

## PART - I : REASONING

1. Among five people- A, B, C, D and E, each scoring different marks, only one person scored less marks than B. D scored more than B but less than A. A did not score the highest. Who scored the second highest ?

- (1) E  
(2) Cannot be determined  
(3) A  
(4) C  
(5) D

**Directions (2-4) :** Study the given information carefully to answer the given questions.

A is 14m east of B. C is 6m south of A. P is 4m west of C. Point C is the midpoint of points P and H, such that points P, C and H form a straight line. O is 6m south of point H.

2. Kunal walks 10 m towards north from point H, takes a left turn, and walks for 4 m. How far will he be from point C ?

- (1) 2 m                      (2) 10 m  
(3) 4 m                      (4) 6 m  
(5) 7 m

3. If A is 2 m to the north of L and R is 4 m west of O, how far is point L from point R ?

- (1) 10 m                      (2) 12 m  
(3) 7 m                        (4) 14 m  
(5) 9 m

4. In which direction is B with respect to H ?

- (1) North-east  
(2) South-east  
(3) North-west  
(4) North  
(5) West

**Directions (5-9) :** Study the following information and answer the given questions.

Nine friends- P, Q, R, S, T, U, V, W and X live on nine different floors of a building but not necessarily in the same order. The lower most floor of the building is numbered one, the one above that is numbered two and so on till the topmost floor is numbered nine. T lives on an odd numbered floor below the floor numbered five. Only three people live between T and X. Only one person lives between X and V. V lives above X. Q lives on an odd numbered floor immediately below P. Q does not live on the floor numbered five. The number of persons living between X and P is equal to the number of people living between T and S. W lives on an even numbered floor immediately above R.

5. S is related to the floor numbered six and R is related to the floor numbered three, in a certain way X is related to which of the following floor numbers following the same way ?

- (1) Seven                      (2) Nine  
(3) Five                        (4) Eight  
(5) Four

6. U lives on which of the following floor numbers ?

- (1) Five  
(2) Four  
(3) Nine  
(4) Three  
(5) Other than those given as options

7. Four of the following five are alike in a certain way as per the given arrangement and thus form

a group. Which of the following does not belong to that group ?

- (1) QU                        (2) VW  
(3) SR                        (4) PR  
(5) XT

8. How many persons live below the floor on which W lives ?

- (1) One  
(2) Two  
(3) More than three  
(4) Three  
(5) None

9. Which of the following statements is true as per the given arrangement ?

- (1) Only three people live between S and V.  
(2) None of the given statements is true  
(3) Q lives immediately above T.  
(4) More than three persons live above R.  
(5) U lives on the floor numbered nine.

10. How many such pairs of digits are there in the number 71864392 (both in forward and backward directions), each of which has as many digits between them as in the arithmetic series ?

- (1) More than three  
(2) None                      (3) Three  
(4) One                        (5) Two

11. Four of the following five are alike in a certain way (based on their positions of alphabets in the English alphabetical series) and hence form a group. Which is the one that does not belong to that group ?

- (1) RQT                        (2) NPL  
(3) FHD                        (4) KMI  
(5) WYU

**Directions (12-16) :** Study the following information to answer the given questions.

Nine persons, B, C, D, E, L, M, N, O and P are seated in a straight line facing north, with equal distance between each other, but not necessarily in the same order. As many people sit to the left of E as to the right of E. Only one person sits between E and O. L sits third to the left of P. P is not an immediate neighbour of O. Neither P nor D sits at any of the extreme ends of the line. Only three persons sit between B and C. B is not an immediate neighbour of E. The number of people sitting between B and E is double as that between E and N.

12. Who sits third to the right of B ?  
 (1) E (2) O  
 (3) N (4) L  
 (5) No one as B sits at one of the extreme ends of the line
13. 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 ?  
 (1) C, E (2) M, D  
 (3) O, C (4) B, L  
 (5) D, B
14. Which of the following is true with respect to M as per the given arrangement ?  
 (1) M sits second to the left of O.  
 (2) M is an immediate neighbour of L.  
 (3) More than two people sit between D and M.  
 (4) None of the given options is true  
 (5) M sits at one of the extreme ends of the line.
15. Who amongst the following sit exactly between L and P ?  
 (1) E, N (2) M, O  
 (3) B, N (4) C, O  
 (5) D, E
16. In which of the given pairs of people, is odd number of people sitting between them ?  
 (1) E, M (2) B, M  
 (3) L, C (4) L, P  
 (5) P, O

**Directions (17-21) :** Study the following information to answer the given questions.

Gaurav watches seven movies viz. Gladiator, Braveheart, Titanic, Inception, Chinatown,

Avatar and Passion on seven different days of the same week, starting from Monday and ending on Sunday, but not necessarily in the same order. Thus on one day he watches only one movie.

Gaurav watches Inception on Friday. He watches only one movie between Inception and Titanic. He watches only three movies between Titanic and Gladiator. He watches only two movies between Titanic and Chinatown. Gaurav watches Avatar immediately before the day he watches Titanic. He watches Passion on one of the days after he watches Avatar.

17. How many movies does Gaurav watch between Braveheart and Passion ?  
 (1) None (2) Three  
 (3) One (4) Two  
 (5) Four
18. 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 ?  
 (1) Wednesday-Avatar  
 (2) Friday-Braveheart  
 (3) Thursday-Titanic  
 (4) Saturday-Inception  
 (5) Sunday-Chinatown
19. Which of the following is true as per the given arrangement ?  
 (1) Gaurav watches Inception on the day immediately after the day on which he watches Braveheart.  
 (2) None of the given statements are true.  
 (3) Gaurav watches only two movies between Avatar and Chinatown.  
 (4) Gaurav watches Passion on Wednesday.  
 (5) Gaurav watches Gladiator on Sunday.
20. On which day of the week does Gaurav watch Avatar ?  
 (1) Saturday (2) Sunday  
 (3) Tuesday (4) Wednesday  
 (5) Thursday
21. Which movie does Gaurav watch on Monday ?  
 (1) Chinatown  
 (2) Gladiator  
 (3) Titanic  
 (4) Braveheart  
 (5) Passion

**Directions (22-26) :** In these questions, relationship between different elements is shown in the statement(s). The statement(s) are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

**Give answer :**

- (1) If **only** conclusion I is true  
 (2) If **both** conclusions I and II are true  
 (3) If **either** conclusion I or II is true  
 (4) If **only** conclusion II is true  
 (5) If **neither** conclusion I nor II is true
22. **Statements :**  $T = V \leq R < B, T \leq D$   
**Conclusions :** I.  $D \geq R$   
 II.  $B \leq T$
23. **Statements :**  $R < O \geq E; Y \geq O > C$   
**Conclusions :** I.  $Y > R$   
 II.  $E < C$
24. **Statements :**  $P > R = S \geq Q; M \leq R$   
**Conclusions :** I.  $M < P$   
 II.  $Q \leq M$
25. **Statements :**  $H < M \geq I > N = C \geq R$   
**Conclusions :** I.  $C < H$   
 II.  $M > R$
26. **Statements :**  $R < O \geq E; Y \geq O > C$   
**Conclusions :** I.  $Y = E$   
 II.  $Y > E$
27. In a certain code language, 'give me call' is coded as 'jo kl mx' and 'call for me' is coded as 'mx jo st'. How will 'for' be coded as in the given code language ? (**Note :** all codes are two letter codes only)  
 (1) Either 'mx' or 'jo'  
 (2) Either 'jo' or 'kj'  
 (3) kj  
 (4) mx  
 (5) st
- Directions (28-32) :** In these questions, two/three statements followed by two conclusions are given. You have to take the 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 disregarding commonly known facts.

**Give answer :**

- (1) If **only** conclusion I is true  
 (2) If **both** conclusions I and II are true  
 (3) If **either** conclusion I or II is true  
 (4) If **only** conclusion II is true  
 (5) If **neither** conclusion I nor II is true



- (1) 48 (2) 45  
 (3) 40 (4) 46  
 (5) 41

45. The number of Professors in Universities J and K together is approximately what percent more than the number of Assistant Professors in University L?

- (1) 22 (2) 8  
 (3) 35 (4) 15  
 (5) 18

46. What is the average number of Assistant professors in Universities J, L and M?

- (1) 139 (2) 138  
 (3) 135 (4) 137  
 (5) 132

**Directions (47-51) :** What value will come in place of question mark (?) in the given questions? (You are not expected to calculate the exact value)

47.  $344 \div 4.99 + 144.08 \div 8.89 = ?$

- (1) 119 (2) 85  
 (3) 43 (4) 54  
 (5) 70

48.  $\sqrt{?} \times 359.88 \div 12.01 = 289 - 109.992$

- (1) 4 (2) 16  
 (3) 64 (4) 36  
 (5) 1

49.  $43.99 \times 20.001 - 1439 \div 6 = ?$

- (1) 500 (2) 640  
 (3) 540 (4) 600  
 (5) 680

50.  $459.85 + 519.82 = ?\%$  of 1399.92

- (1) 90 (2) 70  
 (3) 75 (4) 50  
 (5) 80

51.  $40\%$  of  $249 \div 4 + ? = 6.999^2$

- (1) 24 (2) 12  
 (3) 42 (4) 56  
 (5) 34

52. A starts a small business with ₹ 3,600/-. At the end of few months from the start of business, B joined the business with ₹ 4,000/-. If the annual profit between A and B was divided between them in the respective ratio of 6 : 5, then B joined the business after how many months from the start of the business?

- (1) Four (2) Two  
 (3) Six (4) Five  
 (5) Three

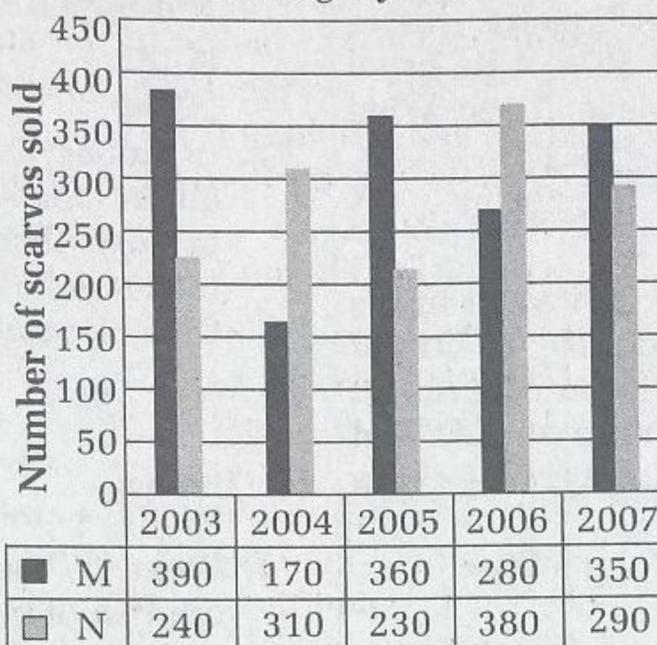
53. The sum of the dimensions of a room (i.e. length, breadth and height) is 24 m and its length, breadth and height are in the ratio of 8 : 7 : 5 respectively. If the

room to be painted at the rate of ₹ 12 per  $m^2$ , what would be the total cost incurred on painting only the four walls of the room (in ₹)?

- (1) ₹ 2,592/- (2) ₹ 2,648/-  
 (3) ₹ 2,848/- (4) ₹ 2,120/-  
 (5) ₹ 1,956/-

**Directions (54-58) :** Refer to the graph and answer the given questions.

**Data related to number of scarves sold by two stores (M and N) during 5 years**



54. If the respective ratio between total number of scarves sold by stores M and N together in 2003 and that in 2006 is 7 : 11, what is the total number of scarves sold by stores M and N together in 2008?

- (1) 880 (2) 1100  
 (3) 660 (4) 770  
 (5) 990

55. If the total number of scarves sold by stores M and N together in 2010 is 105% of that in 2004, what is the total number of scarves sold by stores M and N together in 2010?

- (1) 508 (2) 524  
 (3) 520 (4) 504  
 (5) 512

56. Number of scarves sold by store M decreased by what percent from 2005 to 2006?

- (1)  $18\frac{1}{3}\%$  (2)  $22\frac{2}{9}\%$   
 (3)  $32\frac{4}{9}\%$  (4)  $24\frac{4}{3}\%$   
 (5)  $20\frac{2}{3}\%$

57. What is the difference between total number of scarves sold by store M in 2003 and 2004

together and total number of scarves sold by store N in 2006 and 2007 together?

- (1) 150 (2) 130  
 (3) 90 (4) 100  
 (5) 110

58. What is the average number of scarves sold by store N in 2005, 2006 and 2007?

- (1) 310 (2) 280  
 (3) 220 (4) 290  
 (5) 300

59. A boat takes a total time of 8 hours to travel 63 km upstream and the same distance downstream. The speed of the current is  $\frac{1}{8}$ th of the speed of the

boat in still water. What is the speed of the boat in still water? (in km/h)

- (1) 32 (2) 24  
 (3) 16 (4) 8  
 (5) 36

60. P, Q and R have a certain amount of money with themselves. Q has 25% more than what P has, and R has  $\frac{1}{5}$ th of what Q has. If P, Q and

R together have ₹ 150/-, then how much money does P alone have? (₹ in)

- (1) 40 (2) 70  
 (3) 80 (4) 60  
 (5) 50

61. In a class, the average weight of 40 boys is 65 kg and that of 50 girls is 60 kg. After a few days, 40% of the girls and 50% of the boys leave. What would be the new average weight of the class (in kg)? Assume that the average weight of the boys and the girls remains constant throughout.

- (1) 65 (2) 62  
 (3) 68 (4) 55  
 (5) 58

**Directions (62-66) :** In these questions, two equations numbered I and II are given. You have to solve both the equations and choose the appropriate option.

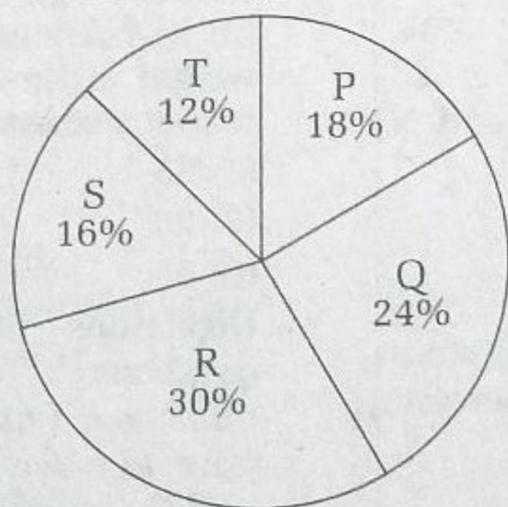
**Give answer :**

- (1) If  $x < y$   
 (2) If  $x > y$   
 (3) If  $x \geq y$   
 (4) If  $x \leq y$   
 (5) If relationship between x and y can not be determined

62. I.  $x^2 - x - 12 = 0$   
 II.  $y^2 + 4y + 4 = 0$
63. I.  $2x^2 - 15x + 27 = 0$   
 II.  $2y^2 - 23y + 63 = 0$
64. I.  $x^2 + 11x + 28 = 0$   
 II.  $5y^2 + 27y + 28 = 0$
65. I.  $x^2 - 11x + 30 = 0$   
 II.  $y^2 - 15y + 56 = 0$
66. I.  $3x^2 + 16x + 21 = 0$   
 II.  $2y^2 + 15y + 25 = 0$
67. At its usual speed, a train of length L metre crosses platform 300 m long in 25 sec. At 50% of its usual speed, the train crosses a vertical pole in 20 sec. What is the value of L?  
 (1) 160 m (2) 260 m (3) 200 m  
 (4) 310 m (5) 350 m
68. Jar A has 36 litre of mixture of milk and water in the respective ratio of 5 : 4. Jar B which had 20 litre of mixture of milk and water, was emptied into Jar A, and as a result in Jar A, the respective ratio of milk and water becomes 5 : 3. What was the quantity of water in Jar B?  
 (1) 5 litre (2) 3 litre (3) 8 litre  
 (4) 2 litre (5) 1 litre
69. Three years ago, the respective ratio between A's age at that time and B's age at that time was 9 : 5. A's age two years hence will be 17 years more than B's age five years hence, what is B's present age?  
 (1) 26 years (2) 27 years (3) 28 years  
 (4) 24 years (5) 23 years

**Directions (70-74) :** Refer to the pie chart and answer the given questions.

**Percentage of bags available in different stores in November 2011**  
**Total number of bags available in all the stores together = 800**



70. In November,  $\frac{1}{12}$  of the available bags in store Q remained unsold and  $\frac{3}{15}$  of the available bags in store

T remained unsold. How many bags were sold by stores Q and T together in November?

- (1) 246 (2) 254 (3) 248  
 (4) 252 (5) 268
71. What is the difference between the average number of bags available in stores P and Q together and the average number of bags available in stores R and S together?  
 (1) 16 (2) 15 (3) 18  
 (4) 21 (5) 12
72. The respective ratio between the number of bags available in store R in December and that available in the same store in November was 7 : 6. How many bags were available in store R in December as compared to November?  
 (1) 32 (2) 28 (3) 40  
 (4) 12 (5) 80
73. In January 2012, the total number of bags available in all the stores together was 40 more than that available in November. What was the percentage increase in the total number of bags available in all the stores together from November to January?  
 (1)  $7\frac{1}{2}\%$  (2) 5% (3)  $6\frac{1}{2}\%$   
 (4) 4% (5)  $4\frac{1}{2}\%$
74. What is the central angle corresponding to the number of bags available in store Q? (in degree)  
 (1)  $83.2^\circ$  (2)  $86.4^\circ$  (3)  $82.5^\circ$   
 (4)  $88.6^\circ$  (5)  $84.2^\circ$

**Directions (75-79) :** What will come in place of question mark (?) in the given number series?

75. 455 212 131 104 95 ?  
 (1) 84 (2) 92 (3) 45  
 (4) 61 (5) 49
76. 2 3 8 27 112 ?  
 (1) 565 (2) 650 (3) 316  
 (4) 290 (5) 430
77. 45 57 67 75 81 ?  
 (1) 89 (2) 85 (3) 105  
 (4) 91 (5) 78
78. 36 37 33 42 26 ?  
 (1) 51 (2) 41 (3) 61  
 (4) 45 (5) 49
79. 5 7.5 15 37.5 ? 393.75  
 (1) 80 (2) 112.5 (3) 160  
 (4) 48 (5) 72
80. The sum of a series of 5 consecutive odd numbers is 225. The second number of this series is 15 less than the second lowest number of another series of 5 consecutive even numbers. What is 60% of the highest number of this series of consecutive even numbers?  
 (1) 36.0 (2) 34.6 (3) 38.4  
 (4) 40.8 (5) 39.2