

NUMERICAL ABILITY

1. (e) 2. (c) 3. (a) 4. (d) 5. (b) 6. (e) 7. (d) 8. (c) 9. (d) 10. (a)
 11. (a) 12. (c) 13. (e) 14. (a) 15. (e) 16. (b) 17. (c) 18. (d) 19. (d) 20. (a)
 21. (e) 22. (d) 23. (d) 24. (b) 25. (a) 26. (b) 27. (c) 28. (a) 29. (c) 30. (c)
 31. (d) 32. (b) 33. (e) 34. (e) 35. (c)

REASONING ABILITY

36. (b) 37. (c) 38. (a) 39. (a) 40. (b) 41. (e) 42. (b) 43. (d) 44. (a) 45. (c)
 46. (b) 47. (c) 48. (b) 49. (b) 50. (d) 51. (b) 52. (d) 53. (b) 54. (b) 55. (c)
 56. (b) 57. (a) 58. (b) 59. (e) 60. (b) 61. (d) 62. (c) 63. (b) 64. (b) 65. (b)
 66. (d) 67. (a) 68. (b) 69. (d) 70. (a)

ENGLISH LANGUAGE

71. (d) 72. (c) 73. (b) 74. (c) 75. (b) 76. (c) 77. (d) 78. (d) 79. (a) 80. (d)
 81. (d) 82. (e) 83. (b) 84. (c) 85. (b) 86. (b) 87. (d) 88. (d) 89. (a) 90. (d)
 91. (d) 92. (b) 93. (a) 94. (c) 95. (e) 96. (c) 97. (b) 98. (c) 99. (b) 100. (d)

1. (e) 8.88 88.8 88 69391.872

2. (c)

$$? \ 1\frac{4}{7} \ 1\frac{3}{5} \ 1\frac{1}{3} \ 1\frac{4}{7} \ 1\frac{3}{5} \ 1\frac{1}{3}$$

$$3 \ \frac{60}{105} \ \frac{63}{105} \ \frac{35}{105} \ 3 \ \frac{158}{105} \ 4 \ \frac{53}{105}$$

3. (a)

$$\frac{9}{18} \ \frac{2}{7.5} \ \frac{27}{5} \ \frac{9}{4} \ \frac{13.5}{3} \ 4.5$$

4. (d)
 ?% of 280 18% of 550 1438
 or, ?% of 280 1438 18% of 550
 or, ? $\frac{(1438 \times 18 \times 550)}{100}$

$$\frac{1438 \times 99}{280} \ 100 \ 16$$

5. (b)

$$\sqrt{\sqrt{2500}} \ \sqrt{\sqrt{961}} \ \sqrt{\sqrt{50}} \ 31 \ \sqrt{81} \ 9$$

 Now, $(?)^2 = 9$

$$? = 3$$

6. (e)

$$\sqrt{?} = 75$$

 Squaring on both the sides, we get

$$? = 75 \times 75 = 5625$$

7. (d)

$$\frac{21}{8} \ \frac{7}{72} \ \frac{1}{171} \ ?$$

 or, ? $\frac{21}{8} \ \frac{72}{7} \ \frac{1}{71} \ \frac{3}{19}$

8. (c)

$$? \ 4\frac{1}{2} \ 6\frac{2}{3} \ 5\frac{1}{3}$$

$$(4 \ 6 \ 5) \ \frac{3}{6} \ \frac{4}{6} \ \frac{2}{6} \ 15 \ \frac{9}{6} \ 16 \ \frac{1}{2}$$

9. (d)
 ? 79202 10132 30676 58658

10. (a)
 300% of 150 ? of 600
 or, ? of 600 = 45000 or, ? = 75

11. (a)
 Let the two-digit no. be $10x \ y$.
 Then, $(10x \ y) (10y \ x) = 36$
 or, $x \ y = 4$

12. (c)
 Reqd no. $\frac{2}{5} \ 200 \ \frac{3}{5} \ 125 \ 80 \ 75 \ 5$

13. (e)
 Let the breadth of the rectangular field be 'x' m. Then,
 length of the field will be $x \ \frac{15}{100} \ \frac{23x}{20}$

Now, $x \ \frac{23x}{20} = 460$
 or, $23x^2 = 460 \times 20$
 or, $x^2 = 20 \times 20$
 or, $x = 20$ m

14. (a)
 List price of calculator $\frac{8250}{30} \ 100$ Rs. 275

Deepa bought calculator in 275 0.70 Rs. 192.50

15. (e)

O, A, E	S	F	T	W	R
---------	---	---	---	---	---

When the vowels are always together, then treat all the vowels as a single letter then all the letters can be arranged in $6!$ ways and also all three vowels can be arranged in $3!$ ways. Hence, required no. of arrangement = $6! \times 3! = 4320$.

16. (b)

Distance covered in first two hours 70 2 140 km
 Distance covered in next two hours 80 2 160 km
 Distance covered in first four hours 140 160 300 km
 Remaining distance 345 300 45 km
 Now, this distance will be covered at the rate of 90 km/hr.

$$\text{time taken} = \frac{48}{90} \frac{1}{2} \text{ hour}$$

$$\text{Total time} = 4 \frac{1}{2} + 4 \frac{1}{2} \text{ hours.}$$

17. (c)

Quick Method:

Area of boundary $2(\text{width of boundary}) \times [\text{length} + \text{breadth of rectangular plot} + 2 \times \text{width of boundary}]$

$$2 \times 1 \times \frac{340}{2} + 2 \times 1 \times 344 = m^2$$

$$\text{cost of gardening} = 10 \times 344 = \text{Rs. } 3440$$

18. (d)

Let p and r be the principal amount and rate of interest respectively.

$$\text{Then, } \frac{p \cdot r \cdot 7}{100} = 1750$$

$$\text{or, } pr = 25000$$

$$\text{Now, SI} = \frac{p \cdot (r + 2) \cdot 7}{100}$$

We have to find the value of

$$\frac{p \cdot (r + 2) \cdot 7}{100} = \frac{p \cdot r \cdot 7}{100} + M = 1750$$

$M = SI$ when the rate of interest is 2% more.

When we solve this equation, we find that we have two variables and one equation. Therefore, Can't be determined is the correct answer.

20. (a)

$$\text{Reqd ratio} = 5 \frac{140}{100} : 7 \frac{150}{100} : 8 \frac{175}{100}$$

$$5 \cdot 140 : 7 \cdot 150 : 8 \cdot 175 = 2 : 3 : 4$$

21. (e)

$$\begin{array}{ccc} \text{Here, } 24 & 7^2 & 73 \\ & 73 & 6^2 & 109; \\ & 109 & 5^2 & 134 \\ & 134 & 4^2 & 150 \end{array}$$

$$150 \cdot 3^2 = 159$$

Hence, the question mark (?) should be replaced 73.

22. (d)

$$\begin{array}{ccc} 17 & 0.5 & 0.5 & 9 \\ & 9 & 1 & 1 & 10 \\ 10 & 1.5 & 1.5 & 16.5 \\ & 16.5 & 2 & 2 & 3; \\ 35 & 2.5 & 2.5 & 90 \end{array}$$

Hence, the question mark (?) should be replaced by 16.5

23. (d)

$$\begin{array}{ccc} 3 & 2 & 14 & 20 \\ 20 & 3 & 18 & 78 \\ 78 & 4 & 20 & 332 \\ 332 & 5 & 20 & 1680 \\ 1680 & 6 & 18 & 10098 \end{array}$$

Hence, the question mark should be replaced by 10098.

24. (b)

$$\begin{array}{ccc} 13 & 2 & 4 & 30 \\ 30 & 2 & 6 & 66 \\ 66 & 2 & 8 & 140 \\ 140 & 2 & 10 & 290 \\ 290 & 2 & 12 & 592 \end{array}$$

Hence, the question mark should be replaced by 290.

25. (a)

$$\begin{array}{ccc} 3 & 5 & 15 \\ 5 & 15 & 75 \\ 15 & 75 & 1125 \\ 75 & 1125 & 84375 \end{array}$$

26. (a)

We have

$$\begin{array}{ccc} 6,23898 & 99 & ? & 60,000 \\ ? & \frac{6,23,898}{60,000} & 99 & \frac{623898}{60,000} & 623898 \end{array}$$

$$1030$$

27. (c)

$$\text{We have, } \frac{4}{5} \frac{3}{7} \frac{6}{7} \frac{5}{9} \frac{4}{5} \frac{3}{7} \frac{7}{6} \frac{9}{5} \frac{18}{25}$$

28. (a)

$$(39998)^2 - 400^2 = 160000$$

29. (c)

We have

$$\sqrt{624.9995} - (4.9989)^2 = ? \frac{1}{4.9900865}$$

$$\sqrt{625} - (5)^2 = ? \frac{1}{5}$$

$$? \frac{1}{5} (25 - 25) = 10$$

30. (c)

$$\begin{array}{ccc} 989.001 & 100982 & 76.792 \\ 990 & 1 & 76.8 & 1066.8 \end{array}$$

31. (d)

$$\text{Required amount} = 1,20,000 \frac{13}{100} \frac{(100 \ 12)}{100}$$

$$1,20,000 \frac{13}{100} \frac{88}{100} \text{ Rs. } 13,728$$

32. (b)

$$\text{Required cost} = 1,20,000 \frac{(15 \ 14)}{100}$$

$$1,20,000 \frac{29}{100} \text{ Rs. } 34,800$$

33. (e) Required amount

$$1,20,000 \frac{(19 \ 11)}{11} \quad 1,20,000 \frac{8}{100} \text{ Rs. } 9600$$

34. (e) Estimated cost of furniture

$$1,20,000 \frac{13}{100} \text{ Rs. } 15,600$$

Estimated cost of miscellaneous items

$$1,20,000 \frac{8}{100} \text{ Rs. } 9600$$

Actual cost of furniture

$$\text{Rs. } 15,600 \frac{88}{100} \text{ Rs. } 13,728$$

Actual cost of miscellaneous items = Rs. 10,200

The total expenditure of the family in renovation of house

$$= \text{Rs. } 1,20,000 \text{ Rs. } [(15,600+9,600) + (13,728+10,200)]$$

$$\text{Rs. } 1,20,000 \text{ Rs. } 1,272 \text{ Rs. } 1,81,728$$

35. (c)

$$\text{Required per cent} \frac{10,200}{1,20,000} 100 \ 8.5\%$$

36. (b)

All banks are offices conversion Some offices are banks. But, conclusion I does not follow from this. Again, No office is a shop conversion No shop is a office. Hence, conclusion II follows.

37. (c)

Some states are capitals (I) + Some capitals are districts (I) = I + I = No conclusion. But conclusion I and II make a complementary pair (I-E). Thus, either I or II follows.

38. (a)

All coffees are teas (A) + All teas are snacks (A) = A + A = A = all coffees are snacks implication Some coffees are snacks. Hence conclusion I follows. Again, All teas are snacks (A) + All snacks are drinks (A) = A + A = A = All teas are drinks. Hence conclusion II does not follow.

39. (a) 40.(b)

(41-45) :

too much rush ru me be ... (i)

traffic hour starts ta no pa ... (ii)

it is rush hour do me pa sa ... (iii)

traffic is too much ru be do no ... (iv)

From (i) and (iii), rush me ... (v)

From (i) and (iv), too/much be/ru ... (vi)

From (ii) and (iii), hour pa ... (vii)

From (ii) and (iv), traffic no ... (viii)

From (iii) and (iv), is do ... (x)

From (iii), (v), (vii) and (x) it sa ... (xi)

41.(e) 42.(b) 43.(d) 44.(a) 45.(c)

(46-50) : The seating arrangement is given below:

V R Q S P X T W

n alphabetical order:

P Q R S T V W X

46.(b) 47.(b)

48.(b) Arranging in alphabetical order:

P Q R S T V W X

Only S retains its position.

49. (b)

50. (d) In all other options the second person of the pair sits third to the right of the first person of the pair.

51. (b)

Number arranged in ascending order

369 434 625 717 922

Exactly middle

Product of the first and the last digit of 625 = 6 5 30

52. (d) After interchanging the first and the last digit of each of the numbers, the numbers thus obtained are 963, 717, 229, 526, and 434 is the second lowest number. Sum of all the digits of 434 = 4 + 3 + 4 = 11

53. (b)

3 6 9 7 1 7 9 2 2

1 2 1 1 1 1 2 2

2 8 8 6 0 6 8 4 4

6 2 5 4 3 6

2 +2 1 +2 1 2

8 4 4 6 2 6

Among the newly formed numbers, 288 is the lowest one.

Read difference = 8 2 6

54. (b)

Highest number = 369

Third digit of the lowest number = 9

Now, $\frac{\text{First digit of the highest number}}{\text{Third digit of the lowest number}} = \frac{9}{9} = 1$

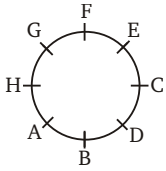
55. (c)

After arranging the digits in descending order within each number, the new numbers thus formed are

963 771 922 652 443

Second highest

(56-60) :



56.(b) 57.(a) 58.(b)

59. (e) In all the other options, only one person sits between the given persons.

60. (b)

61. (d) In all other options, the sequence is not correct.

62. (c) S E C T O R

T S R O E C

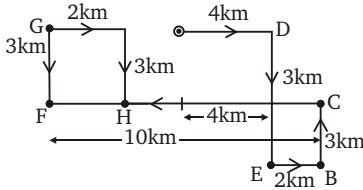
Reverse alphabetical order

S R Q P F B

P is fourth from the left.

(63-64) :

63. (b)



AG = 4 km

G is 4 km towards West from A.

64. (b)

65. (b)

Floor	Person
5	---
4	---
3	---
2	---
1	---

66. (d)

Give statement: A = C T < F ... (i)

K P > C ... (ii)

Now, from (i), we have A < F So, A > F is not true.

Hence, conclusion I is not true.

Again, combining (i) and (ii), we have

K P C T

We can't compare between k and T.

Hence, conclusion II is not true.

67. (a)

Give statements: R U ... (i)

B = M ... (ii)

R < M ... (iii)

W B ... (iv)

Combining all these statements, we have

U R M B W

Hence, conclusion I is true.

Again, combining all these statements, we have

U R M B W
M W

Thus, conclusion II is not definitely true.

68. (b)

Given statement : D > F > L N = O > S V = X

Now, from the statements we have

D F L N O S V X
N V

Hence, conclusion I is not true.

Again, from these statements we have

D F L N O S V X
O X

Hence, conclusion II is true.

69. (d)

Give statements : I < E > V ... (i)

E < G ... (ii)

V < H < J ... (iii)

Combining (i) and (ii), we have

I E G
I G

Hence, conclusion I is not true.

Again combining (i) and (iii), we have

E V H J

Can't compare E and J.

Hence, conclusion II is true.

70. (a)

Give statements: Q Z I N ... (i)

Y I ... (ii)

Now, from (i), we have

Q Z I N
Thus, Q N

Hence, only conclusion I follows.

But conclusion II does not follow.

- 71.(d) 72.(c) 73.(b) 74.(c) 75.(b) 76.(c) 77.(b)
 78.(d) 79.(a) 80.(e) 81.(d) 82.(e) 83.(b) 84.(c)
 85.(b) 86.(b) 87.(d) 88.(c) 89.(a) 90.(d) 91.(d)
 92.(b) 93.(a) 94.(c) 95.(e) 96.(c) 97.(b) 98.(c)
 99.(b) 100.(d)