

EXPLANATIONS

For General Mental Ability, Logical Reasoning & Analytical Ability Test-I

1. a, The first two letters of the first group are each moved two steps forward and the last two letters are each moved one step forward to obtain the corresponding letters of the second group.
2. d, The first and third letters of the first group are each moved one step backward while the second and fourth letters are each moved one step forward to obtain the corresponding letters of the second group.
3. c, Each letter of the first group is moved five steps backward to obtain the corresponding letter of the second group.
4. b, The first and fourth letters of the first group are each moved three steps forward while the second and third letters are each moved five steps forward to obtain the corresponding letters of the second group.
5. d, The first and third letters of the first group are each moved four steps backward while the second and fourth letters are each moved five steps forward to obtain the corresponding letters of the second group.
6. d, In each set, $\frac{1\text{st number} + 3\text{rd number}}{2}$
= 2nd number.
7. d, In each set, 2nd number = (1st number + 9).
and, 3rd number = (2nd number + 9)
8. d, Each set contains cubes of three consecutive natural numbers in order.
9. a, Each set contains squares of three alternate natural numbers in reverse order.
10. b, In each set, second number is the square of the first number and the third number is obtained by reversing the order of the digits of the second number.
11. d, In each set, (3rd number \times 2) + 1st number = 2nd number.
12. b, In each set, 1st number = (2nd number)² - 1;
and 2nd number = (3rd number)² - 1.
13. d, Each set consists of prime numbers only.
14. d, Each set consists of even numbers only whose H.C.F. is 2.
15. d, Each set consists of numbers which are obtained by multiplying a certain number by 9, 7 and 5 respectively.
- Thus, in the given set, 63
= 7×9 , 49 = 7×7 , 35 = 7×5
- Similarly,
81 = 9×9 , 63 = 9×7 , 45 = 9×5
16. d, In all other pairs, first is the head of the second.
17. a, In all other pairs, first is an alloy of the second.
18. a, In all other pairs, the two words are antonyms of each other.
19. d, In all other pairs, first is an essential constituent of the second.
20. d, In all other pairs, second is a part of the first
21. d, The first digits of the numbers are 4, 5, 6, 7,... .The second digits are 3, 4, 5, 6 The third digits are 6, 7, 8,9,... and the last digits are 8, 9, 10, 11
22. a, $\frac{1}{24} \times 2 = \frac{1}{12}$, $\frac{1}{12} \times 3 = \frac{1}{4}$, $\frac{1}{4} \times 4 = 1$, ... and so on.

23. c, The sum of 3 numbers is the next number.

24. b, The sequence is + 2, + 4, + 6, + 8, ... and so on.

25. d, The sequence is + 3, + 5, + 7, + 9, ... and so on.

26. a, The sequence is 13 -1, 23 -1, 33 -1, 43 -1, ... and so on.

27. b, The sequence is -6, -5, -4, -3, ... and so on.

28. c, The sequence is $\times \frac{1}{6}, \times \frac{1}{5}, \times \frac{1}{4}, \dots$ and so on.

29. b, The sequence is + 8, + 12, + 16, + 20, ... and so on.

30. d, (Number \times 3) + 1 is the next number.

31. d, Letters of code follow the respective letters of word.

32. b, Last two letters of word appear as first two of the code, third letter remains the same, then first two letters of the word appear as last two letters of code.

Solutions: Letters of words are coded as a specific number. Same numbers shall apply to the similar letter in question word.

33. b,

34. d,

35. c,

36. a,

37. a, Numerics 1 to 26 are assigned to alphabets in sequence then

B A N D R A =

$$2 + 1 + 14 + 4 + 18 + 1 = 40,$$

D U M D U M =

$$4 + 21 + 13 + 4 + 21 + 13 = 76$$

38. d, R = 18; $18 \times 2 = 36$

$$\text{RAT} = 18 + 1 + 20 = 39; 39 \times 2 = 78$$

$$\text{FAN} = 6 + 1 + 14 = 21; 21 \times 2 = 42$$

39. d, The code is number of letters in the word less one.

$$40. \text{ c, Here, } \text{AT} = 1 \times 20 = 20$$

$$\text{RAT} = 18 \times 1 \times 20 = 360$$

$$\text{CAT} = 3 \times 1 \times 20 = 60$$

41. b, Codes for Alphabet start from 5, ie, A = 5, B = 6, C = 7 and so on.

42. d, C O N S U M E R P R O D U C E R

3 15 14 19 21 13 5 18 16 18 15 4 21 3 5 18

3 6 5 10 3 4 5 9 7 9 6 4 3 3 5 9

Solutions (Q. Nos. 43 to 48) One numeric code is used for one word. And same rule is applied to all the sentences. Answer can be found by associating common words with common numbers.

43. d,

44. c,

45. b,

46. d,

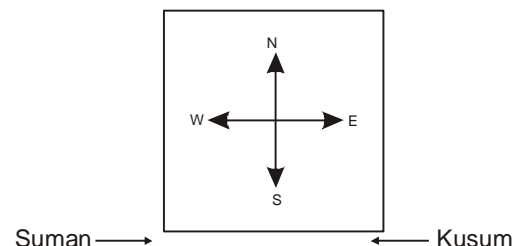
47. c,

48. d,

49. a, Number 1 to 26 are assigned to alphabet A to Z. The numbers of respective alphabets are codes.

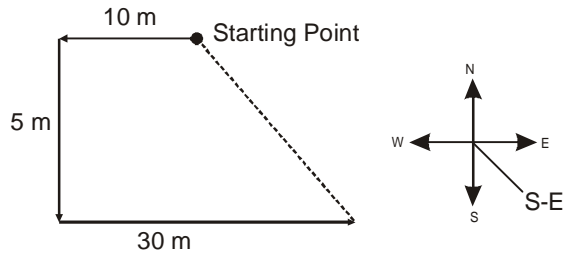
50. d, One numeric code is used for one word. And same rule is applied to all the sentences. Answer can be found by associating common words with common numbers.

51. a, Rama \longrightarrow \longleftarrow Uma



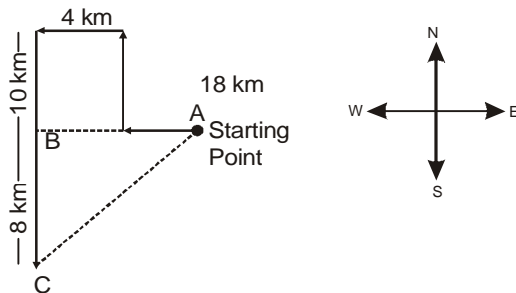
So, the correct option is (b).

52. c.,



So, Kartik is in South-East direction from starting point.

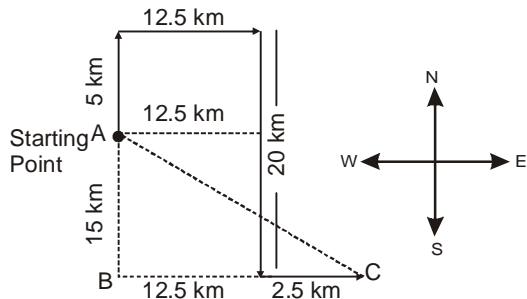
53. a,



$$AC = \sqrt{8^2 + 6^2}$$

$$AC = 10 \text{ km}$$

54. b,



$$AC = \sqrt{15^2 + 15^2}$$

$$= \sqrt{450}$$

$$AC = 21.21 \text{ km}$$

55. d, Musician who are dances but not engineers

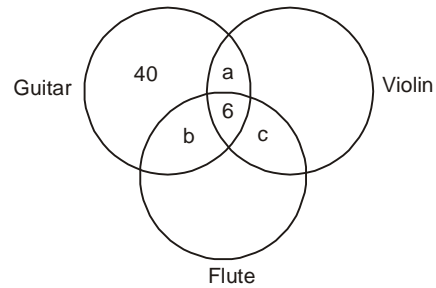
$$= 10 + 5 = 15$$

56. b, Total number of females are

$$= 11 + 8 + 25 + 30 + 12 + 5 + 26 = 117$$

57. d, Engineers who neither give music nor

$$\text{dance are} = 32 + 11 = 43$$



58. d,



10th to the left

9th from right end is V and 10th to the left of V is H.

59. a,



15th from the left end

15th from the left end is O and 10th to the left of O is E.

60. a, According to the question, in the given arrangements not any number is immediately preceded by a symbol and immediately followed by a letter.

61. b, Required element = (22 - 9)

$$= 13^{\text{th}} \text{ to the right} = i$$

According to the question, in the given arrangements.

62. c, Two such symbols 5δR and 2#U are immediately preceded by a number and immediately followed by a letter.

63. d, After dropping all the number, the given arrangement order is as follow

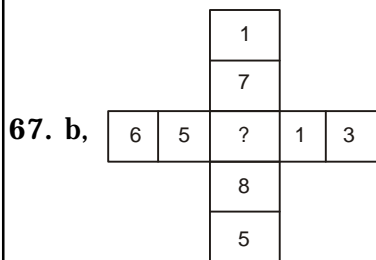


64. c, According to the question, in the given arrangements two such consonants 9BJ

and 8TN are immediately preceded by a number and immediately followed by another consonants.

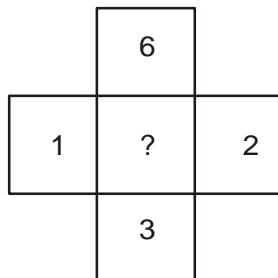
65. d, Except 'J9E' all other group are following same nature in the given arrangements.

66. c, $\sqrt{20+29} = 7$ (Row wise). The missing number is $\sqrt{200+200} = 20$.



If we find out the difference between adjacent digits.

Then,



Now, $6 \times 2 - 3 \times 1 = 12 - 3 = 9$

68. b, In the first figure :

$$6 = 1 + 5$$

$$2 = 1 + 1$$

$$4 = 2 + 2$$

So, in second figure

$$5 = 3 + 2$$

$$7 = 1 + 6$$

$$8 = 3 + 5$$

69. d, $5 @ 6 = 5^2 + 6^2 = 61$

$$8 @ 10 = 8^2 + 10^2 = 164$$

$$7 @ 9 = 7^2 + 9^2 = 130$$

70. a, $20 - 2 = 20, 25 - 4 = 50$

$$\Rightarrow 20 \times 20 \times \frac{2}{2} = 20, 25 \times 2 = 50$$

Similarly, $24 - 6 = 24 \times 24 \times \frac{6}{2} = 72$

71. c, $(\sqrt{49} - \sqrt{36}) \times 3 = 3; (\sqrt{100} - \sqrt{49}) \times 3 = 9$

The missing number is

$$(\sqrt{81} - \sqrt{36}) \times 3 = (9 - 6) \times 3 = 9 (20 - 15)^3 = 125$$

72. d, $(2 - 1)^3 = 1$ (column wise). The missing number is $(20 - 15)^3 = 125$

73. a, $\left(\frac{18-14}{2}\right)^2 = 4, \left(\frac{20-10}{2}\right)^2 = 25$

The missing number is

$$\left(\frac{10-2}{2}\right)^2 = \left(\frac{8}{2}\right)^2 = 16.$$

74. c, $\sqrt{3 \times 9 \times 3} = 9$, the missing number is $\sqrt{8 \times 4 \times 2} = 8$

75. d, $\left(\frac{16}{4}\right) = 4$ (column wise). The missing

number is $\left(\frac{56}{8}\right) = 7$

The coding is done in the binary system.

Solutions (76 to 80)

= means not equal to (\neq)

% means either greater than or equal to (\geq)

< means neither greater nor equal means less than ($<$)

\neq means neither equal to nor smaller than means greater than ($>$)

\geq means neither smaller nor greater means equal to ($=$)

76. c, $E = F$, $F \neq O$, $O < E$

$E = F$ and $O < E$ means

O is neither greater than nor equal to E and F is greater than O follows.

Hence, conclusions I and II follow

77. b, $J \neq L$, $L < A$, $J = A$

L is less than A and $J = A$ means L is less than J also.

Conclusion I is $L > A$ does not follow and

Conclusion II is $J > L$ also does not follow.

Hence, conclusions I and II does not follow.

78. a, $U \geq T$, $T < K$, $K > S$

The exact position of T and S are not known.

Conclusion I states that $U \geq S$ does not follow and

Conclusion II states that $S \geq T$ also does not follow.

79. d, $K \geq R$, $R > P$, $P \neq O$

$K \geq R > P$ means K is greater than P .

Conclusion I states that $K < R$ does not follow.

Conclusion II states that $K > P$ follows.

80. c, $G > J$, $J < N$, $N > P$

The exact position of J and P are not known.

Conclusion I states that $P = J$ does not follow.

Conclusion II states that $G > N$ also does not follow.

$$A \oplus B \Rightarrow A \geq B$$

$$A \phi B \Rightarrow A > B$$

$$A \textcircled{R} B \Rightarrow A = B$$

$$A @ B \Rightarrow A < B$$

$$A \textcircled{C} B \Rightarrow A \leq B$$

**For Any Help & Guidance
Call Our
Course
Director**

Mr. S.A.Majid
+91 9911626661