

MOCK-2 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) $8.88 \times 88.8 \times 88 = 69391.872$

2. (c)

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

$$= 3 + \left(\frac{60+63+35}{105}\right) = 3 + \frac{158}{105} = 4\frac{53}{105}$$

3. (a)

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

4. (d)

$$?\% \text{ of } 280 + 18\% \text{ of } 550 = 1438$$
 or, $?\% \text{ of } 280 = 1438 - 18\% \text{ of } 550$
 or, $?\% = \frac{(1438 - 18\% \text{ of } 550)100}{280}$

$$= \frac{(1438 - 99)}{280} \times 100 = 16$$

5. (b)

$$\sqrt{\sqrt{2500} + \sqrt{961}} = \sqrt{50 + 31} = \sqrt{81} = 9$$
 Now, $(?)^2 = 9$
 $\therefore ? = 3$

6. (e)

$$\sqrt{?} = \pm 75$$
 Squaring on both the sides, we get

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

7. (d)

$$\frac{21}{8} \div \frac{7}{72} \times \frac{1}{171} = ?$$
 or, $?\% = \frac{21}{8} \times \frac{72}{7} \times \frac{1}{71} = \frac{3}{19}$

8. (c)

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

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

9. (d)

$$? = 79202 + 10132 - 30676 = 58658$$

10. (a)

$$300\% \text{ of } 150 = ? \text{ of } 600$$
 or, $?\% \text{ of } 600 = 45000$ 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. = $\frac{2}{5} \times 200 - \frac{3}{5} \times 125 = 80 - 75 = 5$

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

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

14. (a)
 List price of calculator $\frac{82.50}{30} \times 100 = \text{Rs. } 275$

Deepa bought calculator in $275 \times 0.70 = \text{Rs. } 192.50$

15. (e)

O, A, E	S	F	T	W	R
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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 = $70 \times 2 = 140$ km
 Distance covered in next two hours = $80 \times 2 = 160$ 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.

$$\therefore \text{time taken} = \frac{45}{90} = \frac{1}{2} \text{ hour}$$

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

17. (c)

Quick Method:

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

$$= 2 \times 1 \times \left[\frac{340}{2} + 2 \times 1 \right] = 344 \text{ m}^2$$

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

18. (d)

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

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

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

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

We have to find the value of

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

$M = \text{SI}$ 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)

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

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

21. (e)

$$\text{Here, } 24 + 7^2 = 73$$

$$73 + 6^2 = 109;$$

$$109 + 5^2 = 134$$

$$134 + 4^2 = 150$$

$$150 + 3^2 = 159$$

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

22. (d)

$$17 \times 0.5 + 0.5 = 9$$

$$9 \times 1 + 1 = 10$$

$$10 \times 1.5 + 1.5 = 16.5$$

$$16.5 \times 2 + 2 = 3;$$

$$35 \times 2.5 + 2.5 = 90$$

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

23. (d)

$$3 \times 2 + 14 = 20$$

$$20 \times 3 + 18 = 78$$

$$78 \times 4 + 20 = 332$$

$$332 \times 5 + 20 = 1680$$

$$1680 \times 6 + 18 = 10098$$

Hence, the question mark should be replaced by 10098.

24. (b)

$$13 \times 2 + 4 = 30$$

$$30 \times 2 + 6 = 66$$

$$66 \times 2 + 8 = 140$$

$$140 \times 2 + 10 = 290$$

$$290 \times 2 + 12 = 592$$

Hence, the question mark should be replaced by 290.

25. (a)

$$3 \times 5 = 15$$

$$5 \times 15 = 75$$

$$15 \times 75 = 1125$$

$$75 \times 1125 = 84375$$

26. (a)

We have

$$6,23898 \times 99 = ? \times 60,000$$

$$\therefore ? = \frac{6,23898 \times 99}{60,000} = \frac{623898 - 623898}{60,000}$$

$$\approx 1030$$

27. (c)

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

28. (a)

$$(399.98)^2 \approx 400^2 \approx 160000$$

29. (c)

We have

$$\sqrt{624.9995} + (4.9989)^2 = ? + \frac{1}{49900865}$$

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

$$\therefore ? \approx \frac{1}{5}(25 + 25) \approx 10$$

30. (c)

$$989.001 + 1.00982 \times 76.792$$

$$\approx 990 + 1 \times 76.8 \approx 1066.8$$

31. (d)

$$\begin{aligned} \text{Required amount} &= 1,20,000 \times \frac{13}{100} \times \frac{(100-12)}{100} \\ &= 1,20,000 \times \frac{13}{100} \times \frac{88}{100} = \text{Rs. } 13,728 \end{aligned}$$

32. (b)

$$\begin{aligned} \text{Required cost} &= 1,20,000 \times \frac{(15+14)}{100} \\ &= 1,20,000 \times \frac{29}{100} = \text{Rs. } 34,800 \end{aligned}$$

33. (e) Required amount

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

34. (e) Estimated cost of furniture

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

Estimated cost of miscellaneous items

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

Actual cost of furniture

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

Actual cost of miscellaneous items = Rs. 10,200

The total expenditure of the family in renovation of house

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

$$= \text{Rs. } 1,20,000 - \text{Rs. } 1,272 = \text{Rs. } 1,18,728$$

35. (c)

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

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	-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

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

55. (c)

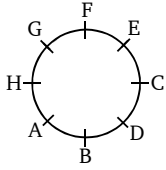
After arranging the digits in descending order within each number, the new numbers thus formed are

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.

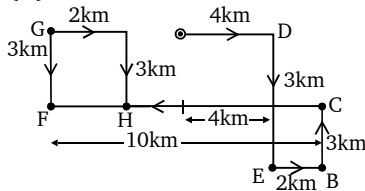
62. (c) S E C T O R

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: $A = C \leq T < F \dots$ (i)

$K \geq P > C \dots$ (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

$K \geq P > C \leq T$

We can't compare between k and T.

Hence, conclusion II is not true.

67. (a)

Give statements: $R \leq U \dots$ (i)

$B = M \dots$ (ii)

$R < M \dots$ (iii)

$W \geq B \dots$ (iv)

Combining all these statements, we have

$U \leq R < M = B \leq W$

Hence, conclusion I is true.

Again, combining all these statements, we have

$U \geq R < M = B \leq W$
 $M \leq W$

Thus, conclusion II is not definitely true.

68. (b)

Given statement : $D > F > L \leq N = O > S \geq V = X$

Now, from the statements we have

$D > F > L \leq N = O > S \geq V = X$
 $N > V$

Hence, conclusion I is not true.

Again, from these statements we have

$D > F > L \leq N = O > S \geq V = X$
 $O > X$

Hence, conclusion II is true.

69. (d)

Give statements : $I < E > V \dots$ (i)

$E < G \dots$ (ii)

$V < H < J \dots$ (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)

Given statements: $Q \geq Z > I \geq N \dots$ (i)

$Y \leq I \dots$ (ii)

Now, from (i), we have

$Q \geq Z > I \geq N$
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)