1000000}\right]$

$27500\left[\dfrac{420034.624}{1000000}\right]$

$= 27500 \times 0.42 = ₹ 11550$

7. (e) Rate per annum $= \dfrac{30240 \times 100}{84000 \times 3}\% \quad 12\%$

$\therefore$ Compound Interest $= 84000\left[\left(1 + \dfrac{12}{100}\right)^3 - 1\right]$

$= 84000\left[\left(1 + \dfrac{3}{25}\right)^3 - 1\right] = 84000\left[\left(\dfrac{28}{25}\right)^3 - 1\right]$

$84000\left[\dfrac{\begin{array}{c}28 \times 28 \times 28 \\ -25 \times 25 \times 25\end{array}}{25 \times 25 \times 25}\right] \quad 84000\left[\dfrac{21952 - 15625}{15625}\right]$

$= 84000 \times \dfrac{6327}{15625} = ₹ 34013.95$

8. (a) Suppose the principle is ₹ x.

$x\left[\dfrac{6}{100} \quad \dfrac{6.5}{100} \quad \dfrac{7.0}{100} \quad \dfrac{7.5}{100}\right] \quad 3375$

$\dfrac{x}{100} \times 27 \quad 3375 \quad \therefore \quad x \quad \dfrac{3375 \times 100}{27} = ₹ 12500$

9. (d) $R \quad \dfrac{12000 \times 100}{40000 \times 3}\left[R \quad \dfrac{S.I. \times 100}{P \times T}\right] = 10\%$

$CI = P\left[\left(1 + \dfrac{r}{100}\right)^t - 1\right] = 40000\left[\left(1 + \dfrac{10}{100}\right)^3 - 1\right]$

$= 40000\left[\left(\dfrac{11}{10}\right)^3 - 1\right] \quad 40000\left[\dfrac{1331 - 1000}{1000}\right]$

$40000\left[\dfrac{31}{1000}\right] = 40 \times 331 = ₹ 13240$

10. (d) Suppose at the rate of 12% p.a. he borrowed ₹ x.

$36480 - 30000 = \dfrac{x \times 12 \times 2}{100} \quad \dfrac{(30000 - x) \times 10 \times 2}{100}$

$6480 = \dfrac{24x}{100} \quad \dfrac{600000 - 20x}{100}$

$6480 \times 100 = 24x + 600000 - 20x$

$648000 - 600000 = 4x$

$4x = 648000 - 600000 = 48000$

$x \quad \dfrac{48000}{4} = ₹ 12000$

11. (a) $R = \dfrac{6800 \times 100}{17000 \times 4} \quad 10\%$

$C.I. = 17000\left[\left(1 + \dfrac{10}{100}\right)^4 - 1\right] = 17000\left[\left(\dfrac{11}{40}\right)^4 - 1\right]$

$17000\left[\dfrac{11 \times 11 \times 11 \times 11 - 10 \times 10 \times 10 \times 10}{10 \times 10 \times 10 \times 10}\right]$

$17000\left[\dfrac{14641 - 10000}{10000}\right]$

$\dfrac{17000 \times 4641}{10000} = ₹ 7889.7$

12. (b) Ratio of two parts $= r_2 t_2 : r_1 t_1 = 54 : 50 = 27 : 25$

∴ Sum lent out at 10% $= \dfrac{2600}{52} \times 27 = ₹ 1350$

13. (a) Let the rate of interest $= r$ %

∴ times $= r$ years

Now, $\dfrac{S}{16} = \dfrac{S \times r \times r}{100}$

or, $r^2 = \dfrac{100}{16}$ ∴ $r = \dfrac{25}{4} = 6\dfrac{1}{4}$%

14. (d) Let the money borrowed be ₹ x and the rate of interest charged $= r$%

Time = 2 years

Now, $4000 = \dfrac{x \times r \times 2}{100}$

$\Rightarrow rx = 200000$ ....(i)

Again, $x \left(1 + \dfrac{r}{100}\right)^2 - x = 4200$

$\Rightarrow \dfrac{xr^2}{10000} + \dfrac{2xr}{100} = 4200$

or $20r + 4000 = 4200$ [from (i)]

or $r = 10\%$

15. (a) Let the amount given 4% per annum be ₹ x.

then, amount given at 5% per annum $= ₹ (1200 - x)$

Now, $\dfrac{x \times 4 \times 2}{100} + \dfrac{(1200 - x) \times 5 \times 2}{100} = 110$

$\Rightarrow x = ₹ 500$

And, the amount given at 5% per annum

$= ₹ (1200 - x) = ₹ (1200 - 500) = ₹ 700$

16. (d) Quicker Maths :

$\text{Sum} = \dfrac{\text{Difference in Interest} \times 100}{\text{Times} \times \text{Difference in rates}}$

or, $500 = \dfrac{2.5 \times 100}{2 \times x}$ ∴ $x = \dfrac{2.5 \times 100}{2 \times 500} = 0.25\%$

17. (b) Suppose ₹ x was lent at 6% per annum.

Thus, $\dfrac{x \times 6 \times 5}{100} + \dfrac{(7000 - x) \times 4 \times 5}{100} = 1600$

$\dfrac{3x}{10} + \dfrac{7000 - x}{5} = 1600$

or, $\dfrac{3x + 14,000 - 2x}{10} = 1600$

∴ $x = 16000 - 14000 = ₹ 2000$

18. (b) Given $8P = P\left(1 + \dfrac{r}{100}\right)^3$

Where P = Principal amount,

r = Compound interest rate

$\Rightarrow r = 100\%$

∴ let the time in which the principal amount becomes 16 times be n

Then $16P = P\left(1 + \dfrac{100}{100}\right)^n$ $\Rightarrow 16 = 2^n \Rightarrow n = 4$yrs.

19. (b) After 2 years, amount returned to Ramu

$= 400 + \dfrac{400 \times 5 \times 2}{100} = ₹ 440$

Amount returned to Arun = 2% of ₹ 440 = ₹ 8.80

20. (a) Let the sum be ₹ x.

∴ Interest $= \dfrac{x \times 8 \times 4}{100} = \dfrac{32x}{100}$

$x - \dfrac{32x}{100} = \dfrac{68x}{100}$

When interest is $\dfrac{68x}{100}$ less, the sum is ₹ x.

∴ when interest is 340 less, the sum is $\dfrac{x}{68x} \times 100 \times 340 = ₹ 500$

21. (a) $594.5 = 5800\left[\left(1 + \dfrac{r}{100}\right)^2 - 1\right] = \dfrac{594.5}{5800} = \left(1 + \dfrac{r}{100}\right)^2 - 1$

$0.1025 + 1 = \left(1 + \dfrac{r}{100}\right)^2$

$1.1025 = \dfrac{(100 + r)^2}{10000}$

$1.1025 \times 10000 = (100 + r)^2$

$11025 = (100 + r)^2$.

$105 = 100 + r$

$r = 5\%$

22. (b) Suppose principle is P

∴ Compound interest $= P\left[\left(1 + \dfrac{r}{100}\right)^t - 1\right]$

$1414.40 = P\left[\left(1 + \dfrac{8}{100}\right)^2 - 1\right]$

$1414.40 = P [1.1664 - 1]$

$P = \dfrac{1414.40}{0.1664} = ₹ 8500$

So A = P + SI = 8500 + 1414.40 = ₹ 9914.40

23. (d) Compound interest $= 7400\left[\left(1 + \dfrac{27}{200}\right)^2 - 1\right]$

$= 7400\left[\left(\dfrac{227}{200}\right)^2 - 1\right] = 7400\left[\dfrac{227 \times 227 - 200 \times 200}{200 \times 200}\right]$

$= 7400\left[\dfrac{51529 - 40000}{40000}\right] = 7400 \times \dfrac{11529}{40000}$

$= 2132.865 = ₹ 2132.87$

24. (c) C.I. $= P\left[\left(1 + \dfrac{r}{100}\right)^T - 1\right]$

$4676.25 = 14500\left[\left(1 + \dfrac{r}{100}\right)^2 - 1\right]$

$\Rightarrow \dfrac{4676.25}{14500} = \left(1 + \dfrac{r}{100}\right)^2 - 1$

$\Rightarrow \dfrac{4676.25}{14500} + 1 = \left(1 + \dfrac{r}{100}\right)^2$

$\Rightarrow \dfrac{4676.25 \times 14500}{14500} = \left(1 + \dfrac{r}{100}\right)^2$

$\Rightarrow \sqrt{\dfrac{19176.25}{14500}} = 1 + \dfrac{r}{100} \Rightarrow \sqrt{1.3225} = 1 + \dfrac{r}{100}$

$$\Rightarrow \sqrt{\frac{13225}{10000}} = 1 + \frac{r}{100}$$

$$\Rightarrow \frac{115}{100} = 1 + \frac{r}{100} \Rightarrow \frac{r}{100} = \frac{115}{100} - 1$$

$$\Rightarrow \frac{r}{100} = \frac{115 - 100}{100} \Rightarrow \frac{r}{100} = \frac{15}{100}$$

$$\Rightarrow r = 15\%$$

25. (c) $\text{C. I.} = P\left[\left(1 + \frac{R}{100}\right)^n - 1\right] = 8000\left[\left(1 + \frac{15}{100}\right)^3 - 1\right]$

$$= 8000\left[\left(\frac{115}{100}\right)^3 - 1\right] = 8000\left[\left(\frac{23}{20}\right)^3 - 1\right]$$

$$= 8000\left[\frac{23 \times 23 \times 23 - 20 \times 20 \times 20}{20 \times 20 \times 20}\right]$$

$$= \frac{8000}{8000}[12167 - 8000] = ₹ 4167$$

26. (a) Let A lent ₹ x and B lent ₹ y
Since, A and B together lent out ₹ 81600
$\therefore x + y = 81,600$
Now, given (r) Rate = 4%

$$\therefore 1 + r = 1 + \frac{4}{100} = \frac{26}{25}$$

According to the question, we have

$$\frac{x}{y} = \left(\frac{26}{25}\right)^{3-2} = \frac{26}{25}$$

$\therefore$ Investment made by B $= 81600 \times \frac{25}{51} = 40,000$

27. (c) Let Shyam's share be x
According to question

$$x\left(1 + \frac{5}{100}\right)^9 = 5887 - x\left(1 + \frac{5}{100}\right)^{11}$$

$$\frac{x}{5887 - x} = \left(1 + \frac{5}{100}\right)^2$$

$$\frac{x}{5887 - x} = 1.1025$$

$$x = ₹ 3087$$

28. (e) Required difference $= P\left(\frac{R}{100}\right)^2 = 985\left(\frac{14}{100}\right)^2$

$$= 985 \times \frac{196}{10000} = 19.306$$

29. (a) Let the sum be ₹ x.

Then, $\frac{x \times 4 \times 4}{100} + 57 = x\left\{\left(1 + \frac{5}{100}\right)^3 - 1\right\}$

or, $\frac{4x}{25} + 57 = x \times \frac{1261}{8000}$

or, $x\left[\frac{4}{25} - \frac{1261}{8000}\right] = 57$

or, $x\left[\frac{1280 - 1261}{8000}\right] = 57$

$\therefore x = \frac{57 \times 8000}{19} = ₹ 24000$

30. (d) Difference in amounts = 2977.54 − 2809 = ₹ 168.54
Now, we see that ₹ 168.54 is the interest on ₹ 2809 in one year (it is either simple or compound interest because both are the same for a year).

Hence, rate of interest $= \frac{168.54 \times 100}{2809} = 6\%$

Now, for the original sum,

$$2809 = x\left(1 + \frac{6}{100}\right)^2$$

or, $2809 = x\left(\frac{53}{50}\right)^2$

$\therefore x = \frac{2809 \times 50 \times 50}{53 \times 53} = ₹ 2500$

31. (c) Difference in interest = 236.25 − 225 = ₹ 11.25
This difference is the simple interest over ₹ 225 for one year.

Hence, rate of interest $= \frac{11.25 \times 100}{225 \times 1} = 5\%$

Now, since any particular number of years is not mentioned, we cannot find the sum.

32. (a) $10000 = x\left(1 + \frac{25}{100}\right)^3$

$\therefore \frac{10000 \times 4 \times 4 \times 4}{5 \times 5 \times 5} = ₹ 5120$

33. (d) Let the Sharma's total saving = x
Difference between SI and CI

$$D = \frac{SI \times r}{200} \Rightarrow 605 - 550 = \frac{550 \times r}{200}$$

$$\Rightarrow 55 = \frac{55r}{20} \Rightarrow r = 20\%$$

$$D = \frac{x\, r^2}{100 \times 100}$$

$$55 = \frac{x \times 20 \times 20}{100 \times 100} \Rightarrow x = 1375$$

Total saving = 1375 × 2 = ₹ 2750

34. (a) The general formula for such question is :

$$A = P\left(1 + \frac{r_1}{100}\right)\left(1 + \frac{r_2}{100}\right)\left(1 + \frac{r_3}{100}\right)\cdots$$

where A = Amount, P = Principal and r_1, r_2, r_3 are the rates of interest for different years.

$$2249.52 = P\left(1 + \frac{3}{100}\right)\left(1 + \frac{4}{100}\right)\left(1 + \frac{5}{100}\right)$$

or, $2249.52 = P(1.03)(1.04)(1.05)$

$\therefore P = \frac{2249.52}{1.03 \times 1.04 \times 1.05} = ₹ 2000$

35. (c) Let the principal be ₹ x.

$$\text{S.I.} = \frac{P \times R \times T}{100}$$

$$\therefore \frac{x \times 2 \times 6}{100} + \frac{x \times 2 \times 7}{100} + \frac{x \times 8 \times 3}{100} = 7536$$

$$\Rightarrow \frac{50x}{100} = 7536$$

$\Rightarrow x = 2 \times 7536 = ₹ 15072$
$\therefore$ Amount = 15072 + 7536 = ₹ 22608

SPEED TEST 17

1. **(e)** According to the question
Present age of Parineeta = 33 – 9 = 24 years
Present age of Manisha = 24 – 9 = 15 years
Present age of Deepali = 24 + 15 = 39 years
$\because$ 5 : X = 15 : 39

$\therefore$ X = $\dfrac{5 \times 39}{15}$ = 13

2. **(a)** Let the 4 members are x_1, x_2, x_3, daughter
Sum of 4 members five years ago
= $x_1 + x_2 + x_3$ + daughter = 94
After 5 years,
$x_1 + x_2 + x_3$ + daughter = 114   ...(1)
daughter + daughter in law = 92
Daughter = 92 – daughter in law
Put this eqn. ...(1)
$x_1 + x_2 + x_3$ + 92 – Daughter in law = 114
$x_1 + x_2 + x_3$ = 22 + Daughter in law
So, the required difference is 22 years.

3. **(a)** Let Sudha's and Neeta's present ages be 6x and 7x years respectively.
According to the question.

$\dfrac{6x-5}{7x-5} = \dfrac{5}{6}$

$\Rightarrow$ 36x – 30 = 35x – 25
$\Rightarrow$ x = 5
$\therefore$ Sudha's present age = 6 × 5 = 30 years

4. **(a)** Required average age = $\left(\dfrac{15 \times 36 + 12 \times 16}{36 + 12}\right)$ years

= $\left(\dfrac{540 + 192}{48}\right)$ years = $\left(\dfrac{732}{48}\right)$ years = 15.25 years.

5. **(a)** Let the ages of Swati and Khyati two years ago be 5x and 7x years respectively.

According to the question, $\dfrac{5x+4}{7x+4} = \dfrac{7}{9}$

$\Rightarrow$ 49x + 28 = 45x + 36
$\Rightarrow$ 4x = 8 $\Rightarrow$ x = 2
$\therefore$ Khyati's present age = 7x + 2 = 7 × 2 + 2 = 16 years

6. **(b)** **Shortcut method :**

Son's age = $\dfrac{5(9-1)}{(9-4)}$ = 8 yrs

$\therefore$ Father's age = 4 × 8 = 32 yrs

7. **(b)** **Shortcut method :**

Son's age = $\dfrac{5(7-1)+5(3-1)}{7-3}$ = 10 yrs

From the first relationship of ages, if F is the age of the father then F + 5 = 3 (10 + 5)
$\therefore$ F = 40 yrs

8. **(c)** **Shortcut method :**

Daughter's age = $\dfrac{10(4-1)+10(2-1)}{4-2}$ = 20 yrs

9. **(c)** Samir's age = x year (let)
$\therefore$ His father's age = 4x years

Reema's age = $\dfrac{3}{2}x$ years

$\therefore$ Required ratio = x : $\dfrac{3x}{2}$: 4x = 2 : 3 : 8

10. **(b)** Let the age of the daugher be x yrs.
Then, the age of the mother is (50 – x) yrs.
5 yrs ago, 7(x – 5) = 50 – x – 5
or, 8x = 50 – 5 + 35 = 80
$\therefore$ x = 10
Therefore, daughter's age = 10 yrs
and mother's age = 40 yrs

11. **(c)** Let the ratio of proportionality be x, then
4x × x = 196   or, 4x² = 196   or, x = 7
Thus, Father's age = 28 yrs, Son's age = 7 yrs
After 5 yrs, Father's age = 33 yrs.
Son's age = 12 yrs
$\therefore$ Ratio = 33 : 12 = 11 : 4

12. **(a)** Let Trisha's and Shalini's present ages be 7x and 6x years respectively.

After 8 years, $\dfrac{7x+8}{6x+8} = \dfrac{9}{8}$

$\Rightarrow$ 56x + 64 = 54x + 72
$\Rightarrow$ 2x = 72 – 64 = 8
$\Rightarrow$ x = 4
$\therefore$ Required difference = 7x – 6x $\Rightarrow$ x = 4 years

13. **(c)** Let the present age be x yrs. Then,
125% of (x – 10) = x; and $83\dfrac{1}{3}$% of (x + 10) = x

$\therefore$ 125% of (x – 10) = $83\dfrac{1}{3}$% of (x + 10)

$\dfrac{5}{4}$(x – 10) = $\dfrac{5}{6}$(x + 10)

or, $\dfrac{5}{4}x - \dfrac{5}{6}x = \dfrac{50}{6} + \dfrac{50}{4}$

or, $\dfrac{5x}{12} = \dfrac{250}{12}$ $\therefore$ x = 50 yrs.

14. **(b)** Let the father's present age be x and son's age be x_1 and x_2.
Now,   x   = $3(x_1 + x_2)$ .....(i)
Also,   x + 5 = $2(x_1 + 5 + x_2 + 5)$
          x + 5 = $2(x_1 + x_2 + 10)$ .....(ii)

Putting value of $(x_1 + x_2) = \dfrac{x}{3}$ from (i) in equation (ii)

x + 5 = $2\left(\dfrac{x}{3} + 10\right)$ $\Rightarrow$ 0 $\therefore$ x = 45

15. **(a)** Let the present ages of P and Q be 3x and 4x respectively.
After 4 years
    4x – 3x = 5
$\therefore$ x = 5
$\therefore$ P's present age = 3x = 3 × 5 = 15 years

16. **(c)** Let the present ages of Rama and Shyama be 4x and 5x years respectively,

$\therefore$ $\dfrac{4x+5}{5x+5} = \dfrac{5}{6}$

$\Rightarrow$ 25x + 25 = 24x + 30
$\Rightarrow$ x = 30 – 25 = 5
$\therefore$ Rama's present age = 4 × 5 = 20 years

17. **(d)** Let the mother's age be y years.
$\therefore$ The age of father = $(y + 9)$ years

The age of son = $\dfrac{y}{2}$ years

The age of daughter = $\left(\dfrac{y}{2} - 7\right)$ years
Now according to the given condition,

$(y + 9) = 3\left(\dfrac{y}{2} - 7\right)$

$\Rightarrow y + 9 = \dfrac{3y - 42}{2}$

$\Rightarrow 2y + 18 = 3y - 42$

$\Rightarrow y = 60$ years

18. (e) Suppose age of Ram = R
his son's age = S
and his father's age = F

According to question, $S = \dfrac{R}{3}$ and $R = F \times \dfrac{2}{5}$

$\therefore F = \dfrac{5R}{2}$ and $\dfrac{R + S + F}{3} = 46$

$R + S + F = 46 \times 3$

$R + \dfrac{R}{3} + \dfrac{5R}{2} = 138$

$R = 36$

$S = \dfrac{36}{3} = 12$

$F = \dfrac{5 \times 36}{2} = 90$ $\therefore$ Difference = 90 – 12 = 78

19. (c) Let the ages of Abhay and his father 10 years ago be x and 5x years respectively. Then,
Abhay's age after 6 years = (x + 10) + 6 = (x + 16) years.
Father's age after 6 years = (5x + 10) + 6 = (5x + 16) years.

$\therefore (x + 16) = \dfrac{3}{7}(5x + 16) \Leftrightarrow 7(x + 16) = 3(5x + 16)$

$\Leftrightarrow 7x + 112 = 15x + 48$

$\Leftrightarrow 8x = 64 \Leftrightarrow x = 8.$

Hence, Abhay's father's present age = (5x + 10) = 50 years.

20. (b) Let their present ages be 4x, 7x and 9x years respectively.
Then, (4x – 8) + (7x – 8) + (9x – 8) = 56 $\Leftrightarrow$ 20x = 80 $\Leftrightarrow$ x = 4.
$\therefore$ Their present ages are 16 yrs. 28 yrs. and 36 yrs. respectively.

21. (d) 16 years ago, let T = x years and G = 8x years
After 8 years from now, T = (x + 16 + 8) years and
G = (8x + 16 + 8) years.
$\therefore$ 8x + 24 = 3(x + 24) $\Leftrightarrow$ 5x = 48.

8 years ago, $\dfrac{T}{G} = \dfrac{x + 8}{8x + 8} = \dfrac{\frac{48}{5} + 8}{8 \times \frac{48}{5} + 8} = \dfrac{88}{424} = \dfrac{11}{53}$

22. (d) R – Q = R – T $\Rightarrow$ Q = T. Also, R + T = 50
$\Rightarrow$ R + Q = 50
So, (R – Q) cannot be determined.

23. (a) Let present ages of Mahesh and Ajay is $3x$ and $2x$ respectively.
According to question,

$\dfrac{3x + 8}{2x + 8} = \dfrac{11}{8}$

$\Rightarrow 24x + 64 = 22x + 88$

$\Rightarrow 2x = 24$

$\Rightarrow x = 12$

Present age of Ajay is 2 × 12 = 24 years

Present age of Mahesh's son = $\dfrac{24}{2} = 12$ years

24. (a) Let the age of Geeta's daughter be x. Then Geeta's age is 8x.

$\dfrac{8x + 8}{x + 8} = \dfrac{10}{3}$

x = 4

Geeta's present age = 8x = 32 years.

25. (b) Anup's age = (5 – 2) years = 3 years. Let Gagan's age be x years.

Then, $\dfrac{x - 6}{18} = 3 \Leftrightarrow x - 6 = 54 \Leftrightarrow x = 60.$

26. (c) Let the school ages of Neelam and Shaan be 5x and 6x respectively. Then,

$\dfrac{\frac{1}{3} \times 5x}{\frac{1}{2} \times 6x} = \dfrac{5}{9} \Leftrightarrow \left(\dfrac{1}{3} \times 9 \times 5x \right) = \left(\dfrac{5}{2} \times 6x \right) \Leftrightarrow 15 = 15.$

Thus, Shaan's age cannot be determined.

27. (d) Let present ages of Samir and Tanuj are 8x and 15x years respectively.
Difference between their ages = 15x – 8x = 7x
Ratio of ages after 9 years,

$\dfrac{8x + 9}{15x + 9} = \dfrac{11}{18}$

$\Rightarrow 144x + 162 = 165x + 99$

$\Rightarrow 21x = 63 \Rightarrow x = 3$

Difference between their ages = 7x = 21 years

28. (d) Let the present ages of the father and son be 2x and x years respectively.
Then, (2x – 18) = 3 (x – 18) $\Leftrightarrow$ x = 36.
$\therefore$ Required sum = (2x + x) = 3x = 108 years.

29. (d) Let the ages of Preeti and Sonal 1 year ago be 4x and x years respectively.
Then, [(4x + 1) + 6] – [(x + 1) + 6] = 9 $\Leftrightarrow$ 3x = 9 $\Leftrightarrow$ x = 3.
$\therefore$ Required ratio = (4x + 1) : (x + 1) = 13 : 4.

30. (a) Let the present age of the father be 'x' and that of the son be 'y'. Then $\dfrac{x}{y} = \dfrac{8}{3}$

$\therefore 3x = 8y$ ...(i)

Further, $\dfrac{x + 12}{y + 12} = \dfrac{2}{1} \therefore x + 12 = 2y + 24$

$\therefore x - 2y = 12$ ...(ii)

From eqn (i) and (ii), x = 48, y = 18
$\therefore$ sum = 66 yrs.

SPEED TEST 18

1. (a) $x^2 + 15x + 56 = 0$ $y^2 - 23y + 132 = 0$

2. (b) $x^2 - 22x + 120 = 0$ $y^2 - 26y + 168 = 0$

3. (d) $x^2 + 12x + 32 = 0$ $y^2 + 17y + 72 = 0$
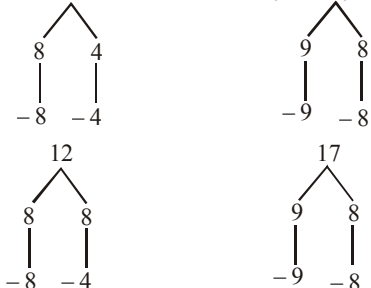
4. (c) $x^2 = 144$; $x = 12$

   $y = \sqrt{169} = 13$

5. (b) $x = \sqrt{121} = 11$, $y^2 = 121$, $y = 11$

6. (e) I. $\frac{3}{\sqrt{x}} + \frac{4}{\sqrt{x}} = \sqrt{x} \Rightarrow \frac{7}{\sqrt{x}} = \sqrt{x}$

   $\Rightarrow 7 = \sqrt{x^2} = x$ ∴ $x = 7$

   II. $y^2 - \frac{(7)^{5/2}}{\sqrt{y}} = 0 \Rightarrow y^2 = \frac{(7)^{5/2}}{\sqrt{y}}$

   $\Rightarrow y^2 \times \sqrt{y} = (7)^{5/2} \Rightarrow (y)^{5/2} = (7)^{5/2} \Rightarrow y = 7$

7. (b) I. $16x^2 + 20x + 6 = 0$

   $\Rightarrow 8x^2 + 10x + 3 = 0 \Rightarrow (4x + 3) + (2x + 1) = 0$

   ∴ $x = -\frac{3}{4}$ or $-\frac{1}{2}$

   II. $10y^2 + 38y + 24 = 0 \Rightarrow 5y^2 + 19y + 12 = 0$

   ∴ $(y + 3)(5y + 4) = 0$

   ∴ $y = -3$ or $-\frac{4}{5}$ Hence, $x > y$

8. (d) I. $18x^2 + 18x + 4 = 0 \Rightarrow 9x^2 + 9x + 2 = 0$

   $\Rightarrow (3x + 2)(3x + 1) = 0$

   ∴ $x = -\frac{2}{3}$ or $-\frac{1}{3}$

   II. $12y^2 + 29y + 14 = 0$

   $\Rightarrow (3y + 2)(4y + 7) = 0$

   ∴ $y = -\frac{2}{3}$ or $-\frac{7}{4}$ Hence, $x \geq y$

9. (c) I. $8x^2 + 6x - 5 = 0$

   $\Rightarrow (4x + 5)(2x - 1) = 0$ ∴ $x = -\frac{5}{4}$ or $\frac{1}{2}$

   II. $12y^2 - 22y + 8 = 0 \Rightarrow 6y^2 - 11y + 4 = 0$

   $\Rightarrow (2y - 1)(3y - 4) = 0$ ∴ $y = \frac{1}{2}$ or $\frac{4}{3}$

   Hence, $x \leq y$

10. (a) I. $17x^2 + 48x - 9 = 0$

    $\Rightarrow (x + 3)(17x - 3) = 0 \Rightarrow x = -3$ or $\frac{3}{17}$

    II. $13y^2 - 32y + 12 = 0 \Rightarrow (y - 2)(13y - 6) = 0$

    ∴ $y = 2$ or $\frac{6}{13}$ Hence, $x < y$

11. (a) I. $\sqrt{25x^2} - 125 = 0 \Rightarrow \sqrt{25x^2} = 125$

    $\Rightarrow 5x = 125$ ∴ $x = \frac{125}{5} = 25$

    II. $\sqrt{361}y + 95 = 0 \Rightarrow 19y = -95$

    $\Rightarrow y = -5$ Hence, $x > y$

12. (c) I. $\frac{5}{7} - \frac{5}{21} = \frac{\sqrt{x}}{42} \Rightarrow \frac{15 - 5}{21} = \frac{\sqrt{x}}{42}$

    $\Rightarrow \sqrt{x} = \frac{10}{21} \times 42 = 20$ ∴ $x = 20 \times 20 = 400$

    II. $\frac{\sqrt{y}}{4} + \frac{\sqrt{y}}{16} = \frac{250}{\sqrt{y}} \Rightarrow \frac{4\sqrt{y} + \sqrt{y}}{16} = \frac{250}{\sqrt{y}}$

    $\Rightarrow 5\sqrt{y} \times \sqrt{y} = 250 \times 16 \Rightarrow y = \frac{250 \times 16}{5} = 800$

    Hence, $y > x$

13. (a) I. $5x^2 - 18x + 9 = 0$

    $\Rightarrow 5x^2 - 15x - 3x + 9 = 0 \Rightarrow 5x(x - 3) - 3(x - 3) = 0$

    $\Rightarrow (5x - 3)(x - 3) \Rightarrow x = \frac{3}{5}$ or 3

    II. $3y^2 + 5y + 2 = 0$

    $\Rightarrow y = -\frac{2}{3}, -1$

14. (b) I. $12x^2 + 11x + 12 = 10x^2 + 22x$

    $2x^2 - 11x + 12 = 0$

    $2x^2 - 8x - 3x + 12 = 0$

    $(x - 4)(2x - 3) = 0$

    $x = 4, x = 3/2$

    II. $13y^2 - 18y + 3 = 9y^2 - 10y$

    $4y^2 - 8y + 3 = 0$

    $4y^2 - 6y - 2y + 3 = 0$

    $(2y - 3)(2y - 1) = 0$

    $y = \frac{3}{2}, \frac{1}{2}$

    ∴ $x \geq y$

15. (c) I. $\frac{18}{x^2} + \frac{6}{x} - \frac{12}{x^2} = \frac{8}{x^2}$

    $\Rightarrow \frac{18 + 6x - 12}{x^2} = \frac{8}{x^2} \Rightarrow 6x + 6 = 8$

    ∴ $x = \frac{2}{6} = 0.33$

    II. $y^3 + 9.68 + 5.64 = 16.95$

    $\Rightarrow y^3 = 16.95 - 15.32$

    $\Rightarrow y^3 = 1.63 = y = \sqrt[3]{1.63}$

16. (a) I. $35x + 70 = 0$

    ∴ $x = \frac{-70}{35} = -2$

    II. $(81)^{1/4} y + (343)^{1/3} = 0$

    $\Rightarrow 3y + 7 = 0 \Rightarrow 3y = -7$

    ∴ $y = -\frac{7}{3} = -2.33$ ∴ $x > y$

17. (a) I. $\frac{2^5 + 11^3}{6} = x^3$

    $\Rightarrow \frac{32 + 1331}{6} = x^3 \Rightarrow \frac{1363}{6} = x^3$

    ∴ $x^3 = 227.167$

    II. $4y^3 - \frac{589}{4} = 5y^3 \Rightarrow \frac{589}{4} = y^3$

    ∴ $y^3 = 147.25$ ∴ $x > y$

18. (d) I. $x^{7/5} \div 9 = 169 \div x^{3/5}$

    $\frac{x^{7/5}}{9} = \frac{169}{x^{3/5}}$

    $\Rightarrow x^{10/5} = 9 \times 169 \Rightarrow x^2 = 9 \times 169$

    $x = 3 \times 13 = 39$

    II. $y^{1/4} \times y^{1/4} \times 7 = \frac{273}{y^{1/2}}$

$y \dfrac{273}{7} = 39$

$x \le y$

19. (b)
I. $x^2 + 2x - 1 = 2$
$x^2 + 2x - 3 = 0$
$x + 3x - x - 3 = 0$
$x(x + 3) - 1(x + 3) = 0$
$(x + 3)(x - 1) = 0$
$x = -3, 1$
II. $2y^2 - 12y + 18 = 0$
$y^2 - 6y + 9 = 0$
$(y - 3)^2 = 0$
$y = 3, 3$
Hence, $y > x$

20. (b)
I. $4x^2 - 24x + 20 = 0$
$x^2 - 6x + 5 = 0$
$x^2 - 5x - x + 5 = 0$
$x(x - 5) - 1(x - 5) = 0$
$(x - 5)(x - 1) = 0$
$x = 5, 1$
II. $y^2 - 13y + 42 = 0$
$y^2 - 7y - 6y + 42 = 0$
$y(y - 7) - 6(y - 7) = 0$
$(y - 7)(y - 6) = 0$
$y = 7, 6$
Hence, $y > x$.

21. (a)
I. $2y^2 + 3y - 5 = 0$
$2y^2 + 5y - 2y - 5 = 0$
$y(2y + 5) - 1(2y + 5) = 0$
$(2y + 5)(y - 1) = 0$
$y = \dfrac{-5}{2}, 1$
II. $x^2 - 3x = 2x - 6$
$x^2 - 5x + 6 = 0$
$x^2 - 3x - 2x + 6 = 0$
$x(x - 3) - 2(x - 3) = 0$
$(x - 3)(x - 2) = 0$
$x = 3, 2$
Hence, $x > y$.

22. (e)
I. $6x^2 + 14x = 12$
$3x^2 + 7x - 6 = 0$
$(x + 3)(3x - 2) = 0$
$x = -3, \dfrac{2}{3}$

II. $1 + 2y^2 = \dfrac{17}{6}y$
$12y^2 - 17y + 6 = 0$
$12y^2 - 8y - 9y + 6 = 0$
$4y(3y - 2) - 3(3y - 2) = 0$

$(3y - 2)(4y - 3) = 0$
$y = \dfrac{2}{3}, \dfrac{3}{4}$
Hence, $x \le y$

23. (b) I. $4x^2 - 32x + 63 = 0$
$\Rightarrow 4x^2 - 14x - 18x + 63 = 0$
$\Rightarrow 2x(2x - 7) - 9(2x - 7) = 0$
$\Rightarrow (2x - 7)(2x - 9) = 0$
$\Rightarrow x = \dfrac{7}{2}$ or $\dfrac{9}{2}$
II. $2y^2 - 11y + 15 = 0$
$\Rightarrow 2y^2 - 6y - 5y + 15 = 0$
$\Rightarrow 2y(y - 3) - 5(y - 3) = 0$
$\Rightarrow (y - 3)(2y - 5) = 0$
$\Rightarrow y = 3$ or $\dfrac{5}{2}$
Clearly, $x > y$

24. (b) I. $x^3 = (216)^{\frac{1}{3} \times 3} = 216$
$\Rightarrow x = \sqrt[3]{216} = 6$
II. $6y^2 = 150$
$\Rightarrow y^2 = \dfrac{150}{6} = 25$
$\Rightarrow y = \sqrt{25} = \pm 5$
Clearly, $x > y$

25. (a) I. $12x^2 + 17x + 6 = 0$
$\Rightarrow 12x^2 + 9x + 8x + 6 = 0$
$\Rightarrow 3x(4x + 3) + 2(4x + 3) = 0$
$\Rightarrow (4x + 3)(3x + 2) = 0$
$\Rightarrow x = -\dfrac{3}{4}$ or $-\dfrac{2}{3}$
II. $6y^2 + 5y + 1 = 0$
$\Rightarrow 6y^2 + 2y + 3y + 1 = 0$
$\Rightarrow 2y(3y + 1) + 1(3y + 1) = 0$
$\Rightarrow (3y + 1)(2y + 1) = 0$
$\Rightarrow y = -\dfrac{1}{3}$ or $-\dfrac{1}{2}$
Clearly, $x < y$

26. (c) I. $20x^2 + 9x + 1 = 0$
$\Rightarrow 20x^2 + 5x + 4x + 1 = 0$
$\Rightarrow 5x(4x + 1) + 1(4x + 1) = 0$
$\Rightarrow (4x + 1)(5x + 1) = 0$
$\Rightarrow x = -\dfrac{1}{4}$ or $-\dfrac{1}{5}$
II. $30y^2 + 11y + 1 = 0$
$\Rightarrow 30y^2 + 6y + 5y + 1 = 0$
$\Rightarrow 6y(5y + 1) + 1(5y + 1) = 0$
$\Rightarrow (5y + 1)(6y + 1) = 0$
$\Rightarrow y = -\dfrac{1}{5}$ or $-\dfrac{1}{6}$
Clearly, $x \le y$

27. (b) I. $20x^2 - x - 12 = 0$
$\Rightarrow 20x^2 - 16x + 15x - 12 = 0$
$\Rightarrow 4x(5x - 4) + 3(5x - 4) = 0$
$\Rightarrow (5x - 4)(4x + 3) = 0$
$\Rightarrow 5x - 4 = 0$ or $4x + 3 = 0$
$\Rightarrow x \dfrac{4}{5}$ or $\dfrac{-3}{4}$

II. $20y^2 + 27y + 9 = 0$

$\Rightarrow 20y^2 + 15y + 12y + 9 = 0$

$\Rightarrow 5y(4y+3) + 3(4y+3) = 0$

$\Rightarrow (5y+3)(4y+3) = 0$

$\Rightarrow y = \dfrac{-3}{5}$ or $\dfrac{-3}{4}$

Clearly, $x \geq y$

28. **(d)** I. $x^2 = 106 + 218 = 324$

$\therefore x = \sqrt{324} = 18$

II. $y^2 - 37y + 342 = 0$

$\Rightarrow y^2 - 18y - 19y + 342 = 0$

$\Rightarrow y(y-18) - 19(y-18) = 0$

$\Rightarrow (y-19)(y-18) = 0$

$\Rightarrow y = 19$ or 18 $\therefore$ x $\leq$ y

29. **(e)** I. $\dfrac{7}{\sqrt{x}} + \dfrac{5}{\sqrt{x}} = \sqrt{x}$

$\Rightarrow 7 + 5 = \sqrt{x} \times \sqrt{x}$

$\Rightarrow x = 12$

II. $y^2 - \dfrac{12^{5/2}}{\sqrt{y}} = 0$

$\Rightarrow y^{2-\frac{1}{2}} - (12)^{(5/2)} = 0$

$\Rightarrow y^{5/2} = 12^{5/2}$

$\Rightarrow y = 12$ $\therefore$ x = y

30. **(c)** I. $19x + 4 = 0$

$\Rightarrow 19x = -4$

$\Rightarrow x = \dfrac{-4}{19}$

II. $21y + 4 = 0$

$\Rightarrow y = \dfrac{-4}{21}$ $\therefore$ y > x

SPEED TEST 19

1. **(e)** Total possible result $= n(S) = {}^{12}C_2 = \dfrac{12 \times 11}{1 \times 2} = 66$

Total number of event $= n(E) = {}^4C_2 = \dfrac{4 \times 3}{1 \times 2} = 6$

$\therefore$ Required probability $= \dfrac{n(E)}{n(S)} = \dfrac{6}{66} = \dfrac{1}{11}$

2. **(b)** Total possible result $= n(S) = {}^{12}C_3$.

$= \dfrac{12 \times 11 \times 10}{1 \times 2 \times 3} = 220$ Total number of event $= n(E)$

Except blue marbles, selection of 3 marbles out of 7 marbles

$= {}^7C_3 = \dfrac{7 \times 6 \times 5}{1 \times 2 \times 3} = 35$

$\therefore$ Required probability $= \left(1 - \dfrac{35}{220}\right) = \left(1 - \dfrac{7}{44}\right) = \dfrac{37}{44}$

3. **(d)** Total possible result = Selection of 3 marbles out of 12

${}^{12}C_3 = \dfrac{12 \times 11 \times 10}{1 \times 2 \times 3} = 220$

Total number of event $n(E) = {}^3C_3 + {}^4C_3$.

$n(E) = 1 + 4 = 5$

Required probability $= \dfrac{n(E)}{n(S)} = \dfrac{5}{220} = \dfrac{1}{44}$

4. **(b)** Probability to be a Blue $= \dfrac{{}^3C_3}{{}^7C_3}$

Probability to be a Red $= \dfrac{{}^4C_3}{{}^7C_3}$

Required probability $= \dfrac{{}^3C_3}{{}^7C_3} + \dfrac{{}^4C_3}{{}^7C_3} = \dfrac{5}{35} = \dfrac{1}{7}$

5. **(c)** Required probability

= Probability that a ball from bag A is red and both the balls from bag B are black + Probability that ball from bag A is black and one black and one red balls are drawn from bag B

$= \dfrac{{}^4C_1}{{}^9C_1} \times \dfrac{{}^7C_2}{{}^{10}C_2} + \dfrac{{}^5C_1}{{}^9C_1} \times \dfrac{{}^3C_1 \times {}^7C_1}{{}^{10}C_2}$

$= \dfrac{4}{9} \times \dfrac{7}{15} + \dfrac{5}{9} \times \dfrac{7}{15} = \dfrac{7}{15}$

6. **(b)** Chandra hits the target 4 times in 4 shots. Hence, he hits the target definitely.

The required probability, therefore, is given by

P(both Atul and Bhola hit) + P(Atul hits, Bhola does not hit) + P(Atul does not hit, Bhola hits)

$= \dfrac{3}{6} \times \dfrac{2}{6} + \dfrac{3}{6} \times \dfrac{4}{6} + \dfrac{3}{6} \times \dfrac{2}{6}$

$= \dfrac{1}{6} + \dfrac{1}{3} + \dfrac{1}{6} = \dfrac{4}{6} = \dfrac{2}{3}$

7. **(a)** Total number of balls $= 5 + 7 + 8 = 20$

Probability that the first ball drawn is white

$= \dfrac{{}^5C_1}{{}^{20}C_1} = \dfrac{1}{4}$

If balls are drawn with replacement, all the four events will have equal probability.

Therefore, required probability

$= \dfrac{1}{4} \times \dfrac{1}{4} \times \dfrac{1}{4} \times \dfrac{1}{4} = \dfrac{1}{256}$

8. **(c)** Total no. of numbers $= 6$ positive $+ 8$ negative $= 14$

$\Rightarrow n(S) = {}^{14}C_4$

The product of four numbers could be positive when,

(a) all the four numbers chosen are positive or

(b) all the four numbers chosen are negative or

(c) two of the chosen numbers are positive and two are negative.

Required Prob. $= \dfrac{{}^6C_4}{{}^{14}C_4} + \dfrac{{}^8C_4}{{}^{14}C_4} + \dfrac{{}^6C_2 \times {}^8C_2}{{}^{14}C_4}$

$= \dfrac{505}{1001}$

9. **(d)** The probability of selecting any bag $= \dfrac{1}{2}$

Now, probability of getting a white ball from the first bag $= \dfrac{1}{2} \times \dfrac{3}{5} = \dfrac{3}{10}$

and probability of getting a white ball from the second

bag $= \frac{1}{2} \times \frac{2}{6} = \frac{1}{6}$

Required Probability = The probability that a white ball is drawn either from the first or the second bag

$= \frac{3}{10} + \frac{1}{6} = \frac{7}{15}$

10. (b) n(S) = Number of ways to select 3 marbles out of 7 marbles = $^7C_3$.

$= \frac{7 \times 6 \times 5}{1 \times 2 \times 3} = 35$

n(E) = Probability that two are green and one is red = $^4C_2 \times {}^3C_1$

$= \frac{4 \times 3}{1 \times 2} \times 3 = 18$ Required probability $= \frac{n(E)}{n(S)} = \frac{18}{35}$

11. (c) Total number of cards = 104 = 2 × 52
and total number of jacks = 8 = 2 × 4

∴ Probability for the jack in first draw $= \frac{8}{104}$

and probability for the jack in second draw $= \frac{7}{103}$

Since both the events are independent events.
Hence the probability that both of them are jacks.

$= \frac{8}{104} \times \frac{7}{103} = \frac{7}{1339}$

12. (d) $P(E)$ = Probability of passing in English = 0.6
$P(E \cap M)$ = Probability of passing in Maths and English = 0.54
$P(M)$ = Probability of passing in Maths
Since, $P(M)$ and $P(E)$, both are independent events.
So, $P(E \cap M) = P(E) \times P(M)$

$P(M) = P(E \cap M)/ P(E) = \frac{0.54}{0.6} = 0.9$

∴ Probability of failing in Maths = 1 – 0.9 = 0.1 = 10%

13. (c) Probability of Head or Tail on the upper side for a coin

$= \frac{1}{2}$ ∴ Probability of same side on the upper side for the

three coins $= \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \left(\frac{1}{2}\right)^3 = \frac{1}{8}$

14. (c) For 1st student, Probability of selecting any one day as his

birthday $= \frac{365}{365} = 1$ Now, the remaining two students to be

selected must have same day as their birthday as for the 1st student.
Probability of rest two students, having the same birthday as

that of the 1st student $= \frac{1}{365} \times \frac{1}{365}$

Hence, required probability $= 1 \times \frac{1}{365^2} = \frac{1}{365^2}$

15. (c) Probability of a particle lying in any particular half $= \frac{1}{2}$

∴ Probability of all 10 particles lying in either 1st half or

2nd half $= \left(\frac{1}{2}\right)^{10} + \left(\frac{1}{2}\right)^{10} = 2\left(\frac{1}{2}\right)^{10} = \frac{1}{2^9}$

16. (c) Let E be the event of selecting the three numbers such that their product is odd and S be the sample space.
For the product to be odd, 3 numbers choosen must be odd.
∴ $n(E) = {}^5C_3$
$n(S) = {}^9C_3$

∴ $P(E) = \frac{n(E)}{n(S)} = \frac{^5C_3}{^9C_3} = \frac{5}{42}$

17. (c) Suppose three people have been given a, b and c number of items.
Then, a × b × c = 30
Now, There can be 5 cases :
Case I : When one of them is given 30 items and rest two 1 item each.

So, number of ways for (30 × 1 × 1) $= \frac{3!}{2!} = 3$

(As two of them have same number of items)
Case II : Similarly, number of ways for (10 × 3 × 1) = 3! = 6
Case III : Number of ways for (15 × 2 × 1) = 3! = 6
Case IV : Number of ways for (6 × 5 × 1) = 3! = 6
Case V : Number of ways for (5 × 3 × 2) = 3! = 6
Here, either of these 5 cases are possible.
Hence, total number of ways = 3 + 6 + 6 + 6 + 6 = 27.

18. (c) If six coins are tossed, then the total no. of outcomes
$= (2)^6 = 64$

Now, probability of getting no tail $= \frac{1}{64}$

Probability of getting at least one tail

$= 1 - \frac{1}{64} = \frac{63}{64}$

Alternative:
On tossing a coin, there must be a head or a tail. The

probability of getting a tail in a toss. $p = \frac{1}{2}$

So corresponding probability of getting no tail i.e., head,

$q = 1 - \frac{1}{2} = \frac{1}{2}$.

∴ Probability of getting atleast one tail
$= 1 - P$ (no tail)

$= 1 - {}^6C_0 \; p^0 q^6 = 1 - \left(\frac{1}{2}\right)^0 \left(\frac{1}{2}\right)^6 = 1 - \frac{1}{64} = \frac{63}{64}$

19. (b) Two white balls can be selected in the following ways
Both the balls are white
or
Both the balls are black
Hence, the required probability

$= \frac{^6C_2}{^{13}C_2} + \frac{^7C_2}{^{13}C_2} = \frac{15}{78} + \frac{21}{78} = \frac{36}{78} = \frac{6}{13}$

20. (c) Selection of 1 boy and 3 girls in $^5C_1 \times {}^4C_3 = 5 \times 4 = 20$ ways
Selection of 4 girls and no boy in $^5C_0 \times {}^4C_4 = 1 \times 1 = 1$ way
∴ n(E) = total no. of ways = 21
Without any restriction, a committee of 4 can be formed from among 4 girls and 5 boys in $^9C_4$

$= \frac{9 \times 8 \times 7 \times 6}{4 \times 3 \times 2} = 9 \times 7 \times 2$ ways

∴ $P(E) = \frac{n(E)}{n(S)} = \frac{21}{9 \times 7 \times 2} = \frac{1}{6}$.

21. (c) Total no. of balls = 4 + 3 + 5 = 12

$n(S) = {}^{12}C_2 = \frac{12 \times 11}{2} = 66$

$n(E) = {}^4C_2 + {}^3C_2 + {}^5C_2 = \frac{4 \times 3}{2} + \frac{3 \times 2}{2} + \frac{5 \times 4}{2}$
$= 6 + 3 + 10 = 19$

∴ Required probability, $P(E) = \frac{n(E)}{n(S)} = \frac{19}{66}$

22. **(b)** P(At least one good) = 1 – P(All bad)

$$= 1 - \frac{^4C_3}{^{12}C_3} = 1 - \frac{4}{220} = 1 - \frac{1}{55} = \frac{54}{55}$$

23. **(b)** Total number of balls = 5 + 4 + 3 = 12

$$n(S) = {}^{12}C_3 = \frac{12 \times 11 \times 10}{1 \times 2 \times 3} = 220$$

i.e., 3 marbles out of 12 marbles can be drawn in 220 ways.
If all the three marbles are of the same colour, it can be done
in $^5C_3 + {}^4C_3 + {}^3C_3 = 10 + 4 + 1 = 15$ ways
Now, P(all the 3 marbles of the same colour) + P(all the 3
marbles are not of the same colour) = 1
∴ P(all the 3 marbles are not of the same colour)

$$= 1 - \frac{15}{220} = \frac{205}{220} = \frac{41}{44}$$

24. **(b)** P(At least one from Karnataka) = 1 – P(No one from Karnataka)

$$= 1 - \frac{^{10}C_4}{^{15}C_4} = 1 - \frac{10 \times 9 \times 8 \times 7}{15 \times 14 \times 13 \times 12} = 1 - \frac{2}{13} = \frac{11}{13}$$

25. **(b)** Total number of possible arrangements for 4 boys and
3 girls in a queue = 7!
When they occupy alternate positions the arrangement
would be like
B G B G B G B
Thus, total number of possible arrangements

$$= \underbrace{4 \times 3 \times 2}_{\text{For boys}} \times \underbrace{3 \times 2}_{\text{For girls}}$$

Required probability $= \dfrac{4 \times 3 \times 2 \times 3 \times 2}{7!}$

$$= \frac{4 \times 3 \times 2 \times 3 \times 2}{7 \times 6 \times 5 \times 4 \times 3 \times 2} = \frac{1}{35}$$

SPEED TEST 20

1. **(a)** Principal can be appointed in 36 ways.
Vice principal can be appointed in the remaining 35 ways.
Total number of ways = 36 × 35 = 1260

2. **(d)** Two possibilities are there :
(i) Chemistry part I is available in 8 books with Chemistry
part II.
or
(ii) Chemistry part II is not available in 8 books but Chemistry
part I is available.

Total No. of ways $= 1 \times 1 \times {}^6C_1 + {}^7C_3 = 6 + \dfrac{7 \times 6 \times 5}{3 \times 2} = 6 + 35 = 41$

3. **(c)** Required number of ways
= ways of selecting 4 objects out of 6 given objects

$$= {}^6C_4 = \frac{6 \times 5}{2} = 15$$

4. **(c)** Total no. of unrestricted arrangements = (7 – 1) ! = 6 !
When two particular person always sit together, the total no.
of arrangements = 6! – 2 × 5!
Required no. of arrangements = 6! – 2 × 5!
= 5! (6 – 2) = 5 × 4 × 3 × 2 × 4 = 480.

5. **(c)** In MATHEMATICS, the consonants *M* and *T* are repeated
two times each.
Also the vowel *A* is repeated two times.
Since there are four vowels, *A, A, E* and *I; A* being repeated,

therefore vowels can be arranged in $\dfrac{\lfloor 4}{2} = 12$ ways.

Now remaining 7 consonants, with M, T being repeated, can

be written in $\dfrac{\lfloor 7}{2 \times 2} = 7 \times 6 \times 5 \times 3 \times 2 = 1260$ ways.

Now four vowels together can take any of the 8 places as
shown below:
VC VC VC VC VC VC VC V
∴ Total number of ways in which the letters of the word
MATHEMATICS can be arranged such that vowels always
come together = 1260 × 8 × 12 = 120960.

6. **(b)** Under the given restrictions, 5 questions can be
selected in the following ways :
2 questions from the first section and 3 questions from
the second section

or

3 questions from the first section and 2 questions from
the second section.
Required no. of ways = $^4C_2 \times {}^4C_3 + {}^4C_3 \times {}^4C_2$
= 24 + 24 = 48

7. **(d)** Let the four candidates gets the votes *x, y, z* and *w* such that
$x + y + z + w = 51$ ...(i)
Here $x \ge 0$, $y \ge 0, z \ge 0, w \ge 0$
The number of solutions of the above equation in this case is
same as the number of ways in which the votes can be given
if atleast no two candidates get equal number of votes.
(**Note :** The number of ways in which n identical things can be
distributed into r different groups $= {}^{n + r - 1}C_{r - 1}$)
∴ Total number of solutions of eqn. (i)
$= {}^{5 + 4 - 1}C_{4 - 1} = {}^8C_3 = 56$
But in 8 ways the two candidate gets equal votes which are
shown below.
(2, 2, 1, 0), (2, 2, 0, 1), (0, 2, 2, 1), (1, 2, 2, 0), (0, 1, 2, 2),
(1, 0, 2, 2), (2, 0, 1, 2), (2, 1, 0, 2)
Hence the required number of ways = 56 – 8 = 48

8. **(a)** 6 men can be sit by 5! ways and on remaining 6 seats, 5
women can sit by $^6C_5$ ways .
∴ Required number of ways = 5! × $^6C_5$ = 6! × 5!
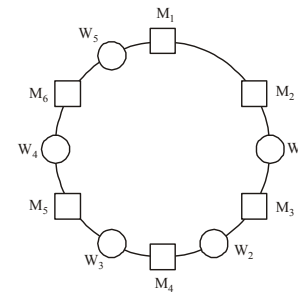
9. **(c)** The student can choose 4 questions from first 5 questions or
he can also choose 5 questions from the first five questions.
∴ No. of choices available to the student
$= {}^5C_4 \times {}^8C_6 + {}^5C_5 \times {}^8C_5 = 196.$

10. **(c)** There are 55 girls and 45 boys in the college.
Out of 45 boys, 36 are studying Statistics and 9 are not
studying statistics.
∴ The probability that a boy picked up at random is not

studying Statistics $= \dfrac{9}{45} = \dfrac{1}{5}$.

11. **(a)** No. of ways in which 6 men and 5 women can dine at a round
table = 6! × 5!

12. **(c)** Since 2 players are always included
∴ We have to select only 9 players from 20.
∴ No. of ways = $^{20}C_9$. Also 4 are always excluded. i.e. 9
should be selected from 16 only, i.e. $^{16}C_9$ ways.

13. **(c)** Number of ways = $\dfrac{6!}{2!}$ (∵ T letter comes in two time)

$$= \frac{6 \times 5 \times 4 \times 3 \times 2 \times 1}{2 \times 1} = 360$$

14. **(c)** Four possible arrangements are :
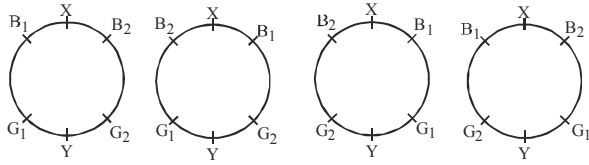
Alternative :
Let B_i and G_i be denoted for boy and girl respectively, where i = 1, 2.
According to the question, $X + B_1 + B_2$ is a unit and $Y + G_1 + G_2$ is also another unit. These two units can be seated around a table by $(2 - 1)! = 1!$ way. And B_1 and B_2 as well as G_1 and G_2 are seated by 2! ways.
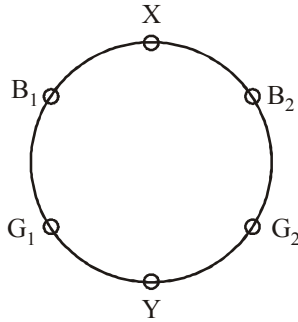
Hence required number of arrangements = $1! \times 2! \times 2!$
= 4 ways
Total no. of letters in the word is 5; T is repeated twice.

15. (c) The committee of 4 persons is to be so formed that it has at least 1 woman.
The different ways that we can choose to form such a committee are:

(i) 1w. 3 m in $^4C_1 \times {}^6C_3 = 4 \times \dfrac{6 \times 5 \times 4}{3 \times 2 \times 1}$ 80

(ii) 2w. 2 m in $^4C_2 \times {}^6C_2 = \dfrac{4 \times 3}{2 \times 1} \times \dfrac{6 \times 5}{2 \times 1}$ 90

(iii) 3w. 1 m in $^4C_3 \times {}^6C_1 = 4 \times 6 = 24$
(iv) 4w in $^4C_4 = 1$
∴ Total no. of different ways in which a committee of 4 persons can be formed so that it has at least one woman.
= 80 + 90 + 24 + 1 = 195

16. (d) The committee of 4 persons is to be so formed that it has at least 2 men. The different ways that we can choose to form such a committee are:

(i) 2m. 2w in $^6C_2 \times {}^4C_2 = \dfrac{6 \times 5}{2 \times 1} \times \dfrac{4 \times 3}{2 \times 1}$ 90

(ii) 3m. 1w in $^6C_3 \times {}^4C_1 \dfrac{6 \times 5 \times 4}{3 \times 2 \times 1} \times 4$ 80

(iii) 4m in $^6C_4 = \dfrac{6 \times 5}{2 \times 1}$ 15

∴ Total no. of different ways in which a committee of 4 persons can be formed so that it has at least 2 men.
= 90 + 80 + 15 = 185

17. (e) One girl can be chosen in $^4C_1 = 4$ ways
and 4 boys can be chosen in $^6C_4 = 15$ ways
∴ Total number of ways = 4 × 15 = 60 ways

18. (a) CORPORATION= 11 letters
'O' comes thrice, 'R' twice.
∴ total no. of ways = $\dfrac{11!}{3!2!}$ = 3326400

19. (b) There are seven letters in the word "COUNTRY" and two vowels O and U. Considering two vowels as one unit, total number of letters will be 5 + 1 = 6. So, number of arrangements = 6!

Now, the two vowels can be arranged in 2! ways among themselves.
∴ Total number of ways = 6! × 2! = 1440

20. (c) The word PROBLEM consists of 7 distinct letters.
∴ Number of arrangements = 7!
= 7 × 6 × 5 × 4 × 3 × 2 × 1 = 5040

21. (d) There are 4 seats on the left and the same number of seats on the right side.

Three men can be arranged on left in $^4P_3$ ways.
Two men can be arranged on right in $^4P_2$ ways.
Now the remaining seats are 3 on which remaining 3 men can be arranged in 3! ways . Hence, the required no. of arrangemensts = $^4P_3 \times {}^4P_2 \times 3!$

22. (a) In word 'offices', there are 7 letters and F comes two times.
Required number of ways = $\dfrac{7!}{2!}$ $\dfrac{7 \times 6 \times 5 \times 4 \times 3 \times 2!}{2!}$ = 2520

23. (e) ARMOUR = 6 letter whereas R repeated twice
∴ $\dfrac{6!}{2!}$ $\dfrac{6 \times 5 \times 4 \times 3 \times 2 \times 1}{2 \times 1}$ 360

24. (b)

P	P	S	S	M	M

no. of ways = 3!
Required no. of ways
= 3! 2! 2! 2! = 3 × 2 × 2 × 2 × 2 = 48

25. (c) Total number of ways to stand boys and girls together
= 4! × 3! × 2! = 4 × 3 × 2 × 3 × 2 × 2 = 288

26. (c) Total number of ways = 8C4 = 70

27. (d) ∴ Required numbre of ways = (7C3 × 6C2) + (7C4 × 6C1) + (7C5)

= $\left(\dfrac{7 \times 6 \times 5}{3 \times 2 \times 1} \times \dfrac{6 \times 5}{2 \times 1} \right) + ({}^7C_3 \times {}^6C_1)$ $({}^7C_2)$

= 525 $\left(\dfrac{7 \times 6 \times 5}{3 \times 2 \times 1} \right)$ $\left(\dfrac{7 \times 6}{2 \times 1} \right)$ = (525 + 210 + 21) = 756

28. (c) The word 'LEADING' has 7 different letters.
When the vowels EAI are always together, they can be supposed to form one letter.
Then, we have to arrange the letters LNDG (EAI).
Now, 5 (4 + 1 = 5) letters can be arranged in 5! = 120 ways. The vowels (EAI) can be arranged among themselves in 3! = 6 ways.
Required number of ways = (120 x 6) = 720.

29. (d) Since each desired number is divisible by 5, so we must have 5 at the unit place. So, there is 1 way of doing it.
The tens place can now be filled by any of the remaining 5 digits (2, 3, 6, 7, 9). So, there are 5 ways of filling the tens place.
The hundreds place can now be filled by any of the remaining 4 digits. So, there are 4 ways of filling it.
Required number of numbers = (1 x 5 x 4) = 20.

30. (c) Any one prize can be given to any one of the 3 boys and hence there are 3 ways of distributing each prize.
Hence, the 4 prizes can be distributed in 3⁴= 81 ways.

SPEED TEST 21

1. (b) No of right angles in one hour = 2
∴ No of right angles in 24 hours = 24 × 2 = 48

2. (a) Hour hand covers an angle of 360° in 12 hours.
∴ Time taken to cover an angle of 135°

= $\dfrac{12}{360} \times 135 = 4.5$ h ∴ Required time = 3 + 4.5 = 7.5 = 7:30

3. (d) Angle made by hour hand for 12 hours = 360°

Angle made by hour hand for 1 hour = $\dfrac{360}{12}$

∴ Angle made by hour hand for 6 hours = $\dfrac{360}{12} \times (6) = 180°$

4. (b) In a year, number of weeks = 52 extra day = 1
From 2002 to 2008, there are 6 years.
So number of extra days = 6 (1) = 6
While 2004 and 2008 are leap years, having one more extra day apart from the normal extra day.
Thus, number of extra days = 6 + 1 + 1 = 8
Out of these 8 extra days, 7 days form a week and so 1 day remains.
Hence, March 1, 2002 is 1 day less then March 1, 2008 i.e., it is Friday.

5. (c) In one hour, hour hand and minute hand are at right angles 2 times.
Time = 10 p.m − 1 p.m = 9 hr.
∴ No. of times, when both hands are perpendicular to each other in 9 hr = 9 × 2 = 18

6. (b) Here H × 30 = 4 × 30 = 120⁰.
(Since initially the hour hand is at 4. ∴ H = 4).
Required angle A = 90⁰ and since, H × 30 > A° so, there will be two timings.

Required time T = $\dfrac{2}{11}$ (H × 30 ± A) minutes past H.

∴ One timing = $\dfrac{2}{11}$ (4 × 30 + 90) minutes past 4

= $38\dfrac{2}{11}$ minutes past 4. Or 4 : 38 approx.

7. (a) Since, in one hour, two hands of a clock coincide only once. so, there will be value.

Required time T = $\dfrac{2}{11}$(H×30 A) minutes past H.

Here H = initial position of hour hand = 3
(Since 3 o'clock)
A° = required angle = 0° (Since it coincides)

T = $\dfrac{2}{11}$(3×30 0) minutes past 3

= $16\dfrac{4}{11}$ minutes past 3.

8. (b) At 5 o'clock, the hands are 25 min. spaces apart.
To be at right angles and that too between 5.30 and 6, the minute hand has to gain (25 + 15) = 40 min. spaces
55 min. spaces are gained in 60 min.

40 min. spaces are gained in $\left(\dfrac{60}{55}\times40\right)$ min. $43\dfrac{7}{11}$ min.

∴ Required time = $43\dfrac{7}{11}$ min. past 5

9. (d) At 4 o'clock, the hands of the watch are 20 min. spaces apart.
To be in opposite directions, they must be 30 min. spaces apart.
∴ Minute hand will have to gain 50 min. spaces
55 min. spaces are gained in 60 min.

50 min. spaces are gained in $\left(\dfrac{60}{55}\times50\right)$min. or $54\dfrac{6}{11}$ min.

∴ Required time = $54\dfrac{6}{11}$min. past 4

10. (a) 55 min. spaces are covered in 60 min.

60 min. spaces are covered in $\left(\dfrac{60}{55}\times60\right)$min. $65\dfrac{5}{11}$ min.

Loss in 64 min. = $\left(65\dfrac{5}{11}-64\right)$ $\dfrac{16}{11}$ min.

Loss in 24 hrs. = $\left(\dfrac{16}{11}\times\dfrac{1}{64}\times24\times60\right)$min $32\dfrac{8}{11}$min.

11. (c) 100 years contain 5 odd days.
∴ Last day of 1st century is Friday
200 years contain (5 × 2) ≡ 3 odd days.
∴ Last day of 2nd century is Wednesday.
    300 years contain (5 × 3) = 15 ≡ 1 odd day.
∴ Last day of 3rd century is Monday.
400 years contain 0 odd day.
∴ Last day of 4th century is Sunday.
This cycle is repeated.
∴ Last day of a century cannot be Tuesday or Thursday or Saturday.

12. (a) The century divisible by 400 is a leap year.
∴ The year 700 is not a leap year.

13. (b) x weeks x days = (7x + x) days = 8x days

14. (c) On 31st December, 2005 it was Saturday.
Number of odd days from the year 2006 to the year 2009
= (1 + 1 + 2 + 1) = 5 days
∴ On 31st December 2009, it was Thursday.
Thus, on 1st Jan, 2010 it is Friday.

15. (c) The year 2004 is a leap year. It has 2 odd days.
∴ The day on 8th Feb, 2004 is 2 days before the day on 8th Feb, 2005. Hence, this day is Sunday.

16. (d) Count the number of odd days from the year 2007 onwards from the year 2007 onwards to get the sum equal to 0 odd day.

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Odd day	1	2	1	1	1	2	1	1	1	2	1

17. (b) Each day of the week is repeated after 7 days
So, after 63 days, it will be Monday.
∴ After 61 days, it will be Saturday.

18. (c) 17th June, 1998 = (1997 years + Period from 1.1.1998 to 17.6.1998)
Odd days in 1600 years = 0
Odd days in 300 years = (5 × 3) ≡ 1
97 years has 24 leap years + 73 ordinary years.
Number of odd days in 97 years = (24 × 2 + 73) = 121 = 2 odd days.
Jan. Feb. March April May June
(31 + 28 + 31 + 30 + 31 + 17) = 168 days
= 24 weeks = 0 odd day
Total number of odd days = (0 + 1 + 2 + 0) = 3
Given day is Wednesday.

19. (d) No. of days between 21st July, 1947 and 21 st July, 1999 = 52 years + 366 days.
= 13 beap years + 39 ordinary years + 366 days
= (13 × 2) odd days + 39 odd days + 2 odd days
= (26 + 39 + 2) odd days = 67 odd years = 4 odd days.
= (7 − 4) = 3 days before the week day on 21st July, 1999 = Saturday.

20. (b) Next train for N. Delhi leaves at 8:30 p.m. Since time interval between two trains for N. Delhi is 45 minutes. A train for New Delhi has left 15 minutes ago.
Time of information = 8:30 − 45 + 15 = 8 P.M.

21. (b) Time between 1 p.m. on Tuesday to 1 p.m. on Thursday = 48 hrs. The watch gains (1 + 2) = 3 minutes in 48 hrs.
it gains 1 min, in 16 hrs.
Hence, it will show correct time at 5 a.m. on Wednesday.

22. (b) A reverse flow chart will look as follows:

23. (b) Ashish leaves his house at 6:40 AM.
Ashish reaches Kunal's house at 7:05 AM.
They finish Breakfast at 7:05 + 0:15 = 7:20 AM.
That's the time when they leave Kunal's house for thier office.

24. (b) Anuj reached at = 8 : 15 AM
Time when the other man came = 8:15 + 0:30=8:45 AM
(who was 40 minutes late)
∴ scheduled time of meeting = 8:45 – 0: 40 = 8 : 05 AM

25. (d) First clock will gain 11 × 2 minutes in 11 hrs., and second clock will lose 11 × 1 minutes in 11 hrs.
Hence difference will be 33 minutes.

26. (d) 1st of month was Tuesday, hence the date on first Saturday was 5th.
Hence the other Saturdays of the month are 12, 19, 26.
Rama met her brother on 26th.

27. (d) $2\frac{1}{2}$ hrs   150 min

∴ Angle covered by hour hand in 1 min = $\frac{1}{2}$

∴ Angle covered by hour hand in 2½ hrs.

= 150 min =150 × $\frac{1}{2}$ = 75°

28. (c) Total no. of days between 27.3.1995
and 1.11. 1994 = 27 + 28 + 31 + 31 + 29 = 146
Now, 146 is not completely divided by 7. It we have one day more then we have 147 days which is completely divided by 7. Thus, the days of the week on 1 Nov, 1994 was Monday. But the day will be Tuesday (We have 146 days)

29. (a) 16 - 1- 1997—Thursday.
Number of normal year between 1997 and 2000 = 2
We know every year has 1odd day.
Now, number of leap year = 1
Leap year has 2 odd days
∴ odd days = 2 + 2 = 4   ∴ 4 Jan, 2000 was Tuesday.

30. (b) Day is on 28th Feb = Tuesday
Since, the leap year is excluded
∴ The day is on 28th March = Tuesday

SPEED TEST 22

1. (e) $2\pi r = 88$ ∴ r $\frac{88 \times 7}{44}$ 14 m

∴ Area = πr^2.

= $\frac{22}{7}$ ×14×14 = 616 m² $2\pi r_1 = 220$ r_1 $\frac{220 \times 7}{2 \times 22}$ 35 m

∴ Area = $\pi r_1^2 = \frac{22}{7}$ ×35×35   3850m²

Difference = 3850 – 616 = 3234 m²

2. (b) 2 (l + b) = 668 ∴ l + b = 334 ∴ l = (334 – b)
Length of a rectangle = Twice the diameter of a circle

334 – b = 2 × d = 2 × 2r = 4r ∴ r $\frac{334-b}{4}$

Area of square = Circumference of circle ,(22)² = 2πr

484   $\frac{2 \times 22}{7 \times 4}$ $\frac{334-b}{4}$ ∴ 334 – b = $\frac{484 \times 7 \times 4}{2 \times 22}$ 308

∴ b = 334 – 308 = 26 cm

3. (c) Area of square (a)² = 196

∴ a $\sqrt{196}$ 14cm Radius of a circle = 14 × 2 = 28 cm

∴ Circumference = $\frac{22}{7}$ ×2×28 = 176 cm

Now according to question b, = 176 m
Also 2(l +b) = 712; 2(l + 176) = 712
l + 176 = 356 ∴ l = 356 – 176`   ∴   l = 180 cm

4. (b) Volume of the earth taken out = 30 × 20 × 12 = 7200 m³

470 m

Field

30 m

30 m

20 m

470 m

30 m

Tank
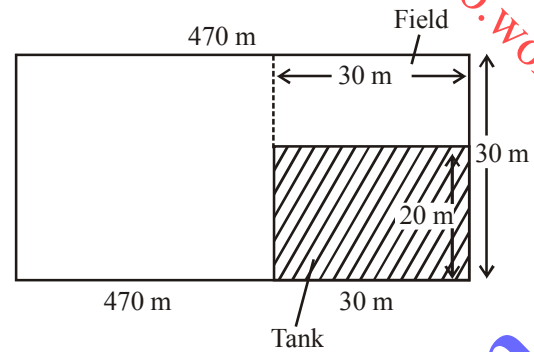
Area of the remaining portion (leaving the area of dug out portion)
= 470 × 30 + 30 × 10 = 14100 + 300 = 14400 m²
Let h be the height to which the field is raised when the earth dug out is spread.
Then, 14400 × h = 7200 ⇒ h = 0.5 m

5. (c) Circumference of smaller circle = 132 m 2πr₁ = 132

r₁ $\frac{132}{2\pi}$ $\frac{132 \times 7}{2 \times 22}$ 21 m

Circumference of larger circle = 176 m

2πr₂ = 176 r₂ $\frac{176}{2\pi}$ $\frac{176 \times 7}{2 \times 22}$ 28 m

Required difference = π{(28)² – (21)²}

= $\frac{22}{7}$ 28+21   28–21   = $\frac{22}{7}$ ×49×7   1078 sq m

6. (d) Let the length and breadth of the rectangle be x and y cm, respectively.
Then, $(x-4)(y+3) = xy \Rightarrow 3x - 4y = 12$ ....(i)
Also, $(x-4) = (y+3)$ [sides of square]
⇒ $x - y = 7$ ....(ii)
From (i) and (ii),
$x = 16$ and $y = 9$
Perimeter of the original rectangle = $2(x+y) = 50$ cm

7. (c) Suppose the length of the field is x m.

So, the breadth of the field will be $\frac{3x}{4}$ m.

1.5 m

1.5 m
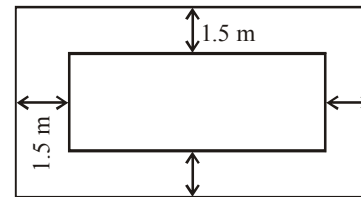
⇒ x × $\frac{3x}{4}$ 300 ∴ x² $\frac{300 \times 4}{3}$ 400

x $\sqrt{400}$ x = 20 ∴ Area of the garden
= {(20 + 3) (15 + 3)} – 300 = {(23) (18)} – 300
= 114 square metre

8. (b) We have,
radius of the hemisphere = raidus of the cone
= height of the cone = height of the cylinder = r (say)
Then, ratio of the volumes of cylinder, hemisphere and cone
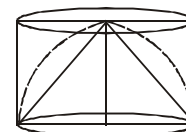
$= \pi r^3 : \frac{1}{3}\pi r^3 : \frac{1}{3}\pi r^3 \quad 1 : \frac{2}{3} : \frac{1}{3} \quad 3 : 2 : 1$

9. (d) Let edge of the new cube = x cm.
Volume of the newly formed figure (cube)
= sum of volume of smaller cubes.
i.e. $(x)^3 = (3)^3 + (4)^3 + (5)^3 = 27 + 64 + 125 = 216$
$\Rightarrow x = 6$ cm

10. (d) Let the radius be $4x$ and height be $3x$.
Now the required ratio

$$\frac{2\pi rh + 2\pi r^2}{\pi r\ell + \pi r^2} \quad \frac{2(h \quad r)}{\sqrt{r^2 \quad h^2} \quad r}$$

$(\because \ell = \text{slant height} \quad \sqrt{h^2 \quad r^2})$

$$\frac{2 \quad 7x}{\sqrt{16x^2 \quad 9x^2} \quad 4x} \quad \frac{14x}{5x \quad 4x} \quad \frac{14x}{9x} \quad \frac{14}{9} \text{ tim}$$

11. (d) Let the length, breadth and height of the cuboid be x, $2x$ and $3x$, respectively.
$\therefore$ volume $= x \times 2x \times 3x = 6x^3$
New length, breadth and height = $2x$, $6x$ and $9x$, respectively.
New volume $= 108x^3$
Thus, increase in volume $= (108 - 6)x^3 = 102 x^3$
$\therefore$

$$\text{Required answer} = \frac{\text{Increase in volume}}{\text{Original volume}}$$

$$\frac{102x^3}{6x^3} \quad 17 \text{ Times}$$

12. (c) Let the rise in the level of water be x cm.
Then, the volume of sphere = volume of the water displaced

i.e. $\frac{4}{3}\pi \quad 3 ^3 = \pi \quad 6 ^2 \times x \Rightarrow x \quad \dfrac{\frac{4}{3} \times 27}{36} \quad 1 cm$

13. (b)
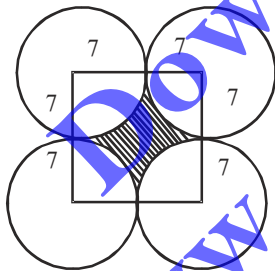
The shaded area gives the required region.
Area of the shaded region = Area of the square – area of four quadrants of the circles

$$= (14)^2 - 4 \times \frac{1}{4}\pi (7)^2$$

$$= 196 - \frac{22}{7} \times 49 \quad 196 - 154 \quad 42 \, cm^2$$

14. (b) Such area = Area of semicircle – Area of such largest triangle

$= \frac{\pi}{2}r^2 - r^2 = r^2\left(\frac{\pi}{2} - 1\right) = 14 \quad \times \frac{(22-14)}{14} \quad 112 \, cm^2$

15. (b) In any quadrilateral,
Area of the quadrilateral

$= \frac{1}{2} \times$ any diagonal $\times$ (sum of perpendiculars drawn on

diagonal from two vertices) $= \frac{1}{2} \times D \times (P_1 \quad P_2)$

$= \frac{1}{2} \times 23 \times (17 \quad 7) = 12 \times 23 = 276$ sq cm

16. (a) Let the radius of the sphere be r cm and side of the cube be x cm. Then, diagonal of cube = Diameter of sphere or, $\sqrt{3}x \quad 2r$

or, x $= \frac{2r}{\sqrt{3}}$

Ratio of volumes = Vol. of cube : Vol. of sphere

$= x^3 : \frac{4}{3}\pi r^3 = \left(\frac{2r}{\sqrt{3}}\right)^3 : \frac{4}{3}\pi r^3 = \frac{8}{3\sqrt{3}} : \frac{4}{3}\pi = 2 : \sqrt{3}\pi$

17. (d) Let the side of the big cube be 'a' cm.
Then, volume of the big cube = sum of volumes of the smaller cubes
i.e. $a^3 = (3)^3 + (4)^3 + (5)^3 = 27 + 64 + 125$
$\Rightarrow a^3 = 216 \quad \Rightarrow a = 6$
Now, required ratio

$$\frac{6[3^2 \quad 4^2 \quad 5^2]}{6[6]^2} \quad \frac{9 \quad 16 \quad 25}{36}$$

$$\frac{25}{18} = 25 : 18$$

18. (b) Length of the wire = circumference of the circle
$= 2\pi \times 42 = \frac{2 \times 22 \times 42}{7} \quad 264$ cm
Now, perimeter of the rectangle = 264 cm.
Since, perimeter includes double the length and breadth, while finding the sides we divide by double the sum of ratio.

Therefore, length $= \frac{264}{2(6 \quad 5)} \times 6 \quad 72$ cm

and breadth $= \frac{264}{2(6 \quad 5)} \times 5 \quad 60$ cm

19. (b) Edge of the cube $= \sqrt[3]{343} \quad 7$ cm
$\therefore$ Radius of cone = 3.5 cm

height = 7 cm volume of cone $= \frac{1}{3}\pi r^2 h$

$= \frac{1}{3} \times \frac{22}{7} \times 3.5 \times 3.5 \times 7 = \frac{1}{3} \times 22 \times 12.25 \approx 90$ cc

20. (c) Number of coins $= \frac{\text{Volume of the cylinder}}{\text{Volume of a coin}}$
Volume of coin $\equiv$ Volume of cylinder
($\because$ thickness of coin is given)

$$\frac{2.25 \, ^2 \times 10}{0.75^2 \times 0.2} \quad \frac{50.625}{0.1125} \quad 450$$

21. (a) Total area of the two roads
$= 80 \times 10 + 60 \times 10 - 10 \times 10 = 1300 \, m^2$
Required cost $= 1300 \times 30 = ₹ 39000$

22. (c) Let the radius of hemispherical bowl $= r$

$\therefore$ Volume of hemispherical bowl $= \frac{2}{3}\pi r^3$
Let the height of cylindrical vessel = h

$r = h\left(1 \quad \frac{50}{100}\right) \quad h = \frac{2}{3}r$

Volume of cylindrical vessel $= \pi r^2(2r/3) = \frac{2}{3}\pi r^3$

Hence, volume of the beverage in the cylindrical vessel

$= \frac{(2/3)\pi r^3}{(2/3)\pi r^3} \times 100\% = 100\%$

23. (d) Let the angles be $4x$, $3x$ and $2x$.
   $4x + 3x + 2x = 180° \quad x = 20°$
   ∴ angles are $80°$, $60°$ and $40°$.

24. (a) Let the length of the room be ℓ m

   Then its, breadth $= \ell/2$

   ∴ $\ell \times \frac{\ell}{2} \quad \frac{5000}{25} \Rightarrow \ell^2 = 400 \Rightarrow \ell = 20$ m

   Also, $2\ell h + 2 \times \frac{\ell}{2} \times h \quad \frac{64800}{240} \Rightarrow 3\ell h = 270$

   $\Rightarrow h \quad \frac{270}{3 \times 20} \quad \frac{270}{60} \quad 4.5 m$

25. (a) Let r and h be the radius and height of cylinder respectively.
   Since the cylinder is made by rolling 100 cm side.

   ∴ $h = 50$ cm $= \frac{1}{2}m$ and $2\pi r \quad 100$ cm $\Rightarrow r \quad \frac{1}{2\pi}$ m

   ∴ Curved surface area $= 2\pi rh = 2\pi \times \frac{1}{2\pi} \times \frac{1}{2} = \frac{1}{2}m^2$

   Cost of painting $= ₹ 50$ per m^2

   ∴ Total cost of painting $= \frac{1}{2} \times 50 = ₹ 25$

26. (a) Let the edge of the small cube be x cm.
   ∴ $12^3 = 6^3 + 8^3 + x^3$
   $\Rightarrow x^3 = 12^3 - 6^3 - 8^3 \Rightarrow x = 10$ cm.

27. (a)
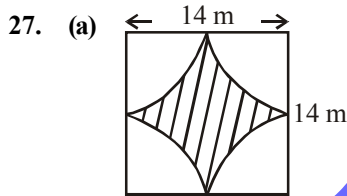
   Area of grazed portion $= \frac{1}{4} \times 4 \pi r^2$

   Area of ungrazed portion $= 14 \times 14 - \pi r^2$

   $= 196 - \frac{22}{7} \times 49 \quad 42$

   ∵ πr^2 area will last 11 days

   ∴ $42 m^2$ area will last $\frac{11}{\pi r^2} \times 42 = \frac{11 \times 7 \times 42}{22 \times 49} = 3$ days.

28. (d) Volume of cistern $= \pi \times 10^2 \times 15 = 1500\pi\, m^3$

   Area of pipe $= \pi r^2 = \pi \times \left(\frac{25}{100}\right)^2 m^2 \quad \frac{\pi}{16} m^2$

   ∴ Time taken to fill the cistern

   $\dfrac{\text{Volume of cistern}}{\text{Area of pipe} \times \text{Velocity of water}}$

   $\dfrac{1500\pi}{\dfrac{\pi}{16} \times 5} = 4800 \text{sec} \approx 80 \text{ minutes}$

29. (c) Given, length of garden $= 24$ m and
   breadth of garden $= 14$ m
   ∴ Area of the garden $= 24 \times 14\, m^2 = 336\, m^2$.
   Since, there is 1 m wide path outside the garden
   ∴ Area of Garden (including path)
   $= (24 + 2) \times (14 + 2) = 26 \times 16\, m^2 = 416\, m^2$.
   Now, Area of Path $=$ Area of garden(incuding path)
   $\qquad\qquad\qquad - $ Area of Garden
   $= 416 - 336 = 80\, m^2$.
   Now , Area of Marbles $= 20 \times 20 = 400\, cm^2$

   ∴ Marbles required $= \dfrac{\text{Area of Path}}{\text{Area of Marbles}}$

   $= \dfrac{80,0000}{400} \quad 2000$

30. (c) Area of the carpet $= 3 \times 3 \times 1.44\, m2$
   Total increase in area $= 25 + 40 + (25 \times 40)/100 = 75\%$
   Increase in cost $= 3 \times 3 \times 1.44 \times 75 \times 45/100 = ₹ 437.4$

SPEED TEST 23

1. (d) The correct pattern is $+ 6^3, + 5^3, + 4^3, + 3^3, ...$
   So, 521 is wrong and must be replaced by $(498 + 3^3)$ i.e. 525.

2. (c) The correct pattern is $\div 12, \div 10, \div 8, \div 6,.....$
   So, 24 is wrong and must be replaced by $(48 \div 6)$ i.e. 8.

3. (a) The terms of the series are $(2^3 - 3), (3^3 - 3), (4^3 - 3),$
   $(5^3 - 3), (6^3 - 3), (7^3 - 3), (8^3 - 3)$.
   So, 27 is wrong and must be replaced $(3^3 - 3)$ i.e. 24.

4. (c) The given sequence is a combination of two series :
   I. 11, 20, 40, 74 and
   II. 5, 12, 26, 54
   The correct pattern in I is $+ 9, + 18, + 36,.....$
   So, 40 is wrong and must be replaced by $(20 + 18)$ i.e. 38.

5. (d) The correct pattern is $\times 2 + 1, \times 3 + 1, \times 2 + 1, \times 3 + 1 + 1,.....$
   So, 356 is wrong and must be replaced by $(129 \times 3 + 1)$
   i.e. 388.

6. (e) The series is $\times 1 + 1, \times 2 + 2, \times 3 + 3, ...$ So 8 is wrong.

7. (e) The series is $\times 1 + 1^2, \times 2 + 2^2, \times 3 + 3^2 ....$ So 265 is wrong.

8. (b) The series is $\times 2 + 9, \times 2 + 11, \times 2 + 13 ....$ So 58 is wrong.

9. (d) The series is $\times 1 - 1, \times 2 + 2, \times 1 - 1 \times 2 + 2 ...$ So 8 is wrong.

10. (d) The series is $\times 3 + 1, \times 4 + 1, \times 5 + 1, ...$

11. (e) The pattern is :
   $2 \times 3 = 6$
   $6 \times 2.5 = 15$
   $15 \times 2 = 30$
   $30 \times 1.5 = 45$
   $45 \times 1 = 45 \ne \boxed{43.5}$
   $45 \times 0.5 = 22.5$
   So 43.5 is the wrong term.

12. (c) The pattern is :
   $950 - 661 = 289 = 17^2$
   $661 - 436 = 225 = 15^2$
   $436 - \boxed{269} = 167 \ne 13^2$

$\therefore$ $436 - 267 = 169 = 13^2$
$267 - 146 = 121 = 11^2$
$146 - 65 = 81 = 9^2$
So 269 is the wrong term.

13. **(e)** The pattern is :
$6.5 + 5.3 = 11.8$
$11.8 + 2 \times 5.3 = 11.8 + 10.6 = 22.4$
$22.4 + 3 \times 5.3 = 22.4 + 15.9 = 38.3$
$38.3 + 4 \times 5.3 = 38.3 + 21.2 = 59.5$
$59.5 + 5 \times 5.3 = 59.5 + 26.5 = 86$

$\neq$ $\boxed{87.3}$

$86 + 6 \times 5.3 = 86 + 31.8 = 117.8$

14. **(e)** The pattern is :
$1 \times 3 - 1 = 2$
$2 \times 3 - 2 = 4$
$4 \times 3 - 3 = 9$
$9 \times 3 - 4 = 23$

$23 \times 3 - 5 = 69 - 5 = 64 \neq \boxed{69}$
$64 \times 3 - 6 = 192 - 6 = 186$

15. **(e)** The pattern is :
$250 - 11 = 239$
$239 - (11 \times 2 + 1) = 239 - 23 = 216$
$216 - (11 \times 3 + 2) = 216 - 35 = 181$

$181 - (11 \times 4 + 3) = 181 - 47 = 134 \neq \boxed{136}$
$134 - (11 \times 5 + 4) = 134 - 59 = 75$
$75 - (11 \times 6 + 5) = 75 - 71 = 4$

16. (d) Series is $-99, -89, -79, -69, -59$.
17. (a) Series is $\times 1 + 11, \times 2 + 21, \times 3 + 31, \times 4 + 41$.
18. (b) Series is $+ 11^2, + 10^2, + 9^2, + 8^2$.
19. (e) Series is $\times 9 + 9, \times 8 + 8, \times 7 + 7, \times 6 + 6$.
20. (a) Series is $+91, +81, +71, +61$.
21. **(b)** The pattern is
$\times 1 + 1, \times 2 + 2, \times 3 + 3, \times 4 + 4, \times 5 + 5,....$
So, the missing term is $(208 \times 5) + 5 = 1045$

22. **(d)**

18   48   100   180   294   448 $\boxed{648}$

+30 +52 +80 +114 +154 +200

22   28   34   40   46

6   6   6   6
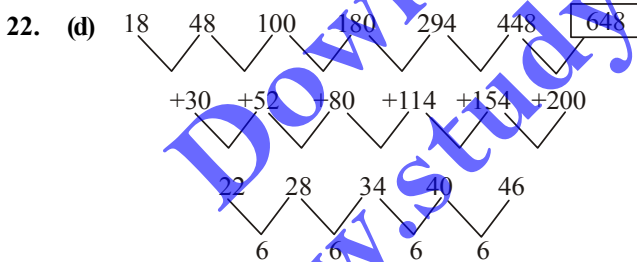
23. **(e)** The given pattern is $17^2, 19^2, 23^2, 29^2, 31^2, 37^2, ...$
(ie, square of prime numbers)
So, the missing term is $37^2 = 1369$

24. (d) The given pattern is $\times 4 - 1, \times 4 - 2, \times 4 \times - 3, \times 4 - 4, \times 4 - 5, \times 4 - 6, ...$
So, the missing term is $(7739 \times 4) - 6 = 30950$

25. **(c)** The given pattern is

8484   4248   2112   1074   513   286.5 $\boxed{107.25}$

$\div\frac{1}{2} + 6$ $\div\frac{1}{2} - 12$ $\div\frac{1}{2} + 18$ $\div\frac{1}{2} - 24$ $\div\frac{1}{2} + 30$ $\div\frac{1}{2} - 36$

26. **(c)** The given number series is based on the following pattern :

$13 \times 1 + 1 = 14$
$14 \times 2 + 2 = 30$
$30 \times 3 + 3 = 93$
$93 \times 4 + 4 = 376$
$376 \times 5 + 5 = 1885$

$\therefore$ $? = 1885 \times 6 + 6 = \boxed{11316}$

Hence, number 11316 will replace the question mark.

27. **(b)**

4   6   9   13.5   20.25   30.375 $\boxed{45.5625}$

$\times 1.5$ $\times 1.5$ $\times 1.5$ $\times 1.5$ $\times 1.5$ $\times 1.5$

28. **(d)**

400   240   144   86.4   51.84   31.104 $\boxed{18.6624}$

$\times 0.6$ $\times 0.6$ $\times 0.6$ $\times 0.6$ $\times 0.6$ $\times 0.6$

29. **(a)**

9   4.5   4.5   6.75   13.5   33.75 $\boxed{101.25}$

$\times 0.5$ $\times 1$ $\times 1.5$ $\times 2$ $\times 2.5$ $\times 3$

In each term in the series added by 1, 2, 3, ... and then multiplied by 23

30. **(e)** $705 + 1 \times 23 = 728$
$728 + 2 \times 23 = 774$
$774 + 3 \times 23 = 843$
$843 + 4 \times 23 = 935$
$935 + 5 \times 23 = 1050$
$\therefore$ $? = 1050 + 6 \times 23$
$= 1050 + 138 = 1188$

31. **(d)** $20 \times 2 - 1^2 = 39$
$39 \times 2 - 2^2 = 74$
$74 \times 2 - 3^2 = 139.....$

32. **(c)** $\frac{14}{2} + 1 = 8$, $\frac{8}{2} + 2 = 6$

$\frac{6}{2} + 3 = 6$

33. **(a)** $6 \times 1 + 7 = 13$
$13 \times 2 - 6 = 20$
$20 \times 3 + 5 = 65....$

34. **(b)** $14 \times 1 - 8 = 6$
$6 \times 2 - 8 = 4$
$4 \times 3 - 8 = 4$

35. **(a)** $6 \times 2 + 4 = 16$
$16 \times 3 - 3 = 45$
$45 \times 4 + 4 = 184....$

36. **(b)**

37. **(c)** $5 \times 1 + 2 = 7$
$7 \times 2 - 4 = 10$
$10 \times 3 + 6 = 36$
$36 \times 4 - 8 = 136$
$136 \times 5 + 10 = 690$

38. **(d)** $156 + 17 \times 1 = 173$
$173 - 21 \times 2 = 131$
$131 + 25 \times 3 = 206$
$206 - 29 \times 4 = 50$
$50 + 33 \times 5 = 215$

39. **(c)** $25 + 5 \times 2 = 35$
$35 - 5 \times 3 = 20$
$20 + 5 \times 5 = 45$
$45 - 5 \times 7 = \boxed{10}$

40. (d) 14.5
$24 \times 0.5 - 2 = 10$
$10 \times 1 + 3 = 13$
$13 \times 1.5 - 5 = 14.5$
$14.5 \times 2 + 7 = 36$

SPEED TEST 24

1. (a) In year 2000 no. of cars = 86 is more than scooter and motorbikes (42+34 = 76) put together. Hence this is the answer.

2. (c) Easier method is as follows :
No. of Motorbike exported = $40 \times 0.1 = 4$
No. of Cars exported = $48 \times 0.12 = 5.76$
No. of scooters exported = $60 \times 0.2 = 12$
Total no. of automobiles exported = 21.76
Thus, 2,17,600 automobiles were exported in year 1999.

3. (b) No. of automobiles exported in year 1996 is as follows :
Cars = 48×0.28
Scooters = 60×0.35
Motorbikes = 38×0.42
Required ratio = $48 \times 28 : 60 \times 35 : 38 \times 42 = 16 : 25 : 19$.

4. (c) Export earnings of auotmobiles are as follow :
Cars = $75 \times 0.3 \times 2$
Scooter = $60 \times 0.4 \times 1$
Motorbike = $84 \times 0.25 \times 1.5$

$\therefore$ Required ratio = $\dfrac{75 \times 3 \times 2}{10} : \dfrac{60 \times 4 \times 1}{10} : \dfrac{84 \times 25 \times 15}{10 \times 100}$
= 30 : 16 : 21

5. (a) Solving with the help of options.
In 1997 motorbike production is 56 ('0000 units).
Total Production = Car + Scooter + Motorbike
= 40 + 44 + 56 = 140 ('0000 units)

$\therefore$ Required % = $\dfrac{56}{140} \times 100$ 40%.

6. (d) Suppose the expenditure of company A in year 2007 was ₹ x lakh.
$\therefore 40 = \dfrac{1.5}{x} \times 100$ $40 x = 150$ x $\dfrac{150}{40}$ 3.75 lakh

7. (d) Data insufficient.

8. (a) Suppose in 2004, expenditure by company A and B each was ₹ one lakh.
For company A
$\therefore 35 = \dfrac{I_1 - I}{I} \times 100 \Rightarrow 135\,I = 100\,I_1.$ .... (i)
For company B $40 = \dfrac{I_2 - I}{I} \times 100$
$\Rightarrow 140\,I = 100\,I_2$ .... (ii)
Equations (i) and (ii) $\dfrac{I_1}{I_2}$ $\dfrac{135}{140}$ $\dfrac{27}{28}$ 27 : 28

9. (e) Average percentage profit earned by company B over the years.
= $\dfrac{40 \quad 45 \quad 40 \quad 35 \quad 50 \quad 30}{6} = \dfrac{240}{6}$ 40%

10. (c) If in year 2008, income of each company was x lakhs then
for company B
$50 = \dfrac{x - E_1}{E_1} \times 100$ $150 E_1 = 100\, x$ .... (i)
For company A,
$25 = \dfrac{x - E_2}{E_2} \times 100$ $125\,E_2 = 100\, x$ .... (ii)
From equations (i) and (ii) $\dfrac{E_1}{E_2}$ $\dfrac{125}{150}$ 5 : 6

11. (c) $\dfrac{2.5 \quad 3 \quad 3.5 \; 1000}{3}$ 3000

12. (d) Total number in 2002 = 0.5 + 1 + 1.5 = 3 × 1000 = 3,000
Total number in 2003 = 1 + 2 + 2.5 = 5.5 × 1000 = 5,500
Total number in 2004 = 1.5 + 2.5 + 3 = 7 × 1000 = 7,000
Total number in 2005 = 2.5 + 3 + 3.5 = 9 × 1000 = 9,000
Total number in 2006 = 2.5 + 3 + 3.5 = 9 × 1000 = 9,000
Total number in 2007 = 2.5 + 3 + 3.5 = 9 × 1000 = 9,000
From graph it is clear that number is same in 2005, 2006 and 2007.

13. (a) In 2004, B + C = 2.5 + 3 = 5.5 × 1000 = 5500
In 2007, B + C = 3.5 + 3 = 6.5 × 1000 = 6500

Required percentage = $\dfrac{5500}{6500} \times 100 = 84.61\% \approx 85\%$

14. (d) $(1 + 2 + 2.5) - 3 = 2.5 \times 1000 = 2500$

15. (b) $\dfrac{1 \quad 2 \quad 1.5 \quad 2.5 \quad 3 \quad 2.5 \times 1000}{6} = 2083 \approx 2090$

(16-20)
Profit (in ₹) of three crops A, B and C in the given years.

Crop	2004	2005	2006	2007	2008	2009
A	1200	2700	4800	3000	3000	6400
B	1200	2400	4000	2400	3000	6000
C	1000	1800	2800	1600	2000	6000

16. (a) Crop C % increase = $\dfrac{6000 \times 1000}{1000} \times 100$ 500%

Crop B % increase = $\dfrac{6000 - 1200}{1200} \times 100$ 400%

Crop A % increase = $\dfrac{6400 \times 1200}{1200} \times 100 = 433.33\%$
Hence, crop 'C' has given maximum percent increase in profit.

17. (a) Required Ratio = $3000 + 3000 : 1200 + 2400$
= 6000 : 3600 = 5 : 3

18. (a) Average profit of C from 2005-2007
$\dfrac{1800 \quad 2800 \quad 1600}{3} = ₹\,2066.67$
Average profit of B from 2005-2007
$\dfrac{2400 \quad 4000 \quad 2400}{3} = ₹\,2933.33$
Average profit of A from 2005-2007
$\dfrac{2700 \quad 4800 \quad 3000}{3} = ₹\,3500$
Hence, crop 'C' has minimum average profit in the given years.

19. (d) Total profit in 2008 = 3000 + 3000 + 2000 = ₹ 8000

20. (a) Total profit for all crops during 2009 = ₹ 18,400
Total profit for all crops during 2006 = ₹ 11600
Required percentage increase
= $\dfrac{18400 - 11600}{11600} \times 100$ 58.62 ≈ 59%

21. (d) Income of company A in the year 2005 = ₹ 1354300
Profit of company A in the year 2005 = ₹ 600000
Required expenditure = 1354300 – 600000 = ₹ 754300

22. (e) Expenditure of company B in the year 2006 = 2211430
Profit of company B in the year 2006 = 400000
Required income = 2211430 + 400000 = ₹ 2611430

23. (c) Required average profit = $\dfrac{3 \quad 5 \quad 4 \quad 5 \quad 6 \quad 6}{6}$ lakh

$= \dfrac{29}{6}$ lakh $483333 \approx 483000$ (approx.)

24. **(a)** Profit made by company A in the year 2002 = 5 lakh
Profit made by company A, B and C in the years 2002
= 5 + 3 + 8 = 16 lakh

Required percentage $= \dfrac{5}{16} \times 100$ 31.25%

25. **(b)** Required percentage increase

$= \dfrac{8-7}{7} \times 100$ 14.28% $\approx$ 14% (approx.)

(26-30)

Expenditure (in ₹ crore) by six corporate sectors for given year.

Year	Insurance	Services	Real Estate	Retail	Whole sale	Other
2008	48	43.2	144	28.8	96	120
2009	104	114.4	135.2	41.6	31.2	93.6
2010	195.3	107.1	31.5	119.7	50.4	126

26. **(d)** From the above table, it has been seen that Insurance, services and others three corporate sector contributed more than ₹ 60 crore each to rural development in both 2009 and 2010.

27. **(b)** Total contribution (in ₹ crore) by the corporate sectors from the 2008 to 2010 = ₹ 630 – ₹ 480 = ₹ 150 crore

28. **(b)** Required more contribution = ₹ 144 – ₹ 31.5
= ₹ 112.5 crore

29. **(c)** From the above table, it has been seen that Real Estate decreases with greatest Rupee amount.

30. **(d)** Wholesale sector's 2008 contribution = ₹ 96 crore contribution to village road improvement

$= ₹\ 96 \times \dfrac{1}{3}$ ₹ 32 core

Remaining part $= ₹\ (96 - 32) = ₹\ 64$

Contribution to conal laying $= ₹\ 64 \times \dfrac{3}{4}$
$= ₹\ 48$ crore
Required amount $= ₹\ (48 - 32) = ₹\ 16$ crore

SPEED TEST 25

1. **(c)** Number of students in school Q in 2007 = 8000 and in year 2006 = 5500
Increase = 8000 – 5500 = 2500

% increase $= \dfrac{2500}{5500} \times 100 \approx 45\%$

2. **(b)** Ratio $= \dfrac{\text{Student qualified from School P in 2005}}{\text{Student qualified from School Q in 2008}}$

$\dfrac{85}{90}$ 17 : 18

3. **(a)** Students qualified in 2005 from both the schools together =
(85 + 60) × 100 = 145 × 100 = 14500
Total number of students qualified from school Q over all the years together = (60 + 55 + 80 + 90 + 75 + 85) × 100 = 445 × 100 = 44500
Difference = 44500 – 14500 = 30000

4. **(e)** Total number of students, who qualified in the exam from school P over all the years together
= (85 + 80 + 95 + 65 + 40 + 90) × 100 = 455 × 100 = 45500
Total number of the students, who qualified in the exam from both the schools together in the 2006 and 2007 years together.
= (80 + 55 + 95 + 80) × 100 = 310 × 100 = 31000

Required percentage $= \dfrac{45500}{31000} \times 100 \approx 147\%$

5. **(b)** Total number of students, who qualified in the exam over all the years from both the schools together
= (85 + 60 + 80 + 55 + 95 + 80 + 65 + 90 + 40 + 75 + 90 + 85) × 100 = 900 × 100 = 90000

$\therefore$ Required number of males $= 90000 \times \dfrac{60}{100} = 54000$
[Since females are 40%]

6. **(e)** Required number of people = 25 + 15 = 40 thousand

7. **(a)** Required percentage $= \dfrac{10}{55} \times 100 = 18.18 \approx 18$ (approx.)

8. **(b)** Required ratio = 15 : 10 = 3 : 2

9. **(d)** Required percentage $= \dfrac{55}{60} \times 100 = 91.666 = 91.67$

10. **(a)** Average number of people using mobile service M

$= \left(\dfrac{5\ \ 10\ \ 25\ \ 20\ \ 25\ \ 15}{6} \right)$ thousand

$= \dfrac{100}{6}$ thousand $= 16\dfrac{2}{3}$

11. **(a)** Fastest growing rate of population is in China

i.e., $\dfrac{22 - 16.5}{1000} \times 100$ 0.55%

Slowest growing rate of population is in France and U.K.

i.e., $\dfrac{1}{1000} \times 100$ 0.1%

$\therefore$ Required difference = 0.55 – 0.1 = 0.45%

12. **(d)** Total birth in USA $= \dfrac{25,00,00,000 \times 6}{1000} = 15,00,000$

Total deaths in Russia $= \dfrac{15,00,00,000 \times 2}{1000} = 3,00,000$

Difference = 15,00,000 – 3,00,000 = 12,00,000

$\therefore$ Required % $= \dfrac{12,00,000}{3,00,000} \times 100$ 400%

13. **(b)** Total birth in Japan in 2008 $= \dfrac{15,00,00,000 \times 9}{1000}$
$= 13,50,000$

Number of infants dying $= \dfrac{13,50,000 \times 3}{1000} = 4050$

Total death in Japan in 2008 =

$15,00,00,000 \times \dfrac{6.5}{1000}$ 975000

Now, required % $= \dfrac{4050}{975000} \times 100$ 0.415

14. **(d)** We cannot be determined because population in 2008 is not given.

15. **(c)** Percentage growth rate of given countries:

USA : $\dfrac{1.5}{1000} \times 100$ 0.15%

UK : $\dfrac{1}{1000} \times 100$ 0.10%

India : $\dfrac{5}{1000} \times 100$ **0.50%**

China : $\dfrac{5.5}{1000} \times 100$ **0.55%**

Japan : $\dfrac{2.5}{1000} \times 100 = 0.25\%$

Russia : $\dfrac{1.5}{1000} \times 100 = 0.15\%$

France : $\dfrac{1}{1000} \times 100 = 0.10\%$

Hence, only two countries from all of the given countries have the rate of growth of population greater than 0.25%

16. (d) Required percentage = $\dfrac{31}{15} \times 100 = 206.67 \approx 207$ (approx.)

17. (c) A = $35000 \times \dfrac{18}{100} \times \dfrac{3}{10} = 1890$

B = $35000 \times \dfrac{22}{100} \times \dfrac{11}{20} = 4235$

C = $35000 \times \dfrac{31}{100} \times \dfrac{3}{5} = 6510$

D = $35000 \times \dfrac{15}{100} \times \dfrac{2}{5} = 2100$

E = $35000 \times \dfrac{14}{100} \times \dfrac{1}{4} = 1225$

Total number of females in all the organizations
= 1890 + 4235 + 6510 + 2100 + 1225 = 15960

18. (b) Total number of females in organization A and C

= $35000 \left(\dfrac{18}{100} \times \dfrac{30}{100} + \dfrac{31}{100} \times \dfrac{60}{100} \right)$

= $\dfrac{35000}{10000} (540 + 1860) = 3.5 \times 2400 = 8400$

19. (a) Number of males in organization B = $\dfrac{35000 \times 22 \times 9}{100 \times 20} = 3465$

Number of males in organization E = $\dfrac{35000 \times 14 \times 3}{100 \times 4} = 3675$

Required difference = $3675 - 3465 = 210$

20. (e) Number of males in organization D

= $35000 \times \dfrac{15}{100} \times \dfrac{60}{100} = 3150$

21. (d) Required average growth rate

= $\dfrac{60,000 - 30,000}{30,000 \times 3} \times 100 = 33.33\%$

22. (c) From the visual observation we can see that year 2004 shows the maximum percentage change in the average price per car of PAL with respect ot previous year.

$\dfrac{6 - 3.75}{6} = 37.5\%$

23. (a) Total production of cars in 2002 = 300000
Total production of PAL cars in 2002 = 50000

∴ Required share of PAL car = $\dfrac{50000}{300000} \times 100 = 16.67\%$

24. (d) Revenue of PAL company cannot be detemined as we have the average price per car not the actual price per car.

25. (c) Production rejected in 2000 = $40000 \times \dfrac{10}{100} = 4000$

Thus the products available for sale = 40000 – 4000 = 36000

∴ Required turnover = 36000 × 3,00000 = 1080 crore.

26-30.

	Day 1			**Day 2**		
Vehicle	**Time in hr**	**Distance in km**	**Speed in km / hr**	**Time in hr**	**Distance in km**	**Speed in km/hr**
A	16	832	52	16	864	54
B	12	516	43	18	774	43
C	11	693	63	18	810	45
D	12	552	46	15	765	51
E	16	935	58.4	14	546	39
F	19	703	37	12	636	53

26. (d) Vehicle B.

27. (c) Speed of vehicle A on day 1 = 52 km/hr
Speed of vehicle C on day 1 = 63 km/hr
Difference = 63 – 52 = 11 km / hr

28. (e) Speed of vehicle can day 2 = 45 km/hr

$\Rightarrow \left(45 \times \dfrac{5}{18} \right)$ m / sec = 12.5 m / sec

29. (e) Percentage

= $\dfrac{\text{Distance travelled by vehicle F on day 2}}{\text{Distance travelled by vehicle F on day 1}} \times 100$

= $\dfrac{636}{703} \times 100 \approx \dfrac{630}{700} \times 100 \approx 90\%$

30. (b) Speed of vehicle D on day 2 = 51
Speed of vehicle E on day 2 = 39

Required ratio = $\dfrac{51}{39} = \dfrac{17}{13}$ or 17:13

SPEED TEST 26

For (Qs. 1 - 5)

According to the question, cost of total production by all the seven companies = ₹ 25 crores.

Company Name	Production cost (in Rs. Crores)	Cost of Item I (in Rs. Crores)	Cost of Item II (in Rs. Crores)
A	3.75	1.5	2.25
B	2.75	1.65	1.1
C	5.5	4.4	1.1
D	2	0.75	1.25
E	6.75	4.21875	2.53125
F	1.25	0.25	1
G	3	1	2

1. (d) Required % = $\dfrac{0.25}{1.25} \times 100 = 20\%$

2. (a) Total Profit earned by G for both items I and II
= 30% of 1 crore + 24% of 2 crore
= 30 lakhs + 48 lakhs = 78 lakhs.

3. **(c)** $\dfrac{\text{Cost of production of I by company A}}{\text{Cost of production of I by company D}}$

$\dfrac{1.5}{0.75}$ $\dfrac{2}{1}$ $2:1$

4. **(e)** Cost of production of both items together by company E = 6.75 crores
Cost of production of C & D = 7.50 crores; of B & G = 5.75 crores; of A and D = 5.75 crores; of C & F = 6.75 crores, A and G = 6.75

5. **(a)** Cost of production of item I by A and item II by B = 1.5 + 1.10 = 2.60 crores.

Sol. (6-10) :

Departments	Number of Graduate employes	Number of employes other than	Number of employees
Production	1200	3800	5000
Finance	150	1850	2000
Administration	300	1700	2000
Design	750	3250	4000
Marketing	600	3400	4000

6. **(e)** Required percentage $= \dfrac{6650}{8000}\times 100$ 83.12%

7. **(b)** Required number $\dfrac{1500}{5250}$ 0.285

8. **(e)** Required Percentage $= \dfrac{5100-300}{300}\times 100$ 1600%

9. **(d)** Required Ratio = 1850 : 300 = 6 : 1

10. **(b)** Median $\dfrac{1200\ 600\ 750\ 150}{4}$ $\dfrac{2700}{4}=675$

11. **(d)** Average number of players who play football and rugby

together $= \dfrac{4200\times\dfrac{17\ 13}{100}}{2}$ 630

12. **(a)** Female players who plays lawn tennis $= 2000\times\dfrac{22}{100}$ 440

Male players who plays rugby

$= 4200\times\dfrac{13}{100} - 2000\times\dfrac{10}{100} = 546 - 200 = 346$

Difference $= 440 - 346 = 94$

13. **(c)** Female players who plays cricket

$= 2000\times\dfrac{40}{100}$ 800

Male players who plays hockey

$4200\times\dfrac{10}{100} - 2000\times\dfrac{15}{100} = 420 - 300$ 120

Ratio $= \dfrac{800}{120}$ $20:3$

14. **(b)** Number of male players who plays football, cricket and lawn tennis

$= 4200\times\dfrac{17\ 35\ 25}{100} - 2000\times\dfrac{13\ 40\ 22}{100}$

$= 3234 - 1500 = 1734$

15. **(a)** Male players who plays rugby

$= 4200\times\dfrac{13}{100} - 2000\times\dfrac{10}{100} = 546 - 200 = 346$

Total number of players play lawn tennis

$= 4200\times\dfrac{25}{100}$ 1050

Required percentage $= \dfrac{346}{1050}\times 100 \approx 33\%$

16. **(b)** Number of promoted employees in HR department
$= 1200 \times 0.11 = 132$
Number of working employees in HR department
$= 3600 \times 0.12 = 432$

So, required percentage $= \dfrac{132}{432}\times 100$ 30.56

17. **(d)** Number of promoted employees in all departments = 1200
Number of working employees in all departments = 3600

So, required percentage $= \dfrac{1200}{3600}\times 100$ 33

18. **(c)** Number of working employees in production and marketing
$= 3600 \times (0.35 + 0.18) = 1908$
Number of male employees in production and marketing =
$2040 \times (0.50 + 0.15) = 1326$
So, the number of female employees in production and marketing = 1908 – 1326 = 582

19. **(e)** Number of promoted employees in IT department
$= 1200 \times 0.26 = 312$
Number of promoted male employees in HR department = 156
Number of working male employees in IT department
$= 2040 \times 0.20 = 408$

So, required percentage $= \dfrac{156}{408}\times 100 \approx 38$

20. **(a)** Number of working employees in accounts department
$= 3600 \times (0.20) = 720$
Number of male employees in accounts department = 2040 $\times (0.05) = 102$
So, number of working females in accounts department
$= 720 - 102 = 618$

21. **(e)** Number of candidates selected from agriculture discipline =

$7390\times\dfrac{7}{100}$ 517.3

Number of candidates selected from Engineering discipline =

$7390\times\dfrac{11}{100} = 812.9$

Required difference = 812.9 – 517.3 = 295.6
≈ 296 (approx.)

22. **(c)** Science $\Rightarrow \dfrac{25780\times 28}{100} - \dfrac{7390\times 32}{100}$

$= 7218 - 2365 = 4853$
Engineering

$\Rightarrow \dfrac{25780\times 16}{100} - \dfrac{7390\times 11}{100} = 4124 - 813$ 3311

Commerce $\Rightarrow \dfrac{25780 \times 18}{100} - \dfrac{7390 \times 16}{100}$

$= 4640 - 1182 = 3458$

Management $\Rightarrow \dfrac{25780 \times 12}{100} - \dfrac{7390 \times 20}{100}$

$= 3093 - 1478 = 1615$

Hence, the difference is maximum in science discipline.

23. **(b)** Required percentage $= \dfrac{24}{16} \times 100$ 150

24. **(a)** Total number of candidates selected from commerce and agriculture discipline.

$= 7390$ of $23\% = \dfrac{23 \times 7390}{100}$ $1699.70 \approx 1700$ (approx.)

25. **(b)** Required ratio $= \dfrac{25780 \times 12}{100} : \dfrac{7390 \times 11}{100} = 3094 : 813$

26. **(d)** Number of working men in Marketing department

$= 1800 \times \dfrac{18}{100} \times \dfrac{7}{12}$ 189

27. **(b)** $\dfrac{1800 \times \dfrac{28}{100} \times \dfrac{11}{11} \dfrac{1}{1}}{1800 \times \dfrac{28}{100}} \times 100 = \dfrac{462}{504} \times 100$ 91.67%

28. **(c)** $\dfrac{1800 \times \dfrac{17}{100} \times \dfrac{2}{2} \dfrac{2}{7}}{1800 \times \dfrac{17}{100}} = \dfrac{68}{306}$ $\dfrac{2}{9}$ 2 : 9

29. **(a)** $\dfrac{1800 \times \dfrac{14}{100} \times \dfrac{3}{4}}{1800 \times \dfrac{14}{100}} = \dfrac{189}{252}$ $\dfrac{3}{4}$ 3 : 4

30. **(e)** $\dfrac{1800 \times \dfrac{23}{100} \times \dfrac{4}{9}}{1800} \times 100$ 10% (approx.)

SPEED TEST 27

1. **(c)** A is a triangle
So, area of A $= 1/2 \times 16 \times 12 = 96$ sqm
So, cost of flooring of A $= 96 \times 50 = ₹ 4800$

2. **(a)** Perimeter of B $= 2 (10 + 20) = 60$ m
So, cost of fencing of B $= 60 \times 15 = 900$
Perimeter of C $= 4 \times 15 = 60$ m
So, cost of fencing of C $= 60 \times 18 = ₹ 1080$
So, required difference $= 1080 - 900 = ₹ 180$

3. **(d)** Area of D $=$ Base $\times$ Height $= 20 \times 12 = 240$ mtr sq
So, cost of flooring of D $= 240 \times 60 = ₹ 14400$
Perimeter of D $= 2 (20 + 12) = 64$ m
So, cost of fencing of D $= 64 \times 25 = ₹ 1600$
So, required ratio $= 14400 : 1600 = 9 : 1$

4. **(d)** Perimeter of E $= 2\pi r = 2 \times 22/7 \times 10 = 440/7$ m
Cost of fencing of E $= 440/7 \times 22 = ₹ 1382.85$
Area of C $= 15 \times 15 = 225$ mtr square
So, cost of flooring of C $= 225 \times 40 = ₹ 9000$
So, required % $= 1382.85 \times 100 / 9000$
$= 15.36\%$ of flooring cost of C.

5. **(b)** Fencing cost of C $= ₹ 1080$
Fencing cost of D $= ₹ 1600$

Required % $= 1080/1600 \times 100 = 67.5\%$

6. **(b)** Total number of soldiers retired from Air Force in the years 2006, 2007 and 2008 $= 2.9 + 5.4 + 4.2 = 12.5$
Number of soldiers retired from Army in the year 2009 $= 8.4$ Difference $= 12.5 - 8.4 = 4.1$ thousands $= 4100$

7. **(c)** Total number of soldiers retired from BSF in the years 2005 and 2006 $= 5.1 + 3.7 = 8.8$
Total number of soldiers retired from Navy over all the years together
$= 1.6 + 1.9 + 2.4 + 2.8 + 1.5 + 3.5 = 13.7$

Required per cent $= \dfrac{8.8}{13.7} \times 100 \approx 64\%$

8. **(a)** Total number of soldiers retired in the year 2007
$= (5.4 + 7.2 + 2.8 + 2.7 + 5.2) \times 1000$

$= 23300$ $\therefore$ Average $= \dfrac{23300}{5}$ 4660

9. **(e)**

10. **(d)** Required ratio $= \dfrac{5.2}{1.2}$ 13 : 3

11. **(c)** Let the principal be ₹ x. Interest accrued from

company C $\dfrac{x \times 2 \times 9}{100} = ₹ \dfrac{9x}{50}$

Interest accrued from company

B $= ₹ \dfrac{9.5x}{50}$

$\therefore \dfrac{9.5x}{50}$ $\dfrac{9x}{50}$ 14800

$\Rightarrow 18.5x = 14800 \times 50$

$\Rightarrow x = \dfrac{14800 \times 50}{18.5} = ₹ 40000$

12. **(a)** CI earned under the scheme I of company E

$= P\left[\left(1+\dfrac{R}{100}\right)^T - 1\right] = 120000\left[\left(1+\dfrac{9}{100}\right)^2 - 1\right]$

$= 120000 \times 0.1881 = ₹ 22572$

S.I earned under the scheme IV of the company A

$\dfrac{120000 \times 2 \times 10}{100} = ₹ 24000$

Difference
$= ₹ (24000 - 22572) = ₹ 1428$

13. **(b)** SI earned under the scheme IV of company D

$\dfrac{25000 \times 9.5}{100} = ₹ 2375$

Amount $= ₹ (25000 + 2375) = ₹ 27375$
Total amount under scheme II

$= ₹ 27375 \left(1 \dfrac{9}{100}\right) = ₹ \left(\dfrac{27375 \times 109}{100}\right)$

$= ₹ 29838.75$

14. **(d)** CI got by Abhishek $= 45000\left[\left(1+\dfrac{8}{100}\right)^2 - 1\right]$

$= ₹ (45000 \times 0.1664) = ₹ 7488$

Interest got by Jeevan

$$= ₹ \left(\frac{45000 \times 10.5 \times 2}{100} \right) = ₹ \ 9450$$

∴ Difference = ₹ (9450 – 7488) = ₹ 1962

Jeevan earned more interest.

15. (a) Interest earned under scheme II of company A

$$= ₹ \left(\frac{30000 \times 9.5 \times 2}{100} \right) = ₹ \ 5700$$

CI earned under scheme II of company D

$$= 48000 \left[\left(1 + \frac{9}{100} \right)^2 - 1 \right]$$

$$= ₹ \ (48000 \times 0.1881) = ₹ \ 9028.8$$

∴ Total interest earned by Mr. Lal

$$= ₹ \ (5700 + 9028.8) = ₹ \ 14728.8$$

16. (a) From table we can say that expenditure on water supply and sanitation are increasing in every plan. So, the graph represent in option (a) is best explain of it.

17. (b) By watching table, we see that the ratio of public sector expenditure to the expenditure on social service was highest in the VIth plan.

18. (a) From table, we can say that in all the sector, there is no continuous decrease.

19. (d) Required percentage $= \frac{97500}{24880} \times 100 = 392\%$

20. (c) Total expenditure on education in all the plans
$= 1530 + 2730 + 5890 + 7860 + 13360 + 25240$
$= 56610 \ million$
Total expenditure on health in all the plans
$= 980 + 2140 + 2260 + 3370 + 7610 + 18210 = 34570 \ million$
∴ Required difference $= (56610 - 34570)$
$= 22040 \ million = ₹ \ 22040 \times 1000000$
$= ₹ \ 22040000000$

21. (d) Marks obtained by C (in percentage)

$$= \frac{\begin{array}{l} 100 \times \frac{75}{100} + 100 \times \frac{56}{100} + 150 \times \frac{72}{100} \\ + 60 \times \frac{75}{100} + 150 \times \frac{75}{100} + 40 \times \frac{80}{100} \end{array}}{6}$$

$$= \frac{75 + 56 + 108 + 45 + 112.5 + 32}{6}$$

$$= \frac{428.5}{6} = 71.41\% \approx 71\%$$

22. (a) Marks obtained by B in Maths and English

$$= 100 \times \frac{88}{100} + 150 \times \frac{88}{100} = 88 + 132 = 220$$

Marks obtained by F in maths and english

$$= 100 \times \frac{85}{100} + 150 \times \frac{74}{100} = 85 + 111 = 196$$

Difference = 220 – 196 = 24

23. (c) Marks obtained by E in Geography $= 40 \times \frac{75}{100} = 30$

Marks obtained by E in Hindi $= 100 \times \frac{60}{100} = 60$

$60 \times x\% = 30 \ x = 50\%$

24. (b) Marks obtained by D in History $= 60 \times \frac{80}{100} = 48$

and Geography $40 \times \frac{62}{100} = 24.8$

Total marks obtained 48 + 24.8 = 72.8

Total marks = 60 + 40 = 100

Percentage marks $= \frac{72.8}{100} \times 100 = 72.8\%$

25. (e) Average marks of all students in Science

$$= \frac{150 \times \frac{82}{100} + 150 \times \frac{85}{100} + 150 \times \frac{72}{100}}{6}$$
$$+ \frac{150 \times \frac{80}{100} + 150 \times \frac{68}{100} + 150 \times \frac{90}{100}}{6}$$

$$= \frac{150 \left(\frac{82}{100} + \frac{85}{100} + \frac{72}{100} + \frac{80}{100} + \frac{68}{100} + \frac{90}{100} \right)}{6}$$

$$= \frac{477 \times 150}{600} = 119.25$$

26. (d) Total amount earned by store C through the sales of M and O type products together
$= (57 \times 5.6 + 48 \times 50) \ thousand$
$= (319.2 + 2400) \ thousand$
$= 27.192 \ lakh$

27. (e) Number of L type product sold by store F = 48
Number of L type product sold by store E = 40

∴ Required percentage $= \frac{48}{40} \times 100 = 120$

28. (a) Required difference
$= (60 \times 75 - 44 \times 15) \ thousand$
$= (4500 - 660) \ thousand$
$= 38.4 \ lakh$

29. (e) Required ratio $= (61 + 54) : (54 + 48) = 115 : 102$

30. (b) Required average

$$= \left(\frac{16 + 15 + 14.5 + 15.6 + 18.2 + 14.9}{6} \right) \ thousand$$

$$= \left(\frac{94.2}{6} \right) \ thousand = ₹ \ 15700$$

SPEED TEST 28

Sol. (1-5) :

Number of Passengers in train A = 700

Number of Passenger in train B = 30% of 700 + 700 = 910

Coaches	General	Sleeper	First Class	AC	Total
Train A	140	161	224	175	700
Train B	241	273	91	305	910
Total	381	434	315	480	1610

1. (c) Number of passengers in first class coaches of train A = 224
Number of passengers in sleeper class coaches of train B = 273

∴ Required ratio $= \frac{224}{273} = \frac{7 \times 32}{7 \times 39} = 32 : 39$

2. (d) Passengers in the general coaches of train A = 140
Passengers in the AC coaches of train B = 305
∴ Total = 140 + 305 = 445

3. (e) The number of passengers in AC coaches of train
A = 175
Total number of passengers in sleeper class coaches and first class coaches together of train B
= (273 + 91) = 364
∴ Their difference = 364 – 175 = 189

4. (b) Passengers in general class coach of train A and train B =
(140 + 241) = 381
Total number of passengers in train B = 910

∴ Required percentage = $\frac{381}{910} \times 100\%$ = 41.8% ≈ 42%

5. (c) The cost of per ticket of first class coach = ₹ 450
Number of Passenger in first class coaches of Train A = 224.
Total amount = 450 × 224 = ₹ 100800

(6-10) : Rate of painting per sq. metre = ₹ 3200

Rate of tiling per square metre = $\frac{3200 \times 125}{100}$ = ₹ 4000

Rate of carpeting per sq. metre = $\frac{4000 \times 120}{100}$ = 4800

6. (a) Area of the four walls of the room
= 2 × 5(6 + 6) = 120 sq. metre
∴ Expenditure on painting = ₹(120 × 3200)
Area of the floor = 6 × 6 = 36 sq. metre
∴ Expenditure on decoration= ₹ (36 × 4800 × 14)
∴ Required ratio = (120 × 3200) : (36 × 4800 × 14)
= 384000 : 2419200 = 10 : 63

7. (b) Area of tiles on the walls
= 2 × 0.25 (6 + 6) = 6 sq. metre
∴ Required total cost = ₹
[(36 + 6) × 4000 + 36 × 4800 × 14]
= 168000 + 2419200
= ₹ 2587200

8. (c) Area of the four walls of room
= 2 × 27 (21 + 42) = 3402 sq. metre
Area of the floor
= 21 × 42 = 882 sq. metre
Painting ⇒ (3402 + 882) × 3200
=₹13708800
Carpeting ⇒ 4800 × 882 = ₹ 4233600
Decoration ⇒ 4233600 × 14 = ₹ 59270400
Electrification ⇒ $\frac{4233600 \times 75}{100}$ = ₹ 3175200
∴ Total expenditure
= ₹ (13708800 + 4233600 + 59270400 + 3175200)
= ₹ 80388000

9. (d) Area of the floor = 51 × 59 = 3009 sq. metre
Rate of tiling = $\frac{4000 \times 175}{100}$ = ₹ 7000
∴ Total cost = ₹ (3009 × 7000) = ₹ 21063000

10. (a) New length of the room
= $\frac{6 \times 120}{100}$ = 7.2 metre

Breadth = $\frac{6 \times 132}{100}$ = 7.92 metre

Height = $\frac{5 \times 112}{100}$ = 5.6 metre

Area of the four walls
= 2 × height (length + breadth)
= 2 × 5.6 (7.2 + 7.92)
= 2 × 5.6 × 15.12
= 169.344 sq. metre
Area of the floor = 7.2 × 7.92 = 57.024 sq. metre
Painting ⇒ 3200 × 169.344 = ₹ 541900.8
Tiling ⇒ 57.024 × 4000 = ₹228096
Total cost = ₹ (54190.8 + 228096) = 769996.8

(11-15) : Distribution of officers in different categories is as follow:

Pub. Ru	Pub. Ur	Pri. Ru	Pri. Ur	Pub. Ru Ur
450	3750	300	1800	3600

Pub. Pri Ru	Pub. Pri Ur
600	2250

11. (b) 450 + 300 + 3600 + 600 = 4,950
12. (d) Total number of candidates.
= 450 + 3750 + 3600 + 600 + 2250 = 10650
13. (b) Reqd ratio $\frac{450}{300}$ $\frac{3}{2}$ 3 : 2
Required ratio = 300 + 450 = 2 : 3
14. (c) Required number of candidates working in Private Sector Banks in Urban Areas.
= 1800 + 2250 = 4050
15. (e) Number of candidate having no prior experience of working in banking sector
= 15000 – (450 + 3750 + 300 + 1800 + 3600 + 600 + 2250)
= 15000 – 12750 = 2250

Req. % = $\frac{2250}{15000} \times 100$ 15%

(16-20) :

Facilities	No. of Villagers
Have only adequate water supply	$\frac{25}{100} \times 1800$ 450
Have only proper electric supply	$\frac{15}{100} \times 1800$ 270
Have only proper education facilities	$\frac{7}{100} \times 1800$ 126
Have only telecommunication services	$\frac{12}{100} \times 1800$ 216
Have only health care services	$\frac{16}{100} \times 1800$ 288
Have water and electric supply	$\frac{6}{100} \times 1800$ 108
Have proper water supply, electric supply and health care services	$\frac{8}{100} \times 1800$ 144
Have proper electric supply tele-communication and health care services	$\frac{5}{100} \times 1800$ 90
Have all the facilities	$\frac{6}{100} \times 1800$ 108

16. (d) Number of villages with adequate water supply
= 450 + 108 + 144 + 108 = 810

17. (a) Number of villages with adequate supply of water and electricity
= 108 + 144 + 108 = 360

18. (d) Number of villages with proper supply of electricity
= 270 + 108 + 144 + 90 + 108 = 720
Number of villages not having proper electric supply
= 1800 – 720 = 1080

19. (b) Number of villages with only proper education facilities = 126

20. (e) Number of villages with all the facilities = 108

(21-25): Total Number of students = 280
Number of students who passed Maths = 185
Number of students who passed Physics = 210
Number of students who passed Chemistry = 222
Students who passed in Maths and physics = 180
Students who passed in Maths and Chemistry = 175
Students who passed in Physics and Chemistry = 200
Number of students who passed in atleast one subject =
280 – 47 = 233
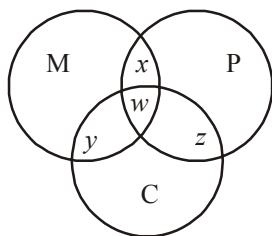
$x + w = 180$ ....(i)
$w + z = 200$ ....(ii)
$w + y = 175$ ....(iii)
$M + x + w + y = 185$ ....(iv)
$P + x + w + z = 210$ ....(v)
$C + y + w + z = 222$ ....(vi)
$M + P + C + y + x + z + w = 233$ ....(vii)
By (iv) + (v) + (vi) – (vii),
$x + y + z + 2w = 384$ ....(viii)
by (i) + (ii) + (iii),
$x + y + z + 3w = 555$ ....(ix)
By (ix) – (viii),
$w = 171$
From equation (i),
$x = 9$
From equation (ii),
$z = 200 – 171 = 29$
From equation (iii),
$y = 175 – 171 = 4$
$M = 185 – 4 – 9 – 171 = 1$
$P = 210 – 9 – 171 – 29 = 1$
$C = 222 – 4 – 29 – 171 = 18$

21. (a) Number of students passed in Chemistry only = 18
22. (d) Number of students who have passed in all three subjects = 171
23. (a) Number of students who failed in Physics and Maths = 47 + 18 = 65
24. (d) Number of students who passed in Maths but failed in both Physics and Chemistry = 1

25. (b) Required answer = $x + y + z + w$
9 + 29 + 4 + 171 = 213

(26-30) :
Number of students in the college = 7200

Number of boys = $\frac{7}{12} \times 7200$ 4200

Number of girls = $\frac{5}{12} \times 7200$ 3000

Number of student in B. Tech. (nano technology)
= 22% of 7200 = 1584
Number of girls in B. Tech. (computer science)
= 16% of 3000 = 480
Number of boys in B.Tech. (mechanical) = 18% of 4200 = 756
Number of girls in B.Tech. (civil) = 30% of 480 = 144
Number of boys in B.Tech. (electronics) = 15% of 4200 = 630
Number of boys in B.Tech. (computer science) = 50% of 480 = 240
Number of girls in B.Tech. (aerospace) = 15% of 3000 = 4500

Number of boys in B.Tech. (civil) $= \frac{3}{1} \times 144$ 432

Number of students in B.Tech (electronics) = 24% of 7200 = 1728
∴ Number of girls in B.Tech. (electronics) = 1728 – 630 = 1098

Number of boys in B.Tech. (aerospace) $= \frac{12}{5} \times 450$ 1080

Number of boys in B.Tech. (nano technology) = Remaining
Number of boys = 4200–(756+630+240+432+1080)
          = 4200–3138=1062
∴ Number of girls in B.Tech. (nano technology)
= 1584 – 1062 = 522
Number of girls in B.Tech. (mechanical) = Remaining
Number of girls = 3000 – (480 + 144 + 450 + 1098 + 522)
= 3000 – 2694 = 306
Tabular form of above information is shown below.

Subjects	Number of boys	Number of girls
B.Tech. (computer science)	240	480
B.Tech. (mechanical)	756	306
B.Tech. (civil)	432	144
B.Tech. (electronics)	630	1098
B.Tech. (aerospace)	1080	450
B.Tech. (nano technology)	1062	522
Total	4200	3000

26. (a) From the table, it is clear that total number of students enrolled in B.Tech. (meachanical)

27. (c) Number of girls enrolled in B.Tech. (electronics) = 1098

∴ Required percentage $= \frac{1098}{7200} \times 100\% = 15.25\% \simeq 15\%$

28. (e) Number of girls enrolled in B.Tech. (nano technology) = 522
29. (d) Number of boys enrolled in B.Tech. (aerospace) = 1080
Number of girls enrolled in B.Tech. (computer science) = 480

∴ Required percentage $= \frac{1080}{480} \times 100\% = 225\%$

30. (b) Total number of boys enrolled in B.Tech. (civil) = 432

SPEED TEST 29

1. (a) Using linear equation we can easily find the required time.
It is not, given in the statement II what time it takes to travel from C to B. So, we cannot find the travel time from A to B.

2. (b) From statement II, we can easily get the average monthly wage of an employee by dividing the total yearly wage bill by the total no. of employees.
Statement I is of no use.

3. (d) Since salary status of 1989 to 1990 is not given so, we cannot get Ram Gopal's income in 1990.

4. (b) A number is divisible by 3, it does not clear that it would be divisible by 9. For example, 6, 15, 21 etc. If the number is divisible by 27, then it is surely divisible by 9 because 27 has one of the factors as 9.
Hence II alone suffices to answer the question.

5. (d) Even when we use both the statements we cannot arrive at the conclusion that other two sides of the quadrilateral are equal.

6. (d) Statement I only gives in time taken its solving the first problem only and nothing about time taken to solve the remaining 149 problems.
Statement II does not say anything about the compartive efficiency of man and computer.

7. (c) If we use both the statements together we get the profit on 6 cows as (24000 – 15000) as well as average profit per cow $\left(\dfrac{9000}{6}\right)$.

8. (b) Statement I gives extra information.
We get the answer from the statement II alone itself as speed is given.

9. (d) We need individual frequencies to answer the such type of questions. Both the statements together do not provide total no. of students who would have got 80 marks in Maths test.

10. (d) Statement I : We need former price to get the answer.
Statement II : We need initial profit to get the answer.
Hence, we cannot find the answer even using both the statements.

11. (c) Using the information contained in both the statements, we get the Ramesh has worked 7 hours as overtime. Hence we can find his earning using both the statements.

12. (d) The value of metal in the ring cannot be calculated as the value of copper is not given in any of the statements.

13. (b) Statement (I) does not tell anything about the cost of the apples.
From statement (II), we can easily find the cost of two kg of apples.

14. (d) Statement I : No value about the requirements for the foundation of the apartment.
Statement II : There is no information about the density of the cement.

15. (d) We cannot find the length of the track with the information provided in both the statements together or alone.

16. (c) From statement I we get total number of attendance in both Maths and from statement II we get total number of games. Hence, we will require both the statements.

17. (b) From statement (I) we do not get the answer because the number of votes received by other contestants are not given. From statement (II), we can directly get the answer.

18. (a) Only statement I is sufficient because total number of his book is given

19. (a) Only statement I is sufficient to answer because we can find the weight lose by sheela during first seven days.

20. (c) From statement II we can easily get the marks obtained by Namita and Mona.
From statement I we get the average marks of Namita and Mona i.e. marks obtained by Akshay.

21. (c) Statement (I) : No. of admissions is given
$= 50 \times 15\% = 7.5$
Statement (II) : No. of those who deposit fee is given
$= 7.5 \times 80\% = 6$
Thus, both the statement are required to answer the question.

22. (a) From statement (I), the value of n = 64 because $2 < 64 < 100$
and 64 is cube of an integer i.e., 4 and also a square of an integer i.e., 8

23. (d) Since both statements do not give the proper figure, so, nothing can be calculated definitely on the basis of both the statements.

24. (c) Since total number of votes in favour of A and C is given so, we can find the number of votes obtained by each candidates.

25. (e) Since we can find the area of floor from either statements, so both the statements are true.

26. (c) From statement I ⇒ Total Marks $= \dfrac{2 \times 100}{4} = 50$
Pass Marks $= 50 \times \dfrac{32}{100} = 1 \quad 17$
From statement (II), Total Marks $= \dfrac{5}{10} \times 100 = 50$ and
Pass Marks $= 50 \times \dfrac{30}{100} = 2 \quad 17$

27. (b) Statement (I), alone sufficient to answer the question, as the product of any odd number with 5 is always an odd number.

28. (a) From statement I, the actual cost price is not known.
From statement II, we can get the marked price.
$\left(\text{Marked price} = \dfrac{200 \times 115}{100} \times \dfrac{100}{90}\right)$

Hence, both the statements together do not suffices to answer the question.

29. (d) When we use with the statements together, we only get the area of the right angled triangle. As there is no information about the base of the right triangle, we cannot get the height of the right angled triangle.

30. (d) Using both the statements, we get
A + C + 2B
Hence, we cannot exactly say whether B is even or odd.

SPEED TEST 30

(1 to 5) :

1. (a) Passengers of airline A
= (15 + 10 + 20 + 10 + 15 + 10) thousands
= 80 thousands
Passengers of airline C
= (15 + 15 + 15 + 10 + 20 + 10) thousands
= 85 thousands
Difference = 85 − 80 = 5 thousands

2. (b) Passengers of airline C who travelled to Delhi and Kolkata = 30 thousands

Required percentage = $\frac{30}{85} \times 100 \approx 35$

3. (c) Required ratio = (15 + 10) : (15 + 10) = 25 : 25 = 1 : 1

4. (d) Passengers of airline A who travelled to Chennai
First quarter ⇒ 10000

Second quarter ⇒ $10000 \times \frac{150}{100} = 15000$

Third quarter ⇒ $\frac{15000 \times 100}{120}$ 12500

= $\frac{12500 - 10000}{10000} \times 100 = \frac{250000}{10000}$ 25

5. (e) Passengers of airline B who travelled to Bangaluru.
First quarter ⇒ 10000

Second quarter ⇒ $\frac{10000 \times 130}{100} = 13000$

Passengers of airline B who travelled to Kolkata
First quarter ⇒ 10000
Second quarter ⇒ 14000

∴ Required percentage = $\frac{20000}{27000} \times 100 \approx 74$

6. (d) 9228.789 ~ 9230; 5021.832 ~ 5020 and 1496.989 ~ 1500
Now the equation will become
9230 − 5020 + 1500 = ?
? = 5710
But the nearest value is 5700.
[Note: Even rounding of the numbers to nearest hundred places gives the same

7. (a) 1002 ~ 1000; 49 ~ 50; 99 ~ 100 and 1299 ~ 1300
Now the equation will become
1000 ÷ 50 × 100 − 1300 = ?
20 × 100 − 1300 = ?
2000 − 1300 = ?
? = 700

8. (d) The difference between two nearest values is 70 (210 and 280). So round off the numbers to the nearest integers.
29.8% of 260 ~ 30% of 260; 60.01% of 510 ~ 60% of 510 and 103.57 ~ 104
Now the equation will become
30% of 260 + 60% of 510 − 104 = ?
$30/100 \times 260 + 60/100 \times 510 − 104 = ?$
78 + 306 − 104 = ?
? = 384 − 104 = 280

9. (a) $(21.98)^2 = (22)^2$
$(25.02)^2 = (25)^2$
and $(13.03)^2 = (13)^2$
The equation will becomes
$22^2 − 25^2 + 13^2 = ?$
484 − 625 + 169 = ?
653 − 625 = ?
? = 28 so the nearest value is 25

10. (e) $\sqrt{24.98} \times \sqrt{6.25} \times \sqrt{99} = ?$
$5 \times 2.5 \times 10 = 125$

11. (e) From statement I,
Let the number of students in the intitutes A and B be 3x and 4x respectively. However we get no conclusive answer by using data given in all the statements.

12. (c) From statements I and II, Let Mr. X's monthly income = ₹ x. Then

$\frac{15 \times x}{100}$ 4500

⇒ x $\frac{4500 \times 100}{15}$ ₹ 30000

From statements I and III,

$x \times \frac{4}{5} \times \frac{85}{100}$ 20400

⇒ x $\frac{20400 \times 5 \times 100}{4 \times 85}$ = ₹ 30000

13. (a) From Statements I and III, Let Suchitra's son's present age be x years.
∴ Suchitra's present age = 2x years
After 4 years,

$\frac{2x}{x}$ $\frac{4}{4}$ $\frac{13}{24}$

We can get the required answer by this relation.
So statement II is not required.

14. (d) From all three statements, Seeta's investment

= ₹ $\left(\frac{3}{8} \times 2.5\right)$ lakh = ₹ 93750

Geeta's investment = ₹ 156250
Ratio of Neeta's, Seeta's and Geeta's profit
= 85000 × 24 : 93750 × 18 : 156250 × 18
We can get the share of Neeta if total profit is given.
So data given in all three statements is required to answer the question.

15. (d) Let the marked price of the article be ₹ x.
From statement II.

$$\frac{95 \times x}{100} = 608$$

$$\Rightarrow x = \frac{608 \times 100}{95} = ₹ 640$$

From statements I and III,

Marked price $= \frac{128 \times 500}{100}$

$= ₹ 640$

So statement II is sufficient to give the answer.

16. (a) Required ratio = 40 : 35 = 8 : 7

17. (b) Required average

$$= \left(\frac{15 + 25 + 30 + 40 + 15 + 10}{6}\right) \text{thousand}$$

$$= \frac{135}{6} = 22.5 \text{ thousand}$$

18. (c) Required percentage increase

$$= \frac{25 - 10}{10} \times 100 = 150$$

19. (e) Laptops manufactured by Apple, Lenovo and Samsung
in 2013 = 15 + 40 + 25 = 80 thousand
Laptops manufactured by Dell, HP and Abascus in 2014
Required = 15 + 25 + 35 = 75 thousand
Difference = 5000

20. (a) Abascus $\Rightarrow$

21. (b) Suppose x units are produced each year.
So, in the year 2006,
Total revenue = 1200
$\Rightarrow 12 \times x = 1200$
$\Rightarrow x = 100$
Prifit = 300
$\therefore$ Cost price = 1200 – 300 = 900

$\therefore$ Cost per unit $= \frac{900}{100} = 9$

In the year 2005,
Total revenue = 1400
$\Rightarrow 14 \times x = 1400$
$x = 100$
Profit = 100
$\therefore$ Cost price = 1400 – 100 = 1300

$\therefore$ Cost per unit $= \frac{1300}{100} = 13$

In the year 2009,
Total revenue = 400
$\Rightarrow 8 \times x = 400$
$\Rightarrow x = 50$
Profit = 150
$\therefore$ Cost price = 400 – 150 = 250

$\therefore$ Cost per unit $= \frac{250}{50} = 5$

In the year 2011,
Total revenue = 700
$\Rightarrow 14 \times x = 700$
$\Rightarrow x = 50$
Profit = 200
$\therefore$ Cost price = 700 – 200 = 500

$\therefore$ Cost per unit $= \frac{500}{50} = 10$

Thus, per unit cost is highest in the year 2005.

22. (b)

Years	Unit price	Revenue	Total units $= \dfrac{\text{Revenue}}{\text{Unit price}}$
2004	10	700	70
2005	14	1400	100
2006	12	1200	100
2007	12	900	75
2008	11	1100	100
2009	8	400	50
2010	10	200	20
2011	14	700	50
2012	10	600	60
2013	10	800	80
2014	15	900	60
			Total = 765

$\therefore$ Average units $= \frac{765}{11} \simeq 70$ units

23. (c) Checking option (a),

Volatility per unit $= \dfrac{15-8}{\frac{126}{11}} = \frac{77}{126} = 0.611$

Checking of option (b),
Total cost = Revenue – Profit
= (700 + 1400 + 1200 + 900 + 1100 + 400 + 200 + 700 + 600 + 800 + 900) – (0 + 100 + 300 + 150 + 0 + 150 + 100 + 200 + 0 + 400 + 300)
= 8900 – 1700 = 7200

Average cost per unit $= \dfrac{7200}{11}$

Volatility cost per unit $= \dfrac{(1400-100)-(200-100)}{7200} \times 11$

$= \dfrac{1300-100}{7200} \times 11 = 1.833$

Checking option (c),

Average profit $= \dfrac{1700}{11}$

$\therefore$ Profit volatility $= \dfrac{400-0}{\dfrac{1700}{11}} = \dfrac{44}{17} = 2.588$

Checking option (d),

Average revenue $= \dfrac{8900}{11}$

$\therefore$ Revenue volatility $= \dfrac{1400-200}{\dfrac{8900}{11}}$

$= \dfrac{132}{89} = 1.483$

$\therefore$ Total profit has highest volatility.

24.

Year	New revenue	Total cost = Old revenue – Profit
2004	80% of 700 = 560	700
2005	80% of 1400 = 1120	1300
2006	80% of 1200 = 960	900
2007	80% of 900 = 720	750
2008	80% of 1100 = 880	1100
2009	400	120% of 250 = 300
2010	200	120% of 100 = 120
2011	700	120% of 500 = 600
2012	600	120% of 600 = 720
2013	800	120% of 400 = 480
2014	900	120% of 600 = 720

In a year when total cost is more than new revenue then in that year there is loss.
These years are 2004, 2005, 2007, 2008 and 2012
So, there are total 5 yr.

25. (b) Total decrease in revenues
= 20% of (700 + 1400 + 1200 + 900 + 1100) = 1060
Total increase in cost
= 20% of (250 + 100 + 500 + 600 + 400 + 600) = 490
Decrease in cumulative profit
= Total decrease in revenues + Total increase in cost
= 1060 + 490 = ₹1550

a $\quad x + y + 4z = 122 \quad$ ... (i)
$\quad x + y + 3z = 88 \quad$ ... (ii)
$\quad x + y + z = 78 \quad$ ... (iii)
By equation (iii) × 3 – equation (ii),

$27x + 6y + 3z = 234$
$4x + 5y + 3z = 88$
$\underline{\quad - \quad - \quad - \quad}$ ...(iv)
$23x + y = 146$

By equation (iii) × 4 – equation (i),

$36x + 8y + 4z = 312$
$7x + 6y + 4z = 122$
$\underline{\quad - \quad - \quad - \quad}$ ...(v)
$29x + 2y = 190$

By equation (iv) × 2 – equation (v),

$46x + 2y = 292$
$29x + 2y = 190$
$\underline{\quad - \quad - \quad}$ ...(iv)
$17x = 102$

$\Rightarrow x = 6$
From equation (iv), $23 \times 6 + y = 146$
$\Rightarrow y = 146 - 138 = 8$
From equation (iii),
$9 \times 6 + 2 \times 8 + z = 78$
$\Rightarrow 54 + 16 + z = 78$
$\Rightarrow z = 78 - 70 = 8$
Clearly, $x < y = z$

27. (c) By equation (II) × 2 – equation (I)

$8x + 6y = 118$
$7x + 6y = 110$
$\underline{\quad - \quad - \quad - \quad}$
$x = 8$

From equation (I)
$7 \times 8 + 6y = 110$
$\Rightarrow 6y = 110 - 56 = 54$
$\Rightarrow y = 9$
From equation (iii),
$8 + z = 15 \Rightarrow z = 7$
Clearly, $x < y > z$

28. (e) I. $x = \sqrt{(36)^{\frac{1}{2}} \times (1296)^{\frac{1}{4}}} = \sqrt{6 \times 6} = 6$

By equation II × 3 – equation III

$6y + 9z = 99$
$6y + 5z = 71$
$\underline{\quad - \quad - \quad - \quad} \quad \Rightarrow z = 7$
$4z = 28$

From equation II,
$2y + 3 \times 7 = 33$
$\Rightarrow 2y = 33 - 21 = 12$
$\Rightarrow y = 6$
$x = y < Z$

29. (d) By equation 1 × 5 – II × 8

$40x + 35y = 675$
$40x + 48y = 792$
$\underline{\quad - \quad - \quad - \quad}$
$-13y = -117$

$\Rightarrow y = 9$
From equation I,
$8x + 7 \times 9 = 135$
$\Rightarrow 8x = 135 - 63 = 72$
$\Rightarrow x = 9$
From equation III,
$9 \times 9 + 8z = 121$
$\Rightarrow 8z = 121 - 81 = 40$
$\Rightarrow z = 5$
Clearly, $x = y > z$

30. (e) I. $(x + y)^3 = 1331$

$\Rightarrow \ x + y = 11$

$\Rightarrow \ y = 11 - x$

From equation III,

$x(11 - x) = 28$

$\Rightarrow \ 11x - x^2 = 28$

$\Rightarrow \ x^2 - 11x + 28 = 0$

$\Rightarrow \ x^2 - 7x - 4x + 28 = 0$

$\Rightarrow \ x(x - 7) - 4(x - 7) = 0$

$\Rightarrow \ (x - 7)(x - 4) = 0$

$\Rightarrow \ x = 7, 4$

From equation I

$y = 4, 7$

From equation II

$7 - 4 + z = 0 \Rightarrow z = -3$

$4 - 7 + z = 0 \Rightarrow z = 3$

31. (b) Let Shashi had sum of ₹ P.

then, $\dfrac{2}{3}P \times \dfrac{12 \times 6}{100} + \dfrac{1}{3}P\left(1 + \dfrac{10}{100}\right)^2 - \dfrac{1}{3}P = 2805$

$= \dfrac{48P}{100} + \dfrac{1}{3}P\left(\dfrac{121}{100}\right) - \dfrac{1}{3}P = 2805$

$= \dfrac{48P}{100} + \dfrac{121P - 100P}{300} = 2805 \Rightarrow \dfrac{144P + 21P}{300} = 2805$

$\Rightarrow \ \dfrac{165P}{300} = 2805$

$\Rightarrow \ P = \dfrac{2805 \times 300}{165}$

$\Rightarrow \ P = 17 \times 300 = ₹ 5100$

32. (b)

Time taken $= \dfrac{\text{Total distance to cover}}{\text{Relative velocity}} = \dfrac{559}{86} = 6.5\,h$

∴ Meeting time

$= 10\,am + 6.5\,h. = 4:30\,pm$

(33 – 35)
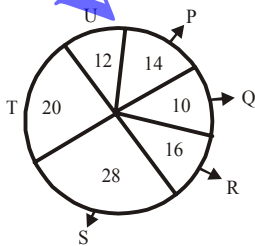
Total Number = 11200

Store	Nokia/ Samsung
P	4 : 3
Q	3 : 1
R	5 : 4
S	7 : 6
T	1 : 4
U	11:10

33. (a) Total % of (P + R + S + T)

Together = 78%

Number of Nokia sold by store

$P = \dfrac{4}{7} \times 14 \times \dfrac{11200}{100} = 8 \times \dfrac{11200}{100} = 896$

Number of Nokia sold by store

$R = \dfrac{5}{9} \times 16 \times \dfrac{11200}{100} = \dfrac{80 \times 112}{9} = 996$

Number of Nokia sold by store

$S = \dfrac{7}{13} \times \dfrac{28}{100} \times 11200 = 14 \times 112 = 1568$ approx

Number of Nokia sold by store

$T = \dfrac{1}{5} \times \dfrac{20}{100} \times 11200 = 448$

Total Nokia phone sold by

$(P + R + S + T) = 896 + 996 + 1568 + 448 = 3908$

∴ Required average $= \dfrac{3908}{4} = 977$

34. (e) Samsung phone sold by store

$p = \dfrac{3}{7} \times \dfrac{14}{100} \times 11200 = 672$

Samsung phone sold by store

$Q = \dfrac{1}{4} \times \dfrac{10}{100} \times 11200 = 280$

Total Samsung sold by (P + Q) = 672 + 280 = 952

Total Nokia phone sold by R = 996

Difference = 996 – 952 = 44

Required percentage, $= \dfrac{44}{952} \times 100 = \dfrac{44 \times 25}{238} = \dfrac{22 \times 25}{119}$

$= \dfrac{550}{119} = 4\dfrac{74}{119}$

35. (c) We know, 100% = 360°

So, 1 = 3.6°

So, 28% = 28 × 3.6 = 100.8°

36. (b) Number of Nokia phones sold by store S = 1568 (approx)

Total Number of Samsung phone sold by store T

$= \dfrac{4}{5} \times \dfrac{20}{100} \times 11200 = 1792$

Total Number of Samsung phone sold by store U

$$= \frac{10}{21} \times \frac{12}{100} \times 11200 \quad 640$$

∴ Required ratio
= 1568 : (1792 + 640)
= 1568 : 2432 : 49 : 76

37. (c) Total Number of cellular phones sold by stores Q in October

$$= \frac{10}{100} \times 11200 \quad 1120$$

Sold in November = $1120 \times \frac{115}{100} \quad 1288$

Total Number of cellular phone by T in October

$$= = \frac{20}{100} \times 11200 \quad 2240$$

Sold in Novermber = $2240 \times \frac{105}{100} = 2352$

Total Phone sold = 2352 + 1288 = 3640

38. (b) The pattern is :
$3523 - 3459 = 64 = 4^3$
$3459 - 3243 = 216 = 6^3$
∴ ? = $3243 - 8^3 = 3243 - 512 = 2731$
$2731 - 1731 = 1000 = 10^3$
$1731 - 3 = 1728 = 12^3$

39. (c) The pattern is :

$10 \times 2 - 2 = 20 - 2 \quad 18$
$18 \times 2 - 2 = 36 - 2 \quad 34$
$34 \times 2 - 2 = 68 - 2 \quad \boxed{66}$
$66 \times 2 - 2 = 132 - 2 \quad 130$

40. (c) The pattern is :

$4 \times 2 \quad 2 \quad 10$
$10 \times 3 \quad 3 \quad 33$
$33 \times 4 \quad 4 \quad 136$
$136 \times 5 \quad 5 \quad 680 \quad 5 \quad \boxed{685}$

41. (c) The pattern is :

$4000 \div 5 \quad 800$
$800 \div 2 \quad \boxed{400}$
$400 \div 5 \quad 80$
$80 \div 2 \quad 40$
$40 \div 5 \quad 8$

42. (d) The pattern is :

$3 \times 1 \quad 1^3 \quad 4$
$4 \times 2 \quad 2^3 \quad 8 \quad 8 \quad 16$
$16 \times 3 \quad 3^3 \quad 48 \quad 27 \quad 75$
$75 \times 4 \quad 4^3 \quad 300 \quad 64 \quad 364$
$364 \times 5 \quad 5^3 \quad 1820 \quad 125$
$\boxed{1945}$

43. (b) $(16-2)! \times 2 = 14! \times 2$

44. (b) Pipe A's work in % = 100/10 = 10%
Pipe B's work in % = 100/20 = 5%
Pipe C's work in % = 100/40 = 2.5%
All of them are opened for 2 hours + after 2 hours, tap C is closed + After the 4th hour, tap B is also closed = 100
⇒ (10 + 5 + 2.5) × 2 + (10 + 5) × 2 + work done by tap A alone = 100
⇒ 35 + 30 + work by tap A alone = 100
⇒ work by tap A alone = 100 – 65 = 35%

45. (b) $^{17}C_3 = (17 \times 16 \times 15)(3 \times 2 \times 1) = 4080/6 = 680$
$^3C_3 = 1$
P = 1/680

46. (a) $^{17}C_5 = 17 \times 16 \times 15 \times 14 \times 13/5 \times 4 \times 3 \times 2 \times 1 = 742560/120 = 6188$
$^{11}C_5 = 11 \times 10 \times 9 \times 8 \times 7/5 \times 4 \times 3 \times 2 \times 1 = 55440/120 = 462$
P = 462/6188 = 33/442

47. (c) Speed of 2nd train = Speed of first train ×

$\sqrt{\text{Time taken by 1st train after meeting}}$

$/\sqrt{\text{Time taken by 2nd train after meeting}}$

$$\Rightarrow 45 \times \sqrt{\frac{288}{200}}$$

⇒ 54 km/hr

48. (a) Let the ages of these are A, B, C, D, E
So A + B + C = 84 × 3 = 252
And A + B + C + D = 80 × 4 = 320
So D = 320 – 252 = 68, so E = 68 + 3 = 71
Now B + C + D + E = 79 × 4 = 316
(A + B + C + D) – (B + C + D + E) = 320 – 316
So A – E = 4, so A = 71 + 4

49. (b)

A(Sandal)   B(Sandal)
614   695
      650
45   36
↓×7   28kg ×7
35kg
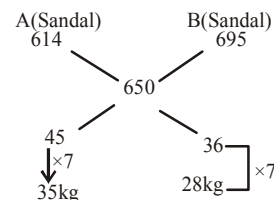
[CP of 1 kg Sandal
$\frac{767 \times 100}{118}$ 650]

So, answer is 28 kg.

50. (d) Required consumption to be reduced

$$\frac{25 \times 100}{100 \quad 25} \quad 20\%$$

SPEED TEST 31

1. **(e)**

$2 \xrightarrow{-3} 3 \xrightarrow{4} \#$

$O \xrightarrow{-3} I \xrightarrow{4} C$

$K \xrightarrow{-3} O \xrightarrow{4} 5$

$\# \xrightarrow{-3} P \xrightarrow{4} I$

$B \xrightarrow{-2} \$ \xrightarrow{3}$

2. **(a)**

$P \xrightarrow{3} \# \xrightarrow{3} 7 \xrightarrow{3} @ \xrightarrow{3} \boxed{D}$

$R \xrightarrow{3} L \xrightarrow{3} I \xrightarrow{3} O \xrightarrow{3} \boxed{K}$

$J \xrightarrow{3} 3 \xrightarrow{3} 2 \xrightarrow{3} N \xrightarrow{3} \boxed{C}$

3. **(c)** 11th to the left of 16th from left means 5th from the left. But the sequence has been reversed. Therefore, required element will be 5th from right in the original sequence.
5th from right ⇒ B

4. **(d)**

Consonant	Number	Symbol

Such combinations are

R 3P , N 7O , K 5D

5. **(e)**

Number	Symbol	Consonant

There is no such combination.

6. **(e)**

1	2	3	4	5	6	7	8	9	10
O	U	T	R	A	G	E	O	U	S

Meaningful words ⇒ EAST, SEAT

7. **(d)** New sequence

9 7 6 8 3 0 4 2 1 5

5th from right

8. **(c)** Arrangement according to english alphabet

C E I N P R

P R I N C E

9. **(a)**

3 8 9 12 4 18 5 14
C H I L D R E N

10. **(b)**

7 6 4 5 2 8

8 7 6 5 4 2

11. **(b)**

D A N G E R O U S
−1 +1 −1 −1 +1 −1 +1 +1 −1
C B M F F Q P V R

12. **(c)**

A D J E C T I V E
+1 −1 −1 +1 −1 −1 +1 −1 +1
B C I F B S J U F

13. **(b)** 489 ⇒ 489; 541 ⇒ 145
654 ⇒ 456; 953 ⇒ 359
783 ⇒ 378
Lowest number ⇒ 145 ⇒ 541

14. **(b)** 489 − 5 ⇒ 484; 541 − 5 ⇒ 536
654 − 5 ⇒ 649; 953 − 5 ⇒ 948
783 − 5 ⇒ 778
Second highest number = 778
Highest number = 948
7 − 4 = 3

15. **(d)** 489 ⇒ 849; 541 ⇒ 451
654 ⇒ 564; 953 ⇒ 593
783 ⇒ 873 = 593 ⇒ 953
Third highest number = 593 ⇒ 953

16. **(a)** 489 + 1 = 490; 541 + 1 = 542
654 + 1 = 655; 953 + 1 = 954
783 + 1 = 784
5 − 4 = 1

17. **(c)** 489 ⇒ 984; 541 ⇒ 145
654 ⇒ 456; 953 ⇒ 359
783 ⇒ 387
Second highest number = 456 ⇒ 654

18. **(b)** C O N T A G I O U S
G I O U S C O N T A

19. **(b)** 5 2 6 3 1 8 7 → 6 1 5 4 2 7 8 → 1 2 4 5 6 7 8

20. **(e)** 169, 196, and 961 which are the squares of 13, 14 and 31 respectively. Of these, 14 is ruled out because it is even. We are still left with two such numbers — 13 and 31.

21. **(b)** The highest number is 813.
The third digit of the highest number is 3.
The second lowest number is 364.
The second digit of the second lowest number is 6.
Now, the required resultant = 6 ÷ 3 = 2.

22. **(c)** 856 245 362 634 128 183
856 - 183 = 673

23. **(c)** 568 245 236 346 128 138
346 - 138 = 208

24. **(b)** 1 is added to 1st digit and 2 sub from last digit :684
523 730 462 316 911
Descending Order :864 532 730 642 631 911
Difference = 6 - 2 = 4

25. **(c)** 587 426 633 365 219 814
426, 633, 219 are divisible by three.

26. **(c)** After changing the digits, we got 837 924 372 498 148 523

27. **(c)** Number in descending order- 994 941 838 529 425 373

28. **(d)** After changing the digits - 378 249 723 984 481 235
So, difference = 9 - 2 = 7

29. **(c)** 837 924 372 498 148 529

30. **(c)** 924 837 523 498 371 148 (after rearrangement)

SPEED TEST 32

1. **(d)**

C O M M U N I C A T I O N

2. **(d)** A, R, D, I, Y. we can make DIARY, DAIRY

3. **(d)**

O V E R S E E

4. **(b)** Newly formed words :
RUN, EDN, AMT, OFR, KSI

5. **(a)** Arrange each alphabet :
NRU, DEN, AMT, FOR, IKS
Arrange each word:
AMT, DEN, FOR, IKS, NRU

6. **(d)** Newly Arrangement :
VQM, CFM, LBS, EPQ, RJJ

7. **(b)** D E F

8. **(e)** Five newly Arrangement : USN, DFN, MBT, FPR, SLI

9. **(b)** There is only one such pair AB.

10. **(b)** Only one word can made is GLUE

11. **(e)** TAME, TEAM, MATE
12. **(b)** 7652348 => 5733159
    Now, 3 + 5 = 8
13. **(d)** P R O D U C T I O N
14. **(b)** BACK
15. **(c)** M E N T I O N
    N D O S J N O
    N and O appear more than once in the new arrangement.
16. **(b)** 325 672 918 348 263 191
    So, difference = 918 - 263 = 655
17 **(c)** 532 267 891 834 326 119
18. **(b)** only 911
19. **(c)** 198 = 18 highest among all
20. **(c)** After subtracting hundred we get -
    135 662 098 338 523 811
    And after arranging in reverse order-
    531 266 890 833 325 118
    118 - Lowest number
    So, answer is 911
21. **(b)** *0Z
22. **(a)** No such arrangement is possible
23. **(a)** W $ R T % M L S C & F J @ P D * Z C ?
24. **(c)** 1 W E 3 $ R T % M 9 4 L S C & F J 2 @ U P 7 D 5 * 0 Z C ?
    Ninth from the right end = P, so third to the right of P = 5
25. **(d)** +2 and then -1 pattern is followed.
26. **(b)** The one having lowest number if 2nd digit.
27. **(d)** +1 = 913 579 664 485 892 773
    Interchange = 319   975   466   584   298   377
28. **(b)** 385   479   564   673   792   813
    673 - 479=194
29. **(b)** 713   379   553   375   791   573
    So,Only 553
30. **(d)** 813   479   564   385   792   673
    813 and 385 - 8/8 = 1

SPEED TEST 33

1. **(a)** H $\xrightarrow{+2}$ J $\xrightarrow{-3}$ G

   P $\xrightarrow{+1}$ Q $\xrightarrow{-3}$ N

   D $\xrightarrow{+1}$ E $\xrightarrow{-3}$ B

   T $\xrightarrow{+1}$ U $\xrightarrow{-3}$ R

   K $\xrightarrow{+1}$ L $\xrightarrow{-3}$ I

2. **(b)**
    P R O B L E M
    ↓ ↓ ↓ ↓ ↓ ↓ ↓
    2 9 4 8 3 7 5

    B O R E M O E P
    ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
    8 4 9 7 5 9 4 7 2 ;

    L B O R O M E P
    ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
    3 8 4 9 4 5 7 2 ;

    E R O L
    ↓ ↓ ↓ ↓
    7 9 4 3

3. **(e)**

4. **(d)** Except 255 all other numbers are one more than perfect square.
    $50 = (7)^2 + 1, 65 = (8)^2 + 1;$
    $170 = (13)^2 + 1, 290 = (27)^2 + 1$
    But, $255 = (16)^2 - 1$
5. **(e)** Except Brinjal, all others grow underground.
6. **(c)** Except 529, all others are perfect squares of even numbers.
    The number 529 is a perfect square of an odd number.
    $196 = 14 × 14; 256 = 16 × 16$
    $529 = 23 × 23; 576 = 24 × 24$
    $324 = 18 × 18$
7. **(a)** R $\xrightarrow{-2}$ P $\xrightarrow{-2}$ N

    W $\xrightarrow{-4}$ S $\xrightarrow{2}$ U

    H $\xrightarrow{-4}$ D $\xrightarrow{2}$ F

    L $\xrightarrow{-4}$ H $\xrightarrow{2}$ J

    Q $\xrightarrow{-4}$ M $\xrightarrow{2}$ O
8. **(b)** The number 441 is a multiple of 3
9. **(e)** P $\xrightarrow{-3}$ M; E $\xrightarrow{-3}$ B;

    T $\xrightarrow{-3}$ Q; I $\xrightarrow{-3}$ F;

    V $\xrightarrow{3}$ Y
10. **(e)** Except number 345, all other numbers are product of 23 and a Prime Number.
    $115 = 23 × 5;$
    $161 = 23 × 7;$
    $253 = 23 × 11;$
    $391 = 23 × 17$
    But $345 = 23 × 15.$
    The number 15 is not a Prime Number.
11. **(c)** O $\xrightarrow{-2}$ M $\xrightarrow{4}$ Q

    H $\xrightarrow{-2}$ F $\xrightarrow{4}$ J

    T $\xrightarrow{-4}$ P $\xrightarrow{2}$ R

    T $\xrightarrow{-2}$ R $\xrightarrow{4}$ V

    V $\xrightarrow{-2}$ T $\xrightarrow{4}$ X
12. **(c)** In all others, 1st letter – 1 = 2nd letter, and 2nd letter – 2 = 3rd letter.
13. **(c)** All others are synonyms
14. **(e)** In all others,
    1st letter + 1 = 4th letter.
    4th letter + 1 = 2nd letter
    and 2nd letter +2 = 3rd letter
15. **(c)** In all others
    4th letter + 1 = 1st letter
    1st letter + 2 = 2nd letter
    2nd letter + 1 = 3rd letter.
16. **(b)** All others are synonyms.
17. **(c)** P R O J E C T → C E O P R T
    P L A N E → E L N P
    W I N → N W
    In every word, the middle element is dropped and rest of the alphabets are arranged in alphabetical order.
    O R G A N I S E D ? A D E G I O R S
18. **(e)** Following the same pattern, DISTANCE cannot be related as it contains even number of alphabets while others contain odd number of alphabets. Therefore, there is no middle letter in the given word DISTANCE.
19. **(c)** Except speak all others are synonyms.
20. **(b)** A pod is a group of dolphins, and a herd is a group of cows.

21. (c) Each term in the series is the product of the digits of the preceding term.
So, missing term = $1 \times 8 = 8$.

22. (b) Except 'SU', all the pairs of letters belong to the first half.

23. (c) As,

Similarly,
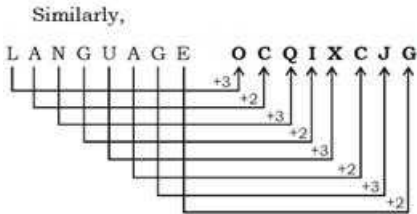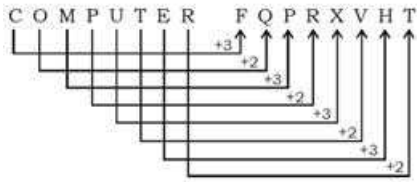
24. (d) To chat is to talk and to flutter is to flap.

25. (a) ERID → DIRE. Alphabets are written in reverse order.
Thus, RIPE ? EPIR

26. (a)

27. (a) Others are continents.

28. (c) A professor works at a college, and a mechanic works at a garage.

29. (b) The doze is to sleep lightly, and to tiptoe is to walk lightly.

30. (c) All others are metals.

SPEED TEST 34

1. (a) As,

Similarly,

2. (c) 'Aeroplane' can fly and 'aeroplane' is called 'bulldozer'.

3. (d) te da ka ni → intelligence is in genes ...(1)
se po lo ni → genes are not responsible ...(2)
ba da fu te → intelligence is through experience ...(3)
From (1) and (2), ni → genes
From (1) and (3), da and te → intelligence and is
∴ ka → in

4. (c)   **5. (a)**   **6. (e)**   **7. (b)**   **8. (d)**

9. (a) As,

Similarly,

10. (e) As,

Similarly,

11. (a)

and

Therefore,

12. (b) As,

Therefore,

13. (c) As,

and

Similarly,

So,

14. (b) how can you go = ja da ka pa .... (i)
can you come here = na ka sa ja ...(ii)
come and go = ra pa sa ...(iii)
From (i) and (ii), can you = ja ka ...(v)
From (ii) and (iii), come = sa ...(vi)
Using (v) and (vi) in (ii), we get *here = na*.

15. (a) As,

Similarly,

Solutions (16-20):

We → pa
Provide → pu
Study → na
Material → bu
Score → ma
Maximum → fa
Selection → ju
The → fu
Of → sa

16. (b) 17. (a) 18. (b) 19. (a) 20. (b)

Solutions (21-25):

Word	Obey	Must	Elders	We	Be	The	Younger	Traffic	rules
Code	za	la	sa	na	da	fa	wa	Ka/ga	ga/ka

21. (c) 22. (e) 23. (a) 24. (e) 25. (a)

Solutions (26-30) :

First and last letter Coding

E = 5+6 (Next number F = 6) = 11

Y = 25+26 = 51

Then Just compare 11<51

Coding for Second letter of every word

Code for N and U is =

Code for H and S is >

Code for E and A is <

Code for I, O and W is !

26. (a) Twisted
T(20+21 = 41) > D(4+5=9) and ! is the code for W

27. (c) Jani
J(10+11) > I(9+10) and < is the code for A(Second Letter)

28. (d) Beautiful
B(2+3) < L(12+13) and < is code for E
Butterfly
B(2+3) <Y(25+26) and + is code for U

29. (e) So
S(19+20) > O(15+16) and code word for O is !

30. (b) Can You Join : 7<<29 51>!43 21<!29
Can ⇒ 7<<29 ; You ⇒ 51>!43 ; Join ⇒ 21<!29

SPEED TEST 35

1. (c)
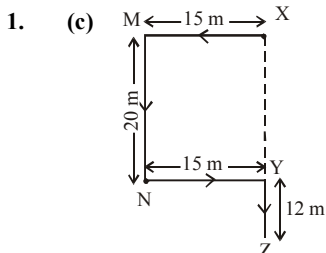
XZ = XY + YZ = MN + YZ = 20 m + 12 m = 32 m

2. (d)
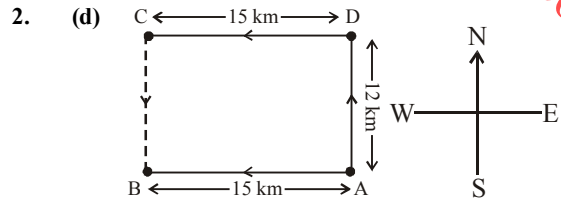
Obviously, CB = AD = 12 km and B is south of C.

3. (b)

BF = AB – (AE + EF) = AB – {(AB – CD) + EF}
= 8 – {(8 – 5) + 3} = 8 – {3 + 3} = 8 – 6 = 2 km

4. (b)

5. (a)
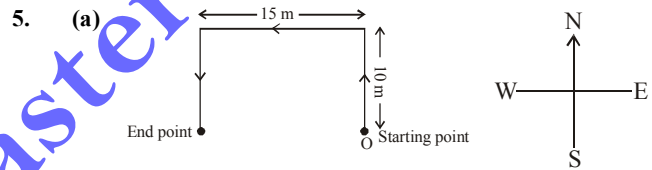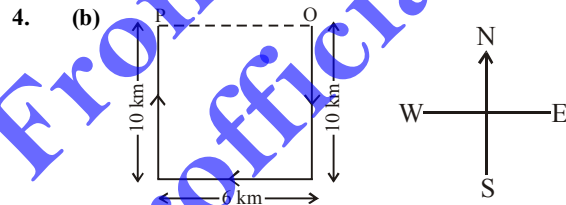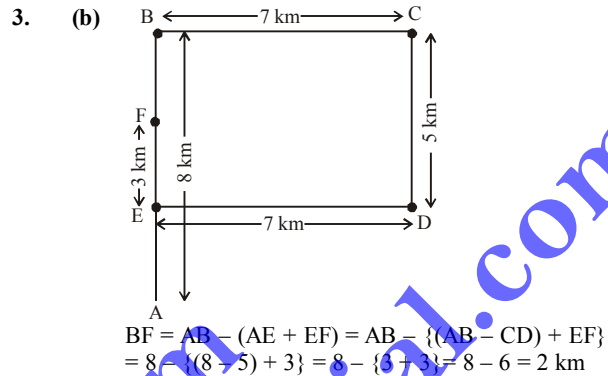
Sol (6–7) :
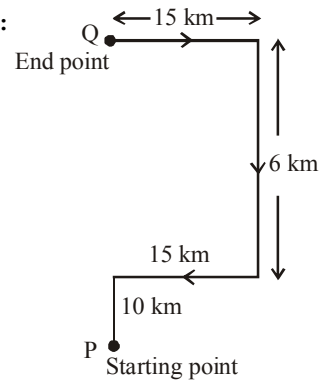
6. (a) PQ = 10 + 6 = 16 km
7. (d) west
8. (a)
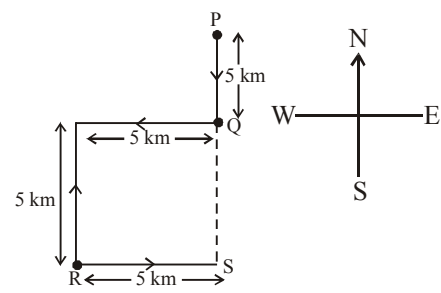
Obviously, Q lies North of S.

9. (d)

10. (b)

OP = 30 m + 20 m = 50 m

11. (b)
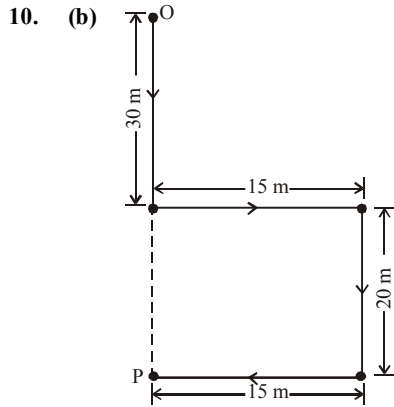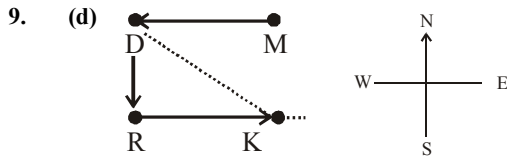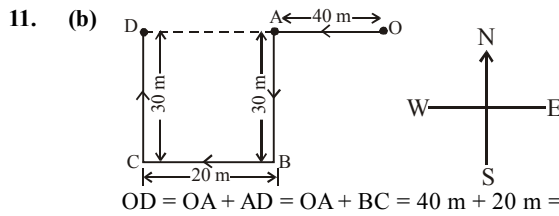
OD = OA + AD = OA + BC = 40 m + 20 m = 60 m

12. (d)
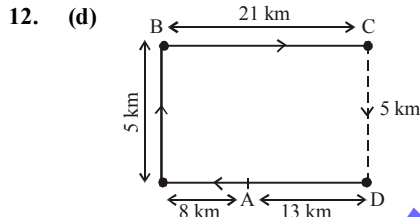
We have to find out C to D.

13. (d) If a person walks in a straight line for 8 m towards West from point R, then he would be cross 'S'.
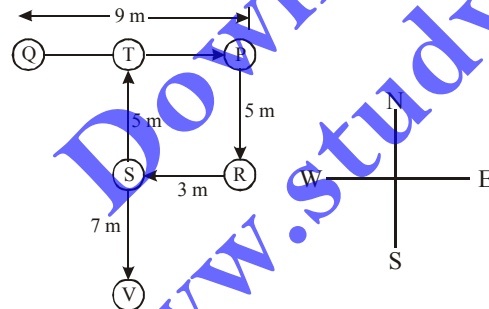
14. (e) S, V, T are in straight line.

15. (b)

16 (a)
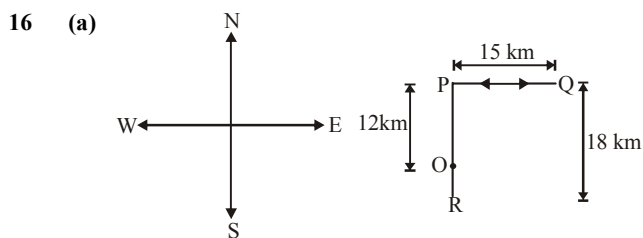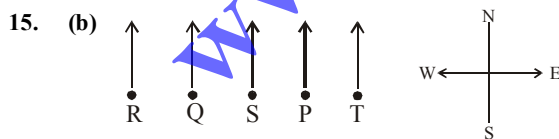
Let O be the starting point and P, Q and R the positions after every movement. Hence, Distance from the starting point = Distance of final position R from O = 18 – 12 = 6 km.

17. (b)
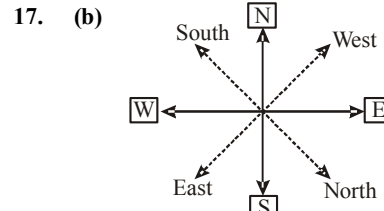
From the figure, it is clear that 'S' becomes 'North-east' in the new figure (dotted line)

18. (e)
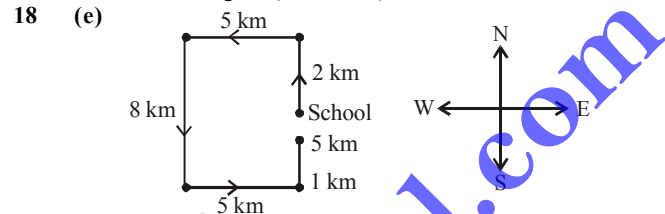
Remaining distance = 8 – (2 + 1) = 5 km
Hence, the drivers require to travel 5 km towards north to reach the school again.

19. (c) Given information diagrammatically can be shown as follows :
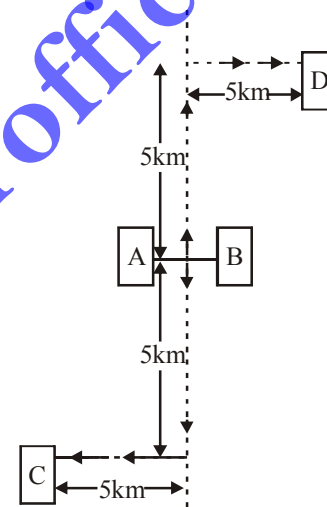
From the above diagram, it is clear that the houses of C and D are less than 20 km apart.

20. (c)

South- west direction

21. (b)
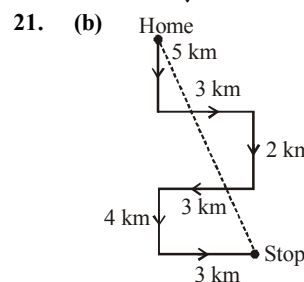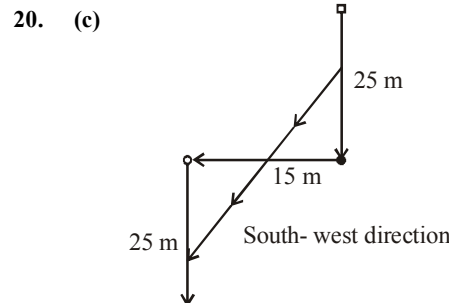
Distance from home $\sqrt{(5\ 2\ 4)^2\ 3^2} = \sqrt{121\ 9}$

$= \sqrt{130}$ km towards South-East.

22. (b)

23. (c)

24. (d)
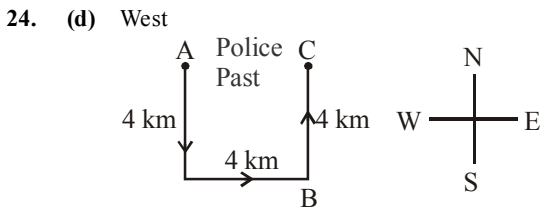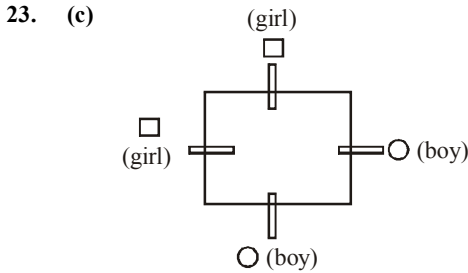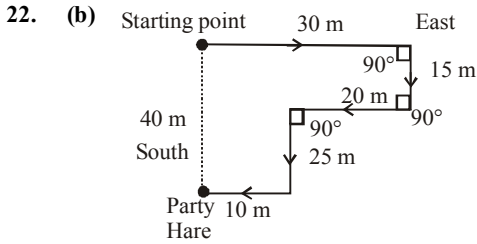
From C to reach A (starting point) policeman will have to move in the West direction to reach his post.

25. (b)
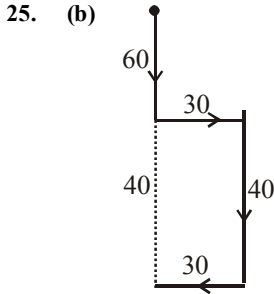
Total distance is 60 + 40 = 100

26. (a) His final position is 8 km towards west and 6 km towards east.

So, final distance is 10 km $(\sqrt{6^2\ 8^2})$ towards north east.

SPEED TEST 36

1. (e) Boy = son of Urmila's grandfather's only daughter
= son of Urmila's paternal aunt
= Urmila's cousin
Hence, Urmila is also the boy's cousin.

2. (d) M is maternal uncle of T.
⇒ M is sister of K, who is mother of T
⇒ M ÷ K − T

3. (a) Grandfather = father of father = H+J+T

4. (b)
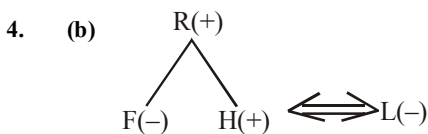
Hence, H is brother of F.

5. (e) If N is the mother, then N must be a female. Hence all the choices are ruled out.

6. (a)

Hence F is the son-in-law of T.

7. (e)

Hence, T is the daughter of S.

8. (b)

9. (c)

S is nephew or niece of T. Absurd relationship.

S is husband of T.
We need not go further.

10. (a)

Hence V is the aunt of T.
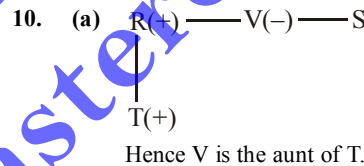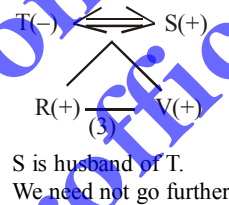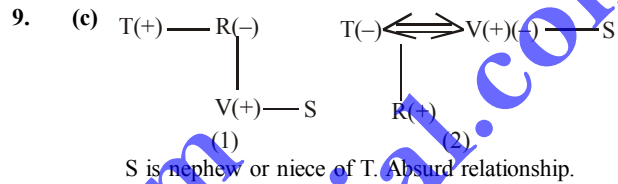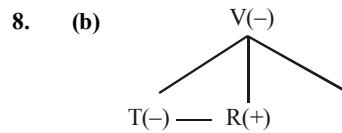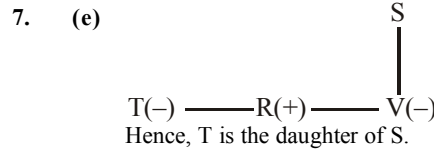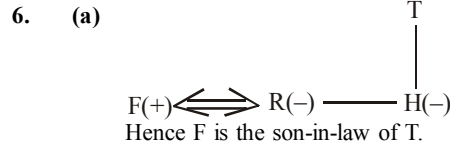
11. (b) Boy = Grandson of Rasika's grandmother's only son = Grandson of Rasika's father = Rasika's nephew

12. (a)
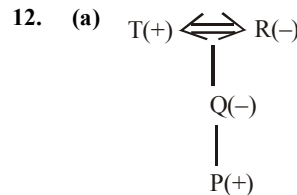
Hence T is maternal grandfather of P.

13. (e) (a), (b) and (c) are ruled out because in all these P is a male, In (d), P is a generation below S whereas "sister" implies same generation. Hence, (d) is ruled out.

14. (a)

Hence P is father of S.

15. (c)

Hence R is P's paternal aunt.

16. (d)

Since we don't know S's sex, S is either uncle or aunt of P.
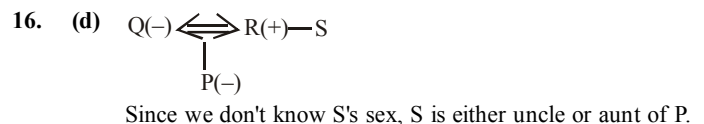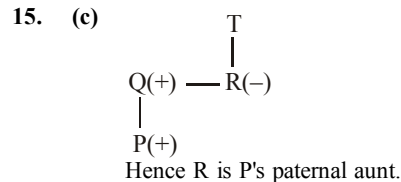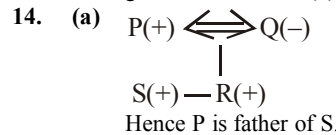
17. **(d)** '↔' → brothers, '=' → couple, '↓' →offspring, '□' → male, 'O' → female, 'X' → unknown
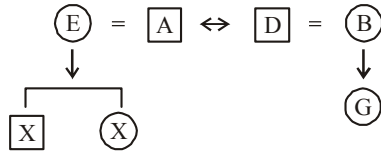
Clearly, C and F are the remaining members to be adjusted in place of two x. since, there are 3 children out of which two are girls, i.e. G and F, so clearly the third children C is a boy. So C is the son of E and A.

18. **(b)** 'O' → Female, '□' →Male, '↔' → Couple, '↓' → Offspring
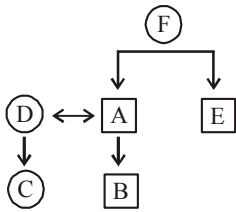
Since, there is only 1 married couple, so *D* must be married to *A*, as *D* is the mother of two and *B* is the son of *A*. Also, as number of males and females are equal, so *F* must be a female.

19. **(d)** '□' → Male,'O' →Female

'↓' → offspring, '=' → couple

'↔' → Sibling

Salesman D = A Lady

Doctor B = C Lawyer

Accountant F = ↔ E engineer
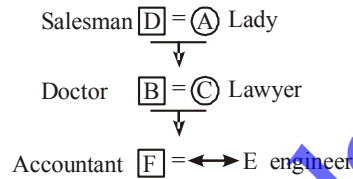
As, sex of E is not clear, so E can be brother or sister of F. Hence, relation between E and F can't be established.

Solutions (20-23) :
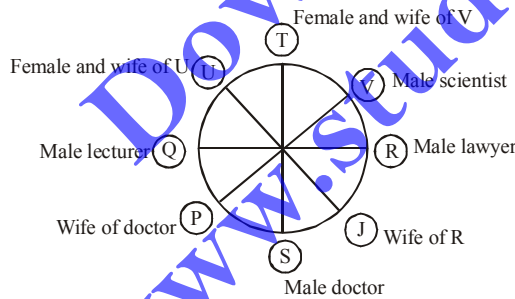
20. **(d)** 21. **(b)** 22. **(c)** 23. **(c)**

Solution (24-26) :
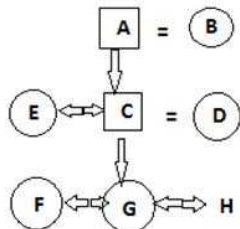
24. **(a)** 25. **(d)** 26. **(a)**

Solutions (27-28):

27. **(b)** Given : F#J*R@L

F is the sister of L

28. **(b)**

B is the husband of T

T is the mother of R means R is the daughter of T

Given : R#F*B$T

29. **(c)**
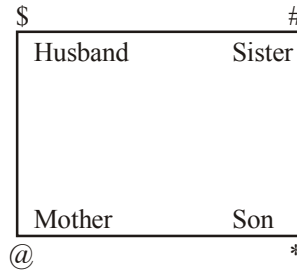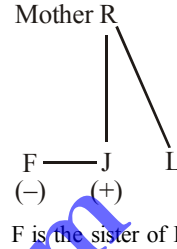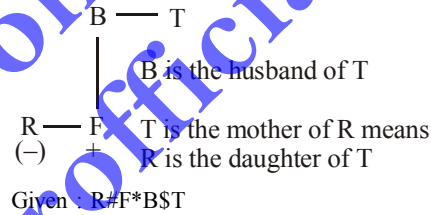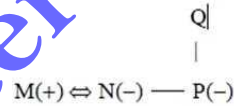
30. **(e)** We have to establish
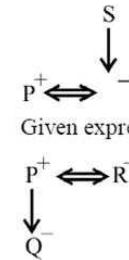
Given expression P × Q + R – T ? S means
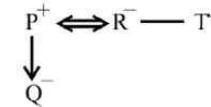
P will be son-in-law of S if S is the father or mother of T. Which can be obtained by putting '+' or '÷' in place of '?'.

SPEED TEST 37

1. **(d)** 1 3 9 5 1 5 1 5 5 3 <u>9</u> 9 3 1 5 7 7
2. **(c)** 4 2 6 1 3 8 9 5 8 1 6 5 1 5 8 5 3 9 4 9 <u>2</u> 3 <u>2</u> 1 5 7 2 6 2 4 2 7 4
3. **(a)** 4 2 6 1 3 8 9 5 8 1 6 5 1 5 8 5 3 9 4 9 2 3 2 1 5 7 2 6 2 4 2 7 4
   There are no such 1s.
4. **(c)** 5 3 7 3 5 9
   Thus there are two digits — 5 and 3 — that appear twice.
5. **(a)** 7th to the right of 19th from the right.
   = (19 – 7 =) 12th from the right = 3
6. **(c)** According to Pratap: 20, 21 or 22   ...(i)
   According to his sister: not 22   ...(ii)
   From (i) and (ii), the birthday falls on Apr 20 or 21.
7. **(a)** R's position = 11th from right
   ∴ M's position = (11 + 15 + 1 =) 27th from right
   = (40 – 27 + 1 =) 14th from left

8. **(c)** According to Mohit: Apr 18 or earlier ...(i)
According to his sister: April 18 or 19 ...(ii)
From (i) and (ii), we get Apr 18.

9. **(e)** 169, 196 and 961, which are the squares of 13, 14 and 31 respectively. Of these, 14 is ruled out because it is even. We are still left with two such numbers — 13 and 31.

10. **(a)** R = 16th from the right.
∴ w = (16 – 5 =) 11th from the right.

11. **(e)** According to Meena, 19th, 20th or 21st ...(1)
According to her brother, 21st, 22nd or 23rd ...(2)
Combining the two, we get 21st.

12. **(d)** According to Nitin, Nidhi's birthday falls on Wed or Thu ...(i)
According to Derek, Nidhi's birthday falls on Thu or Fri ...(ii)
From (i) and (ii), Nidhi's birthday falls on Thursday.

13. **(c)** As per Sunita, Jun, Jul, Aug, Sep, Oct...(i)
As per Sanjay, Aug, Sep, Oct, Nov, Dec ...(ii)
As per Mohan, Apr, Jun, Sep, Nov ...(iii)
From (i), (ii) and (iii), Diwali was celebrated in Sep.

14. **(c)**

12th ⟶ 16th

⟶ R | | | | S ←

22nd

Total number of children in the row = 16 + 22 – 1 = 37

15. **(d)** Neeta is 22nd from the top and Kalyan is 22 + 5 = 27th from the top and 36th from the bottom who passed the examination. Therefore, total number of students who passed the examination.
= 27 + 36 – 1 = 72
Therefore, total number of students in the class
$= \dfrac{72}{4} \times 5 = 90$

16. **(e)**

R I G H T --- D ||||| R ||||| T L E F T

There are five boys between D and R.

17. **(c)** According to question

19.45 = 07.45

18. **(d)** In order to solve this question, we must know the position of either Ravina or Mohini from both the ends.

19. **(a)** There may be many assumptions and hence many sets of answers.

20. **(c)** According to Pratap his mother's birthday may be on 20th, 21st or 22nd April
According to Pratap's sister their mother's birthday may be from 1st April to 21st April.
Common Dates ⇒ 20th and 21st

Solutions (21-23):
Total No. of Students: = 59
Total number of boys = (6+26) –1 = 31
Now total number of girls = Total number of students – number of boys = 59 – 31 = 28
From the information (ii) and (iv), it is known that Sanjay's rank among boys from one end to another end is 6th and 26th respectively.
Therefore total number of boys = (6 + 26) –1 = 31
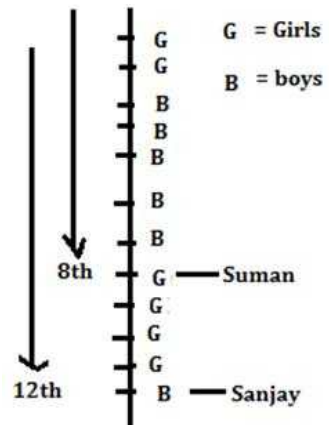
From the information above (i) and (ii) it is clear that Suman rank in the class is 8th from one end and 52nd from other end. Therefore
total no. of students in the class = (8 + 52) – 1 = 59.
Now total number of girls = Total number of students – number of boys = 59 – 31 = 28
Suman rank from the other hand = 28 – 3 + 1 = 26

21. **(c)** There are 3 girls b/w Suman and Sanjay

22. **(a)** Total number of boys = (6+26) – 1 = 31

23. **(b)** There are 5 boys before Suman as it is clear from figure.

24. **(d)**
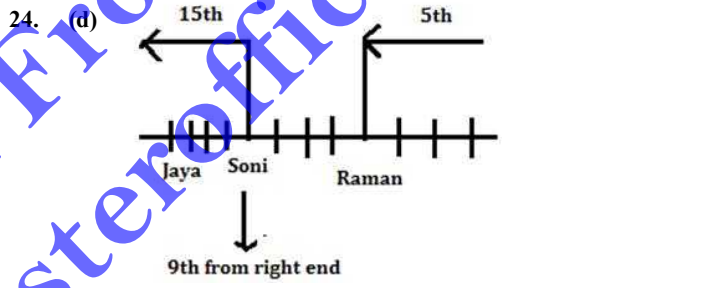
9th from right end

From the figure, it is clear that Soni is 9th from the right end.

25. **(b)** Veena's rank is 17th from the bottom means Veena's rank is 4th from the top. Rohan's rank is exactly between 4th and 12th, i.e. 8th.

26. **(c)** Saurabh's rank = 8th from top
Mamta's rank = (8 + 5) = 13th from top
So, Mamta's rank from bottom = 40 - 13 + 1 = 28th

27. **(e)** Correct order can't be determined.

28. **(b)** From the information given in the question, the newspaper was read in the following order B, C, E, A, D.
Hence B passed the newspaper to C.

29. **(b)** Total no. of girls = 17 + 10 - 1 or 18 + 9 - 1 = 26.

30. **(a)** The order in which the six flags were flown from L to R is France, America, India, Australia, Japan, China.

SPEED TEST 38

Solutions (1-4) : The arrangement of boys and girls:
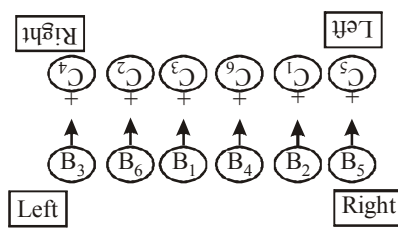
1. **(d)** The girl C_6 is facing the boy B_4.

2. **(b)** The following pairs of boys and girls are at the extreme ends.
$B_3 C_4$, $B_5 C_5$, $B_3 C_5$, $B_5 C_4$

3. **(a)** B_1 is to the immediate left of B_4.

4. **(b)** B_6 is facing C_2.

Solutions (5-10) :

P T Q V S R → Row 1

Row 2 C D E F A B
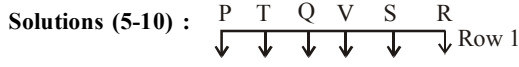
5. (c)   6. (e)   7. (b)   8. (a)   9. (e)
10. (d)

Solutions (11-15) :

S (Pakistan)
W (New Zealand)   V (Sri Lanka)
X (South Africa)   T (India)
R (England)   Q (West Indies)
P (Australia)
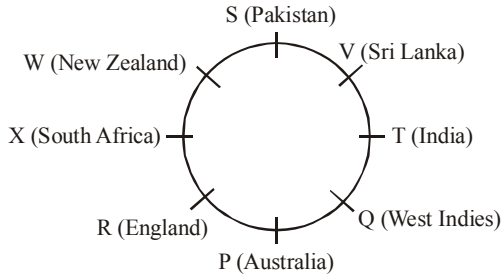
11. (c)   12. (a)
13. (b)   There is pattern of going from the second member of a pair to the first member of the next pair. + 2, + 3, + 4... CW.
14. (c)   15. (d)

Solutions (16-20) :

G
A   B
H   D
E   C
F
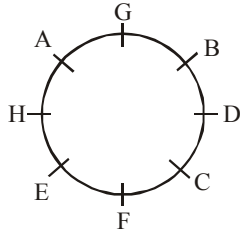
16. (a)   17. (b)   18. (d)   19. (e)   20. (c)

Solutions (21-25):

V
S   Q
R   W
T   P
Y
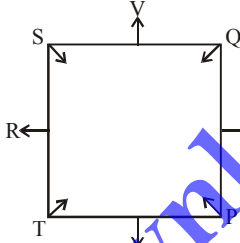
21. (b)   22. (c)
23. (d)   Others sit in the middle of the sides.

24. (a)   Move $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 ... sides clockwise on the square.

25. (c)

SPEED TEST 39

Solutions (1-5):

Sumit (Queen of club)
Suman (King of club)   Shambhu (Queen of diamond)
Shyam (King of diamond)   Saurabh (King of spade)
Sanjeet (Queen of spade)   Suraj (Queen of heart)
Suresh (King of heart)
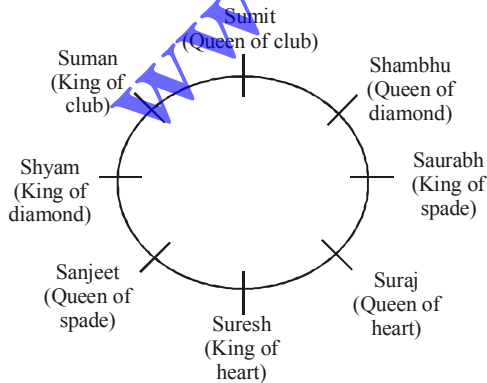
1. (a)   2. (b)   3. (c)   4. (d)   5. (e)

Solutions (6-10):

O Madhyapradesh Times of India
Q Tamilnadu The Hindu   N Telangana Times of India
M West-Bengal Times of India   R Karnataka Indian Express
S Jharkhand Indian Express   T Rajasthan Indian Express
P Goa The Hindu
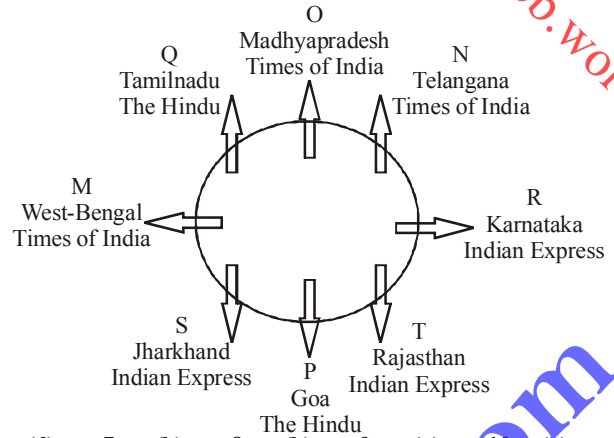
6. (d)   7. (b)   8. (b)   9. (a)   10. (e)

Solutions (11-15):

Patna (U)
Madurai (W)
Punjab (R)   Goa (P)
Noida (V)   Jaipur (T)
Delhi (S)
Mumbai (Q)
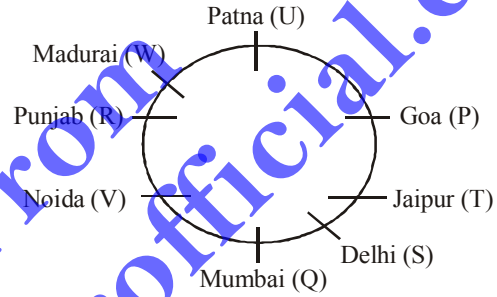
11. (a)   12. (b)   13. (b)   14. (d)   15. (c)

Solutions (16-20):

W
S ←→ N
E

R OR   R OR

V U S Y P W Q X W
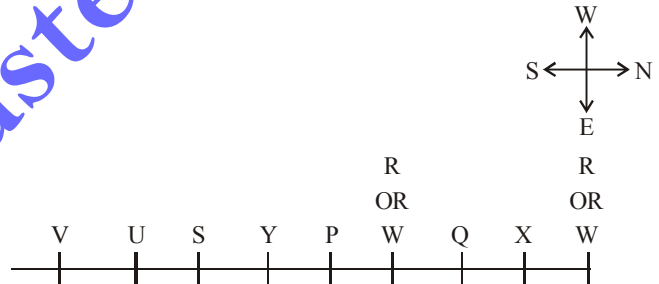
16. (d)   The exact position of w and R is not known. However, they will occupy either seventh or tenth position from the left end.
17. (c)   T is sitting at the left end
18. (e)   One of the immediate neighbours of X will either be W or R.
19. (a)   V is sitting to the second left of S.
20. (c)   If positions of V and P are interchanged, P will become the immediate neighbor of T.

SPEED TEST 40

Solutions (1-5) :

Girls	Hobby	City
Anjali	Learning	Chennai
Bobby	Reading	Hedrabad
Cheri	Riding	Patna
Doly	Drawing	Ranchi
Ekta	Jogging	Noida
Fenny	Cooking	Hisar
Geemy	Dancing	Delhi

1. (b)   2. (d)   3. (c)   4. (a)   5. (d)

Solutions (6-10):

Persons	Departments	Scale
Abhishek	Agriculture Officer	II
Bhupendra	Credit Manager	III
Chetan	Agriculture Officer	I
Dipak	Credit Manager	I
Pawan	Agriculture Officer	III
Pushkar	Finanace Manager	II
Ganesh	Credit Manager	I
Hemant	Finanace Manager	II

6. (c) **7.** (b) **8.** (d) **9.** (a) **10.** (c)

Solutions (11-15):

Boys	Family	Hobby	Studying	Studied	
Kailash	Poor	x	PG	Good	Industrious
Alok	Rich	Singing	PG	Good	Not Industrious
Bunty	Middle	Playing	UG	Average	Industrious
Dinesh	Middle	Singing	UG	Average	Not Industrious
Chetan	Poor	Reading	UG	Poor	Industrious

11. (c) **12.** (b) **13.** (d) **14.** (a) **15.** (d)

Solutions (16-20):

Sub → Level ↓	Civics	Polity	Geog	History	Eco	Empty drawers	Total no. of drawers
L₅	✓	✓	✓	✓	✕	2	6
L₄	✓	✓	✓	✕	✕	2	5
L₃	✓	✓	✓	✕	✕	1	3
L₂	✓	✓	✓	✕	✓	0	4
L₁	✓	✕	✕	✕	✓	0	3

16. (a) **17.** (e) **18.** (d) **19.** (b) **20.** (b)

SPEED TEST 41

Solution (1-5):

Floor	People	City
7	Kevin Spacey	Corsica
6	Al Pacino	Paris
5	Tom Hank	London
4	Johnny Depp	Manchester
3	Russell Crowne	Kansas
2	Brand Pitt	Brussels
1	Robert Niro	Delhi

1. (a) **2.** (b) **3.** (e) **4.** (e) **5.** (b)

Solution (6-10):
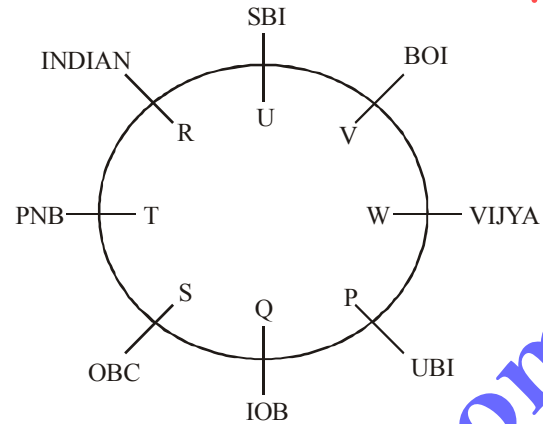
6. (b) **7.** (e) **8.** (c) **9.** (e) **10.** (d)

Solutions (11-15):

Name	Favourite Subjects							Ranks Descending order of performance
	QA	RA	CS	EL	GA	CA	BA	
Sintu	✕	✕	✕	✕	✕	✕	✓	3
Sanjeev	✕	✕	✕	✓	✕	✕		6
Saket	✕	✕	✕	✕	✕	✓	✕	2
Sandeep	✕	✕	✓	✕	✕	✕	✕	4
Sonu	✕	✕	✕	✕	✕	✕	✕	7
Sahil	✕	✕	✕	✓	✕	✕	✕	1
Shyam	✕	✓	✕	✕	✕	✕	✕	5

Note: QA - Quantitative Aptitude, RA - Reasoning Ability, CS - Computer Science, EL- English Language, GA- General Awareness, CA - Current Affairs and BA - Banking Awareness

11. (b) **12.** (a) **13.** (e) **14.** (d) **15.** (c)

Solutions (16-20)

Let us arrange the name of the girls according to descending order of the heights of girls.

From clues D and C, we get

Pampa>Pallavi>Pamela>Parnita>Padmini>Panita>Padma>Pinki

Now let us arrange the girls and their games.

Name	Basketball	Badminton	Boxing
Pinki	✕	✕	✓
Pamela	✓	✕	✕
Pampa	✓	✕	✕
Panita	✕	✓	✕
Pallavi	✕	✕	✓
Padmini	✓	✕	✕
Padma	✕	✓	✕
Parnita	✕	✓	✕

16. (c) **17.** (d) **18.** (e) **19.** (b) **20.** (e)

SPEED TEST 42

For questin 1 to 5 :

Q.No	Candi–date	(i)/(A)	(ii)/(B)	(iii)	(iv)	(v)	Ans.
1.	Shobha	✓	(✓)	✓	✓	✓	(a)
2.	Rohan	✓	—	✓	✓	✓	(c)
3.	Prakash	(✓)	✓	✓	✓	✓	(b)
4.	Sudha	✓	✓	✓	✓	×	(d)
5.	Amit	✓	✓	✓	✓	✓	(e)

For questions 6 to 10:

Q.No	Candi–date	(i)/(A)	(ii)	(iii)	(iv)	(v)/(B)	Ans.
6.	Samir	✓	✓	✓	✓	—	(e)
7.	Navin	✓	✓	✓	✓	✓	(a)
8.	Neeta	✓	✓	✓	×	(✓)	(b)
9.	Ashok	(✓)	✓	✓	✓	✓	(c)
10	Gemma	✓	✓	✓	✓	(✓)	(d)

For questions 11 to 20:

Q.No.	Person	(i)	(ii)/(A)	(iii)/(B)	(iv)	(v)	Ans.
11.	Pranab	✓	✓	✓	✓	✓	(a)
12.	Sheetal	✓	✓	✓	—	✓	(c)
13.	Prabir	✓	(✓)	✓	✓	✓	(d)
14.	Shailesh	✓	✓	(✓)	✓	✓	(e)
15.	Navin	✓	✓	✓	✓	×	(b)
16.	Meera	×	✓	✓	✓	✓	(b)
17.	Akash	✓	(✓)	✓	✓	✓	(d)
18.	Shekhar	✓	✓	✓	✓	✓	(a)
19.	Sunetra	✓	✓	—	✓	✓	(c)
20	Mohit	✓	✓	(✓)	✓	✓	(e)

For questions 21 to 25:

Q.No.	Candidate	(i)	(ii)	(iii)/(A)	(iv)	(v)	(vi)	(vii)/(B)	Ans.
21.	Kesav	✓	✓	(✓)	✓	✓	✓	✓	(b)
22.	Arindam	✓	—	✓	×	✓	✓	✓	(e)
23.	Sohan	—	✓	✓	✓	✓	✓	✓	(a)
24.	Neha	✓	✓	✓	✓	✓	✓	(✓)	(c)
25.	Neeta	✓	✓	✓	✓	✓	✓	✓	(d)

For questions 26 to 30:

Q.No.	Person	I	II(a)	III	IV(b)	V	Ans.
26	Rita Bhat	✓	✓	✓	✓	✓	e
27	Ashok Pradhan	✓	✓	✓	(✓)	✓	c
28	Alok Verma	×	✓	✓	✓	✓	a
29	Swapan Ghosh	✓	(✓)	✓	✓	✓	d
30	Seema Behl	✓	✓	✓	✓	✓	e

SPEED TEST 43

For questions 1 to 5:
- (i) $P \$ Q \Rightarrow P < Q$
- (ii) $P © Q \Rightarrow P > Q$
- (iii) $P \delta Q \Rightarrow P = Q$
- (iv) $P @ Q \Rightarrow P \geq Q$
- (v) $P * Q \Rightarrow P \leq Q$

1. (b) $B © N \Rightarrow B > N$
$N @ R \Rightarrow N \geq R$
$F * R \Rightarrow F \leq R$
Therefore, $B > N \geq R \geq F$
Conclusions
I. $B © R \Rightarrow B > R$: True
II. $F * N \Rightarrow F \leq N$: Not True
III. $R \$ B \Rightarrow R < B$: True

2. (b) $D \$ M \Rightarrow D < M$
$M * B \Rightarrow M \leq B$
$B \delta J \Rightarrow B = J$
Therefore, $D < M \leq B = J$
Conclusions
I. $J © D \Rightarrow J > D$: True
II. $B @ D \Rightarrow B \geq D$: Not True
III. $J @ M \Rightarrow J \geq M$: True

3. (c) $F * T \Rightarrow F \leq T$
$T \$ N \Rightarrow T < N$
$N @ R \Rightarrow N \geq R$
Therefore, $F \leq T < N \geq R$
Conclusions
I. $R \$ T \Rightarrow R < T$: Not True
II. $N © F \Rightarrow N > F$: True
III. $F \$ R \Rightarrow F < R$: Not True

4. (e) $W \delta K \Rightarrow W = K$
$K © F \Rightarrow K > F$
$F \$ M \Rightarrow F < M$
Therefore, $W = K > F < M$
Conclusions
I. $M © K \Rightarrow M > K$: Not True
II. $W @ F \Rightarrow W \geq F$: Not True
III. $F @ W \Rightarrow F \geq W$: Not True

5. (d) $M @ D \Rightarrow M \geq D$
$D \delta K \Rightarrow D = K$
$K © R \Rightarrow K > R$
Therefore, $M \geq D = K > R$
Conclusions
I. $R \$ M \Rightarrow R < M$: True
II. $K \delta M \Rightarrow K = M$: Not True
III. $K \$ M \Rightarrow K < M$: Not True
K is either smaller than or equal to M.
Therefore, either II or III is true.

6. (d) $R \leq D$ ...(i); $D > W$ ...(ii); $B \geq W$ ...(iii)
None of the inequations can be combined.
However, either I ($W < R$) or III ($W \geq R$) must be true.

7. (c) $H \geq V$ ...(i); $V = M$ ...(ii); $K > M$ ...(iii)
Combining these, we get $H \geq V = M < K$
Hence $K > V$ and I follows.
Also, $M \leq H$ and II follows.
But H and K can't be compared. Hence III does not follow.

8. (a) $K < T$ ...(i); $T \geq B$ ...(ii); $B \leq F$ ...(iii)
Clearly, the inequations can't be combined.

9. (a) $Z < F$ ...(i); $R \leq F$ ...(ii); $D > R$ ...(iii)
Clearly, the inequations can't be combined.

10. (b) $M > R$ ...(i); $R = D$ ...(ii); $D \leq N$ ...(iii)
Combining these, we get $M > R = D \leq N$
I does not follow as M and N can't be related.
$N \geq R$ and II follows.
$M > D$ and III follows.

Solutions (11-15):
@ → >
× → ≥
– → =
÷ → <
+ → ≤
© → ≠

11. **(d)** E ≥ J = O ≥ T ≠ Y
I.   E ≠ T
II. E > T
So neither conclusion I or II is true

12. **(e)** L = T < R ≤ A < P
I.   L < P
II. A > L
So both conclusion I and II is true

13. **(e)** T ≠ O ≠ P = A ≥ Z
I.   P ≠ T
II. O ≠ A
So both conclusion I and II is true

14. **(c)** D ≥ E > S = X, M > S.
I.   D > M
II. D ≤ M
So either conclusion I or II is true

15. **(d)** P ≥ A > T = N ≥ S
I.   P ≥ S
II. P ≤ S
So neither conclusion I nor II is true

Directions (16-20):
> --- %
≥ --- @
= --- ©
< --- #
≤ --- $

16. **(d)** P ≤ T ≥ L < U,   I. P ≥ L,   II. U = L
17. **(b)** A ≥ B > D = K,   I. A ≥ K, II. B > K
18. **(e)** J < K= L ≥ P,   I. P ≤ K, II. J < L
19. **(a)** O < T < M ≥ V,   I. M > T, II. O > V
20. **(d)** K ≥ T < C, U ≥ P,   I. C = K, II. C > K

SPEED TEST 44

Solution (1-5)
1. **(d)** A ≥ B; C > D = E; B ≥ C
I. A < E   II. C ≥ E
So neither conclusion I or II is follow
2. **(b)** P ≤ Q; S > T; Q ≥ R = S
I. P < R   II. R > T
So conclusion II is follow
3. **(a)** G = H < I; J > K; I ≤ J
I. H < J   II. G > K
So conclusion I is follow
4. **(c)** Y ≥ W = N; N ≥ M
I. Y > M   II. Y = M
So either conclusion I or II is follow
5. **(b)** J ≤ K; L > M; K ≥ N = L
I. J < N   II. N > M
So conclusion II is follow

Solutions (6-10)
6. **(c)** N = P ≤ F ≥ L = K
I. Not follow   II. Not follow   But (I) + (II) is true
7. **(e)** J ≥ C ≥ G ≥ Q = Z ≥ R
I. Follow   II. Follow
8. **(d)** A > B > C < D > E > F
I. Not follow   II. Not follow
9. **(e)** L > K > M ≥ N > O
I. Follow   II. Follow
10. **(e)** E < F ≤ G = H > S
Conclusion I: G > S : True
Conclusion II: F ≤ H : True

11. **(a)** Statement: A > L = T< R ≤ H > K
Conclusions:
I. H > L   (True)
II. K > T   (false)
12. **(e)** Statement: P ≥ N > D ≥ G < B ≤ J
Conclusions:
I. G < P   (true)
II. G < J   (false)
13. **(b)** Statement: Q ≤ E < I > N = R ≥ S
Conclusions:
I. E ≥ S   (false)
II. S ≤ N   (true)
14. **(d)** Statement: R = S ≥ Y ≥ M < W > O
Conclusions:
I. Y < M   (false)
II. O > S   (false)
15. **(a)** Statement: F ≤ C ≤ V = Z < X = U
Conclusions:
I. V < U   (true)
II. Z < F   (false)
16. **(b)** Statement: N = P, P < F, F > L, L = K
Therefore, N = P < F > L = K
Conclusions:
I. F = K   (false)
II. F > K   (true)
17. **(a)** Statement: Z > T, T < M, M < J
Therefore, Z>T<M<J
Conclusions:
I. T < J   (true)
II. J < Z   (false)
18. **(e)** Statements: Q = Z, C ≥ G, G ≥ Q, Q ≥ R
Therefore, Q=Z, C ≥ G ≥ Q ≥ R
Conclusions:
I. G ≥ Z   (true)
II. C ≥ R   (true)
19. **(d)** Statement: A > B > C, D > E > F, D > C
Therefore, A > B > C < D > E > F
Conclusions:
I. E > C   (false)
II. F > B   (false)
20. **(e)** Statement: K < L, K > M, M ≥ N, N > O
Therefore, K < L > M ≥ N > O
Conclusions:
I. O < M   (true)
II. O < K   (true)

SPEED TEST 45

1. **(c)**

Conclusions :
I.   Not True   II.   True

2. **(b)**

or
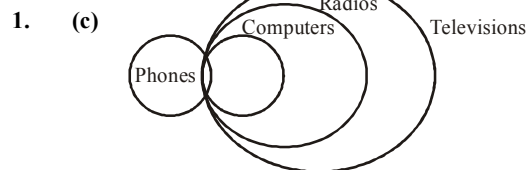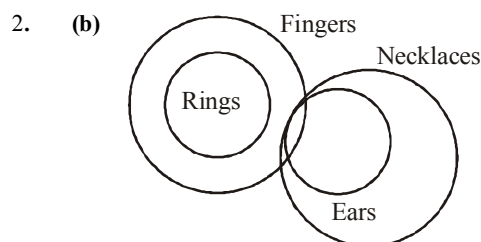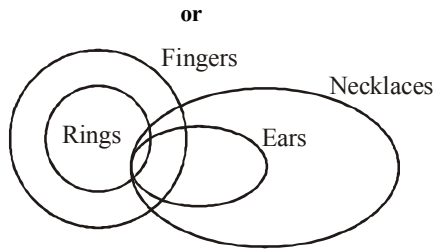
Conclusions :
I.   True   II.   Not True

3.   **(d)**

or
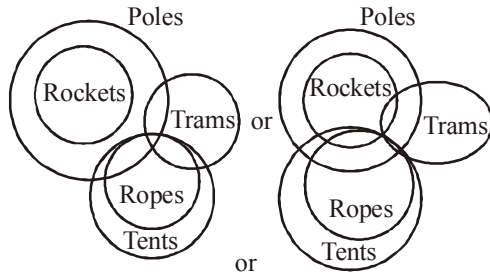
Conclusions :
I.   True
II.   Not True
III. Not True
IV.   True

4.   **(c)**

or
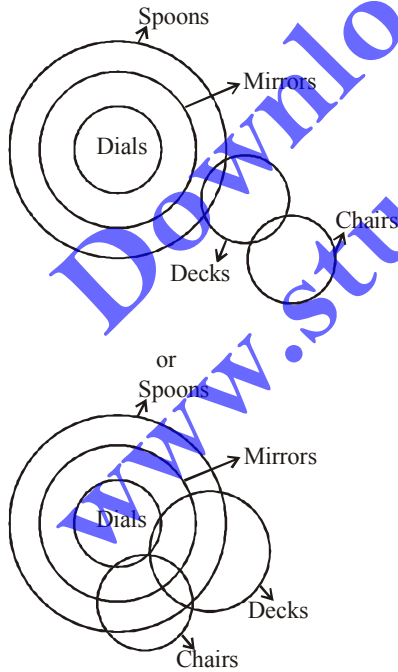
Conclusions :
I.   Not True
II.   True
III. Not True
IV.   Not True

5.   **(a)**

or
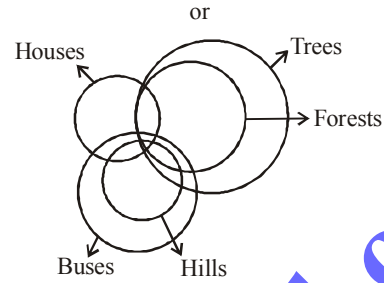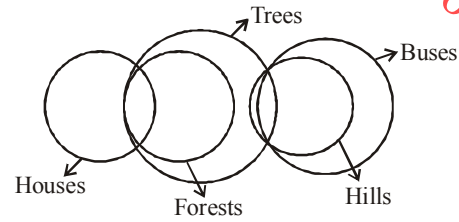
Conclusions :
I.   True
II.   True
III. Not True
IV.   Not True.

6.   **(e)**

or

or
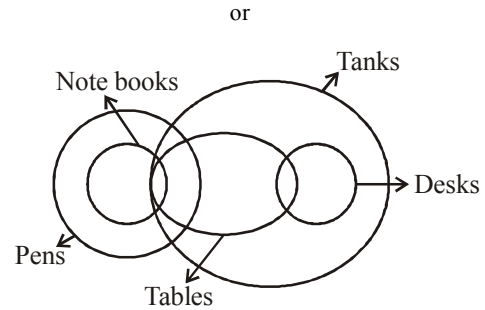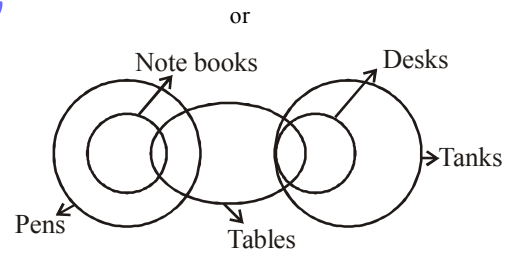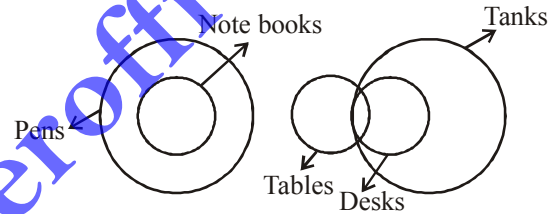
Conclusions :
I.   Not True ⎤
                ⎥ Complementary pairs
II.   Not True ⎦
III. True
IV.   Not True
As, I and IV conclusions complement to each other and III
follows.
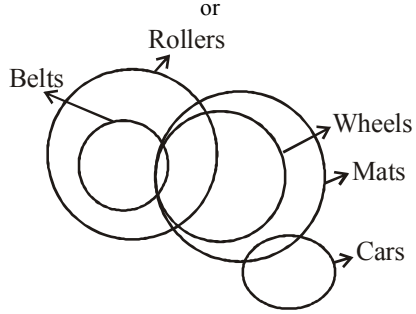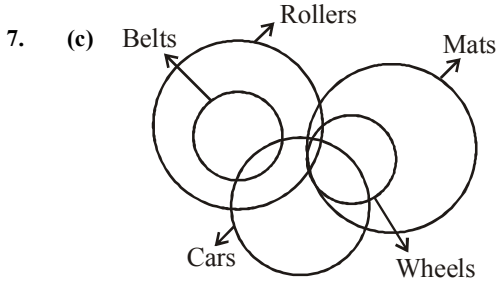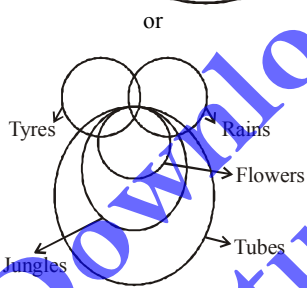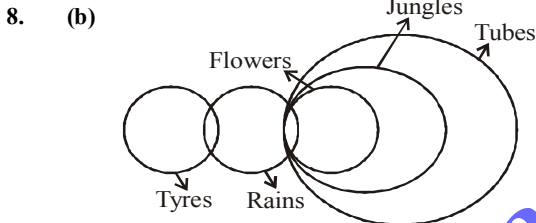
7. (c)

Belts / Rollers / Mats / Cars / Wheels

or

Rollers / Belts / Wheels / Mats / Cars

Conclusions :
I. True
II. Not True
III. Not True
IV. True

8. (b)

Jungles / Tubes / Flowers / Tyres / Rains

or

Tyres / Rains / Flowers / Jungles / Tubes

Conclusions :
I. Not True
II. True
III. True
IV. True

9. (d)

Trunks / Boxes / Chairs / Tables / Desks

Conclusions :
I. True
II. True
III. True
IV. True

10. (c)

Birds / Goats / Tigers / Lions / Horses

or

Birds / Goats / Tigers / Horses / Lions

or

Birds / Goats / Tigers / Lions / Horses
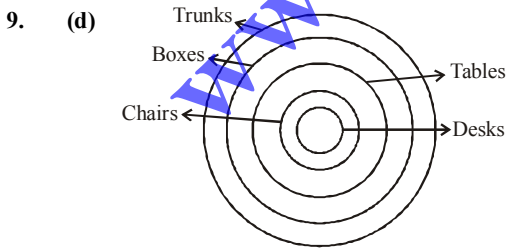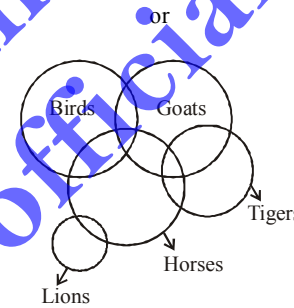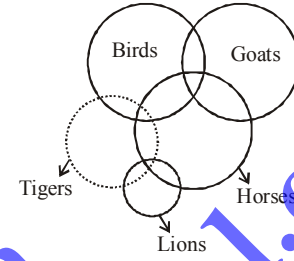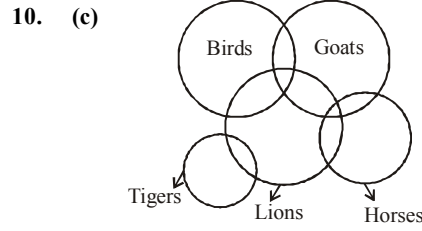
Conclusions :
I. Not True] Complementary pairs
II. Not True
III. Not True] Complementary pairs
IV. Not True
Since, conclusion I and II, and III and IV form complementary pair.
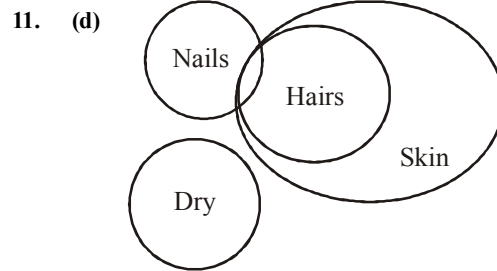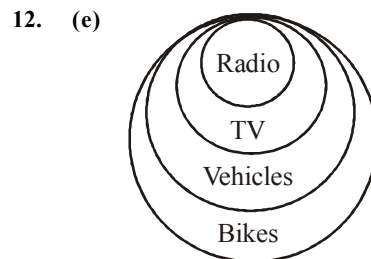
11. (d)

Nails / Hairs / Skin / Dry

So, conclusions I, II and III are follows

12. (e)

Radio / TV / Vehicles / Bikes

So, conclusions I, III and IV are follows.

13. (d)
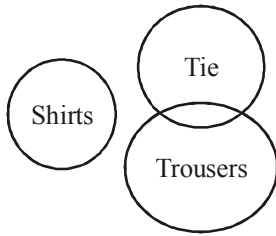
So, conclusions I is follow.

14. (c)
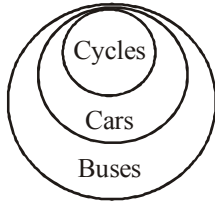
So, conclusions II and III are follows.

15. (a)
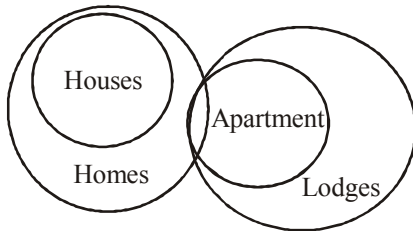
So, conclusions I and II are follows.

16. (c)
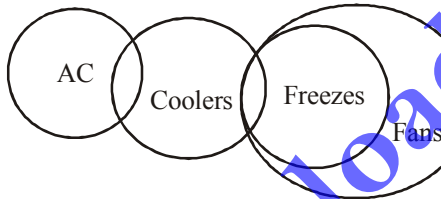
So, conclusions II and III are follows.

17. (e)
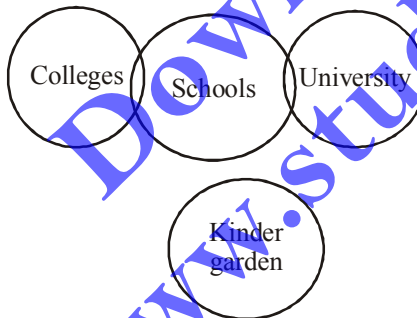
No any conclusions are follows.

18. (c)
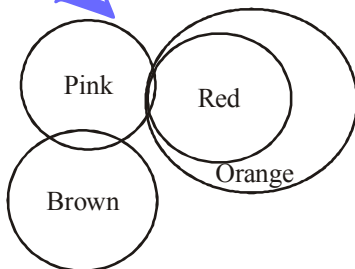
So, conclusions I, II and III are follows.

19. (c)
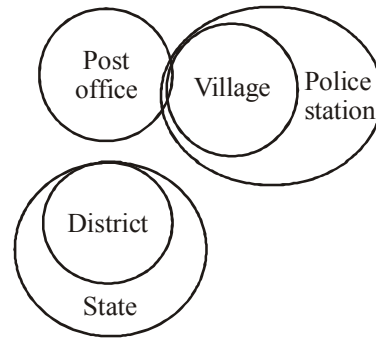
So, conclusions either I or II is follow.

20. (d)
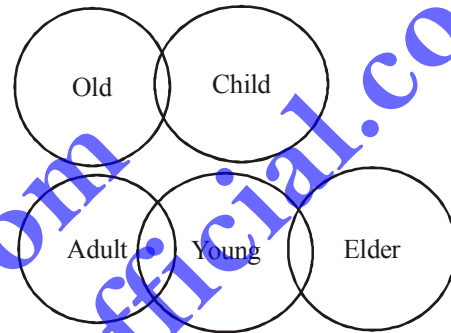
No any conclusions are follows.

21. (b)
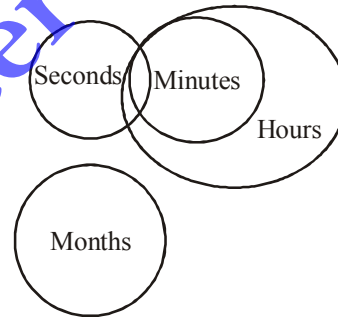
So, conclusions II and III are follows

22. (e)
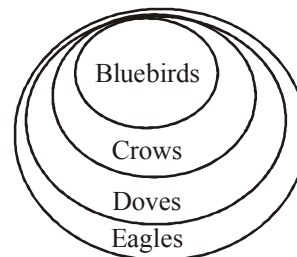
So, conclusions I, III and IV are follows.

23. (d)
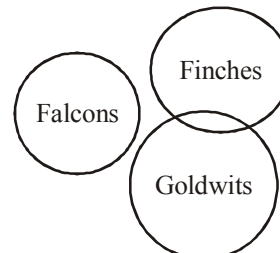
So, conclusions I is follow.

24. (c)
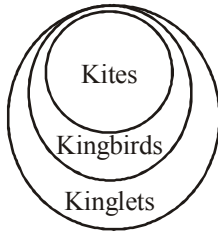
So, conclusions II and III are follows.

25. (a)
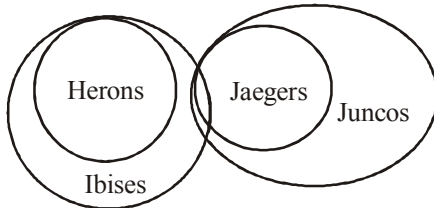
So, conclusions I and II are follows.

26. (c)
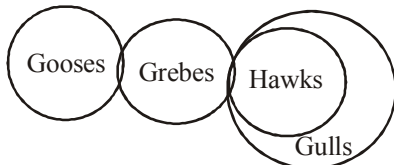
So, conclusions II and III are follows.

27. (e)
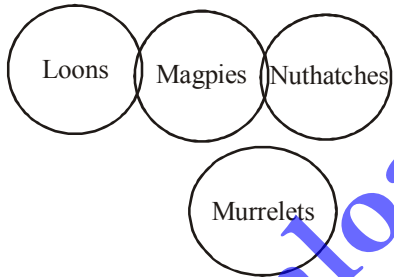
No any conclusions are follows.

28. (c)
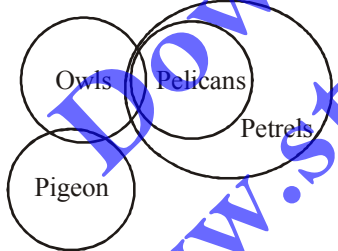
So, conclusions I,II and III are follows.

29. (c)
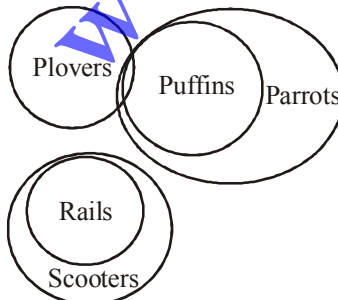
So, conclusions either I or II is follow.

30. (b)
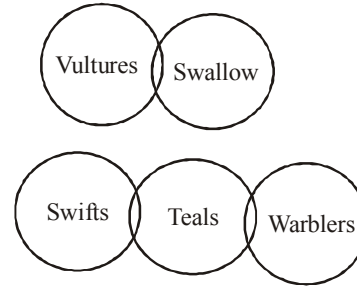
So, conclusions II is follow.

SPEED TEST 46

1. (b) From the below diagram, only (2) conclusion is true.
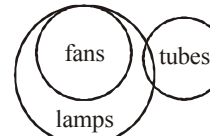
2. (a) From the diagram below, only (1) conclusion follows.
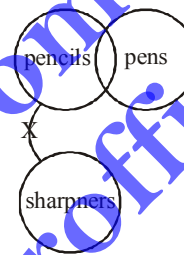
3. (b) From the diagrams below, only conclusion (2) follows.

4. (c) From the diagrams below, either conclusion (1) or (2) follows.
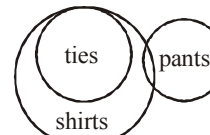
5. (a) From the diagrams below, only conclusion (1) follows.
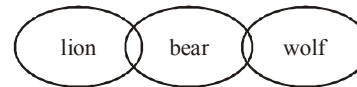
Solutions (6-10):

6. (a)
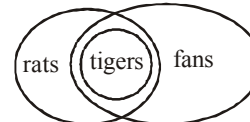
Only conclusion I follows.

7. (b)
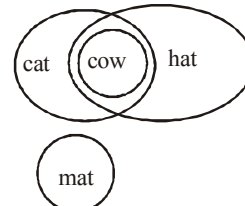
Only conclusion II follows.

8. (a)

Only conclusion I follows.

For (9-10):
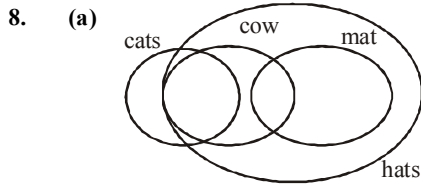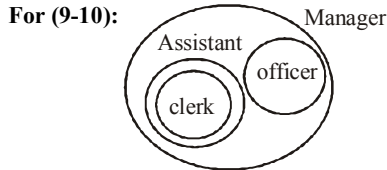
9. (b) Only conclusion II follows.
10. (e) Both conclusion I and II follow.

Solutions (11-20):

11. (b)

So, conclusions II and III are follows

12. (d)

So, All follow.

13. (b)
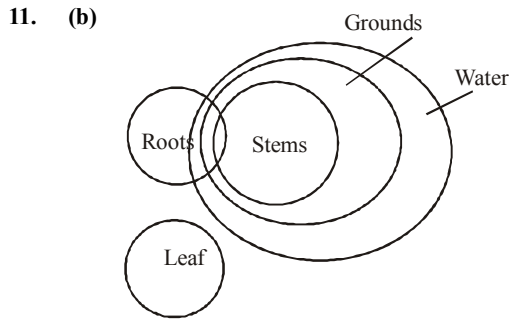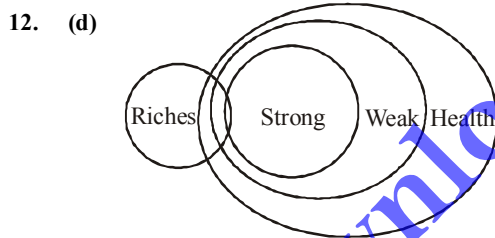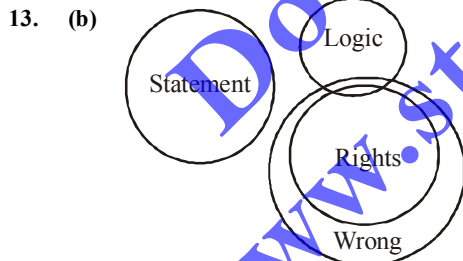
So, conclusion III is follow.

14. (b)
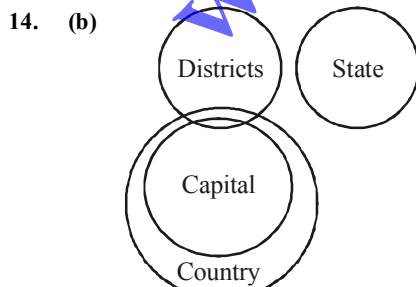
So, conclusions I and III follows.

15. (a)

So, conclusions I and II follows.

16. (b)
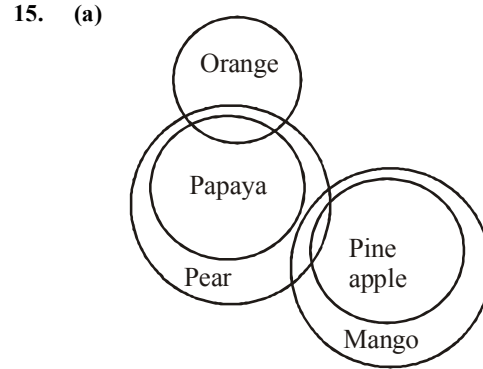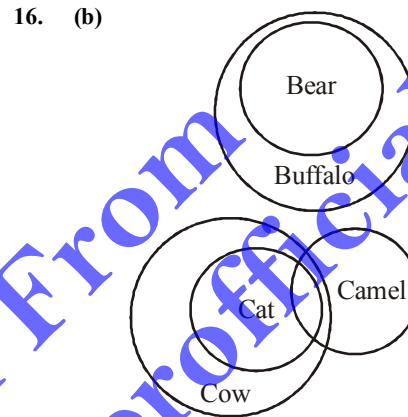
So conclusions either I or IV and III are follows.

17. (c)
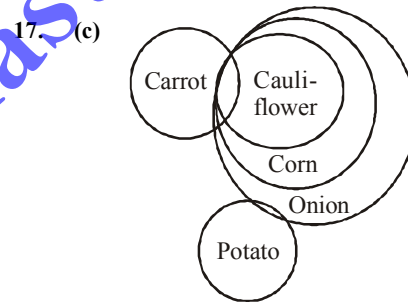
So, conclusions II and III follows.
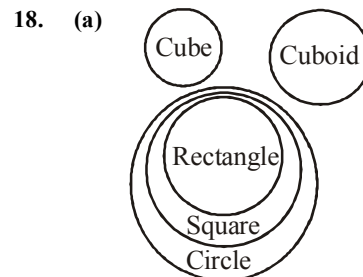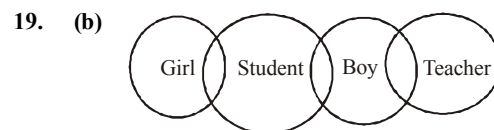
18. (a)

So, conclusions I and II follows.

19. (b)

So, conclusions I is follow.

20. **(b)**
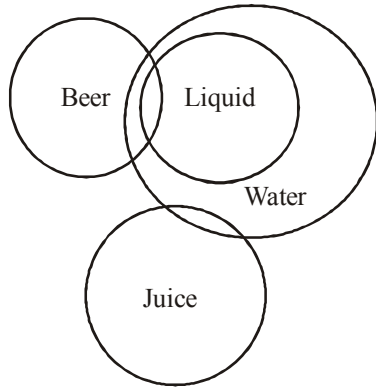
So, conclusions II is follow.

SPEED TEST 47

Sol. (1-5):

In each step, one word gets arranged from the left and one from the right. Note that words starting with vowels get arranged from the left and those starting with consonants get arranged from the right. This goes on in such a manner that finally we have vowel-starting words arranged in reverse alphabetical order followed by consonant-starting words arranged in reverse alphabetical order.

Input: gem stat ace cast omit fan rate uncut era input

Step I : uncut gem stat ace omit fan rate era input cast

Step II : uncut omit gem stat ace rate era input fan cast

Step III : uncut omit input stat ace rate era gem fan cast

Step IV : uncut omit input era stat ace rate gem fan cast

Step V : uncut omit input era ace stat rate gem fan cast

1. **(c)** **2.** **(a)** **3.** **(a)** **4.** **(d)** **5.** **(e)**

Sol. (6-10):

Input : for 52 all 96 25 jam road 15 hut 73 bus stop 38 46

Step I : all for 52 25 jam road 15 hut 73 bus stop 38 46 96

Step II : bus all for 52 25 jam road 15 hut stop 38 46 96 73

Step III : for bus all 25 jam road 15 hut stop 38 46 96 73 52

Step IV : hut for bus all 25 jam road 15 stop 38 96 73 52 46

Step V : jam hut for bus all 25 road 15 stop 96 73 52 46 38

Step VI : road jam hut for bus all 15 stop 96 73 52 46 38 25

Step VII : stop road jam hut for bus all 96 73 52 46 38 25 15

6. **(b)** **Step IV :** hut for bus all 25 jam road 15 stop 38 96 73 52 46
Eighth from the right – road.

7. **(c)** **8.** **(c)**

9. **(a)** **Step V :** jam hut for bus all 25 road 15 stop 96 73 52 46 38
Sixth from the left is 25

10. **(d)**

Sol. (11-15):

In the first step, the smallest number comes to the left most position and the remaining line shifts rightward. In the next step, the word that comes last in the alphabetical order occupies the second position form the left and the remaining line shifts rightward. This goes on alternately till all the numbers are arranged in ascending order and all the words in reverse alphabetical order at alternate positions.

11. **(c)** **Input :** 89 bind 32 goal house 61 12 joy

Step I : 12 89 bind 32 goal house 61 joy

Step II : 12 joy 89 bind 32 goal house 61 joy

Step III : 12 joy 32 89 bind goal house 61

Step IV : 12 joy 32 house 89 bind goal 61

Step V : 12 joy 32 house 61 89 bind goal

Step VI : 12 joy 32 house 61 goal 89 bind

12. **(c)** **Step II :** 15 yes 62 51 48 talk now gone

Step III : 15 yes 48 62 51 talk now gone

Step IV : 15 yes 48 talk 62 51 now gone

Step V : 15 yes 48 talk 51 62 now gone

Step VI : 15 yes 48 talk 51 now 62 gone

13. **(e)** **Step III :** 21 victory 30 joint 64 47 all gone

Step IV : 21 victory 30 joint 47 64 all gone

Step V : 21 victory 30 joint 47 gone 64 all

5 – 3 = 2 more steps will be required

14. **(e)** **Input :** win 92 task 73 59 house range 34

Step I : 34 win 92 task 73 59 house range

Step II : 34 win 59 92 task 73 house range

Step III : 34 win 59 task 92 73 house range

Step IV : 34 win 59 task 73 92 house range

15. **(e)** **Input :** save 21 43 78 them early 36 for

Step I : 21 save 43 78 them early 36 for

Sep II : 21 them save 43 78 early 36 for

Step III : 21 them 36 save 43 78 early for

Step IV : 21 them 36 save 43 for 78 early
Hence step III will be last but one.

Sol. (16-20):

In step I the least number comes to the left most position, pushing the rest of the line rightward . In step II the word that comes last in the alphabetical order shifts to second from left, pushing again the rest of the line rightward. Similarly, in step III the second least number shifts to third from left. In step IV the second from last in the alphabetical order comes to the fourth position. And this goes on alternately till all the numbers are arranged in ascending order and the words in reverse alphabetical order.

16. **(c)** **Step II :** 18 task bear cold dish 81 63 31

Step III : 18 task 31 bear cold dish 81 63

Step IV : 18 task 31 dish bear cold 81 63

Step V : 18 task 31 dish 63 bear cold 81

Step VI : 18 task 31 dish 63 cold bear 81

Step VII : 18 task 31 dish 63 cold 81 bear

17. **(d)** **Input :** 72 59 37 go for picnic 24 journey

Step I : 24 72 59 37 go for picnic journey

Step II : 24 picnic 72 59 37 go for journey

Step III : 24 picnic 37 72 59 go for journey

Step IV : 24 picnic 37 journey 72 59 go for

Step V : 24 picnic 37 journey 59 72 go for

Step VI : 24 picnic 37 journey 59 go 72 for

18. **(a)** **Input :** nice flower 34 12 costly height 41 56

Step I : 12 nice flower 34 costly height 41 56

Step II : 12 nice 34 flower costly height 41 56

Step III : 12 nice 34 height flower costly 41 56

19. **(d)** **Step II :** 16 victory 19 36 53 store lake town

Step III : 16 victory 19 town 36 53 store lake

Step IV : 16 victory 19 town 36 store 53 lake
Since the line is already arranged, there will be no fifth step.

20. **(d)** We can't work out backward.

Solutions (21-26):

First half of the digit are arranged in descending order in left side while half in right side. Each time two step follow. Then alphabets are follows.

Input: '25 Woman 29 92 88 South toy boy for giving'

Step 1: 92 Woman 29 88 South toy boy for giving 25

Step 2: 92 88 Woman South toy boy for giving 29 25

Step 3: 92 88 Woman South toy for giving boy 29 25

Step 4: 92 88 Woman toy South giving for boy 29 25

21. **(b)** Option (b) is correct

22. **(c)** South

23. **(e)** None of these

24. **(b)** boy

25. **(e)** There is no such step.

26. **(b)** 92 88 woman toy South giving for boy 29 25 is the final arrangement.

Solutions (27-30):

The machine rearranges the words and numbers in such a way that the words are arranged according to the length of words in descending order from left end. Words of the same length are arranged in reverse English alphabetical order, while numbers are arranged in ascending order on the right end in each step.

Input:- toy 18 till 24 36 is of never 87 99 cut 73
Step 1: - never toy till 24 36 is of 87 99 cut 73 18
Step 2: - never till toy 36 is of 87 99 cut 73 18 24
Step 3: - never till toy cut is of 87 99 73 18 24 36
Step 4: - never till toy cut of is 87 99 18 24 36 73
Step 5: - never till toy cut of is 99 18 24 36 73 87
Step 6: - never till toy cut of is 18 24 36 73 87 99

27. (b)   28. (c)   29. (b)   30. (c)

SPEED TEST 48

1. **(d)** I is strong because such a reduction in trends will be a desirable consequence. II is weak as it is silent as to what effect the ban will have on the "creative pursuits." III is strong because a ban will take away from the power of the portrayal.

2. **(a)** I is weak because talking of culture is irrelevant in a case which would have made no sense in the absence of modern medical technology. In fact, I is not even true. II is weak because it is simplistic. We are not told what these "unhealthy practices" will be. III is weak because it is superfluous.

3. **(e)** I is weak because it is not true. Look at the alternative given in II. But II is also not strong because instead of getting into the reason it provides an alternative. III is simplistic and hence weak. It is argument by example.

4. **(e)** I is strong because competent workforce is desirable. II is weak because it does not appear to be true for all PSUs. And even if it be true, an argument that takes recourse in helplessness seems to fall short on merit. III is strong because competition is desirable.

5. **(c)** I is weak because there is a mismatch of scale. II is weak because it is a trivial reason. III is strong because discrimination is undesirable.

6. **(a)** Argument I is strong as it attempts to address the power problem from the consumption side. II is weak as it stretches the free market theory a bit too much. III is weak because it is false.

7. **(c)** Argument I is weak as it merely tries to evade the issue. II may turn out to be true but it is based on a negative mindset — may be it's more of an assumption. Hence II is weak. III gets into the reason and is therefore strong.

8. **(e)** I is weak as it is not true. II is also weak on the same grounds. III is strong as it elaborates on how banning exports would help tackle the drought situation.

9. **(e)** Argument I is weak as it is not true. II is strong as such standardisation is desirable. III is also strong as the university-specific requirement's can't be overlooked.

10. **(d)** Argument I is strong as "one year" does matter in a student's career. II and III are strong but contradict each other. Since they can't be true at the same time, either II or III is strong.

11. **(a)** I is strong as growth of the economy is desirable. II is not strong because Saturdays and Sundays are meant for this very "intermittent rest". This purpose is not served by holidays.

12. **(e)** I is strong because it is desirable to help the needy students. II is also strong because compromising on quality takes away from the purpose of education.

13. **(b)** I is weak because it gives undue weightage to nuclear power. Hydel power etc. also help reduce air pollution. II is strong because safety is very important criterion.

14. **(d)** I is weak because it lacks in substance. Merely calling something "a nuisance" is simplistic. II is weak because it wrongly assumes that those people can't contribute to the nation otherwise.

15. **(a)** I is strong because performance should definitely be a criterion for "national sport" status. II is irrelevant: one fails to see the harm in two nations sharing a national sport. Besides, if every nation decided to have a different national sport, we would run out of sports as there would be just too many countries.

16. **(c)** Both the arguments are strong but both can't be true at the same time. The sale with either be affected (as I says) or not be affected (as II says). Hence, either is strong.

17. **(e)** I is strong as school is the ground where we prepare for the future battles of life. II is strong because examinations kill our creativity, turning us all into mere clerks.

18. **(d)** I is weak argument. It is not correlated with the statement. II is also weak because how can common people be encouraged from one rate of interest.

19. **(d)** I is weak argument because it has not been mentioned in statement that virus causing disease. II is also weak because it is not the only way.

20. **(b)** I is strong because it advocates the interest of investors. II is weak because it is wrongly assumed that strict govt. controls are likely to be counter productive.

21. **(d)** I is weak because public sector units are profit making. II is also weak argument because, how we can say that private companies will not be able to run these units effectively.

22. **(c)** I is strong because it will be helpful to increase productivity of public sector undertaking. II is also strong because this step will be against of employees. But both steps cannot be taken at the same time. Hence either I or II follows.

23. **(a)** I is not strong because it does not give sufficient reason. II is strong because it states genuine concern.

24. **(c)** Both I and II are weak arguments. I is weak because it does not explain the necessity of import. II is weak because selective encouragemnet cannot lead to shortage.

25. **(d)** I is strong because government must take care of poor. II is also strong because spending less amount on international sports would discourage international exposure of Indian sports persons.

26. **(d)** I is strong because it would create many kinds of problems in our country. II is also strong because on human grounds they should not be forced to go back.

27. **(a)** Argument I is not strong because it is not the only way. II is strong because it advocates the quality of professional training.

28. **(b)** Argument I is strong because, first those people should be tested who have come in contact with the patients. Then only quarantined if found positive. II is not strong because it may be one of the ways not only way.

29. **(d)** I is not strong because we should think about India's prospect not other countries. II is also weak argument because many other parameters should be counted before giving not to such policies.

30. **(d)** Ban on advertising of tobacco products may be one of the ways to save people from suffering from cancer, hence I is not strong. II is also not strong because it favours only for business of tobacco products not the health of common people.

SPEED TEST 49

1. **(a)** Assumption I is implicit because it is this that makes us import sugar *in spite of* the increase in the number of sugar factories.
    But II is not implicit because "future" is beyond the scope of the statement.

2. **(b)** Compensation is a way of sympathizing with the victims, not a deterrent to terrorism. Hence II is implicit but I is not.

3. **(a)** Assumption I is implicit because only then the switching over makes sense. But II need not be an assumption. The switching over may have been prompted by economic factors or those of convenience.

4. **(b)** When one applies for leave, one assumes that it would be granted. Hence I is not implicit. But Assumption II is implicit because only then period of "two years" assumes meaning.

5. **(a)** When you instruct someone to do something, you assume that he may do it. Hence I is implicit and II is not.

6. **(e)** Assumption I is implicit as this is the purpose assumed while levying the tax. II is also implicit because when a rule is framed, it is assumed that people are capable of following it.

7. **(a)** Assumption I is implicit in "at their own cost" Assumption II is contrary to what the citizens may have assumed.

8. **(d)** Were it assumed that the employees might leave, such a decision would not be taken. Hence Assumption I is not implicit.
Assumption II is not implicit because "next year" is present nowhere in the picture.

9. **(e)** Both are implicit in Mr. X's instructions to his assistant.

10. **(b)** II is implicit as it serves the purpose of introducing AC buses. Contrary to this, I is not implicit as it defeats the purpose.

11. **(a)** I is implicit because whenever a scheme is announced, it is assumed that people will welcome it. II is not implicit. Had fear been there on the mind of the govt, it would have refrained from introducing such a scheme.

12. **(d)** I is not implicit because an announcement is made with the assumption that it will be positively received. It is not implicit because the municipal authority is not covered by the ambit of the statement.

13. **(d)** If the response does not come, as Assumption I says, the ad won't make sense. Hence I is not implicit. II is not implicit; hence the qualification "with good communication skills".

14. **(a)** All these assumptions are in directions contrary to what the statement says.

15. **(c)** Whenever such a decision is taken, the assumptions are that it would be welcome and allowed to implement.

16. **(c)** The urging of the govt makes sense only when (A) and (B) are implicit.

17. **(b)** The decision to auction assumes response to it. Hence (A) is not implicit. Unless the private entities are capable, the decision would make no sense. Hence (B) is implicit. (C) is implicit as without financial benefit, private entities would not turn up for the auction.

18. **(b)** (A) must be implicit to make the request meaningful. The govt is out of picture here. Hence (B) is not implicit. (C) is not implicit as the case may be only of delay, not of cancellation of flight.

19. **(a)** The use of like a man indicates that the man concerned is not mad.

20. **(d)** It is not clear, how many employees are getting travelling allowance, so I is not implicit. The statement barring employees getting travelling allowance indicate that most people will read the notice.

21. **(a)** Banks' willingness to go to customer's doorstep makes statement I implicit. There is no information regarding number of banks or business volume of the market, hence statement II is not implicit.

22. **(b)** From the statement we assume that either assumption is implicit.

23. **(a)** Assumption I is implicit for the given statement. It is true that there are unemployed youths in India who need monetary support, but it may not be true that government has sufficient funds to provide allowance to all these unemployed youths.

24. **(d)** Both of the given assumptions are not implicit for the given statement.

25. **(d)** Both of the given assumptions are not followed by the given statements.

26. **(b)** Assumption II is implicit for the given statement.

27. **(b)** After notice all sales persons will stay away from the society. So I is implicit. II is also an assumption because it may be possible that sales persons do not obey notice and security guard posted at the gate. But both assumptions cannot be at the same time. Hence either I or II follows.

28. **(b)** For compete with bank A other bank may be reduced their retail lending rates. So I is implicit. If other banks do not reduce their retail lending rate then bank A may be able to attract more customers for availing retail loans. But both assumptions cannot be taken at the same time. Hence either I or II follows.

29. **(c)** I is not implicit because it is against of government decision. II is implicit because employees did not want to deduct tax at source. Hence only II is implicit.

30. **(d)** Assumption II is supplementary of assumption I and cannot be assumed with statement.

SPEED TEST 50

1. **(a)** Only conclusion I seems to be reasonable. Considering the different nature of IT Companies different parameters should be employed for rating. It is not necessary that if separate rating agency is established for IT companies the investors will get protection of their investment. Therefore, conclusion II does not follow.

2. **(a)** By increasing the manufacturing capacity the Company "Y" would compete reasonably on the cost front. And, as such it can improve the quality of its products. Hence, conclusion I follows. Conclusion II seems to be an assumption.

3. **(b)** Considering the amount of loss incurred by Public Sector Units it seems to be true that the Government did not take care in the matter of investment in the Public Sector Units. The use of term "only" in the conclusion I makes it invalid.

4. **(b)** Clearly, only conclusion II follows. It is not clear how the population of developing countries will not increase in the future.

5. **(c)** It is mentioned in the statement that Mr. X has been declared successful in the preliminary screening for the post of Director of KLM Institute. Therefore, either he will be selected or will not be selected as Director of KLM Institute.

6. **(d)** II may be an assumption which the professor is assuming before passing his statement but it definitely cannot be a conclusion. Hence II does not follow. I may or may not be possible. Hence I does not follow.

7. **(b)** It is clear that either there is no facility for health insurance available or it is available for only affluent sections. Hence I cannot be definitely concluded. II follows from the given statement, as 'limited resources' of the person suggests that he will go to a hospital which provides treatment on nominal charges or free.

8. **(a)** Only conclusion I follows. The statement talks about dedicated ordinary doctors but that in no way infers that extra ordinary specialists are not dedicated to their profession. So conclusion II follows. I is true in the context of the scenario prevailing in the country.

9. **(c)** Either I or II can follow. As the government would be reviewing the diesel prices in light of the spurt in the international oil prices, the gove can either decide to increase or keep the price stagnant (increasing subsidy.)

10. **(d)** The availability of vegetables is not mentioned in the given statement. So, I does not follow. Also, II is not directly related to the statement and so it also does not follow. Probably the demand is surpassing the supply.

11. **(d)** I and II are assumptions and not conclusions.

12. **(d)** The statement does not say why the poor societies suffer. Hence I does not follow. II also does not follow because the statement merely states a fact; it does not look into the merits of the fact.

13. **(c)** As Praveen has not yet returned, he might have got killed or might have survived. Hence (c) is the correct option.

14. **(b)** Nothing has been said in the statements which imply that VCRs and being now manufactured indigenously. Therefore, I is invalid. Since import licence on VCR's has been withdrawn, they can be now freely imported.

15. **(d)** Nothing of the sort can be concluded as given in two conclusions on the basis of the statements.

16. **(d)** Both the conclusion are invalid.

17. **(b)** Unless absolute figures are given, no conclusin of the type I can be made. Since average no. of students per teacher (60) in rural areas is higher than the average number of students per teacher (50) in urban areas, we can conclude that more students study with the same teacher in the rural areas as compared to those in the urban areas.

18. **(d)** This statement does not mention anything about healthy people. Neither does it mention about evening walks. Hence none of the conclusions follows.

19. **(a)** Only this can balance the equation.

20. **(e)** All the given choices would lead to an increase in the number of visits to health facilities.

SPEED TEST 51

1. **(a)** The alarming situation is pretty obvious. So a review committee is not required. Hence I does not follow. Water crisis is not the concern of the statement. Hence II does not follow. Merely two days of downpour does not merit "relief supplies"; one assumes there is not a flood-like situation as yet. Hence III does not follow.

2. **(d)** (A) would be an extreme step. (B) is not within the govt's purview. (C) is advisable when there is retrenchment on such a large scale.

3. **(a)** (A) would be a step in the right direction: it would ensure that hunger does not deprive children of education. (B) is escapism. (C) is absurd.

4. **(d)** (A) does not make sense unless it be known that these officials are the culprits. (B) is necessary to prevent such incidents in the future. So is (C).

5. **(b)** I and III would be too harsh; II is absurd. Efforts should be made to supervise the quality of the food prepared by the canteen.

6. **(d)** II is for the immediate future, III is for some time ahead. I does not follow because of the word "immediately".

7. **(b)** II would suffice; hence no need to go for I.

8. **(c)** Both of these are solutions to traffic jam but both together may not be feasible or necessary.

9. **(b)** I is not practical. II is necessary.

10. **(b)** Again, I is not practical.

11. **(b)** I is simply absurd. II follows as a solution to the complicated paperwork.

12. **(b)** I is easier said than done. Even I makes sense only when the govt goes for II.

13. **(d)** I is simply absurd. But even II is not the solution.

14. **(e)** Both courses of action are suitable for pursuing. Do not get confused by the use of the term "all" in the first course of action. Since, murder of a large number of people is not a usual event. Therefore, course of action I is also suitable.

15. **(b)** Only course of action II is suitable for pursuing. Since capsuled Vitamin E has not any deleterious effect on human body, it is not proper to ban the sale of capsuled Vitamin E.

16. **(a)** Only course of action I seems to be appropriate for pursuing. It is not desirable to achieve something by undue means.

17. **(e)** Both the courses of action are suitable for pursuing considering the visit of a large number of people.

18. **(b)** The first course of action does not match the scale of the problem. The problem is not so big as to merit a govt enquiry. It is enough that the civic body take action and hence II follows.

19. **(a)** II is an extreme action and hence does not follow. I is a proper course of action. Note that taking immediate steps is not the same as immediate removal of the constructions, which may again have been considered to be an extreme course of action.

20. **(d)** If the rainfall is normal, it does not mean we would deprive the farmer of his due. The actions may be deemed to be correct only if we know that they are the reversal of policies which had been framed during crisis years.

21. **(c)** Since the present epidemic has occurred only after 4 years, it would be unwise to take precautionary measures only after 4 years. Drinking boiled water does not ward off conjectivities. Hence, none of the courses of action is advisable.

22. **(c)** A stringent compliance norm should be put in place. None of the given courses of action is advisable.

23. **(d)** Both the courses of action may lead to speedy disposal of disputes. Hence, both of them are advisable.

24. **(d)** Both the courses of action are advisable as they can lead to more flexibility in the education system.

25. **(c)** Train drivers are not supposed to, nor able to stop trains in such situations, hence I is ruled out. Due to collision with running train, chances of bus driver's survival is negligible, hence II is ruled out. III gives a preventive measure for such mishaps.

26. **(c)** Statement I doesn't suggest a precautionary measure for future; which is there in II and III.

27. **(b)** Statement III puts all responsibility on fishermen alone. Watching a mishap is no cure for the mishap. Statement I is corrective measure and II is precautionary measure.

28. **(d)** Eating habit of a society develops through centuries and is impossible to change, hence II can't be implemented. I and III will help affect the growth in demand.

29. **(c)** Faculty members should be persuaded not to go on strike and an action against the members who join the strike should be taken.

30. **(d)** I is about increasing awareness. II and III are preventive measures.

SPEED TEST 52

1. **(b)** The pressure of the social activists has led to the banning.

2. **(b)** The large number of terrorist attacks has led to tightened security checks.

3. **(b)** The flood has led to epidemics.

4. **(b)** The fighting has led to the closure of the shops.

5. **(e)** It seems the price of petroleum has increased in general. Alternatively, subsidies may have been reduced, again a cause common to both the statements.

6. **(a)** The poor performance of the students has led to the exit of the professor.

7. **(b)** Statement B is the cause and statement A is its effect. Owing to agitation against high fees the Government appointed a committee to look into the matter.

8. **(b)** Statement B is the cause and statement A is its effect. Owing to inability of the small banks to withstand the competitions of the bigger banks the Reserve Bank of India put restrictions on few small banks.

9. **(e)** Both the statements are effects of some common cause.

10. **(b)** In order to check the menace of poor eating habits, schools have banned the sale of fast food.

11. **(a)** The unhealthy competition leads to the negative mindset that is responsible for suicide.

12. **(c)** Both are independent causes.

13. **(b)** Changes in wind pattern have caused increase in temperature.

14. **(a)** The motorists' hardship has led to the municipal sanction.

15. **(b)** Lack of projects has led to the lay-off.

16. **(a)** The attractive schemes are attempts to boost sales.

17. **(e)** There seems to be some common cause that is leading to deterioration in both kinds of education.

18. **(e)** Hike in fuel prices seems to be the common cause.

19. **(d)** The prices of petrol and diesel being stagnant in the domestic market and the increase in the same in the international market must be backed by independent causes.

20. **(b)** The parents' protest against high fees being charged by the institutions led the government to interfere and fix the fees at a more affordable level.

21. **(d)** Closing the schools for a week and the parents withdrawing their wards from the local schools are independent issues, which must have been triggered by different individual causes.

22. **(e)** Both the statements are clearly backed by a common cause, which is clearly an increase in the number of thefts in the locality.

23. **(b)** Clearly, the university's decision to refuse grant to the colleges must have triggered the college authority to become autonomous.

24. **(b)** Clearly, the increase in the literacy rate may be attributed directly to the stringent efforts of the district administration in this direction.

25. **(c)** Waterlogging problems have occurred due to the heavy showers. So II is the cause of effect I.

26. **(b)** Both I and II are independent statements contradicting each other. I contains both effect and cause respectively. There is no correlation between I and II.

27. **(b)** Both I and II are independent events contradicting each other.

28. **(b)** Both statements I and II are independent. There is no correlation between them. Statement II contains both effect and cause respectively.

29. **(d)** Both statements I and II are effects of independent causes. Why did increase in demand for quality tea is not given in statement II. Similarly, why did increase in demand of coffee in the domestic market is also not given in statement I.

30. **(a)** An increase in the number of unemployed youth is bound to draw in huge crowds for a single vacancy.

SPEED TEST 53

1. **(a)** Clearly, India can export only the surplus and that which can be saved after fulfilling its own needs, to pay for its imports. Encouragement to export cannot lead to shortages as it shall provide the resources for imports. So, only argument I holds.

2. **(a)** Clearly, health of the citizens is an issue of major concern for the Government. So, a product like drugs, must be first studied and tested in the Indian context before giving licence for its sale. So, only argument I holds strong.

3. **(a)** Clearly, harnessing solar energy will be helpful as it is an inexhaustible resource unlike other resources. So, argument I holds. But argument II is vague as solar energy is the cheapest form of energy.

4. **(e)** The students union formation shall be a step towards giving to students the basic education in the field of politics. However, it shall create the same political atmosphere in the campus. Thus, both the arguments hold strong.

5. **(a)** Clearly, India cannot part with a state that is a major foreign exchange earner to it. So, argument I holds strong. Further, giving away a piece of land unconditionally and unreasonably is no solution to settle disputes. So, argument II is vague.

6. **(e)** Clearly, neither the students can be burdened with studies at such a tender age, nor can they be left free to take studies casually, as this shall weaken their basic foundation. So, both the arguments follow.

7. **(d)** Clearly, every person must be free to work wherever he wants and no compulsion should be made to confine one to one's own country. So, argument I is vague. However, talented scientists can be of great benefit to the nation and some alternatives as special incentives or better prospects may be made available to them to retain them within their motherland. So, argument II also does not hold.

8. **(d)** The age of a person is no criterion for judging his mental capabilities and administrative qualities. So, none of the arguments holds strong.

9. **(b)** Clearly, I does not provide a strong reason in support of the statement. Also, it is not possible to analyze the really deserving and not deserving. So/argument II holds strong.

10. **(d)** Clearly, at the college level, all the students are assessed according to their performance in the University Exams and not on the basis of any criteria of a more intimate dealings with the students. So, argument I is vague. Also, at this level the awarding of degrees is impartial and simply based on his performance. So, argument II also does not hold.

11. **(d)** 'Hire and fire policy' implies 'taking up the performing employees and discarding the non-performing ones'. Clearly, such a policy would stand out to encourage employees to work hard and devotedly to retain their jobs and thus enhance productivity and profitability of the organizations. So, both arguments I and III hold strong. Argument II seems to be vague in the light of this.

12. **(b)** Clearly, capability is an essential criteria for a profession and reservation cannot ensure capable workers. So, neither I nor III holds strong. However, making one caste more privileged than the other through reservations would hinder the objectives of a classless society. So, argument II holds strong.

13. **(b)** Genetically modified imported seeds have been specially formulated to increase the yield and quality of produce. So, argument II is strong. Besides, increase in production holds much more significance than the sale of domestically produced seeds. Thus, argument I does not hold. Also, the genetically modified seeds result in a producer of finer quality which is no way harmful to the consumer. So, III also does not hold strong.

14. **(c)** Clearly, if the income of farmers is not adequate, they cannot be brought under the net of taxation as per rules governing the Income Tax Act. So, I is not strong. Besides, a major part of the population is dependent on agriculture and such a large section, if taxed even with certain concessions, would draw in huge funds, into the government coffers. Also, many big landlords with substantially high incomes from agriculture are taking undue advantage of this benefit. So, both arguments II and III hold strong.

15. **(a)** Courts are meant to judge impartially. So, argument III is vague. The system of local courts shall speed up justice by providing easy approach and simplified procedures, and thus ease the burden of the higher courts. So, I as well as II holds strong.

16. **(d)** The issue discussed in the statement is nowhere related to increase in unemployment, as the number of vacancies filled in will remain the same. Also, in a working place, it is the performance of the individual that matters and that makes him more or less wanted, and not his educational qualifications. So, neither I nor II holds strong. Besides, the needs of a job are laid down in the desired qualifications for the job. So, recruitment of more qualified people cannot augment productivity. Thus, IV also does not hold strong. However, it is the right of an individual to get the post for which he fulfils the eligibility criteria, whatever be his extra merits. Hence, argument III holds strong.

17. **(a)** Clearly, the need of today is to put to better use the underutilized human resources. Computers with better and speedy efficiency can accomplish this. So, argument I holds, while II does not. Computerization is a much beneficial project and investment in it is not at all a waste. So, III is not strong. Further, development in a new field is not a matter of merely following up other countries. So, IV also does not hold strong.

18. **(e)** Only III is strong. The lure of earning private tuitions reduces the efforts and devotion of the teachers towards the students in schools. So, if tuitions are banned, students can benefit from their teachers' knowledge in the school itself. So, argument III holds strong while I does not. However, a person cannot

be barred from earning more just because he already has a good salary. So, argument IV is vague. Further, the unemployed people thriving on tuitions can survive with the school teachers holding tuitions too, if they are capable enough to guide the students well. So, argument II also does not hold strong.
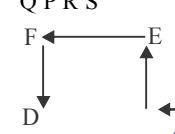
19. **(d)** Clearly, today's children are to make up future citizens of the country and so it is absolutely essential to make them learned, more responsible, more innovative and self-dependent by imparting them education. So, argument II holds strong while I and IV do not. Besides, the goal of literacy cannot be denied for want of infrastructure. So, argument III also does not hold.

20. **(b)** Clearly, trade unions provide a common platform for the workers to voice their demands and protests and thus ensure that they are not subdued or exploited. So, argument II holds strong, while I and III do not. Besides, the idea of imitation of other countries in the implementation of a certain policy holds no relevance. So, argument IV also does not hold strong.

21. **(c)** Since life expectancy depends on genetic make-up migration can't enhance it.

22. **(c)** Once the trials are over, availability of material, management and other resources is necessary to maintain production schedule.
Thus, option I will strengthen the chairman's decision. Option II is not related to the statement. Option III will strengthen the decision because a better network of dealers and complete formalities would be good for sale and thus for the company.

23. **(a)** Read the last statement of the paragraph,

24. **(e)** Conclusion : Public education has deteriorated in the last 50 years. Evidence : The inability of high school seniors to compose a business letter. (e) strengthens the argument by adding meaning to the evidence. If 80 percent of seniors could write acceptable business letters 50 years ago, and only 50 percent of today's seniors can do so, then the conclusion is more believable.

25. **(e)** Coolidge, it's argued, won't benefit from introducing a new cereal since doing so will merely "steal" its own customers away from other Coolidge brands. Anything that demonstrates that Coolidge may actually benefit from introducing a new brand will weaken this argument, and (e) does exactly that. If introducing a new brand will attract buyers of competitor's cereals, Coolidge will have suceeded in increasing its overall customer base without cannibalizing its own product.

26. **(b)** Anything alleging the possibility of keeping abreast of friends' well-being at a distance would seriously weaken the argument. (b) presents a way in which friends can live apart from one another and still keep in contact.

27. **(c)** The correct choice is (c) – the author assumes that excessive pressure, because it's offered as one sure cause, is the *only possible* cause, even though there may be others.

28. **(d)** The argument stated in the information is that all animal actions are a result of an interaction between experiences and genotype. Therefore, if all experiences and genotype are identical, all actions will also be identical. This is mentioned in option (d).

29. **(d)** The given passage says (1) media supplies the stuff of thought.
(2) it shapes the process of though.
(3) internet has reduced our capacity to concentrate → this is stated/exemplified in (d). Therefore, it streng- thens the given argument.

30. **(c)** The author is not happy with the huge amount of expenses incurred in research of things which have no use in day to day life. (c) weakens this argument because we can apply something to the use of mankind only if we have the knowledge of it.

SPEED TEST 54

1. **(c)** This dents the reliability factor.
2. **(e)**   3. **(c)**
4. **(d)** The theme of the passage says that when soldiers are subjected to high pressure situations even in simulated warfare, their naturalistic decision making capacity/ability is not compromised. Statement (i) and (ii) clearly negate the above notion. (iv) suggests that individual and naturalistic decision making ability is lost. (v) says that officers believe more in experience of soldiers than simulation based training. This makes (d) the correct choice.

5. **(e)** The passage clearly emphasizes that practising Hatha- Yoga is really difficult and only a few resolute souls go through all the stages of its practice (refer sentence 3). So E strengthens the idea of the passage. C and D are out of context as the passage doesn't talk about Yoga schools teaching Raja Yoga. A and B are also out of context as they restrict themselves to people in a given ashram .

6. **(b)** A person seeking to refute the argument might argue that managing big organization is more challenging than small. The reason being the CEO of any organization whether it is big or small has similar kind of duties and responsibilities but the CEO of big organization has more complex nature of work.

7. **(a)** If the given statement that CEO of small organization come from good educational background is true it will strengthen the speaker's argument, the reason being the speaker wants that CEOs of big and small organizations should be paid similarly and if the CEO of small organization comes from good educational background they should receive a similar amount which a CEO of big organization receives.

8. **(a)** The argument is essentially that the proposed law makes no sense because knitting needles are dangerous as well. The argument relies explicitly on an analogy between hypodermic and knitting needles. Thus, the two must be similar in all respects relevant to the argument. Otherwise, the argument is unconvincing. (a) affirms that knitting needles are in fact dangerous, thereby affirming the analogy between the two types of needles.
(b) and (c) each in its own way supports the bare assertion that the proposed law might not be effective. However, none of these answer choices affirms the argument's essential reasoning.
(d) actually *weakens* the argument, by providing a reason why hypodermic needles and knitting needles are *not* relevantly similar.

9. **(d)** Provides an alternate source of the Raynhu bark. Even though the tree is rare in the wild, the argument is silent on the availability of cultivated trees. The author of the argument must be assuming that there are no Raynhu trees other than those in the wild, in order to make the leap from the stated evidence to the conclusion that the Raynhu is headed for extinction. The option (d) weakens the assupmtion - 'there are limited raynhu trees' - by saying that there are other ways as well for the propogation of Raynhu. The other answer choices all contain information that is irrelevant. Note that the correct choice does not make the conclusion of the argument impossible. In fact, it is possible that there may be domesticated Raynhu trees and the species could still become extinct. Answer choice (d) is correct because it makes the conclusion about extinction less likely to be true.

10. **(b)** Since these cards are issued to identify an individual for security purposes or in case of any accident, we may conclude that the police need this information to complete the investigation. (1) cannot be concluded because it is mentioned that the govt is providing unique identity cards to all citizens is impossible.

11. (c) 12. (d) 13. (b)
14. (e) 15. (c) 16. (a)
17. (a) If none of the visitors have pets, a notice on "pets" will not be required.
18. (c) Both (c) and (d). Suggest that to prevent the theft of their permissions.
19. (d) The announcement is measure taken to stop cheating in exams.
20. (a) This is the only choice where "the invigilator" is the subject of the sentence.
21. (c) Even (c) can be inferred only probably.
22. (e) If the instructure does not exist, the deal will be a wastage of money.
23. (b) Getting conncected by air is bound to have an impact on road traffic.
24. (d) Takes care of the compability factor and (a) states the advantage over other competing planes.
25. (b) The results in this quarter are promising. And if this promise rides on an "admirable" background, the companies must really be doing well.
26. (a) Look at the way Som Mittal is evaluating the performance of IT companies in his capacity as the President of Nasscom.
27. (c) Hence the emphasis on reflection of "strong fundamentals".
28. (b) (e) brings about a mood of pessimism.
29. (a) Note the relationship with US economy.
30. (c) If an economy is speculative, it cannot be so trustworthy and hence we can't Predict or determine the prices of goods or commodity with respect to that economy. Hence, it weakens the argument of the author.
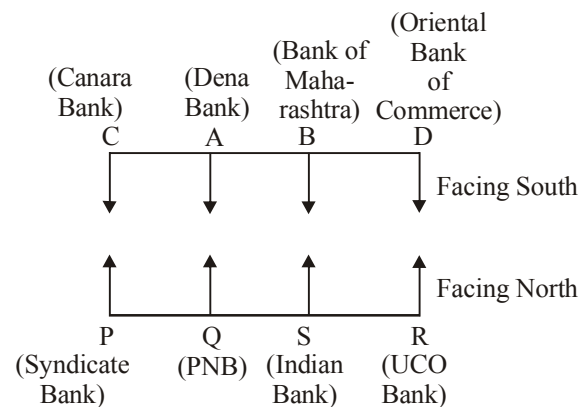
SPEED TEST 55

1. (e) Here either or condition used for R.So we cant find the exact position.
2. (b) Z's daughter MI(Son of H) X => M's sister
3. (c) D =8 B = 8*100/20 = 40 A = 40-12 = 28
4. (e) go to home => pi ma da way for market => sh da si way to home => da pi ma way => da, to/home=> ma/pi
5. (c) O > N > K = L > M
6. (e) H ⇒ D J(wife of C) ⇒ K(son/daughter of J)
7. (c) Q P R S
8. (c)

```
F ◄──────── E
│           ▲
▼           │
D          ──► H
```

9. (b) From II - - - R T O - U - - - - Q - -
10. (d) U > V > W = X > Z
11. (c) From I, Wednesday he didn't arrive
From II, number of possible cases S,M,T,W,T
From III, possible cases W,T
But from first he didn't arrive on Wednesday, so from 1 and 3 he arrives on Thursday.
12. (e) We can't determine the heaviest person from all the three statement as there is no relation between Hari and Surya
13. (c) From III, the total is known and from I, the position of both in a row can be known, so Priya's position can be known.
14. (b) From both I and II
2/3(300) = 200
Sunday = 300 − (200 + 50) = 50
15. (b) From second it is clear that,
(21 students) Venu (11 students) Prakash (26 students)
16. (c) From I:
E < B < (A, D)
From III
C < E
17. (c) From I, R can be in 6th or 4th
From I and II, R is in 6th

18. (e) From I and III, D =8 B = 8*100/40 = 20; A = 20 − 12 = 8
19. (e) S M Tu W Th F Sat
She didn't arrive on Wednesday from I
From II ⇒ before Friday mean S M TuTh
From III ⇒Wednesday and Thursday
20. (b) From second it is clear that,
(21 students) Gopal (11 students) Arun (26 students)
21. (e) From I and III, Vijay left for Mumbai on Wednesday or Thursday.
22. (d) From I and III,Ravi lives in 3rd floor
23. (e) We can't determine the heaviest person from all the three statement as there is no relation between Hari and Siva
24. (c) From (1) E>B (B is earlier than E) and A and C are not first
From (2) C,E > A (A reached earlier than C and E) and also A>D (D is earlier than A) and B>D (D was at station before B) so we get D is first to reach the station
From 3) we can't say anything
25. (d) From 1st Q and R are opposite to each other
From second we get either T is to the immediate right of R or to the immediate left of Q
So from all three we get that P is opposite to S
26. (d) (1)   E > C > B
(2)   A is not the shortest
(3)   A > D (only D),
So from 1 and 3 we get that E is the tallest person
27. (c) (1)   Wednesday he didn't arrive
(2)   number of possible cases S,M,T,W,T
(3)   possible cases W,T
But from first he didn't arrive on Wednesday, so from 1 and 3 he arrives on Thrusday
29. (a) From 2 and 3, we get that either they are in PSR or in RSP manner and P and R didn't sit at the ends, so we get S sits in the middle
29. (c) From 2 and 3 we get that E > C > B and D >A> B, so we can conclude that B is the lightest
30. (d) From all three we get

SPEED TEST 56

(1-5) :

```
                                      (Oriental
                        (Bank of       Bank
         (Dena          Maha-          of
(Canara  Bank)          rashtra)       Commerce)
Bank)
C        A              B              D
│        │              │              │
▼        ▼              ▼              ▼                Facing South


▲        ▲              ▲              ▲                Facing North
│        │              │              │
P        Q              S              R
(Syndicate (PNB)        (Indian        (UCO
Bank)                   Bank)          Bank)
```

1. (b) 2. (e) 3. (d) 4. (a) 5. (d)
(6-10) :

Floor No	Person	Bike
8	B	HP
7	C	Asus
6	G	Samsung
5	F	Apple
4	H	Acer
3	E	DELL
2	A	TOSHIBA
1	D	Lenovo

6. (a) 7. (e) 8. (c) 9. (c) 10. (b)

(11-15) :

Person	Day	Time Slot
G	Mon	10.00 AM
B	Mon	3.00 PM
I	Tue	10.00 AM
D	Tue	3.00 PM
E	Wed	10.00 AM
C	Wed	3.00 PM
F	Thu	10.00 AM
A	Thu	3.00 PM
H	Fri	10.00 AM
J	Fri	3.0 M

11. (c) 12. (a) 13. (d) 14. (e) 15. (b)

(16-20) :
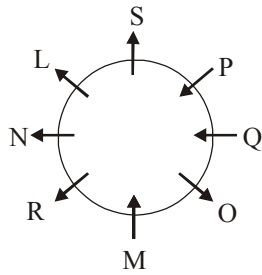
16. (a) 17. (a) 18. (c) 19. (d) 20. (a)

(21-25):

STEP 1 : all and best 11 25 my 47 81 equal 49 strength 16

STEP 2 : all and 81 49 best 11 25 my 47 equal strength 16

STEP 3 : all and 81 49 best equal 11 25 my 47 strength 16

STEP 4 : all and 81 49 best equal 47 25 11 my strength 16

STEP 5 : all and 81 49 best equal 47 25 my strength 11 16

STEP 6 : all and 81 49 best equal 47 25 my strength 16 11

Rule : In step 1 two words picked arranged in alphabetical order and placed it at the left corner and in step 2 , two numbers picked and arranged it in descending order next to words and so on.

Input: best 11 all 25 my 47 81 equal 49 strength 16 and

21. (d) 22. (b) 23. (a) 24. (d) 25. (d)

26. (a) 27. (c) 28. (e) 29. (d) 30. (e)

31. (c) If some plants are tools, then some plants will be pots too which is not possible.

If all trees are tools, then also some plants will be pots too which is not possible.

Some plants are definitely houses.

IV is a possibility

32. (b) All plants are houses is a possibility, so I does not follow.

II is a possibility.
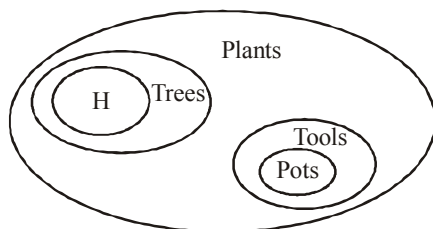
III is a possibility as
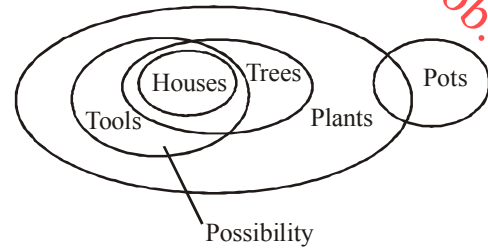
IV is possibility as

33. (a) If some tools are figures, then some lions will be tools which is not possible.

II is a possibility.

III is not definite. Roofs can be tools

34. (d) I and III are false, subject and predicate same so either or occurs

IV is not definite.

II. If all buckets are frames, then some frames will be photos which is not possible.

35. (d) If all sites are buns, then some covers will be buns which is not possible.

II is a possibility.

All sites are buns is not a possibility, so III follows.

No seat is bun because no cover is bun

(36-38) : Colours of the sky = ki la fa so ...(i)

Rainbow colours = ro ki   ...(ii)

[from (i) and (ii)]

∴ Colours = ki.....

sky high rocket = la pe jo   ...(iii)

from (i) and (iii), sky = la

the rocket world = pe so ne

from (i) and (iv), the = so   ...(iv)

and from (iii) and (iv), rocket = pe

36. (e) colours sky high = ki la jo

37. (c) 'the' represents only 'so'.

38. (e) 'pe' represents 'rocket'.

39. (b) I. $\underset{(\ )}{P} \leftrightarrow \underset{}{N} \underset{(-)}{\rightleftharpoons} K$
$\quad \downarrow$
$\quad J$

Using I only, we cannot determine if J is the nephew or niece of K.

II. $\underset{(+)}{P} \leftrightarrow \underset{}{N} \underset{(-)}{\rightleftharpoons} K^+$
$\quad \downarrow$
$\quad \underset{(+)}{J}$

J is the nephew of K.

40. (a) I. Using I only, we can determine that G stays on 4th floor.

41. (e)   42. (c)   43. (d)   44. (e)

45. (a) Since the statement talks of putting the child in school at the age of 5, it means that the child is mentally prepared for the same at this age. So, I is implicit. But nothing about admission after 6 years of age is mentioned in the statement. So, II is not implicit.

46. (b) Assumption I goes against the statement. So, it is not implicit. The allowance will serve as a reward to the employees and shall provoke them to come on time. So, II is implicit.

47. (e) U N D E R S U B S C R I B E D

48. (c) 2nd digit from right = 7th digit from left

Now, 7th digit after rearrangement = 3rd digit in the given number = 1

49. (d)   50. (c)

SPEED TEST 57

1. (b) Imperial means of an empire or its rulers, adamant means firmly or stubbornly, determinedly.
2. (c) Verbose means using or containing more words than are needed, ambiguous means having more than one meaning.
3. (c)
4. (c) Once I fall ill, it takes me long to recuperate. That is, I take a long time to recover my health or strength after I have been ill. Convalesce is another synonym of recuperate. Convalescence is the period or process of becoming healthy and well again after an illness or operation.
5. (b) You are familiar with the word tenuous. Attenuate also comes from the same Latin root tenuis (= thin). If you attenuate something, you make it slender or thin; you reduce it in force or value.
6. (c) If you abstain from something, you deliberately do not do it. Abstinence, however, is a particular kind of abstaining — that from alcoholic drink, sex etc, often for health or religious reasons. If you abstain from drinking, you do not get drunk. Abstinence does not refer to "drink" only,
7. (d) A taciturn person is not dumb. A dumb person can't speak. A taciturn person can speak but does not want to. In other words, he maintains a reserve.
8. (d) One who is blithe is carefree and cheerful.
9. (d) You are captivated by something attractive; It fascinates you.
10. (c) Government servants are not allowed to receive money from any other job. Suppose an income-tax officer desired to edit this book. He would then have to be the honorary editor of this book. That is, he cannot receive any payment as wages for editing the book. An honorary job is thus unpaid for.
11. (b) If you visualise something, you imagine what it is like by forming a mental picture of it. You may visualise future events as well, your wedding for example. You thus foresee your wedding.
12. (a) From Akbar to Aurangzeb, every Mughal emperor went on annexing one kingdom or another to what they inherited. In other words, each of them added to his father's empire.
13. (d) A menage is a group of people living together in one house. In other words, a household.
14. (c) If something is firm, it is strong enough to maintain its balance. Infirmity therefore suggests weakness.
15. (d)
16. (c) The word **spend** (verb) means to pay out, to employ (labour, time etc.) on some objects. For instance,
How do you spend your leissure-time?
Similarly, the word **devote** (verb) means to give time and energy to something. For instance,
He is devoted to his studies.
Thus, spend and devote are synonymous.
17. (d) The word **lie** (verb) means be at rest. For instance,
She is lying on the bed.
Similarly, the word **remain** (verb) means continue to stay. For instance,
Twenty pens were distributed and the remaining were returned.
Thus, lying and remaining are synonymous.
18. (a) The meaning of the word **Starve (Verb)** as used in the passage is: keep deprived of; to not give something that is needed.
Hence, the word **starved** and **deprived** are synonymous.
19. (b) The meaning of the word **Slap (Verb)** as used in the passage is : Impose; to order especially in a sudden or an unfair way, that something must happen or somebody must do something.
20. (a) The meaning of the word **Plow (Verb)** as used in the passage is : to invest a large amount of money in a company or project; to cultivate.
Hence, the words **plowed** and **imposed** are synonymous.
21. (a) 22. (b) 23. (c) 24. (e)
25. (b) 26. (e) 27. (d) 28. (e)
29. (c) 30. (a)

31. (a) The word **dismay** (noun) means feeling of fear and discouragement. For instance,
They were struck with dismay at the news.
While, the word **joy** (noun) means feeling of happiness.
Thus, both are antonymous.
32. (d) The word *tend* (verb) means look after. For instance,
Nurse tended the injured persons.
While, the word **ignore** (verb) means take no notice of. For instance,
Raman ignored the advice of his elders.
Thus, both are antonyms.
33. (b) The meaning of the word **Pressing (Adjective)** as used in the passage is: urgent, serious, insistent, needing to be dealt with immediately.
Hence, the word **pressing** and **undemanding** are antonymous.
34. (c) The meaning of the word **Evaporate (Verb)** as used in the passage is: to disappear, especially by gradually becoming less and less.
Hence, the words **evaporated** and **grew** the antonymous.
35. (b) The meaning of the word **Thrive (Verb)** as used in the passage is : to flourish; to become and continue to be successful, strong, healthy etc.
The word **Deteriorate (Verb)** means : to become worse.
Hence, the words **thrive** and **deteriorate** are antonymous.
36. (b) 37. (d) 38. (a) 39. (a)
40. (b)

SPEED TEST 58

1. (b)	2. (d)	3. (d)	4. (b)	5. (c)	6. (d)	7. (a)
8. (a)	9. (a)	10. (c)	11. (d)	12. (d)	13. (c)	14. (d)
15. (c)	16. (d)	17. (a)	18. (c)	19. (c)	20. (a)	21. (c)
22. (c)	23. (b)	24. (c)	25. (d)	26. (c)	27. (c)	28. (b)
29. (c)	30. (a)					

SPEED TEST 59

1. (d) [Ordinance = enactment;
Ordnance = military stores]
2. (e) The correct word in I is 'reverent' and that in II is 'reverend'.
[Reverent = respectful;
Reverend = respectable]
3. (a) The correct word in II should be 'Antique'.
[Antic = odd, Antique = old]
4. (a) The correct word in II should be 'effected'.
[effect = result, affect = to influence]
5. (c) [Wrapt = lost in something,
Rapt = enraptured]
6. (d) [Meter = a measuring apparatus,
Metre = unit of length]
7. (d) [Urbane = courteous;
Urban = pertaining to city]
8. (a) The correct word in II should be 'jealous'.
[Zealous = full of zeal;
Jealous = envious]
9. (a) The correct word in II should be 'migrants'.
[Emigrant = one who leaves his country to settle in any other country;
Immigrant = one who enters a country to settle there]
10. (b) The correct word in I should be 'accede'.
[Accede = agree; Exceed = surpass]
11. (b) Both (2) and (4), here Alter signifies make different; cause a transformation and change denotes more or less the same. So does modify. On the contrary fix means restore by replacing a part or putting together what is torn or broken while gender means the properties that distinguish organisms on the basis of their reproductive roles.
12. (c) Both (1) and (4) Cryptic and secret are synonyms to the key word mysterious which means of an obscure nature whereas peculiar and queer denotes something odd.

13. (c) All (2), (3) and (4); primitive, Uninitiated and uninstructed are synonyms to naive which means marked by or showing unaffected simplicity and lack of guile or worldly experience while sophisticated means having or appealing to those having worldly knowledge and refinement and savoir-faire.

14. (e) All (1), (2), (3) and (4) options are more or less same in the meaning.

15. (e) All (1), (2), (3) and (4); Disposition, inclination, Trend and leaning are synonyms to the key word tendency.

16. (c) Only (1), (2) and (4), all these three option Future, likely and potential are synonyms to the key word prospective whereas retrospective is just opposite.

17. (a) Only (1), Insufficiency is the synonyms to the key word deficiency. All three options do not match with the key word.

18. (b) (b) Both (2) and (4) i.e. Self-respect and self-regard are synonyms to the key word dignity while other options humility and humbleness do not match with the key word.

19. (a) Only (1) disused is synonyms to obsolete. Other options redundant, Superfluous and surplus have the different meaning.

20. (b) Both (1) and (4), Observation and Expression are the synonyms to the key word reflection while suspension and outburst differ in meaning.

21. (a) consolidation is the synonyms to the word integration whereas Intensifying, combination and Heightening do not match with the key word.

22. (a) Only (4) Nutritious means of or providing nourishment. On the other hand, Tiring, toiling and Tasty do not correspond to the key word.

23. (c) Both (3) and (4) Obeisance means the act of obeying; dutiful or submissive behaviour with respect to another person and respect denotes an attitude of admiration or esteem. Other options Accomplishment and Flexibility differ in meaning.

24. (c) Only (1), (3) and (4), all these three options are synonyms to the key word obligation whereas demand has the different meaning.

25. (e) All (1), (2), (3) and (4), all the four options are close to one another in meaning.

26. (a) Only (3); Simpatico means easy to like; agreeable and is synonyms to the key word compatible. On the other hand, other options have different meaning and do not match with the key word.

27. (c) Both (1) and (2) i.e. Disrupt and Break up are equivalent words to interrupt whereas Examination and Progress have the different meaning.

28. (b) Both (1) and (4) Taunt and Tease are the same in meaning and synonyms to the key word tantalise while spoof and charade denotes a composition that imitates or misrepresents somebody's style, usually in a humorous way.

29. (e) All (1), (2), (3) and (4); all four options Deadlock, Impasse, Standstill and Dead-end are more or less the same in meaning.

30. (a) Only (1) Rite means an established ceremony prescribed by a religion; any customary observance or practice whereas all the three options do not conform to the key word ritual.

SPEED TEST 60

1. (d) started carrying out their plan.
2. (a) started the discussion.
3. (c) A succession of unexpected events.
4. (c) be implemented next month
5. (b) Idiom **put your foot down** means : to be very strict in opposing what somebody wishes to do.
6. (d) In most probability
7. (a) ignorant about
8. (a) in communication with
9. (d) discovered by chance
10. (b) made a record.
11. (e) Piece of cake means something easy to do. Therefore, option (e) is the correct choice.
12. (b) Took to one's heels means to run away. Therefore, option (b) is the correct choice.

13. (e) To pledged means to make a promise. Therefore, option (e) is the correct choice.
14. (d) Crying need means a definite or desparate need for someone or something.
    Therefore, option (d) is the correct choice.
15. (d) Light upon means to arrive at something by chance.
    Therefore, option (d) is the correct choice.
16. (a) Idiom **get/set/start/keep the ball rolling** means : to make something start happening; to make sure that something continues to happen.
17. (b)   18. (c)
19. (b) Idiom **pay through the nose** means : to pay too much money for something.
20. (b) Idiom **pick holes in something** means : to find the weak points in something such as a plan, suggestion etc.
21. (b) In the long run = concerning a longer period in the future.
22. (c) A fish out of water = a person who feels uncomfortable or awkward
23. (c) Apple of discord = cause of quarrel.
24. (c) Let the grass grow under your feet = to delay in getting things done.
25. (c) Smell the rat = to suspect that somebody is wrong about a situation.
26. (a) **Let sleeping dogs lie** = to avoid mentioning a subject that happened in the past, in order to avoid any problems or argument
27. (d) **Born with a silver spoon in your mouth** = having rich parents
28. (c) **A man of straw** = a man of no substance; an ordinary man
29. (b) **Look a gift horse in the mouth** = to refuse or criticize something that is given to you for nothing
30. (d) **A cakewalk** means something that is extremely easy to do

SPEED TEST 61

1. (d) It should be 'here was her son's future'.
2. (c) The correct spelling should be 'triumphant'.
3. (a) The word suppressed should be replaced by revealed or leaked in the sentence.
4. (b) It should be 'handed over' which means the act of moving power or responsibility from one person to another.
5. (a) The correct spelling is difficult.
6. (c)   7. (e)   8. (d)   9. (a)
10. (b)
11. (d) The correct spelling is: coastline.
12. (d) The correct spelling is: manual.
13. (c) The correct spelling is : conducive.
14. (b) The correct spelling is: safety.
15. (a) The correct spelling is : listeners.
16. (d) The correct spelling is : exception.
17. (e) All correct
18. (d) The correct spelling is : mechanical.
19. (c) The correct spelling is : speech.
20. (a) The correct spelling is : coping.
21. (a) frequently
22. (e)
23. (a) accommodation
24. (b) Here 'obvious' should be used.
25. (c) experience.
26. (e)
27. (c) Replace 'creatively' with 'creative'.
28. (b) The correct spelling is 'hospitals'.
29. (b) Replace 'then' with 'than'.
30. (d) The correct spelling is 'pressure',
31. (b) 'disorders'
32. (a) 'creating'
33. (c) 'contemporary'
34. (e)
35. (d) 'sufficient'
36. (a) The correct spelling is — challenge

37. (c) The correct spelling is — floor
38. (d) Replace 'grow' by 'growth'.
39. (b) Replace 'landing' by 'land'
40. (a) Replace 'then' by 'than'.

SPEED TEST 62

1. (e) This sentence is correct none of the changes suggested will improve it. So, the option (e) is the correct answer.
2. (e) This sentence is grammatically correct none of the changes suggested will improve it. So, the option (e) is the correct answer.
3. (c) The correct sentence should be read, 'Appollo was worshipped as long as the Roman empire 'lasted' therefore, option (c) is the correct answer. The reason being Apollo was worshipped till the Roman empire was there therefore 'lasted' fits in best, the other two options was continued or ruled are incorrect.
4. (e)   5. (e)   6. (b)   7. (b)   8. (c)   9. (d) 10. (a)
   11. (d) 12. (b) 13. (c) 14. (c) 15. (b) 16. (a)
   17. (b) 18. (a)
19. (d) Corrects the misuse of phrasal verb for noun. 'Breakout' is a phrasal verb meaning 'to start or appear suddenly' while ' out break' is a noun meaning 'sudden appearance. A preposition or an article is used before a noun, not a verb. Use preposition 'before' in place of 'for' because a preventive measure is taken before the appearance of epidemic.
20. (c) Corrects the idiomatic error. 'Last but not least' is an idiom which means 'last but not less important than others'.
21. (d) 22. (e)   23. (a) 24. (c) 25. (e)

SPEED TEST 63

1. (b) Replace have been by has been. A 'band' – collective noun is used as singular.
2. (c) Replace 'are' by 'is'. 'The number' takes singular verb.
3. (d) Replace 'has been' by 'have been'. Subject, manager's comments – plural so plural verb will be used.
4. (c) Replace 'was' by 'were'. Subject of the verb – details – is plural.
5. (c) Replace 'passes' by 'pass'. The noun after 'of' (writers) is plural so the verb will also be plural.
6. (c) Replace 'mind is due' by 'mind are due'.
7. (c) Replace 'are' by 'is'. The noun after 'of' (mango) is singular so the verb will also be singular.
8. (e) No error.
9. (c) Replace 'have' by 'has'. Governing body – collective noun – so verb singular.
10. (d) Replace 'their' by 'its'. The banker's association – collective noun – so pronoun 'its' singular.
11. (b) Replace 'are' by 'is'. 'five quintals' refers a definite quantity (as collective noun) so verb will be singular.
12. (a) Replace 'have' by 'has'. Dickens is the name of a person.
13. (d) Insert 'are' after 'hopes'. Hopes is plural, so verb will be plural.
14. (a) Place be after may.
15. (b) Replace 'richest man' by 'richest men'.
16. (a) Replace 'We can almost get' by 'we can get almost'.
17. (c) Replace 'drink' by 'drinks'. Every 'Each' takes singular verb.
18. (b) Replace 'is' by 'are'.
19. (b) Replace man by men.
20. (b) Replace 'were' by 'was'.
21. (b) Replace 'are' by 'is'. Horse and carriage refers one thing as a unit so takes singular verb.
22. (b) Replace 'are' by 'is'. Rice and fish used as a unit takes singular verb.
23. (b) Replace 'I can help you' by 'can I help you'. With 'under no circumstances' inversion is applied.
24. (c) Replace 'nor she does' by 'nor does she', Inversion is applied here.
25. (d) Replace 'so John is' by 'so is John'. Inversion is applied here.
26. (a) Write never had I been. Inversion is applied here.
27. (b) Write must this switch., Inversion is applied here.
28. (a) Write Seldom had I seen. With Seldom/Hardly/Rarely/Scarcely/Never, Inversion is applied.

29. (e) No error
30. (b) Replace he created by did he create. Inversion is applied here.
31. (b) Delete 'to'. It is superfluous.
32. (a) Replace 'Yesterday in the night' by last night.
33. (c) Replace 'will approach' with 'will be approaching'.
34. (a) Use of whole is superfluous.
35. (c) Use of that is superfluous.
36. (a) Either you have to remove "comparatively" or convert "better" to "good" in the sentence. The meaning of "comparatively" is - to evaluate anything using comparison estimate by comparison, etc. hence you should use either "better" or "comparatively good" in order to make the sentence correct.
37. (c) "Kindly" will not be used here; because "kindly" and "requested" are never used simultaneously "kindly" and "please" are used in Active Voice to denote "request"; while denote "kindly" and "please" in Passive Voice, "Requested" is generally used.
38. (c) The use of "it" is superfluous here; as the usage of the Object of "bought"- the book: is correct in the sentence.
39. (a) Instead of "passing marks" you should use "pass marks", because "passing marks" is not correct
40. (a) You should use "neighbours" instead of "neighbourers" because, there is no word in English like "neighbourers". The meaning of "neighbours" is people who live or are situated nearby.
41. (a) They started from scratch.
42. (b) Too had a reasonabl equarter.
43. (c)
44. (c) Clause unilaterally.
45. (a) Industry experts point out.
46. (c) In a road accident, was awarded.
47. (e)
48. (a) Certain aspects of.
49. (e)
50. (d) Entire neighbourhood.

SPEED TEST 64

1. (b) You cannot repel (drive away) comments or criticism, only an attack or onslaught can be repelled. So, the pair of most suited words would be citizens - onslaught
2. (c) Since, there is a but between the two parts of the sentence, the passive words should be antonyms. (a) and (d), thus, get eliminated never - also do not fit the sense of the sentence properly thus, not - always are the most suitable fillers for the given sentence.
3. (c) An analysis must be careful, it may or may not be detailed and final. It certainly should bot be random, thus, (a) is eliminated of the remaining careful is the most appropriate choice for this sentence.
4. (c) Graphologist is one who studies handwriting, while a cosmetologist is a person skilled in the art of cosmetics, Beagle is a species of dog and lapidary is a person skilled in polishing of stones.
5. (b) The second blank could either be voice so (c) and (d) are eliminated. Hypothetic means something that is assumed and titular means a ruler without real authority. So, titular - voice is the appropriate choice of words.
6. (b) If the particles need no wounding then spanning is their natural property, so the filler for second plant should be synonymous to natural or internal. Radical means drastic, intrinsic is inbuilt or internal, intangible is something that is not available in the physical form, hypothetical is assumed. Thus, intrinsic will be the filler for the second gap.
7. (b) Apprehend means to arrest, nabbed means to catch, admonish is scolding mildly, the second gap could be filled by either option (a), (b) or (d) renowned means popular for some talent or skill, thus, too can be eliminated. The choice is between (a)

and (b), notorious means popular for wrong reason and is, therefore, a more appropriate choice than famous.

8. **(d)** Spleen means anger, so, according to the meaning of the sentence, the object should be inanimate (lifeless)

9. **(a),** (c) and (d) can be eliminated because intimidations is a noun whereas we have to fill an adjective, inherent will give the sentence a positive meaning whereas it is negative towards compromise. (a) and (b) are available options because unselected and odious are both negative words. Compromise and confusion, although, do not fit well, so (a) will be the answer.

10. **(d)** A proposal is 'turned down' not forced down. So, we have to choose from (b) and (d) naivete means inexperience and saphistry means clever reasoning done to mislead. sophistry and turned are the appropriate fillers for the sentence.

11. (a) 12. (b) 13. (d) 14. (e) 15. (c) 16. (d) 17. (e)
18. (c) 19. (d) 20. (c) 21. (b) 22. (a) 23. (d) 24. (d)
25. (a)

SPEED TEST 65

1. **(d)** As a study report is not a legal document it is not binding on anyone. Sentence represents study in a lighter vein so it must not be taken seriously but as the study is done there must be some purpose of it and results at least is taken note of. This logic brings to the option (d) which is correct part to complete the incomplete sentence of passage.

2. **(a)** Only option (a) seems to be logical for the context. As subsequent part of passage shows how it was a problem to bail out one and to deny other the same resources. Option (d) and (e) are out of place.

3. **(a)** It is only logical option other options do not follow any logic. If income is less than expenditure is less than income than there is definitely a loss.

4. **(a)** As the passage says that risk aggregation is new at the beginning of passage it can be inferred that most banks are yet to conceptualize it in their processes.

    Hence option (a) is correct. Option (c) is farfetched conclusion. Option (d) is repetition of what is being stated in passage earlier. So it can not be the answer.

5. **(a)** Passage is about nonresident Indian entity and its tax deduction. Other options are not in the context of passage as they talk about the things which are not given or can be inferred from the passage.

6. (c) 7. (d) 8. (a) 9. (e) 10. (d) 11. (c) 12. (b)
13. (d) 14. (e) 15. (a)

16. **(c)** The passage talks of the consequences of inflation and what is impacted the most by its consequences is the poor, people without social security and pensioners. Hence, (c) is the right answer.

17. **(e)** seems to be the only logical option as the passage infers credible fiscal consolidation that may only be accompanied with higher capital outlay. Other options are not relevant to the context.

18. **(b)** As the passage tells about the Reserve Bank undertaking several initiative to better banking experience for the disabled and common man, it has gone for faster grievances redressal mechanism. Other options are just redundant.

19. **(c)** As the sentence preceding to the blank cites the investment cycle, the option (c) seems to be the most logical. Other options do not fit in the blank.

20. **(a)** As the passage talks of security features of banknotes, it may possibly tell about the challenge of counterfeit notes; hence option (a) is the correct. Other options do not conform to the blank.

21. (b) 22. (d) 23. (c) 24. (c) 25. (a)

SPEED TEST 66

Sol: (Qs. 1-5): Clearly C must be followed by D, which must be further followed by the E as E reitrates the housing shortage and says that the real deficit will be even higher. D and E provide the statistical proof of the staggering task mentioned in C. So this leads us to two options (b) and (d). Among them (b) seems to be more appropriate as B again emphasises on but is being said is A and also that B cannot be the concluding statement of the paragraph. Hence, ABCDE gives the correct arrangement.

1. (a) 2. (b) 3. (c) 4. (d) 5. (e)

Sol. For (Qs.6-10) : The arrangement EABDC is correct.

The paragraph is clearly taking about Goa state and hence E has to be opening sentence is the paragraph. This is followed by A where the phrase, 'is an impressive case in point', which is an example of what is being said in E. A is followed by E as 'a similar agitation' mentioned in B refers to the public activism mentioned in A. B is further followed by D and C.

6. (e) 7. (a) 8. (b) 9. (d) 10. (c)

Sol For. (Q.11-15): The required arrangement is ABDCE.

A is the opening sentence as is clear from the given options. A is followed by B as 'the proposal' mentioned in B is reffering to whatever has been talked in A. B is followed by D as D continues to talk about the response mentioned in B. Also note that B mentions a 2 : 1 response against the proposal which is also clear by the 68 : 31 mentioned in D. D is followed by C and C is followed by E. The 'other immigration organizations' mentioned in E clearly states that the previous sentence must have a statement from some other organization, which is the immigration lawyers as mentioned in C.

11. (a) 12. (b) 13. (d) 14. (c) 15. (e) 16. (e) 17. (b)
18. (e) 19. (a) 20. (c) 21. (a) 22. (b) 23. (c) 24. (d)
25. (d)

SPEED TEST 67

1. **(b)** Statement b is just out of context; hence, excluded.

2. **(c)** The monarchy does not find mention in the paragraph, so, excluded and an odd sentence.

3. **(c)** The sentence stating working for an ad agency does not part of the paragraph.

4. **(b)** Statement b just looks odd in the paragraph. Hence, can be the answer.

5. **(c)** Statement c does not connect with other three sentences, so, excluded.

6. **(c)** The statement about the paan-chewing driver greeting you with `Good morning' does not fit into the passage.

7. **(a)** Sentence a seems to be out of context, hence, the odd one.

8. **(d)** 'd' stating CEO's leadership role seems to be unfit in the paragraph, hence, can be excluded.

9. **(c)** 'c' is the odd sentence which does not fit into the arranged paragraph, hence, the answer.

10. **(d)** The statement denoting that Indian men do not spend as much as women on clothing seems to be out of context.

11. **(b)** 'The difference between prose and poetry' has no mention in other sentences; hence, b is an odd sentence.

12. **(a)** Sentence a does not match with the core issue of the paragraph, so, excluded.

13. **(a)** The statement a seems to be unfit into the paragraph; so, excluded.

14. **(c)** Sentence c does not match with the paragraph; hence, excluded.

15. **(c)** Statement c does not seem to belong to the paragraph.

16. **(d)** Statement d is not the part of the conversation between the chief minister and reporter.

17. **(d)** The statement which talks of Obama's legacy does not seem to be the part of the paragraph.

18. **(c)** Statement c talks of the winter season and not winter wear; hence, odd sentence.

19. **(d)** Statement d does not match with other three sentences and is excluded.

20. **(a)** Sentence a talks of the sources of carbon dioxide emissions which does not fit into the paragraph.

SPEED TEST 68

1. (d)	2. (c)	3. (a)	4. (e)	5. (d)	6. (a)	7. (d)
8. (d)	9. (b)	10. (c)	11. (d)	12. (e)	13. (a)	14. (b)
15. (a)	16. (c)	17. (d)	18. (c)	19. (e)	20. (a)	21. (e)
22. (4)	23. (c)	24. (a)	25. (d)	26. (e)	27. (b)	28. (c)
29. (c)	30. (a)	31. (c)	32. (b)	33. (c)	34. (b)	35. (a)
36. (c)	37. (d)		38. (b)	39. (a)	40. (d)	

SPEED TEST 69

1. (a)	2. (d)	3. (b)	4. (c)
5. (b)	6. (a)	7. (b)	8. (d)
9. (e)	10. (c)		

11. (d) into
12. (a) around
13. (b) translating
14. (c) practice
15. (c) chance
16. (d) provided
17. (a) other
18. (e) off
19. (e) hard
20. (b) equilibrium
21. (b) conducive
22. (d) question
23. (a) cannot
24. (c) need
25. (e) growth
26. (c) favour
27. (b) enjoys
28. (a) aid
29. (e) increased
30. (a) both

SPEED TEST 70

1 (b)
2. (d)
3. (e) Technology - Reshaping the Future of Education
4. (e) None of these
5. (a) Analyzing the strengths and weaknesses of a student and designing an educational syllabus accordingly
6. (d) The education system is not guided by technology and hence the pace of learning is slow
7. (c)
8. (c) One who freely and actively participates in acquiring skills and knowledge in a systematic manner.
9. (b) Refer to the 5th sentence of para 2 of the passage.
10. (d) Refer to the 2nd sentence of para 1 of the passage.
11. (a)
12. (d) Refer to the 1st sentence of the para 4 of the passage.
13. (a)
14. (a) Refer to the 5th sentence of the para 1 of the passage.
15. (b) Refer to the 6th sentence of the para 4 of the passage.
16. (e) Refer to the 4th sentence of the para 3 of the passage.
17. (d) The reason behind the question is not mentioned in the passage.
18. (a) Refer to the second sentence of the first para of the passage that the king had to agree to a contract....... being a king.
19. (c) Refer to the sentence that the island was covered....... discovered dead bodies.......past kings of the second last sentence of the third para of the passage.
20. (e) Refer to the fourth sentence that in the first month.......trees were cut down.......of the fourth para of the passage.
21. (a) Refer to the last sentence "I turned the deadly island.............a beautiful abode.......peacefully" of the sixth para of the passage.
22. (e) From reading the passage thoroughly we come to the conclusion that the king was intelligent, foresight and cunning as he made deadly island a beautiful place to live in with all luxuries of the kingdom.
23. (b) Refer to the sentence that 'I know.......complete the year' of the statement made by king in the fourth para of the passage.
24. (d) Refer to the second last sentence of the fourth para that he sent all the.......for storage.......of the passage.
25. (c) Refer to the third sentence that however, the king.......leave the kingdom.......of the last para of the passage.

26. (e) The moral of the story is 'Always think and plan ahead'.
27. (e) The lake was to be a source of good food and protection.
28. (b) In order to find out if a golden goose existed.
29. (c) To build a lake in order to attract the golden goose.
30. (e) Only (B) and (C)
31. (d) He wanted to capture the golden goose.
32. (a) He was impressed by his wisdom and nobility.
33. (b) Their king, the golden goose was captured.

SPEED TEST 71

1. (c) The author wants us to stop debating and implement policies.
2. (c) Stated in the first paragraph.
3. (d) Uncertainty about payment is mentioned, hence option (d).
4. (b) Refer to the second paragraph. "State governments have not implemented agreed plans to ensure repayment when due..."
5. (a) All the factors are mentioned in the passage.
6. (a) Refer to the third paragraph. "The Delhi model has worked. But it receives no public support."
7. (d) Clearly, populist measures would go against financial wellbeing.
8. (d) It is stated in the passage that the enforcement of the reforms was inadequate.
9. (c) Eminent British economists and political scientists have strongly attacked the tradition of budget secrecy.
10. (e) It leads to the control of public expenditure in order to set realistic taxation implications.
11. (b) He has presented the example of both the open budget system and the secret budget system, practised by various countries and has looked into all their aspects.
12. (d)
13. (e)
14. (a) Sir Richard Clarke was the originating genius of nearly every important development in the British budgeting techniques during the last two decades.

15. (b)	16. (c)	17. (d)	18. (b)	19. (c)	20. (c)	21. (d)
22. (b)	23. (d)	24. (d)	25. (b)	26. (c)	27. (a)	28. (d)
29. (c)	30. (a)	31. (b)	32. (d)	33. (d)	34. (c)	35. (c)

SPEED TEST 72

1. (b)	2. (c)	3. (a)	4. (d)	5. (b)	6. (d)	7. (e)
8. (d)	9. (b)	10. (a)	11. (b)	12. (d)	13. (e)	14. (c)
15. (a)	16. (a)	17. (b)	18. (c)	19. (d)	20. (e)	21. (d)
22. (e)	23. (c)	24. (a)	25. (b)	26. (e)		

27. (d) 'Mushrooming' should be used-which would serve as an adjective.
28. (c) 'Are' should replace 'is'- verb should agree with 'bulbs'
29. (b) 'By' should replace 'with' - which means 'by the way of'
30. (e)
31. (b) 'Make up' would mean create by altering or modifying such as 'making up a story.' 'Puts up' is also an incorrect expression here as it means 'stays' 'Toil up' is again incorrect option as it means to put hard work into. Option (b) 'conjures' is the right answer which means 'to recall.'
32. (a) 'Sturdy' means 'with strong built up', 'wobbly' means 'unsteady', 'herculean' means 'having great strength.', 'handsome' means 'good looking.' Option (a) is the most appropriate here as a horseman is generally visualized as the one having strong built up.
33. (c) Since the sentence talks about communist rulers 'taking over', option (c) 'imposing' which means 'to thrust.'
34. (d) 'Amplify' and 'stretch' both mean an increase. 'Die' would be a little extreme word here. 'Recede' which means 'to move back' matches up with the word background used in the sentence.
35. (d) The correct tense form here would be option (d) i.e.; 'were.'
36. (a) 37. (c) 38. (b) 39. (e) 40. (e)

SPEED TEST 73

1.	(a)	2.	(a)	3.	(b)	4.	(d)
5.	(a)	6.	(e)	7.	(e)	8.	(c)
9.	(d)	10.	(e)	11.	(c)	12.	(b)
13.	(c)	14.	(c)	15.	(d)	16.	(b)
17.	(b)	18.	(a)	19.	(a)	20.	(c)
21.	(a)	22.	(d)	23.	(e)	24.	(a)
25.	(d)	26.	(e)	27.	(a)	28.	(a)
29.	(e)	30.	(d)				

SPEED TEST 74

1.	(b)	2.	(c)	3.	(c)	4.	(c)
5.	(c)	6.	(c)	7.	(b)	8.	(b)
9.	(c)	10.	(a)	11.	(d)	12.	(e)
13.	(b)	14.	(d)	15.	(d)	16.	(a)
17.	(a)	18.	(c)	19.	(d)	20.	(a)
21.	(a)	22.	(b)	23.	(b)	24.	(b)
25.	(d)	26.	(c)	27.	(d)	28.	(c)
29.	(d)	30.	(c)				

SPEED TEST 75

1.	(b)	2.	(d)	3.	(d)	4.	(a)
5.	(d)	6.	(c)	7.	(b)	8.	(d)
9.	(a)	10.	(d)	11.	(c)	12.	(a)
13.	(d)	14.	(c)	15.	(d)	16.	(a)
17.	(a)	18.	(d)	19.	(a)	20.	(b)
21.	(d)	22.	(b)	23.	(d)	24.	(e)
25.	(e)	26.	(a)	27.	(b)	28.	(a)
29.	(d)	30.	(c)				

SPEED TEST 76

1.	(d)	2.	(a)	3.	(d)	4.	(b)
5.	(c)	6.	(c)	7.	(b)	8.	(a)
9.	(b)	10.	(c)	11.	(c)	12.	(b)
13.	(c)	14.	(b)	15.	(c)	16.	(c)
17.	(b)	18.	(a)	19.	(c)	20.	(c)
21.	(a)	22.	(b)	23.	(a)	24.	(a)
25.	(d)	26.	(c)	27.	(a)	28.	(a)
29.	(b)	30.	(a)				

SPEED TEST 77

1.	(e)	2.	(d)	3.	(a)	4.	(d)
5.	(b)	6.	(b)	7.	(d)	8.	(b)
9.	(c)	10.	(b)	11.	(d)	12.	(a)
13.	(c)	14.	(b)	15.	(d)	16.	(d)
17.	(e)	18.	(b)	19.	(b)	20.	(e)
21.	(b)	22.	(c)	23.	(b)	24.	(e)
25.	(a)	26.	(d)	27.	(c)	28.	(c)
29.	(a)	30.	(c)				

SPEED TEST 78

1.	(b)	2.	(a)	3.	(e)	4.	(b)
5.	(b)	6.	(c)	7.	(d)	8.	(d)

SPEED TEST 79

9.	(c)	10.	(b)	11.	(b)	12.	(a)
13.	(a)	14.	(b)	15.	(d)	16.	(d)
17.	(c)	18.	(b)	19.	(c)	20.	(b)
21.	(b)	22.	(d)	23.	(d)	24.	(a)
25.	(a)	26.	(d)	27.	(d)	28.	(d)
29.	(d)	30.	(c)				

SPEED TEST 79

1.	(c)	2.	(d)	3.	(c)	4.	(a)
5.	(a)	6.	(d)	7.	(b)	8.	(d)
9.	(b)	10.	(b)	11.	(c)	12.	(a)
13.	(a)	14.	(c)	15.	(a)	16.	(b)
17.	(d)	18.	(b)	19.	(d)	20.	(b)
21.	(a)	22.	(d)	23.	(c)	24.	(a)
25.	(a)	26.	(a)	27.	(c)	28.	(d)
29.	(d)	30.	(d)				

SPEED TEST 80

1.	(e)	2.	(a)	3.	(d)	4.	(a)
5.	(a)	6.	(d)	7.	(a)	8.	(a)
9.	(b)	10.	(c)	11.	(c)	12.	(c)
13.	(c)	14.	(a)	15.	(d)	16.	(d)
17.	(c)	18.	(b)	19.	(d)	20.	(a)
21.	(a)	22.	(d)	23.	(c)	24.	(a)
25.	(d)	26.	(b)	27.	(d)	28.	(a)
29.	(c)	30.	(a)				

SPEED TEST 81

1.	(c)	2.	(d)	3.	(a)	4.	(b)
5.	(a)	6.	(b)	7.	(c)	8.	(c)
9.	(c)	10.	(c)	11.	(c)	12.	(c)
13.	(a)	14.	(b)	15.	(e)	16.	(a)
17.	(b)	18.	(c)	19.	(d)	20.	(c)
21.	(a)	22.	(a)	23.	(d)	24.	(c)
25.	(a)	26.	(c)	27.	(b)	28.	(b)
29.	(c)	30.	(c)				

SPEED TEST 82

1.	(b)	2.	(a)	3.	(c)	4.	(b)
5.	(d)	6.	(b)	7.	(c)	8.	(c)
9.	(a)	10.	(b)	11.	(d)	12.	(c)
13.	(d)	14.	(a)	15.	(b)	16.	(b)
17.	(d)	18.	(b)	19.	(a)	20.	(c)
21.	(a)	22.	(b)	23.	(a)	24.	(c)
25.	(a)	26.	(b)	27.	(c)	28.	(a)
29.	(b)	30.	(a)				

SPEED TEST 83

1.	(d)	2.	(b)	3.	(b)	4.	(d)
5.	(a)	6.	(b)	7.	(e)	8.	(b)
9.	(d)	10.	(c)	11.	(c)	12.	(a)
13.	(a)	14.	(d)	15.	(d)	16.	(d)
17.	(a)	18.	(a)	19.	(b)	20.	(d)

SPEED TEST 84

1. (b) 2. (c)
3. (d) The concept of FDI came to India much later in 1991 with Manmohan Singh and P. V. Narasimha Rao bringing FDI in India.
4. (a) 14 commercial banks were nationalized on 19th July, 1969 during PM Indira Gandhi's regime.
5. (b) 6. (c) 7. (d) 8. (c) 9. (c) 10. (c)
11. (d) 12. (b) 13. (d) 14. (d) 15. (b) 16. (d)
17. (a) 18. (c) 19. (b) 20. (a)
21. (c) Allahabad Bank is the oldest Public Sector Bank, established in 1865 in India having branches all over the country and serving the customers for the last 145 years.
22. (d) Imperial Bank of India was later renamed in 1955 as the State Bank of India.
23. (c) The first Bank of India with Limited Liability managed by Indian Board was Oudh Commercial Bank. It was established in 1881 at Faizabad.
24. (d) All the causes of nationalization except the statement 'Banks refused to obey the rules stipulated by the government' are true.
25. (a) The Narsimhan committee in 1991 gave its recommendation i.e. to allow the entry of private sector players into the banking system.
26. (d) The early Indian joint stock bank was the Punjab National Bank, established in Lahore in 1894, which has survived to the present and is now one of the largest banks in India.
27. (a) In 1980, six more banks were nationalised which include Andhra Bank, Corporation Bank, New Bank of India, Oriental Bank of Commerce, Punjab and Sindh Bank and Vijaya Bank.
28. (d) British India Issues commence with the Paper Currency Act of 1861 which gave the Government the monopoly of note issue in India.
29. (c) The first bank of India 'Bank of Hindustan' was established in 1770 in Calcutta under the European management. It was liquidated in 1830-32.
30. (d) Bank of India was the first Indian bank to open a branch in London in 1946. It was also the first to open a branch in continental Europe at Paris in 1974.
31. (c) On the basis of Narsimham committee's recommendations, a Regional Rural Banks Ordinance was promulgated in September 1975, which was replaced by the Regional Rural Banks Act 1976.
32. (a) Earliest evidence of Banking in India is found from the period of Vedic Era when loan deeds were known as mapatra.
33. (c) Calcutta, Bombay, Madras

SPEED TEST 85

1. (a) On the recommendation of Deepak Mohanti Committee the Base Rate System introduced in July 2010.
2. (b) Inflation Expectations Survey of Householder. Following rise of CPI and WWPI based inflation, RBI has launched the June 2016 round of Inflation Expectations Survey of Householders across 18 cities.
3. (c) The accounting year of RBI starts the month between July-June.
4. (a) In Article-30, RBI permitted to the co-operative Bank for special account supervision.
5. (a) Dr. D. Subbarao appointed the Governor of Reserve Bank of India as a 22nd person.
6. (c) The documents related to the new monetary policy passed by the Governor of RBI on 3rd may 2013.
7. (a) RBI was established on 1 April, 1935 in Calcutta.
8. (d) Banking Regulation Act, 1949.
9. (a) RBI advances necessary credit against eligible securities.
10. (d) All of the above.
11. (c) Open market operations of RBI refers to trading in securities.
12. (b) Monetary policy in India is formulated and implemented by RBI.
13. (a) Reserve Bank of India follows minimum reserve system for the issuing of currency.
14. (b) RBI controls credit creation by the Commercial Bank in India.
15. (b) Note issuing department of RBI should always possess the minimum gold stock worth ₹ 115 crore.
16. (b) RBI and CSO in India is entrusted with the collection of data of capital formation.
17. (c) The Bank rate is the rate at which RBI gives credit to the commercial Banks.
18. (b) An increase in CRR by the RBI results in reduction in liquidity in the economy.
19. (c) Commercial Banks provide the largest credit to agriculture and allied sectors.
20. (a) RBI implemented the KYC scheme for the identification of customers/consumers.
21. (a) RBI is the custodian of India's foreign exchange funds.
22. (a) RBI publishes the financial report on currency and finance.
23. (c) 15Days. Currency chests are select branches of scheduled banks, which are authorised by the RBI to facilitate distribution of notes and coins. There are 4,211 currency chests and 3,990 small coin depots spread across the country.
24. (c) RBI sanctions foreign exchange for the import of goods.
25. (d) There are 4 posts of deputy Governor in Reserve Bank of India.
26. (a) The percentage of CRR could not by minimized by 3% according to the RBI act, 1934.
27. (c) Repo rate also known as the benchmark interest rate at which the RBI lends money to the banks for a short term. When the repo rate increases, borrowing from RBI becomes more expensive. Current repo rate is 6.25%.
28. (a) Y.H. Malegam committee gave suggestions on the microfinance sector set up by RBI.
29. (d) RBI regulates the external commercial borrowings.
30. (d) All the statements given above are correct except that, RBI was established in 1949.

SPEED TEST 86

1. (a) State Bank of India has launched a mobile wallet facility- 'Mobicash Easy'. It is a prepaid account accessible over mobile phones, enabling consumers to send remittances to any bank account.
2. (e) ADB and the Government of India signed a $252 million loan to improve rural roads. The interest rate for the loan has to be determined in accordance with ADB's LIBOR – based lending facility.
3. (d)
4. (d) A unique code consisting of alphabets and numbers is allotted to every branch a bank has in India which differentiates it from the other branches. This code is called the IFSC or Indian Financial System Code.
5. (d) Services offered by retail banking include savings and transactional accounts, mortgages, personal loans, debit cards, and credit cards etc.
6. (c) 7. (a) 8. (c) 9. (d)
10. (b) 11. (a) 12. (d)
13. (c) To provide basic banking services to bankless villages

SOLUTIONS

14. **(b)** 15. **(b)** 16. **(d)** 17. **(a)**
18. **(d)** 19. **(a)** 20. **(a)**
21. **(a)** RBI has given nod to Muthoot Finance to set up White Label ATMs. ATMs set up and run by non-banking entities are called White Label ATMs (WLAs).

SPEED TEST 87					
1. (e)	2. (a)	3. (b)	4. (e)	5. (a)	6. (b)
7. (c)	8. (a)	9. (c)	10. (a)	11. (e)	12. (b)
13. (a)	14. (a)	15. (a)	16. (b)	17. (b)	18. (a)
19. (c)	20. (c)	21. (c)	22. (d)	23. (d)	24. (d)
25. (c)	26. (b)	27. (b)	28. (d)	29. (c)	30. (d)

SPEED TEST 88

1. **(c)** Tertiary sector of Indian economy contributes largest to the Gross National Product.
2. **(a)** Service sector is the main source of National Income in India.
3. **(d)** Toll tax is not a tax levied by the government of India.
4. **(d)** The most appropriate measure of a country's economic growth is it's per capita product.
5. **(c)** Foreign Exchange Management Act (FEMA) was finally implemented in the year 2002.
6. **(b)** The most common measure of estimating inflation in India is WPI.
7. **(c)** The largest share of Gross Domestic product in India comes from service sector.
8. **(c)** LPG was announced as new economic policy by Narsimha Rao.
9. **(d)** The national income of India is estimated by CSO.
10. **(d)** Telecom sector.
11. **(b)** 12th five year plan.
12. **(c)** Finance Ministry formulates the fiscal policy in India.
13. **(b)** The devaluation of rupee in India took place twice in the financial year 1991-92.
14. **(c)** VAT is imposed on all stages between production and final sale.
15. **(c)** Balance of payment is used in terms of Exports and Imports.
16. **(b)** The Indian Economy can be described as a developing economy.
17. **(b)** Reserve Bank of India.
18. **(d)** Demonetization is the act of stripping a currency unit of its status as legal tender. Demonetization is necessary whenever there is a change of national currency. The old unit of currency must be retired and replaced with a new currency unit.
19. **(b)** The multi dimensional poverty index of UNDP includes 10 indicators.
20. **(c)** Ministry of Finance is responsible for the preparation and publication of 'Economic Survey'.
21. **(d)** The primary sector of the Indian economy is the sector of an economy making direct use of natural resources which include agriculture, forestry and fishing.
22. **(a)** When the national income is measured at the base year price, it is called national income at Constant price and When the national income is measured at the current year price, it is called national income at current year price.
23. **(d)** Gross Domestic Product is the total money value of all final goods and services produced within the geographical boundaries of the country during a given period of time.
24. **(b)** National Statistical Agency. GDP in a country is usually calculated by National Statistical Agency which compiles the information from a large number of sources.
25. **(b)** The National Development Council (NDC) or the Rashtriya Vikas Parishad is the apex body for decision making and deliberations on development matters in India, presided over by the Prime Minister.
26. **(b)** The Economy of India is the seventh-largest in the world by nominal GDP and the third-largest by purchasing power parity(PPP). The country is classified as a newly industrialised country, one of the G-20 major economies, a member of BRICS and a developing economy with an average growth rate of approximately 7% over the last two decades.
27. **(a)** The new WPI series was introduced on 1 April, 2010.
28. **(d)** There are 4 deputy members in the Finance Commission.

SPEED TEST 89

1. **(d)** The new EXIM policy announced in 1992, is for a period of 5 years.
2. **(b)** Fruits and palm oils are exported to India by arid and semi-arid countries in the Middle East.
3. **(b)** The Earlier name of WTO was GATT before 1995.
4. **(b)** World Development Report is an annual publication of IBRD.
5. **(a)** India has the maximum volume of foreign trade with USA.
6. **(b)** In the last decade, services sector has attracted the highest FDI inflows into India.
7. **(b)** Participatory notes (PNs) are associated with Foreign Institutional Investors (FII's).
8. **(b)** The purpose of India Brand Equity Fund to make 'Made in India' a label of quality.
9. **(a)** A trade policy consists of Export-Import policy.
10. **(b)** FERA in India has been replaced by FEMA.
11. **(b)** TRIPS and TRIMS are the terms associated with WTO.
12. **(c)** In the year 2006, SEZ act was passed by the parliament.
13. **(b)** World Bank is known as the 3rd pillar in international economics relations.
14. **(a)** Tajikisthan and Laos became the new members of WTO.
15. **(b)** There are total 159 members recently in WTO.
16. **(b)** During 2016, India's foreign direct investment (FDI) grew 18% as per data released by the Department of Industrial Policy and Promotion (DIPP).
17. **(c)** According to a report released by Stockholm International Peace Research Institute (SIPRI) on February 20, 2017, India emerged as the world's largest importer of major arms during 2012-16.
18. **(b)** In celebration of the 50th anniversary of United Nations Commission on International Trade Law (UNCITRAL), UN organised the two day conference "Global Standards for Rule-based Commerce" at Vigyan Bhavan in New Delhi from November 28, 2016.
19. **(c)** A revised Double Taxation Avoidance Agreement (DTAA) and the Prevention of Fiscal Evasion (DTAA) with respect to taxes on income, along with its protocol, was signed between India and Cyprus on November 18, 2016 in Nicosia (Cyprus).
20. **(d)** Iran has exceeded Saudi Arabia to become India's top crude oil supplier. Till 2010-11 Saudi Arabia, was the largest supplier of crude oil in India while Iran was the India's second biggest supplier of crude oil. Crude oil exports by Iran to India increased in 2016, by selling 759,700 barrels of oil per day to India in October. This was 56 per cent more than 2015.
21. **(a)** India and Republic of Croatia have signed an agreement to boost bilateral trade and enhance economic cooperation on February 14, 2017 in Zagreb, Croatia. The aim of the agreement is to promote and develop bilateral trade and economic relations.
22. **(a)** 23. **(d)** 24. **(b)**

SPEED TEST 90

1. **(d)** MobiKwik has launched mobile wallet app 'MobiKwik Lite', which will work on basic Internet connection. 'MobiKwik Lite' app available both in English and Hindi and is expected to be available in all major Indian languages. This app works on EDGE connection as well, allowing users in areas with slower connections to make digital payments easily.

2. **(c)** India's first cashless township "Gujarat Narmada Valley Fertilizers and Chemicals (GNFC) township" was inaugurated by Gujarat CM Vijay Rupani on February 13, 2017. Nearly 10,000 residents in GNFC have embraced various digital modes of payments instead of cash.

3. **(a)** Citi Bank has launched instant chat services for customers named Citibank Online (CBOL) on February 16, 2017 to resolve queries instantly regarding cards, loans, domestic and non-resident accounts, and online transactions. With this India become the first country in Asia Pacific within the Citi network to have this kind of service.

4. **(d)** Brazil is not a member of ASEAN.

5. **(b)** 'Sanklap' project is associated with the eradication of HIV/ AIDS.

6. **(d)** The world Environment Day is celebrated on 5th June.

7. **(b)** The 3rd ministrial level SAARC summit held in Nepal (Kathmandu).

8.	(c)	9.	(d)	10.	(d)	11.	(b)	12.	(d)
13.	(c)	14.	(d)	15.	(c)	16.	(d)	17.	(d)
18.	(a)	19.	(a)	20.	(d)	21.	(a)	22.	(a)
23.	(b)								

SPEED TEST 91

1. **(b)** A Laser wall and smart sensors will soon be installed at the Indo-Bangla International Border in West Bengal especially in the porous riverine and unmanned terrain that do not have proper fencing to keep a tight vigil to check infiltration and terrorism.

2. **(d)** The Punjab State Power Corporation Limited (PSPCL) was awarded with "Best Performing Power Distribution Utility in Power Sector" by Central Board of Irrigation & Power (CBIP). Union Minister Sanjeev Kumar Balyan presented this award.

3. **(c)** Micro Economics examine the behaviour of basic elements in the economy including individual agents and market and their interaction. Microeconomics is a branch of economics that studies the behaviour of individuals and firms in making decisions regarding the allocation of limited resources.

4. **(b)** India and Asian Development Bank (ADB) have signed $375 million pact for loans and grants to develop 800 km Visakhapatnam-Chennai Industrial Corridor. It is the first phase of a planned 2,500-km East Coast Economic Corridor. Earlier in September 2016, ADB had approved $631 million in loans and grants for the industrial corridor.

5. **(b)** The Haryana government has set up an online system called sex ratio monitoring dashboard as part of the 'Beti Bachao, Beti Padhao' Scheme to monitor the sex ratio in the Panipat district.

6. **(a)** Tamil Nadu is the first state in the country to launch health programme against Heart Diseases.

7. **(d)** Except agreements on redressal of trade grievances, India and Rwanda have inked three agreements in the fields of innovation, aviation and visa requirements to boost bilateral relations.

8. **(c)** Under this programme, weather scientists using aircrafts will spray chemicals (silver iodide) over clouds hovering above Solapur district, a rain shadow region of Western Ghats in the state.

9. **(a)** State Bank of Bikaner and Jaipur (SBBJ), State Bank of Hyderabad (SBH), State Bank of Mysore (SBM), State Bank of Patiala (SBP) and State Bank of Travancore (SBT) have merged with the country's largest bank, widening the gap between SBI and the No. 2 lender, HDFC Bank Ltd.

10. **(d)** The National Girl Child Day celebration on January 24, 2017 in New Delhi was marked by the release of National Action Plan for Children, 2016 (NPAC). NPAC has been developed by the Ministry of Women & Child Development. The Plan focuses on four key areas including survival, health & nutrition, education & development, protection & participation.

11. **(d)** Arunachal Pradesh launched 'Dulari Kanya', a special scheme to check infant mortality in the state. Governor V Shanmuganathan launched the scheme, under which the government will deposit Rs 20,000 in the bank account of a girl child, born in any government hospital. It would be paid along with the accrued interest after she attains 18 years of her age.

12. **(b)** The India Post has received the final license from the Reserve bank of India to start its operation as payment bank with the name India Post Payment Bank (IPPB). A P Singh has been appointed as the interim MD and CEO of the India Post Payment Bank by the government.

13. **(b)** Ministry of Skill Development and Entrepreneurship and Ministry of Petroleum and Natural Gas sign MoU to boost the skill initiatives in the Hydrocarbon Sector and allied sectors among other areas of cooperation.

14. **(a)** National Cadet Corps (NCC), the largest uniformed youth organisation in the world, celebrated its 68th Raising Day on 27th November 2016 at Amar Jawan Jyoti, India Gate, New Delhi.

15. **(d)** The Global Citizen Festival has been organized on November 19, 2016, at the MMRDA grounds in suburban Bandra Kurla Complex (BKC) in Mumbai. Global Citizen Festival, a charitable event, is one of the biggest international music events held in India.

16. **(c)** The two day Global Investors' Summit (GIS) 2017 was held at Khelgaon in Ranchi, Jharkhand from February 16-17, 2017 with the brand name 'Momentum Jharkhand'. The summit aims to promote industrial activity in Jharkhand and establish the state as one of the prime investment destination of Eastern India.

17.	(a)	18.	(a)	19.	(a)	20.	(a)	21.	(c)
22.	(a)	23.	(e)	24.	(b)	25.	(a)		

SPEED TEST 92

1. **(c)** Dr Sonam Wangchuk, a famous Educationist and Social Scientist from Secmol (Ladakh, Jammu & Kashmir) has been awarded the 40th Rolex Global Enterprise Award at the Dolby Theatre in Los Angeles on November 17, 2016.

2. **(a)** Album Of The Year has been won by 25, Adele. The 59th Annual Grammy Awards ceremony was held on February 12, 2017 at the Staples Centre in Los Angeles. The ceremony recognized the best recordings, compositions, and artists of the eligibility year from October 1, 2015 to September 30, 2016.

3. **(d)** British singer and songwriter Adele won the highest number of awards by winning in 5 categories including Album of the Year, Song of the Year, Record of the Year, Best Pop Vocal Album and Best Pop Solo Performance.

4. **(a)** The Movie La La Land won the most awards at the British Academy of Film and Television Arts (BAFTA) event on February 12, 2017 by winning total five honours including Best Film, Best Director- Damien Chazelle, Best Cinematography- Linus Sandgren, Best Original Music- Justin Hurwitz and Best Actress in a Leading Role- Emma Stone.

5. **(c)** Mumbai based Kush Bhagat has been awarded the Candidate Master (CM) title by the World Chess Federation body, FIDE on February 14, 2017 for his outstanding performance in Western Asian Youth Chess championship 2016 at UAE. He won 3 gold medals at the first ever Western Youth Chess Championship 2016 at Dubai in UAE, Grammy.

6. **(d)** Jamaican sprinter Usain Bolt won the 'Sportsman of the Year' award at the Laureus World Awards or the 'Oscar of Sports' held in Monaco on February 14, 2017. Bolt received the award from legendary Michael Johnson. This is the fourth time that the world's greatest sprinter has won the honour.

7. **(a)** India's premier health institute the All India Institutes of Medical Sciences (AIIMS), New Delhi has been awarded the first prize of the Government's Kayakalp Award under the Central Government Hospitals category on February 15, 2017 in New Delhi for maintaining high standards of sanitation and hygiene.

8. **(b)** Apple has been awarded the number one spot on Fortune's annual list of the "World's Most Admired Companies." The 2017 list marks Apple's tenth consecutive win as the most admired company in the world collecting data from 3,800 executives, analysts, directors, and industry experts.

9. **(c)** Corporation Bank was awarded the 2017 National MSME Excellence Award on February 10, 2017. The award is instituted by the Federation of Industry, Trade and Services (FITS).

10. **(c)** Renowned Hindi litterateur and playwright Surendra Verma has been selected for 2016 Vyas Samman for his novel Kaatna Shami Ka Vriksha Padma Pankhuri Ki Dhar Se published in the year 2010. Mr Verma would be presented a cash prize of Rs. 3.50 lakh a citation and a logo for the prestigious award.

11. **(d)** Melody Queen Lata Mahashkar has been conferred with the 2017 Legendary Award by the Brand Laureate for singing scores of memorable hits and soulful melodies in Hindi film music. The Brand Laureate Awards recognize world-class achievement in branding amongst individuals and companies.

12. **(c)** Cricket icon Kapil Dev has been inducted into Legends Club 'Hall of Fame' at the Cricket Club of India on January 17, 2017. Former Indian player and Legends Club president Madhav Apte presented Kapil with a citation.

13. **(a)** 14. **(b)** 15. **(c)** 16. **(d)** 17. **(b)**
18. **(b)** 19. **(d)** 20. **(b)** 21. **(d)** 22. **(d)**

SPEED TEST 93

1. **(b)** Indian American author Jhumpa Lahiri's The Lowland has been listed among 13 novels longlisted for the Man Booker Prize 2013.

2. **(c)** 3. **(a)**

4. **(a)** American author Lydia Davis has been announced the winner of Man Booker International Prize 2013. She was chosen winner out of ten shortlisted authors.

5. **(a)**
6. **(b)** Bond narrates his account of doon as he saw it in his childhood.
7. **(b)**
8. **(d)** A pictorial coffee table book by Alam Srinivas was launched on 24 June 2013 in Mumbai by former Bombay High Court Chief Justice C S Dharmadhikari.

9. **(a)** **An Uncertain Glory:** India and its Contradictions authored by Amartya Sen and Jean Dreze was released recently.

10. **(b)**

11. **(a)** Philippines authorities are angry over Dan Brown's description for Manila as the gates of hell in his latest fiction work Inferno.

12. **(d)** 13. **(a)** 14. **(b)** 15. **(a)** 16. **(b)**
17. **(b)** 18. **(c)** 19. **(c)** 20. **(d)** 21. **(b)**
22. **(b)** 23. **(a)** 24. **(b)** 25. **(b)** 26. **(c)**
27. **(a)** 28. **(a)** 29. **(d)** 30. **(c)** 31. **(a)**
32. **(a)** 33. **(d)** 34. **(a)** 35. **(c)** 36. **(c)**
37. **(d)** 38. **(c)** 39. **(d)** 40. **(c)** 41. **(d)**
42. **(a)** 43. **(b)** 44. **(d)** 45. **(a)** 46. **(b)**
47. **(a)** 48. **(c)** 49. **(c)**

SPEED TEST 94

1. **(d)** 2. **(c)** 3. **(b)** 4. **(c)** 5. **(d)**
6. **(c)** 7. **(b)** 8. **(a)** 9. **(a)** 10. **(d)**
11. **(d)** 12. **(a)** 13. **(c)** 14. **(c)** 15. **(d)**
16. **(c)** 17. **(b)** 18. **(b)** 19. **(a)** 20. **(c)**
21. **(c)** 22. **(b)** 23. **(a)** 24. **(d)** 25. **(c)**
26. **(c)** 27. **(b)** 28. **(c)** 29. **(a)** 30. **(c)**

SPEED TEST 95

1. **(c)** Swabhiman scheme is associated with Rural Banking in India.
2. **(c)** The unorganised workers social security Act was passed in 2008.
3. **(b)** According to Tendulkar Committee the percentage of the population in India below poverty line is 37.2%.
4. **(c)** Swadhar scheme launched for the women in difficult circumstances.
5. **(a)** The main objective of Pradhan Mantri Gramodaya Yojana is meeting rural needs like housing, drinking, water, healthcare, etc.
6. **(b)** Twenty point Economic programme was first launched in 1975.
7. **(a)** The disguished unemployment is 9 prominent feature mainly of primary sector.
8. **(a)** Golden Quadrangle project is associated with Highways development.
9. **(d)** All the above given statements is the objective of National Food security Mission.
10. **(d)** Mid-day Meal scheme is financed and managed by Ministry of HRD.
11. **(b)** Liberalization of Economy is not a measure of reducing inequalities.
12. **(a)** Valmiki Awas Yojana subsumed Integrated Housing and slum development programme.
13. **(c)** Poverty level in India is established on the basis of house hold consumer expenditure.
14. **(b)** Nirmal Bharat Abhiyan Yojana is associated with community toilets in slum areas.
15. **(d)** 'SJSRY' scheme is not related to the rural development.
16. **(c)** Justice D.K. Jain is the chairman of 20th law commission.
17. **(b)** The Project 15B of Indian navy aims to develop stealth guided missile destroyers. Under the project Mazagon Dock Limited will construct four stealth guided missile destroyers. Project 15B destroyers will feature enhanced stealth characteristics as well as incorporating state of the art weaponry and sensors including the extended range Barak 8 surface-to- air missiles.
18. **(a)** Indian railway has launched the E-Samiksha an online project monitoring system with an aim of monitoring implementation

of various ongoing projects including Rail Budget proposals. Apart from budget-related projects, the E-Samiksha can also be used for monitoring the infrastructure target and board meeting follow-up.

19. **(c)** Association for Promoting Social Action (APSA), a Bengaluru based NGO, has launched a 16-day campaign 'Every 8 Minutes' to create awareness against child trafficking and missing children in the city. The step was taken after a report released by National Crime Records Bureau showed that a child goes missing in India every eight minutes and 40 per cent of these children remain untraced.

20. **(a)** World Toilet Day is observed every year on 19th November 2016 to motivate and mobilize millions around the world on issues of sanitation.

21. **(b)** The Supreme Court constituted a committee headed by former Delhi High Court judge Justice Kailash Gambhir to verify the availability of night shelters for providing shelters to the urban homeless people.

22. **(c)** The twenty-second session of the Conference of the Parties (COP 22) to the United Nations Framework Convention on Climate Change (UNFCC), the twelfth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP 12), and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 1) were held in Bab Ighli, Marrakesh, Morocco from 7-18 November 2016.

23. **(a)** WHO announced on November 19, 2016, that the Zika Virus occurrence will no longer poses a world public health emergency.

24. **(b)** Quami Ekta Week or National Integration Week is observed every year across India from November 19 to the November 25, with around 66 languages, 22 religions, 28 states and numerous tribes to promote the unity in the country.

25. **(d)** Kerala government launched four major programmes- Parippida Mission, Haritha Keralam, Ardram and Life in education, health, housing and sanitation sectors. Under "Parppida Mission", the government plans to ensure housing for all.

26. **(d)** The Union Minister of State for Labour and Employment Bandaru Dattatreya launched the National Career Service (NCS) for youths and Jeevan Praman facility to EPFO pensioners through Post Offices in Hyderabad. The Post Offices will serve as an Employment Registration Centres for Unemployed rural youth on behalf of the "National Career Service" Portal.

27. **(c)** India's first floating elementary school particularly for drop-outs has been inaugurated on Loktak lake at Langolsabi Leikai of Champu Khangpok floating village in Manipur on the occasion of World Wetlands Day on February 2, 2017.

28. **(a)** The Rajya Sabha MP Sachin Tendulkar is adopting Donja village in Osmanabad, Maharashtra under the Sansad Adarsh Gram Yojna to transform the undeveloped village into a model one. Tendulkar has sanctioned over Rs 4 crore from his Members of Parliament Local Area Development (MPLAD) fund for development of Donja.

29. **(b)** UNESCO organised the two-day Nature Fest at the World Heritage Site Great Himalayan National Park (GNHP) at Sairopa in Kullu district of Himachal Pradesh from February 11, 2017.The festival was organised in collaboration with the Wildlife Institute of India (WII).

30. **(d)** The Jammu & Kashmir government launched an E-Prison project on February 13, 2017 at NIC Centre Civil Secretariat Jammu to digitalize the record of jail inmates. The e-Prison project will enable to provide a centralized platform to avoid any data redundancy, avoid delay in processing the information and manage all the jails efficiently and thus reduce the time and cost of the process.

31. **(b)** Kalimpong was declared as 21st district of West Bengal on February 14, 2017 by West Bengal CM Mamta Banerji. The new district has been carved out from Darjeeling.

32. **(b)** India is on its way to catch up with China in terms of air pollution related deaths and even can surpass it if necessary steps are not taken. This was concluded by the 2017 State of Global Air report released on February 14, 2017 by the Health Effects Institute (HEI) and Institute of Health Metrics and Evaluation (IHME) at University of Washington and University of British Columbia.

33. **(c)** The Union Government on February 15, 2017 approved setting up of Food Legumes Research Platform (FLRP) at Amlaha, Sehore in Madhya Pradesh for meeting the emerging food security challenges.

34. **(a)** A three-day International Conference on "NexGen Technologies for Mining and Fuel Industries" (NxGnMiFu-2017) inaugurated in New Delhi on February 15, 2017 to innovate new techniques, technologies and applications for clean, safe, symbiotic sustenance of society, environment and industries in post-2020 era.

35. **(c)** The Himachal Pradesh Governor Acharya Devvrat inaugurated the campaign against Drug Addiction on February 15, 2017 to make the state drug free. With the campaign, the state will make efforts to eradicate drugs that not only affect the physical and mental health of the addict but also lead them towards crime.

36. **(b)** World Radio Day is observed annually on February 13th across the world to remember the unique power of radio which brings people together across the globe.

37. **(a)** Private sector lender Karnataka Bank Ltd launched National Pension System (NPS) at its corporate office in Mangaluru on February 16, 2017 to provide financial security at old age by giving regular income in the form of pension.

38. **(c)** India dropped to 92nd rank in the Global Talent Competitiveness Index (GTCI) released by INSEAD in partnership with The Adecco Group and the Human Capital Leadership Institute of Singapore (HCLI). Last year India stood at 89.

SPEED TEST 96

1.	(e)	2.	(d)	3.	(c)	4.	(e)	5.	(d)
6.	(e)	7.	(d)	8.	(c)	9.	(c)	10.	(b)
11.	(c)	12.	(b)	13.	(d)	14.	(e)	15.	(b)
16.	(d)	17.	(b)	18.	(a)	19.	(d)	20.	(a)
21.	(a)	22.	(a)	23.	(a)	24.	(b)	25.	(c)
26.	(a)	27.	(e)	28.	(e)	29.	(c)	30.	(d)
31.	(a)	32.	(c)	33.	(d)	34.	(a)	35.	(a)
36.	(a)	37.	(c)	38.	(a)	39.	(b)	40.	(b)
41.	(a)	42.	(a)	43.	(c)	44.	(d)	45.	(b)
46.	(c)	47.	(b)	48.	(d)	49.	(c)	50.	(c)

SPEED TEST 97

1.	(e)	2.	(b)	3.	(c)	4.	(a)	5.	(b)
6.	(a)	7.	(d)	8.	(e)	9.	(b)	10.	(c)
11.	(c)	12.	(c)	13.	(d)	14.	(e)	15.	(e)
16.	(c)	17.	(d)	18.	(e)	19.	(c)	20.	(e)
21.	(c)	22.	(d)	23.	(d)	24.	(e)	25.	(a)
26.	(a)	27.	(c)	28.	(d)	29.	(c)	30.	(b)
31.	(a)	32.	(d)	33.	(a)	34.	(a)	35.	(c)
36.	(e)	37.	(c)	38.	(c)	39.	(a)	40.	(a)
41.	(b)	42.	(a)	43.	(c)	44.	(c)	45.	(b)
46.	(c)	47.	(d)	48.	(d)	49.	(e)	50	(a)

SPEED TEST 98

1. (a)   48 % of 525 + ? % of 350 = 399

$\Rightarrow$ $\dfrac{48}{100} \times 525 + \dfrac{?}{100} \times 350 = 399$

$\Rightarrow$ 25200 + ? × 350 = 399 × 100

$\Rightarrow$? × 350 = 39900 − 25200 = 14700

$\Rightarrow$ $? = \dfrac{14700}{350} = 42$

2. (e) $2\dfrac{5}{9} \times 3\dfrac{4}{5} - ? = 12\dfrac{1}{5}$

$\Rightarrow$ $\dfrac{23}{9} \times \dfrac{19}{5} - ? = \dfrac{61}{5}$

$\Rightarrow$ $? = \dfrac{61}{5} - \dfrac{437}{45}$

$\Rightarrow$ $? = \dfrac{549 - 437}{45}$

$\Rightarrow$ $? = \dfrac{112}{45} = 2\dfrac{22}{45}$

3. (d) $\sqrt{?} + 17^2 = 335$

$\Rightarrow$ $\sqrt{?} + 289 = 335$

$\Rightarrow$ $\sqrt{?} = 335 - 289 = 46$

$\Rightarrow$ $? = 46 \times 46 = 2116$

4. (c) $? = \dfrac{28 \times 5 - 15 \times 6}{7^2 + \sqrt{256} + (13)^2}$

$\Rightarrow$ $? = \dfrac{140 - 90}{49 + 16 + 169}$

$\Rightarrow$ $? = \dfrac{50}{234} = \dfrac{25}{117}$

5. (e) $? = 13\dfrac{4}{7} - 5\dfrac{2}{7} \times 2\dfrac{1}{2}$

$\Rightarrow$ $? = \dfrac{95}{7} - \dfrac{37}{7} \times \dfrac{5}{2}$

$\Rightarrow$ $? = \dfrac{95}{7} - \dfrac{185}{14}$

$\Rightarrow$ $? = \dfrac{190 - 185}{14}$

$\Rightarrow$ $? = \dfrac{375}{14} = 26\dfrac{11}{14}$

6. (d)   ? = 784 ÷ 16 ÷ 7

$\Rightarrow ? = \dfrac{784}{16} \div 7 \Rightarrow ? = 49 \div 7 = 7$

7. (c) $? = \dfrac{3}{7}$ of 455 $+ \dfrac{5}{8}$ of 456

$\Rightarrow$ $? = \dfrac{3}{7} \times 455 + \dfrac{5}{8} \times 456$

$\Rightarrow$? = 195 + 285

$\Rightarrow$? = 480

8. (a)   ? = 6425 ÷ 125 × 8

$\Rightarrow$? = 51.4 × 8

$\Rightarrow$? = 411.2

9. (b)   ? = 1.05% of 2500 + 2.5% of 440

$\Rightarrow$ $? = \dfrac{1.05}{100} \times 2500 + \dfrac{2.5}{100} \times 440$

$\Rightarrow$ $? = \dfrac{2625}{100} + \dfrac{1100}{100}$

$\Rightarrow$ $? = \dfrac{3725}{100} = 37.25$

10. (b)   ? = 4900 ÷ 28 × 444 ÷ 12

$\Rightarrow$? = 175 × 37

$\Rightarrow$? = 6475

11. (b)   Number of employees in design, customer relation and HR departments together

$= 4500 \times (32 + 22 + 8)\%$

$= \dfrac{4500 \times 62}{100} = 2790$

Number of women employees in these departments
$= 2000 \times (28 + 20 + 16)\%$

$= \dfrac{2000 \times 64}{100} = 1280$

∴ Required number of males
= 2790 − 1280 = 1510

12. (c)   Number of employees in HR department

$= \dfrac{4500 \times 8}{100} = 360$

∴ Number of males

$= 360 - \dfrac{2000 \times 16}{100}$

= 360 − 320 = 40

Number of employeess in Accounts department

$= \dfrac{4500 \times 12}{100} = 540$

∴ Number of males

$= 540 - \dfrac{2000 \times 12}{100}$

= 540 − 240 = 300

∴ Required ratio = 40 : 300 = 2 : 15

13. (e) Number of employees in marketing and customer relation departments

$$\frac{4500 \times 40}{100} = 1800$$

Number of females in the marketing department

$$\frac{2000 \times 14}{100} = 280$$

∴ Required percentage $= \frac{280}{1800} \times 100 \approx 16$

14. (a) Total number of employees in administrative department

$$\frac{4500 \times 8}{100} = 360$$

Number of males in the same department
= 360 – 200 = 160

∴ Required ratio
= 360 : 160 = 9 : 4

15. (c) Required percentage

$$= \frac{2000}{2500} \times 100 = 80$$

16. (d) Pattern of the series would be as follows

7   9   12   16   21
  +2   +3   +4   +5
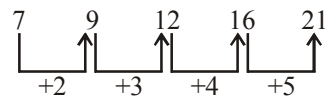
17. (c) Pattern of the series would be as follows

384   192   96   48   24
   ÷2   ÷2   ÷2   ÷2
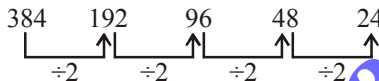
18. (e) Pattern of the series would be as follows
5 × 1 + 1 = 6
6 × 2 + 2 = 14
14 × 3 + 3 = 45
∴   45 × 4 + 4 = 184

19. (e) Pattern of the series would be as follows

8   9   13   22   38
  $+(1)^2$ $+(2)^2$ $+(3)^2$ $+(4)^2$
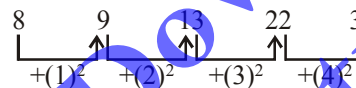
20. (a) Pattern of the series would be as follows

6   11   21   41   81
  +5   +10   +20   +40
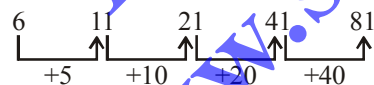
21. (d) Let total number of students in college $A = 3x$
and total number of students in college $B = 4x$
After 50 more students join college A

New Ratio $= \frac{3x + 50}{4x} = \frac{5}{6}$

⇒   18 x + 300 = 20 x
⇒   2x = 300

⇒ $x = \frac{300}{2} = 150$

Total number of students in college
$B = 4x = 4 \times 150 = 600$

22. (b) ∵ Cost price of (12 belts + 30 wallers) = ₹ 8940
∵ Cost price of 3 × (4 belts + 10 wallets) = ₹ 8940

∵ Cost price of 4 belts + 10 wallets $= \frac{8940}{3} = $ ₹ 2980

23. (a) Let the first number be x
and the second number be y

Then, 80% of $x = \frac{3}{5}$ of y

⇒ $\frac{80}{100} \times x = \frac{3}{5} \times y$

⇒ $\frac{4}{5} \times x = \frac{3}{5} \times y$ ⇒ $4x = 3y$

⇒ $\frac{x}{y} = \frac{3}{4} = 3 : 4$

24. (c) ∵ Cost price of an article = ₹ 1850
For 30% profit, selling price of this article

$= 1850 \times \frac{130}{100} = $ ₹ 2405

25. (e) Compound Interest after two years

$= 8500\left(1 + \frac{10}{100}\right)^2 - 8500$

$= 8500 \times \frac{11}{10} \times \frac{11}{10} - 8500$

$= 10285 - 8500 = $ ₹ 1785

26. (a) Let length of the train be x m

Speed of the train be 60 km/h $= 60 \times \frac{5}{18} = \frac{50}{3}$ m/s

Then, $\frac{x + 200}{\frac{50}{3}} = 27$

⇒ $\frac{3(x + 200)}{50} = 27$

⇒ $3x + 600 = 1350$
⇒ $3x = 1350 - 600$
⇒ $3x = 750$

⇒ $x = \frac{750}{3} = 250$ m

27. (c) Each fractions, decimal value are given below :

$\frac{5}{11} = 0.454, \frac{3}{8} = 0.375, \frac{4}{9} = 0.444, \frac{2}{7} = 0.286$

So, ascending order of the fractions is $\frac{2}{7}, \frac{3}{8}, \frac{4}{9}, \frac{5}{11}$.

28. (d) Let ten's digit be x and unit's digit be $8 - x$
Then, x = 3 (8 – x)
⇒   x = 24 – 3x,
⇒   4x = 24

⇒ $x = \frac{24}{4} = 6$

∴ unit's digit = 8 – x = 8 – 6 = 2

So, required number = 62

29. **(b)** Suppose 16 men can complete the same work in x days

Then, Men days

$$10 \uparrow \qquad 8 \downarrow$$
$$16 \quad \qquad x$$

$$16 : 10 :: 8 : x$$

$$\Rightarrow \quad 16 \times x = 10 \times 8$$

$$\Rightarrow \quad x = \frac{10 \times 8}{16} = 5 \text{ days}$$

30. **(e)**   31. **(e)**   32. **(b)**   33. **(d)**   34. **(a)**

35. **(d)**

36. **(d)** Let us draw the family diagram
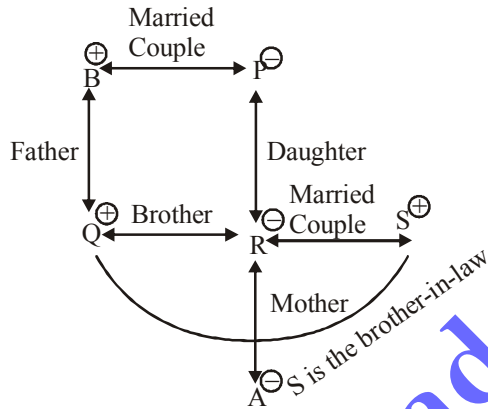
Hence, S is the brother-in-law of Q.

37. **(d)** (a) Summer (b) Winter (c) Spring (d) Cloud

All others are name of seasons.

38. **(d)** The new letter sequence is EDRPSEISNO.

The seventh letter from the right is P.

39. **(c)** According to the question, R > P/U; T/Q > S

∴ T/Q > S > R > P/U

∴ 3rd tallest = S

40. **(d)** According to the question, the direction diagram is as follows
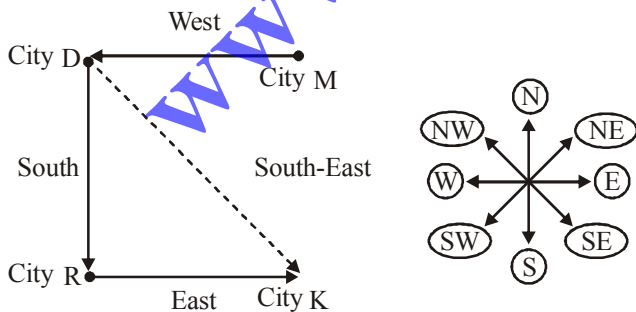
Hence, city K is located in the South-East direction.

41. **(a)**
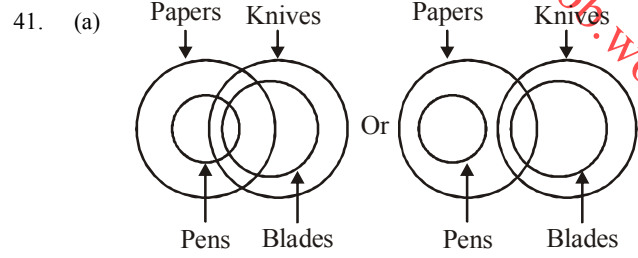
Conclusions   I.   Some knives are papers   (√)

             II.   Some blades are pens   (x)

42. **(d)**
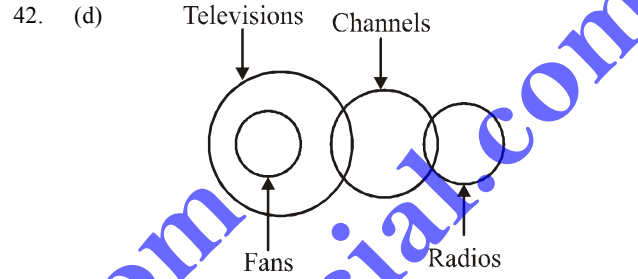
Conclusions   I.   Some fans are channels.   (x)

             II.   Some radios are televisions   (x)
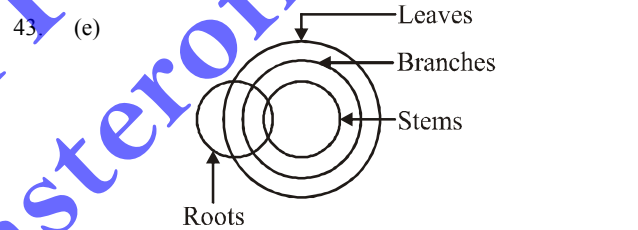
43. **(e)**

Conclusions   I.   Some leaves are roots   (√)

             II.   Some branches are stems (√)

44. **(c)**
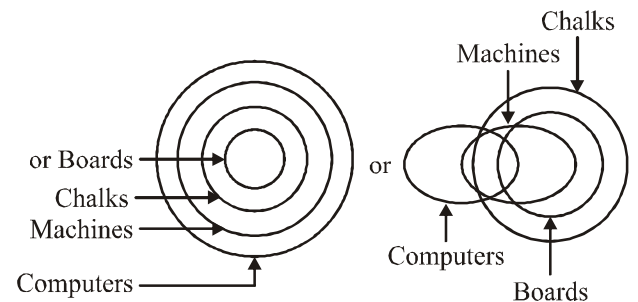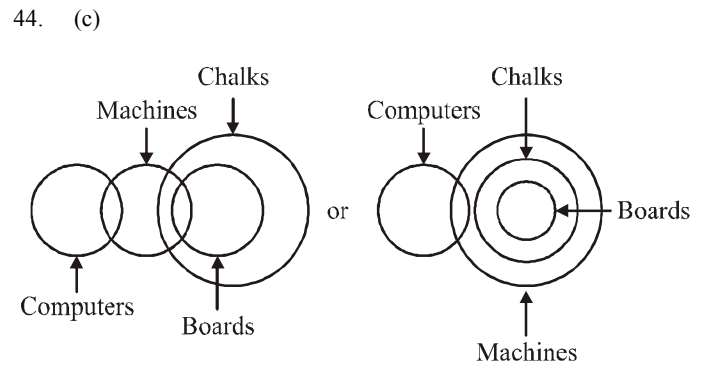
Conclusions   I.   Some chalks are computers.   (x)

             II.   No chalk is a computer   (x)

45. (b)
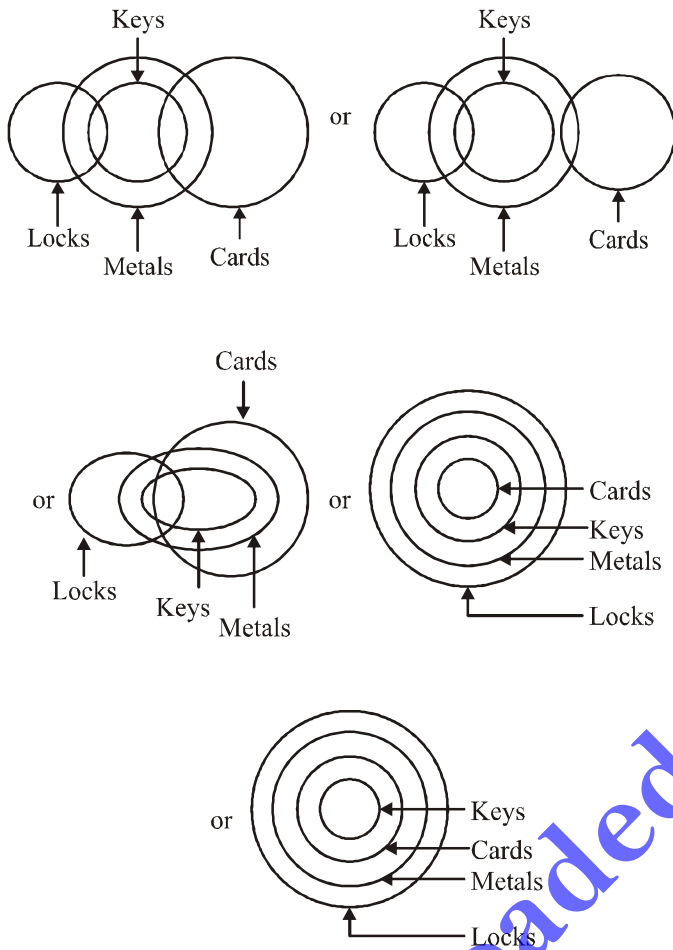
(Qs. 46-50):

Sitting Arrangement:
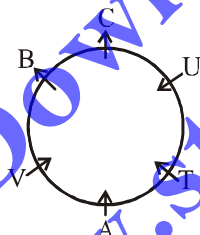
46. (c) B and C are not facing centre.
47. (d) The position of T in respect of B is third to the left or right.
48. (c) The position of V in respect of C is fourth to the right.
49. (c) B and C are not facing centre are sitting together.
50. (a) The position of A in respect of U is second to the left.

(Qs. 51-55):

Sitting Arrangement:

51. (d)   52. (c)   53. (d)   54. (a)   55. (a)

(Qs. 56-60)

# ⇒	@ ⇒	$ ⇒ ≤
* ⇒ ≥	% ⇒	

56. (d)   T < J, J ≥ M, M ≤ B
   No relation between T and M, and J and B.
   So neither I nor II is true.

57. (b)   R > F, F < K, K ≤ V
   No relation between R and V. So conclusion I is not true.
   But V ≥ K   F or V > F
   So, conclusion II is true.

58. (e)   E   A, A   F, F ≤ Q
   Combining all, Q ≥ F   A   E or E < Q and Q ≥ A
   So, both conclusions I and II are true.

59. (b)   L > M, M = D, D ≥ Q
   Combining all, L > M = D ≥ Q or M ≥ Q and Q < L.
   So, only conclusion II is true.

60. (c)   W ≤ F, F < H, H > R
   Although no direct relation between W and R but I and II together show all three probable relations. Hence, either I or II is true.

61. (b)   18 + 3 = 21st letter from the right in the reverse series or, 21st letter from the left in the original series.

62. (e)   N + 3 = Q, Q + 3 = Z, Z + 3 = S
   D – 2 = W, W – 2 = E, E – 2 = V
   P + 3 = B, B + 3 = R, R + 3 = I Hence, ? = SVI

63. (a)   13 + 5 = 18th from you left

64. (d)   10 + 3 = 13th from the right

65. (e)   Given A, L, M, E
   MALE, LAME, MEAL

66. (d)   Condition II apply
67. (b)   Condition III apply
68. (c)   No Condition apply
69. (a)   Condition I apply
70. (a)   Condition I apply

71. (d)   72. (d)   73. (c)   74. (e)   75. (b)
76. (b)   77. (c)   78. (a)   79. (a)   80. (e)
81. (e)   82. (a)   83. (c)   84. (b)   85. (d)
86. (b)   87. (d)   88. (a)   89. (c)   90. (e)
91. (a)   92. (e)   93. (b)   94. (e)   95. (c)
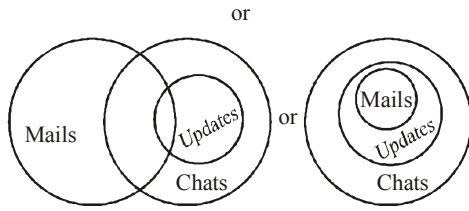96. (b)   97. (d)   98. (c)   99. (d)   100. (a)

SPEED TEST 99

1. (a)   Hence, only conclusion I follows.
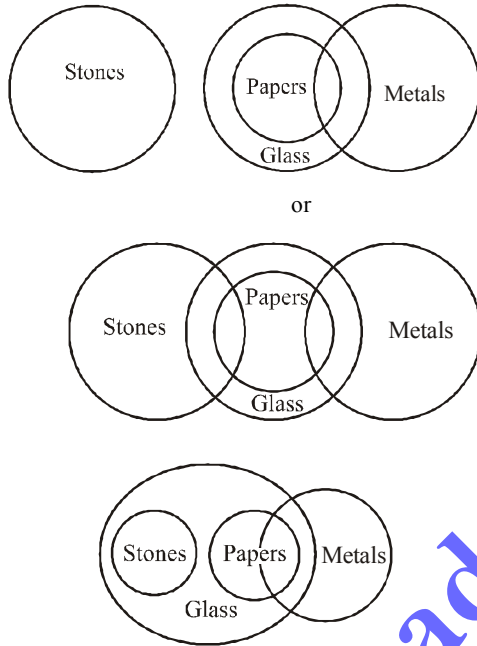2. (b)   Hence, conclusion II follows.
3. (d)   According to statements.
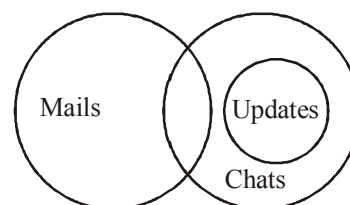
or

Hence, conclusion I follows.

(4 -5) :

According to statements

or

4. (a) Hence, conclusion I follows.
5. (b) Hence, only conclusion II follows.
(6-8) : It is a case of three-step type shifting. In a 3-step type shifting, the change in going from Input to step I differs from the change from step I to step II and step II to step III. The change from Input to step I matches with change from step III to step IV; the change from step I to step II matches with the change step IV to step V; and the change from step II to step III matches with the change from step V to step VI.

Let us replace the word of the input by letters pull = A, the = B, cover = C, and = D, then = E, push = F, into = G

	1	2	3	4	5	6	7
Input :	A	B	C	D	E	F	G
Step I :	A	B	E	D	C	F	G
Step II:	E	B	A	G	F	C	D
Step·III:	G	A	B	E	D	C	F
Step IV:	G	A	D	E	B	C	F
Step V:	D	A	G	F	C	B	E
Step VI:	F	G	A	D	E	B	C
Step VII:	F	G	E	D	A	B	C
Step VIII:	E	G	F	C	B	A	D

6. (e) Step VI

Input: Try your best until you get goal
A B C D E F G
get goal try until you your best
F G A D E B C

Now, see the chart. You get FGADEBC in step VI.

7. (b)
Step VI: deep gutter ball into the has fallen
F G A D E B C
Input: A B C D E F G
ball has fallen into the deep gutter

8. (a)
Step IV: we can't measure the depth without scale
G A D E B C F
Step VII: F G E D A B C
scale we the measure can't depth without

9. (d) It is mentioned that unseasonal downpour paralysed the normal life in the state. Therefore, it is not prudent to set up a review committee. The Course of action (B) does not address the problem properly. Thus, only Course of action (C) is suitable for pursuing.

10. (b) It is clear from the statement that a farm's areas for organic and chemical farming are different.

11. (c) There is a perception among small brands that sale in a supermarket is higher than that of small grocery stores.

12. (e) The statement clearly implies that smaller brands are currently making substantial losses in their businesses. Consider the term "troubled waters".

13. (b) Statement (C) represents a disadvantage of the small grocery stores over the Supermarkets from the perspective of a smaller brand. Small grocery stores do not help in distribution of any brand.

14. (c) Statement (D) represents a reason for the shift from local grocery stores of supermarkets by the smaller brands.

15. (a) Statement (A) will prove that step taken by the smaller brands may not necessarily be correct.

16. (d) People are going abroad for better opportunities.

17. (d) Assumption (d) is implicit in the given statement. If people don't show respect then there is no meaning of this kind of appeal.

18. (d) From given fact it can be inferred that the government generally provides protection to travellers accross the country.

19. (a) All the three causes will effect the sales of four wheelers.

20. (c) (A) would not be effective step as it will create a lots of problems to others. Steps (B) and (C) will encourage in favour of the girl child.

21. (b) **Statement :** $F \geq G = H; G > J \geq K$
Conclusions :
I. $F \geq K$ (False)
II. $K < H$ (True)

22. (e) **Statement :** $P < Q = R \geq S \geq T$
Conclusions :
I. $T \leq Q$ (True)
II. $R > P$ (True)

23. (a) **Statement :** $A \leq B < C; A \geq D; C \leq F$
Conclusions :
I. $D < C$ (True)
II. $F \geq D$ (False)

24. (d) **Statement :** $U > A = I \leq O < E$
Conclusions :
I. $I \leq E$ (False)
II. $O > U$ (False)

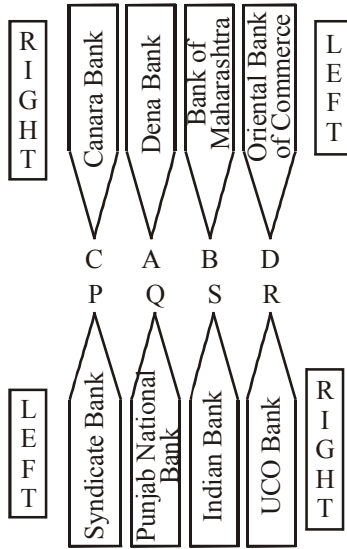25. (b) **Statement :** $L = M \geq N; M > P; L < K$
Conclusions :
I. $K > P$ (False)
II. $N < K$ (True)

26- 30.

26. (b) The person from Punjab National Bank, Q faces A.
    B is from Bank of Maharashtra and he is a immediate neighbour of A.
    A faces of person who sits second to the left of R.
    A is from Dena Bank.
    A sits third from the left and second from the right.

27. (e) S is seated between R and Q, the person from Punjab National Bank.

28. (d) Persons at the extreme ends : C from Canara Bank; D from Oriental Bank of Commerce; P from Syndicate Bank: R from UCO Bank.

29. (a) S from Indian Bank faces B from Bank of Maharashtra

30. (d) P faces the immediate neighbour of A from Dena Bank.
    B faces the immediate neighbour of Q from Punjab National Bank. Similarly, D faces immediate neighbour of S from Indian Bank.

Sol.(31-35)

Day	People	Game
Monday	D	Valleyball
Tuesday	A	Football
Wednesday	G	Cricket
Thursday	B	Kho-Kho
Friday	F	Hockey
Saturday	C	Tennis
Sunday	E	Squash

31. (d) 32. (a) 33. (e) 34. (d) 35. (a)
36. (b) 37. (d) 38. (a) 39. (b) 40. (d)
41. (e) 42. (c) 43. (c) 44. (b) 45. (e)

(46-50):

Specialisation	Total number of students	Male	Female
HR	990	396	594
Marketing	720	420	300
International Business	810	675	135
Banking	540	340	200
IT	945	315	630
Finance	495	275	220
	4500	**2421**	**2079**

46. (b) It is obvious from above.

47. (d) The required per cent $\dfrac{300 \times 100}{4500}$ 6.6% $\approx$ 7%

48. (c) The required number of men = 675 + 340 = 1015

49. (a) The required per cent $\dfrac{220 \times 100}{275}$ 80%

50. (b) IT is obvious from above table.

51. (a) Required ratio = $\dfrac{8}{15}$ $\dfrac{9}{18}$ 17 : 33

52. (d) Here, do not find the ratio of the no. of qualified candidates to that of the appeared. Simply check the ratio of % qualified candidates with respect to the appeared is the least for which state.

53. (d) Required difference = (21 – 13)% of 9000 = 720

54. (b) Reqd % = $\dfrac{(16 \quad 7)\% \text{ of } 9000}{(11 \quad 8)\% \text{ of } 45000} \times 100$ 24.21%

55. (c) Reqd ratio = $\dfrac{(16 \quad 21)\% \text{ of } 9000}{8\% \text{ of } 45000}$ = 37 : 40

56. (d) Required percentage = $\dfrac{150}{130} \times 100$ 115.38%

57. (a) % marks in Eng = $\dfrac{70}{200} \times 100$ 35

    % marks in Geo = $\dfrac{110}{150} \times 100$ 73

    % marks in Phy = $\dfrac{120}{200} \times 100$ 60

    % marks in His = $\dfrac{140}{150} \times 100$ 93

    % marks in Hin = $\dfrac{120}{150} \times 100$ 80

    % marks in Che = $\dfrac{160}{200} \times 100$ 80

    $\therefore$ Average % marks = $\dfrac{421}{6} \approx 70$

58. (a) Marks obtained by B in Geography, History and Hindi = 100 + 110 +150 = 360

    $\therefore$ Average = $\dfrac{360}{3}$ 120

59. (c) Percentage of marks obtained by student B

English	Geography	Physics	History	Hindi	Chemistry
40	66.6	65	73.33	100	85

60. (d) Required difference = $\dfrac{140 - 110}{150} \times 100$

    $= \dfrac{30}{150} \times 100$ 20%

61. (e) Average number of children (painting)

$$= \left(\frac{15000 + 12500 + 32500 + 17500}{4}\right)$$

$$= \left(\frac{77500}{4}\right) = 19375$$

62. (c) Number of children in state A (singing)
= 25000
Total number of children in state A (all classes)
= 25000 + 22500 + 15000
= 62500

∴ Required % $= \frac{25000}{62500} \times 100 = 40$

63. (a) Total number of children (dancing)
= (22500 + 22500 + 25000 + 27500)
= 97500
Total number of children (painting)
= (15000 + 12500 + 32500 + 17500)
= 77500
∴ Difference = 97500 – 77500
= 20000

64. (d) Number of children from state B (dancing) = 22500
Number of children from state D (dancing) = 27500
∴ Ratio = 22500 : 27500 = 9 : 11

65. (b) Average number of children from state C

$$\frac{30000 + 25000 + 32500}{3}$$

$$\frac{87500}{3} = 29166.67 \approx 29167$$

66. (a) Man hours spent in coding = 430 + 100 = 530
Man hours spent in offshore design and coding
= 100 + 430 = 530.
Man hours spent in Testing = 290 + 180 = 570.

67. (c) Total work onsite ≈ 80 + 100 + 170 = 350
Total work done = 350 + 100 + 430 + 290 = 1170.
Hence approximately 30% of the work is carried out onsite.

∴ % work $= \frac{350}{1170} = 29.9\%$.

68. (c) Man hours spent onsite = 350.
Sum of estimated and actual effort for offshore design
= 100 + 80 = 180.
Estimated man-hours of offshore coding = 430
Actual man hours of offshore testing = 290.

Half of estimated offshore coding $= \frac{440}{2} = 220$.

So, (c) is correct.

69. (a) Total hours spent = 1170 (as calculated in Q. 27)
Hours in coding = 430 + 100 = 530 = 45.3%
House in Design = 190 = 16.2%
House in Offshore testing = 290 = 24.8%

House in Offshore testing + Design = 290 + 190 = 480 = 41%.
Hence (a) is the closest option.

70. (b) Total offshore work = 100 + 430 + 290 = 820 man hours.
50% of offshore work is carried out on-site = 410.
Distribution of effort is in ratio, 180 : 530 : 430
= 18 : 53 : 43.
Effort distributed to testing will be

$$\frac{43}{18 + 53 + 43} \times 410 \cong 154 \text{ man-hours.}$$

Offshore testing work is $\frac{290}{2} = 145$.

∴ Proportion of testing carried out offshore is

$$\frac{145}{140 + 140 + 154} \times 100 = 33\% \cong 30\%..$$

71. (b) Profit will be shared in the ratio of
11 × 3 : 16.5 × 3 : 8.25 × 3
= 11 : 16.5 : 8.25 = 44 : 66 : 33

Anil's share in the profit $= \frac{33}{143} \times 19.5 = 14.5$ lakh

50% of Anil's share = 2.25 lakh

72. (d) Cost price of TV when discount is not offered

$$= 11250 \times \frac{100}{90} = ₹12500$$

Total cost of TV after transport and installation
= 12500 + 800 + 150 = 13450
To earn 15% profit, he must sell at

$$13450 \times \frac{115}{100} = ₹15467.50$$

73. (b) Interest earned in 1st half of a year

$$= 20,000 \times \frac{1}{2} \times \frac{20}{100} = 2000$$

Similarly,
During second half, interest earned = 2200
During second year, interest earned = 4840
(Note : Interest is calculated as compound)

74. (a) Required no. of ways
$= {}^2P_2 \times {}^4P_4 = 48$

75. (b) Relative speed of two trains

$$= \frac{180 + 270}{10.8} \frac{m}{s} = \frac{4500}{108} \frac{m}{s}$$

$$= \frac{4500}{108} \times \frac{18}{5} \frac{km}{h} = 150 \text{ km/hr}$$

Speed of second train = 150 – 60 = 90 km/h.

76. (d) Since a 3-digit number cannot start with digit 0, the hundredth place can have place can have any of the 4 digits. Now, the tens and units place can have all the 5 digits. Therefore, the total possible 3-digit numbers are 4 × 5 × 5, i.e., 100.

77. (d) 18 days

Shyam alone worked 10 days. So work done by him

$$= \frac{10}{40} = \frac{1}{4}$$

∴ (Ravi + Shyam) have done

$$1 - \frac{1}{4} = \frac{3}{4}$$ of the work.

(Ravi + Shyam) do $\frac{3}{4}$ of the work in $24 \times \frac{3}{4} = 18$ days

78. (e) Let the age of A = $6x$ years
Let the age of B = $7x$ years
$6x \times 7x = 672$

$$x^2 = \frac{672}{42} = 16 \quad \therefore x = 4$$

Age of A after 6 years = 30 years
Age of B after 6 years = 34 years
Required ratio = 30 : 34 = 15 : 17

79. (c) Different of amount received by R and Q is (7 – 5 =) 2, Total amount received by P and Q = (3 + 5 =) 8:,
Then, 2 ≡ ₹ 4000

$$8 : \equiv \frac{4000}{2} \times 8 = ₹ 16000$$

80. (d)

81. (a) (A) follows because the passage talks of "water conflicts" between developing countries. However, we are told, such conflicts have not escalated into wars.
As for (C), the alteration has been done by water, not by water conflicts.

82. (c)

83. (d) Note that the Prime Minister urges the state governments to show "an appreciation of the other point of view".

84. (e)

85. (a) This can be inferred from the last sentence of the third para.

86. (e) Water is a divisible resource.

87. (c) 88. (d) 89. (b) 90. (b) 91. (e)
92. (a) 93. (d) 94. (b) 95. (c) 96. (d)
97. (a) 98. (d) 99. (d) 100. (e) 101. (a)
102. (b) 103. (e) 104. (c) 105. (c)

106. (d) Medical operations conducted by unqualified person and that also in unsafe environment must have not been recorded or registered. Counted is not right in the context of the situation. Only performed /conducted can be the right choice.

107. (c) Selected/Appointed is grammatically correct. Approved is not right for a person. It might have been right if the sentence would have been like - Proposal for Mr. John's appointment for the top job has been APPROVED by Board of Directors. Questioned is incorrect grammar usage.

108. (b) Use of accurate or in place contradicts the statement. Procedure can be flawed or miscalculated so option (b) is correct option. Irrational is not necessarily flawed.

109. (b) Sacked and removed both carry the same sense. Appointed and Selected are also similar but not given in options. So correct choice is (b)

110. (d) Blanket and prior both completes the sentence meaningfully. Here blanket means inherent in the order but may not be directly or explicitly.
Statement 1 introduces the concept of Strategic change through mobilizing the employees.
Statement 4 suggests how to mobilize the employees through involvement.
Statement 5 carries forward the point of Statement 4 by stating what can happen in absence of the employee involvement (isolation) from decision making.
Statement 2 confirms what was stated in earlier statements as managers also point to the same.
Statement 3 concludes the passage by stating what is role of managers and how everything discussed earlier depends on it.

111. (e) 112. (c)
113. (b) It should be 'has been sounding horn'.
114. (c) Replace 'by' with 'up'.
115. (c) It should be 'was' in place of 'is'.
116. (b) 117. (b) 118. (c) 119. (d) 120. (b)
121. (b) 122. (b) 123. (c) 124. (a) 125. (c)
126. (e) 127. (e) 128. (a) 129. (c) 130. (c)
131. (c) 132. (d) 133. (b) 134. (c) 135. (c)
136. (a) 137. (c) 138. (a) 139. (b) 140. (d)
141. (a) 142. (b) 143. (b) 144. (d) 145. (b)
146. (c) 147. (c) 148. (b) 149. (a) 150. (c)
151. (c) 152. (b) 153. (b) 154. (c) 155. (a)

SPEED TEST 100

1. (e) ? ≈ 840 ÷ 48 ≈ 17.5

2. (b) ? = $\sqrt{8000}$ ≈ 89

3. (c) ? = 18 × 23 × 10 ≈ 4140

4. (a) ? = $\frac{99999}{99 \times 9}$ ≈ 112

5. (d) ? ≈ 7985 + 2541 + 128 ≈ 10654

6. (a) ? $\frac{6255.22}{18.5 \times 21.4}$ 15.8

7. (b) ? $\frac{1.5 \times 78}{0.5}$ 234

8. (d) ? 302.46 395.72 – 123.47
= 698.18 – 123.47 574.71

9. (c) $\sqrt[3]{?}$ $\sqrt[3]{4096}$ $\sqrt[3]{64}$
= $\sqrt[3]{16 \times 16 \times 16}$ + $\sqrt[3]{4 \times 4 \times 4}$
= 16 ÷ 4 = 4
∴ ? = 4 × 4 × 4 64

10. (d) $\frac{800 \times ?}{100}$ = 293 – $\frac{750 \times 22}{100}$
⟹ 8 × ? = 293 – 165 128

$\Rightarrow$? $\dfrac{128}{8}$ 16

11. (d) The given series is $\times 1.5 + 1.5, \times 2.5 + 2.5, \times 3.5 + 3.5, \times 4.5 + 4.5, \times 5.5 + 5.5.$

12. (b) The series is $(15 - 6) \times 1 = 9, (9 - 5) \times 2 = 8, (8 - 4) \times 3 = 12,$
    $(12 - 3) \times 4 = 36, (36 - 2) \times 5 = 170.$
    Similarly, for the question row,
    $a = (19 - 6) \times 1 = 13, b = (13 - 5) \times 2 = 16$

13. (a) The series is $\times 1 - 1, \times 2 - 2, \times 3 - 3, \times 4 - 4, \times 5 - 5.$

14. (e) The series is $\times 2 + 2^2, \times 3 + 3^2, \times 4 + 4^2, \times 5 + 5^2, \times 6 + 6^2.$

15. (c) The series is $\times 1 + 1, \times 2 + 2, \times 3 + 3, \times 4 + 4, \times 5 + 5.$

16. (d) Let the sum be ₹P.
    CI at the rate of 20% pa

    $= 20 + 20 + \dfrac{20 \times 20}{100} = 44\%$ of P

    When the interest is compounded half-yearly, then CI for

    $2 : + 10 + 10 + \dfrac{10 \times 10}{100} = 21\%$

    $3 : + 21 + 10 + \dfrac{21 \times 10}{100} = 33.1\%$

    $4 : + 33.1 + 10 + \dfrac{33.1 \times 10}{100}$

    $= 46.41\%$ of P
    Now, $(46.41 - 44)\%$ of P $= 361.50$
    or, 2.41% of P $= 361.50$ or,
    P $= ₹ 15000$

17. (c) Number of silver coloured cars sold.
    In Metro H $= 20 + 35 + 37 + 42 + 22 + 17 = 173$

    $\dfrac{173}{192} \times 100$ 90%

18. (e) Blue colour cars model C sold in
    Metro M = 50,000
    Red colour cars model F sold in
    Metro H = 34,000
    Difference = 50000 − 34000 = 16000

19. (a) 90,000 is the largest number of cars sold in Metro M and it is for white colour Model C.

20. (a) Total number of blue coloured card of Model E and D sold in Metro
    H = 43 + 37 = 80
    In Metro M, 80 nos. of white coloured Model B was sold.

21. (e) Difference between the white coloured cars sold between the two Metros :
    A : 75 − 60 = 15
    B : 81 − 80 = 1
    C : 90 − 85 = 5
    D : 90 − 86 = 4
    E : 77 − 60 = 17
    F : 87 − 75 = 12
    The minimum difference is 1 and it is for Model B.

22. (a) Maximum expenditure of the family is on food, i.e., 23%.

23. (c) It is obvious from the chart.

24. (a) Expenditure on transport and other item = 20 + 5 = 25%

25. (b) Expenditure on the education of children
    = 12% of ₹100,000

    $\dfrac{12 \times 100000}{100}$ ₹12000

26. (d) The percentage difference in expenditure on Housing and transport = 15 − 5 = 10%
    ∴ The required difference = 10% of ₹100000
    = ₹10000

27. (b) $62.4 \times 1.15 + 75 \times 1.24 + 40 \times 1.32 + 80.5 \times 1.2 + 72.8 \times 1.5 + 64 \times 1.65 = 71.76 + 93 + 52.8 + 96.6 + 109.2 + 105.6 = 528.96$ lakh

28. (e) Total expenditure

    $\dfrac{57.2}{1.3}$ $\dfrac{67.2}{1.12}$ $\dfrac{58.4}{1.6}$ $\dfrac{71.4}{1.75}$ $\dfrac{63}{1.4}$ $\dfrac{84.6}{1.5}$

    $= 44 + 60 + 36.5 + 40.8 + 45 + 56.4$
    $= 282.7$ lakh
    Total income $= 57.2 + 67.2 + 58.4 + 71.4 + 63 + 84.6 = 401.8$ lakh
    ∴ Total profit $= 401.8 − 282.7$
    $= 119.1$ lakh

29. (c) Ratio $= \dfrac{62.4}{67.2}$ $\dfrac{624}{672}$ $\dfrac{13}{14}$

30. (a) $\text{Exp}_B = \dfrac{63}{1.4}$ 45 lakh

    $\text{Exp}_A = 75$ lakh

    ∴ % $= \dfrac{45}{75} \times 100$ 60%

31. (c) Income-B = 63 lakh
    $\text{Exp}_A = 40$ lakh

    ∴ % $= \dfrac{63 - 40}{40} \times 100$ 57.5%

(32-36) :

Dealer	Desktop	Laptop
A	120	205
B	175	240
C	160	300

32. (c) 160

33. (d) $(205 + 240 + 300 = 745)$

34. (a) Ans $= \dfrac{120}{300} \times 100$ 40%

35. (d) Ratio $= \dfrac{175}{300}$ $\dfrac{7}{12}$ $7 : 12$

36. (e) Diff $= (175 + 160) - (120 \quad 205)$
    $= 335 - 325 = 10$

37. (a) Suppose 1 kg of both alloys A and B are melted to form alloy C.

Now, the quantity of diamond in

$C = \left(\dfrac{7}{9} + \dfrac{7}{18}\right) = \dfrac{7}{6}$ kg

and that of silver in

$C = \left(\dfrac{2}{9} + \dfrac{11}{18}\right) = \dfrac{5}{6}$ kg

∴ Required ratio = 7 : 5

38. (e) Let the total number. of editorial staff in MNC be 100.

Then, $100 = 72 + 44 - x$

[Using the formula,

$n(A \cup B) = n(A) + n(B) - n(A \cap B)$]

or, $x = 16$

From 100 staff 16 like both Coffee and Tea.

∴ There are $\left(\dfrac{100 \times 4}{16}\right) = 25$ editorial staff in the office.

39. (c) 8 men complete in 6 days $\dfrac{8 \times 6}{12 \times 8} = \dfrac{1}{2}$ of the work 8 women

complete the work in (6 + 1) = 7 days $\dfrac{8 \times 7}{16 \times 12} = \dfrac{7}{24}$ of the

work

Remaining work $= 1 - \left(\dfrac{1}{2} + \dfrac{7}{24}\right) = \dfrac{5}{24}$

Now, in one day 5/24 part of the work is done by $12 \times 8 \times 5/24 = 20$ men

Additional no. of men = 20 – 8 = 12

40. (d) Number of ways of visiting four cities = 4! = 24

Number of ways of visiting A just before B is = 3! = 6

Required probability $= \dfrac{6}{24} = \dfrac{1}{4}$

41. (d) A's interest on investment = 5% of 60000 = ₹ 3000

Remaining profit = ₹12000 – ₹3000 = ₹ 9000

C's share $= \dfrac{9000}{3} + 15\%$ of $\left(\dfrac{9000}{3}\right) = ₹ 3450$

42. (d) Ratio of their investments = 2 : 3 : 4

Let A invest for 'x' months, so, B invests for (8 – x) months.

Ratio of their profets = 2x : 3(8 – x) : 16

A T Q

$3k(8 - x) - 16x = 2$

or $8k - 3k x = 2$

Here, we have two variables and one equation

So, data inadequote is the correct choice.

43. (d) Let the CP of a shirt be ₹100. So, the SP and the profit of the

shirt are ₹125 and ₹25 respectively.

Now, the SP of a shirt = 90% of 125

= ₹ 112.50

∴ New profit = (112.50 – 100) × 2 = ₹25

∴ Ratio = 25 : 25 = 1 : 1

44. (c) Let the daily income of a man be x and that of a boy be y.

∴ $7x + 11y = \dfrac{10480}{8} = 1310$ ...(1)

$8x + 6y = \dfrac{12840}{12} = 1070$

∴ $4x + 3y = 535$ ...(2)

Equation (1) × 4 – Equation (2) ×7 gives

$28x + 44y = 5240$
$28x + 21y = 3745$
$\underline{ - - -}$
$ 23y = 1495$

∴ y = 65 and x = 85

∴ 12x + 9y = 1020 + 585 = 1605

∴ No. of days $= \dfrac{25680}{1605} = 16$

45. (a) $\dfrac{120 - 8 \times 5}{4} = 20$

46. (b) Stoppage time per hour

$= \dfrac{64 - 48}{64} = \dfrac{1}{4} \times 60 = \dfrac{1}{4}$ hr = 15 minutes

47. (d) Total salary of A, B, C, D and E = 48250 × 5 = 241250

I. Let the salary of B = x

Then C = 1.5 x

II. Total salary of A and B = 23500 × 2 = 47000

Then the salary of A = (47000 – x)

From both statements, we can find the salary of D and E. So, data in both the statements I and II is not sufficient to answer the questions.

48. (c) I. Cost price = (640000 – 320000) = 320000

Profit percentage $= \dfrac{320000}{320000} \times 100 = 100\%$

II. If the cost price = x

Then, selling price = 2x

∴ Profit = 2x – x = x, ie, 100%

So, data in statement I alone or in statement II alone is sufficient to answer the question.

49. (c) I. Simple interest = 11480

Principle = 14350

Time = 4 years

$11480 = \dfrac{14350 \times 4 \times R}{100}$

∴ $R = \dfrac{11480 \times 100}{14350 \times 4} = 20\%$

II. Let the Principle = x

Amount = 2 × x = 2x

Then SI = 2x – x = x

Time = 5 years

$x = \dfrac{x \times 5 \times R}{100}$

∴ R = 20%

So, data in statement I alone or in statement II alone is sufficient to answer the question.

50. (e) I. x – y = 9

II. x × y = 0

This can be possible only when x = 9 and y = 0.

So, the data in both the statements I and II together is necessary to answer the question.

(51–52) :

R ≥ T < M = Z

C > T ≥ B

R ≥ T < C

R ≥ T ≥ B

Z = M > T ≥ B

C > T < M = Z

51. (b) Conclusions :

I. Z > C : Not True

II. B < Z : True

So only conclusions II follows.

52. (a) Conclusions :

I. B < C : True

II. R ≥ C : Not True

So only conclusions I follows.

(53–54):

P ≥ Q > T

Q ≤ R

T ≥ A

P ≥ Q > T ≥ A

P ≥ Q ≤ R

R ≥ Q > T ≥ A

53. (a) **Conclusions :**

I. A < Q : True

II. A ≤ P : Not True

So only conclusions I follows.

54. (e) **Conclusions :**

I. T < P : True

II. R > A : True

So both the conclusions follow.

55. (d) P > T = U ≤ W

Q ≥ R ≥ W

P > T = U ≤ W ≤ R ≤ Q

Conclusions :

I. T = R : Not True

II. U < R : Not True

So None of the conclusion follows.

(56-60):

Candidate	Panel	Company
Harish	V	B
Samir	III	G
Nilesh	IV	A
Shailaja	I	D
Nikita	VI	E
Laxman	VII	F
Sujata	II	C

56. (d)   57. (a)   58. (b)   59. (c)   60. (a)

(61–62):
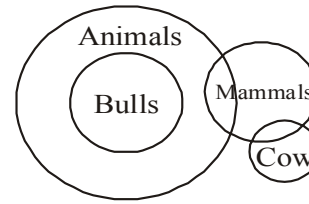
O R
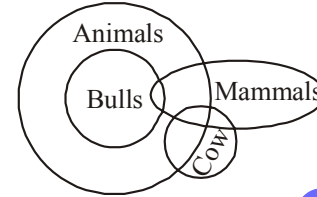
61. (e) **Conclusions:**

I. True

Conversion of the third premise.

II. True

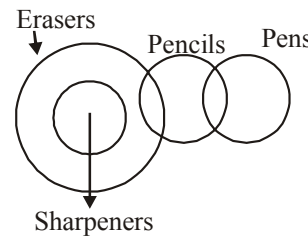So both of the conclusions I and II follow.

62. (a) **Conclusions:**

I. True

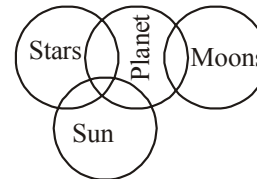Conversion of the second premise.

II. False

63. (d)

O R

Conclusions:
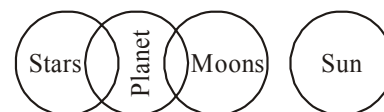
I. False

II. False

So, neither conclusion I nor conclusion II follow.

(64–65)

O R

64. (d) **Conclusions:**
    I. False
    II. False
    None of the conclusions follows.
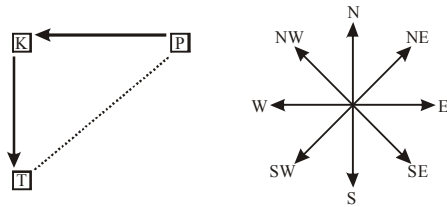65. (b) **Conclusions:**
    I. False
    II. True
66. (d) From both the statements

    he [is sure] ⟶ [ja] ha [ma]

    [is] she [sure] ⟶ ka [ja ma]

    The code for 'sure' is either 'ja' or 'ma'.
67. (e) From both the statements

    10 th
    ⟶ [M] ← 16 — [R]
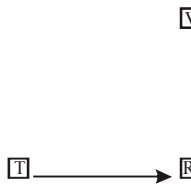
    R's position from the left.
    = 10 + 16 + 1 = 27 th
68. (b) From statement II
    M is the husband of T.
    J is daughter of M and T.
69. (a) From statement I

    [K] ← [P]

    [T]

    (compass rose: N, NW, NE, W, E, SW, SE, S)

    From the diagram it is clear that Town P is towards North-east of Town T.
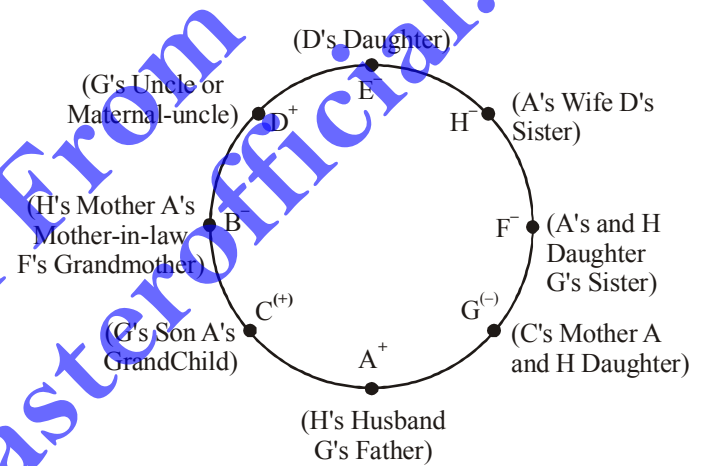   From statement II

    [V]
    ↓
    [T] ⟶ [R]

70. (e) From both the statements
    P > Q > T > S > R
71. (a) From statement I
    Sourav visited Delhi on Tuesday or Wednesday.
    Wednesday is odd day. Therefore, he visited on Tuesday.
    From statement II
    Sourav visited Delhi on Tuesday or Wednesday or Thursday.
72. (b) Only course of action II seems to be appropriate. On the basis of an accident it is not prudent to cancel the licenses of all the private ferry operators.
73. (a) Only course of action I seems to be appropriate. Course of action II is too harsh for minor offence.
74. (e) Clearly both courses of action are appropriate for pursuing.
75. (b) Only course of action II seems to be appropriate. Course of action I is not feasible practically.
76. (b) Input : Train 59 47 25 over burden 63 sky.
    Step I : Burden train 59 47 25 over 63 sky.
    Step II : Burden 25 train 59 47 over 63 sky.
    Step III : Burden 25 over train 59 47 63 sky.
    Step IV : Burden 25 over 47 train 59 63 sky.
    Step V : Burden 25 over 47 sky train 59 63.
    Step VI : Burden 25 over 47 sky 59 train 63.

77. (e) Input : Service 46 58 96 over there desk 15.
    Step I : Desk service 46 58 96 over there 15.
    Step II : Desk 15 service 46 58 96 over there.
    Step III : Desk 15 over service 46 58 96 there.
    Step IV : Desk 15 over 46 service 58 96 there.
    Step V : Desk 15 over 46 service 58 there 96.
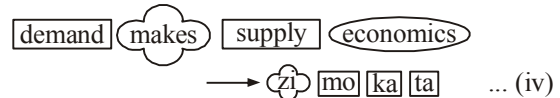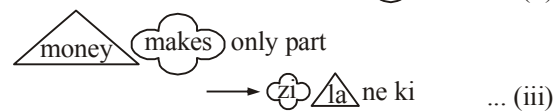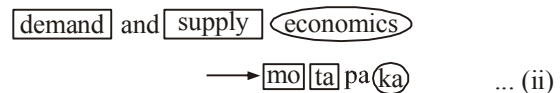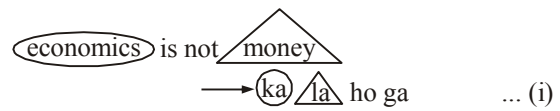   Step VI : Not possible, *ie,* no such step is possible.
78. (d) Cannot determined.
79. (d) Step III : Art 24 day 83 71 54 star power.
    Step IV : Art 24 day 54 83 71 star power.
    Step V : Art 24 day 54 power 83 71 star.
    Step VI : Art 24 day 54 power 71 83 star.
    Step VII : Art 24 day 54 power 71 star 83.
80. (c) Step II : Cold 17 wave 69 never desk 52 43.
    Step III : Cold 17 desk wave 69 never 52 43.
    Step IV : Cold 17 desk 43 wave 69 never 52.
    Step V : Cold 17 desk 43 never wave 69 52.
    Step VI : Cold 17 desk 43 never 52 wave 69.

(81-85) : Eight persons sitting arrangements areas as follows.

(D's Daughter)
(G's Uncle or Maternal-uncle)
E
D^+
H^- (A's Wife D's Sister)
(H's Mother A's Mother-in-law F's Grandmother) B^-
F^- (A's and H Daughter G's Sister)
$C^{(+)}$
$G^{(-)}$ (C's Mother A and H Daughter)
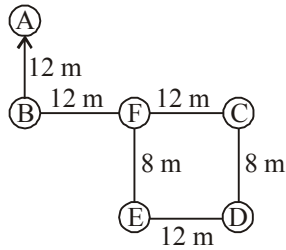(G's Son A's GrandChild)
A^+
(H's Husband G's Father)

81. (d) A's mother-in-law is B and A is second to the right of B.
82. (a) A's grandchild is C and A is immediate right of C.
83. (c) Except C all others are women.
84. (e) B is the mother of H which is true with respect to the given sitting arrangement.
85. (a) F's grandmother sits to the immediate left of C.

(Qs. 86-90) On the basis of given information,

economics is not △money
⟶ (ka) △la ho ga   ... (i)

[demand] and [supply] (economics)
⟶ [mo] [ta] pa (ka)   ... (ii)

△money ☁makes only part
⟶ (zi) △la ne ki   ... (iii)

[demand] ☁makes [supply] (economics)
⟶ (zi) [mo] [ka] [ta]   ... (iv)

86. (e) 87. (e) 88. (a) 89. (b) 90. (d)

(Qs. 91-92) :

A
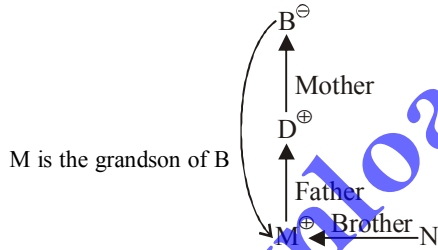↑
| 12 m
B ——12 m—— F ——12 m—— C
| 8 m | 8 m
E ——12 m—— D

91. (d) Point B.
92. (a) The point F is 12 m West of point C.

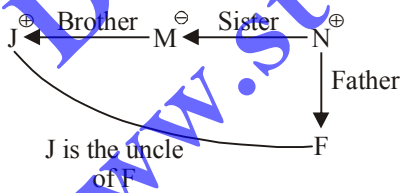**(Qs. 93-94) :** *By decoding given information with symbols of family diagram, we get*

$(P × Q) = P^⊕$ ↑ Father — Q

$(P - Q) = P^⊖$ ←Sister— Q

$(P + Q) = P^⊖$ ↑ Mother — Q

$(P ÷ Q) = P^⊕$ ←Brother— Q
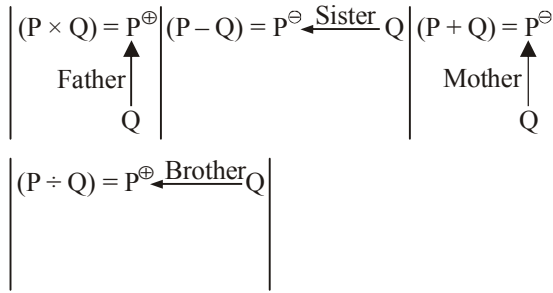
93. (c) By applying above method for (B + D × M ÷ N), we draw the following family diagram

$B^⊖$
↑ Mother
$D^⊕$
↑ Father
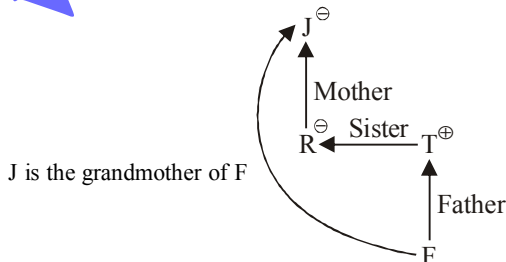$M^⊕$ ←Brother— N

M is the grandson of B

Hence, it is clear that M is the grandson of B.

94. (e) By applying above decoding method, we can check all the options for the required relationship.

(a) (M ÷ T − R × F) = Rejected

$J^⊕$ ←Brother— $M^⊖$ ←Sister— $N^⊕$
| Father
F
J is the uncle of F

(b) (J + R − T × F) = Rejected

$J^⊖$
↑ Mother
$R^⊖$ ←Sister— $T^⊕$
↑ Father
F
J is the grandmother of F

(c) (J ÷ M − N × F) = Rejected

$J^⊕$ ←Brother— $M^⊖$ ←Sister— $N^⊕$
↑ Father
F
J is the uncle of F

So, none of the options is correct to answer the question. So, option (e) will follow.
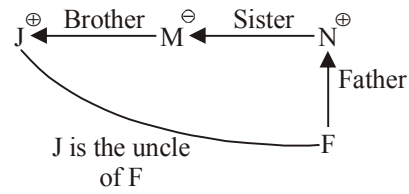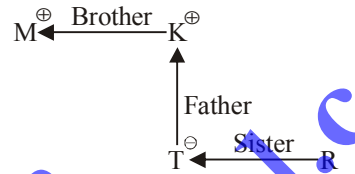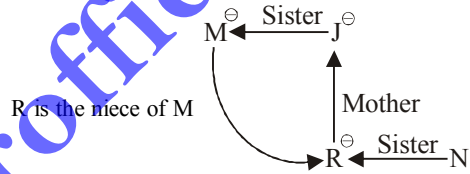
95. (b) By applying above decoding method, we can check all the options for the required relationship
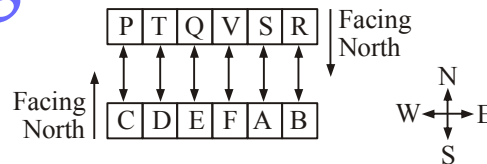
(a) (M ÷ K × T − R) = Rejected

$M^⊕$ ←Brother— $K^⊕$
↓ Father
$T^⊖$ ←Sister— R

Here, gender of R is not known. So, R is either niece or nephew of M.

(b) (M − J + R − N) = Selected

$M^⊖$ ←Sister— $J^⊖$
↑ Mother
$R^⊖$ ←Sister— N
R is the niece of M

As, we have already obtained the answer, so there is no need to check other options.

(Qs. 96-100)

| P | T | Q | V | S | R |
Facing North

| C | D | E | F | A | B |
Facing North

N
W ← + → E
S

96. (c) P, R sits extreme ends of rows, who are facing Southward.
97. (e) S is facing A.
98. (b) There are two perosn Q, V sits between T and S.
99. (a) V is third to the EAst of P and F is also thirs to the East of C. So, B will be the correct anser because B is third to the East of E.
100. (e) F faces V. is definitely true.
101. (a) Passage can be divided in two parts. First part (before the blank) is about the growing expenditure and its subsequent pressure as felt by the governments. Second part is (after the blank) is about the finances and their mishandling by governments. This blank portion should be filled with something that gives some solution to the issue of growing expenditure and provides a beginning platform to discuss / raise the issue of finances. So option (a) is best answer. Option (e) can be rejected out rightly as it has no substantial information. Option (b) & (c) are conclusive statements about finances and are not about expenditures. Option (d) again can end the passage but can not be put in the blank.
102. (a) Read the sentence after the blank space. 'Many concessions and incentives……' If foreign investment was seen as threat to Indian business then definitely Government would not provide incentives. On this logic, Option (b) can be rejected.

Indian economy needs stabilization or not; is not discussed in passage. Hence option (d) is also not right. In option (e) word only is questionable. Option (e) can also be skipped. Option (c)'s statement can be a result of incentives but not preceding this measure. Option (a) is appropriate as seems logical that initially to supplement Indian economy, foreign capital was looked upon and hence some incentives were given to the foreign investors.

103. (a) Tax sharing is discussed in the end only so option (e) is not proper for the blank provided. Option (d) says complete diversion of previous and new commission's approach but the following sentence has word gradually in it and hence contradiction arises. Option (b) is not substantive enough and does not elaborate the matter which is required in the context. Option (c) is generic in nature which is also not appropriate for the blank. Option (a) is best one as it goes with flow of the passage and sentence following the blank validates it.

104. (c) Option (a) is very capitalistic in nature and can be an individualistic thought but not the truth or the correct option for closing the passage. Option (b) is also not hinted at in the passage and can not be inferred from the passage. Option (d) is almost similar to statement in option (a) and is incorrect choice. The passage is about equity in tax for rich and poor not about the rich -poor relationship. Option (e) is out of context. Option (c) gives logical and coherent ending to the passage justifying the preceding statement.

105. (b) Option (a) can be a starter for the passage but it does not throw weight behind the need of integration of risk management in banks. In its comparison with option (b) ,later one is better choice as it explains what was there for risks and what is the need now. Option (d) can also be a starting statement but it is like raising a point and then leaving a blank. It means that if passage starts with it then at least something should be discussed about the risk management in the other parts of world. Option (e) indicates as if there was nothing in banks for risk handling. It is about integrated framework for risk management not about absence of risk management.

106. (c) Medical operations conducted by unqualified person and that also in unsafe environment must have not been recorded or registered. Counted is not right in the context of the situation. Only performed /conducted can be the right choice.

107. (c) Selected/Appointed is grammatically correct. Approved is not right for a person. It might have been right if the sentence would have been like - Proposal for Mr. John's appointment for the top job has been APPROVED by Board of Directors. Questioned is incorrect grammar usage.

108. (b) Use of accurate or in place contradicts the statement. Procedure can be flawed or miscalculated so option (b) is correct option. Irrational is not necessarily flawed.

109. (b) Sacked and removed both carry the same sense. Appointed and Selected are also similar but not given in options. So correct choice is (b)

110. (d) Blanket and prior both completes the sentence meaningfully. Here blanket means inherent in the order but may not be directly or explicitly.
Statement 1 introduces the concept of Strategic change through mobilizing the employees.
Statement 4 suggests how to mobilize the employees through involvement.
Statement 5 carries forward the point of Statement 4 by stating what can happen in absence of the employee involvement (isolation) from decision making.
Statement 2 confirms what was stated in earlier statements as managers also point to the same.
Statement 3 concludes the passage by stating what is role of managers and how everything discussed earlier depends on it.

111.	(a)	112.	(c)	113.	(c)	114.	(d)	115.	(b)
116.	(d)	117.	(b)	118.	(c)	119.	(a)	120.	(e)
121.	(c)	122.	(e)	123.	(e)	124.	(a)	125.	(b)
126.	(c)	127.	(e)	128.	(d)	129.	(a)	130.	(e)
131.	(e)	132.	(d)	133.	(b)	134.	(a)	135.	(c)

136. (c) Among is used for - In the group, number, or class of more than two. It is not proper here in blank and would give not a right sense. As is used as an adjective to mean for instance/to same extent or degree/taken into consideration. It can be used but there should be some closing of the sentence. See As the burgeoning demand is exerting pressure on inflation rate……….. so…….. is happening. But the second part is missing. For the same reason 'in spite of' or 'with' cannot be used. Use of 'amid' does not demand a closing or an effect.

137. (d) Definitely rising prices would increase the inflation and put upward pressure on its rate.

138. (c) 'Dilemma' is best one to put in. Subsequent sentences certify it by showing how banks have two courses to choose from. Banks cannot be attacked .It seems farfetched. Tenterhooks is too strong a word here to use.

139. (c) A close reading of the whole sentence and combining it with what was said earlier in the passage hints that why a particular thing happens is discussed here. So 'cause' is correct. Other options are invalid.

140. (c) Uncounted is not right as any amount it may be can be counted. Unstoppable is wrong as funds inflow is not uncontrollable phenomenon.' Major' is grammatically not correct. It could have been right if a particular source is being discussed or a comparison is being done. See- A major inflow of foreign exchange comes from PE notes Or PE notes do not count for major inflow of foreign exchanges.

141.	(d)	142.	(a)	143.	(b)	144.	(a)	145.	(a)
146.	(c)	147.	(c)	148.	(a)	149.	(c)	150.	(c)
151.	(d)	152.	(a)	153.	(d)	154.	(d)	155.	(b)
156.	(a)	157.	(d)	158.	(c)	159.	(a)	160.	(b)
161.	(c)	162.	(b)	163.	(a)	164.	(b)	165.	(a)
166.	(c)	167.	(a)	168.	(a)	169.	(d)	170.	(a)
171.	(c)	172.	(e)	173.	(d)	174.	(a)	175.	(d)
176.	(e)	177.	(c)	178.	(c)	179.	(b)	180.	(b)
181.	(a)	182.	(b)	183.	(a)	184.	(a)	185.	(a)
186.	(d)	187.	(c)	188.	(e)	189.	(b)	190.	(b)
191.	(e)	192.	(e)	193.	(b)	194.	(e)	195.	(b)
196.	(b)	197.	(c)	198.	(e)	199.	(c)	200.	(e)

SPEED TEST 101

1.	(d)	2.	(b)	3.	(d)	4.	(d)	5.	(b)
6.	(a)	7.	(d)	8.	(b)	9.	(a)	10.	(b)
11.	(b)	12.	(b)	13.	(c)	14.	(c)	15.	(d)
16.	(c)	17.	(a)	18.	(d)	19.	(b)	20.	(a)
21.	(d)	22.	(a)	23.	(d)	24.	(b)	25.	(b)
26.	(a)	27.	(a)	28.	(c)	29.	(b)	30.	(c)
31.	(c)	32.	(d)	33.	(d)	34.	(c)	35.	(b)
36.	(a)	37.	(d)	38.	(d)	39.	(a)	40.	(a)
41.	(a)	42.	(b)	43.	(c)	44.	(d)	45.	(b)
46.	(a)	47.	(d)	48.	(d)	49.	(c)	50.	(d)
51.	(c)	52.	(b)	53.	(d)	54.	(c)	55.	(d)
56.	(c)	57.	(b)	58.	(d)	59.	(c)	60.	(c)
61.	(d)	62.	(a)	63.	(b)	64.	(d)	65	(a)
66.	(a)	67.	(a)	68.	(d)	69.	(c)	70.	(d)
71.	(c)	72.	(c)	73.	(d)	74.	(b)	75.	(d)
76.	(c)	77.	(b)	78.	(b)	79.	(c)	80.	(d)

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