

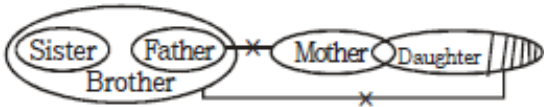
MOCK TEST - 5 (ANSWER KEY)

1. (4) 2. (4) 3. (5) 4. (2) 5. (2) 6. (5) 7. (1) 8. (2) 9. (4)
10. (3) 11. (3) 12. (1) 13. (4) 14. (4) 15. (4) 16. (1) 17. (1)
18. (4) 19. (2) 20. (4) 21. (3) 22. (1) 23. (5) 24. (2) 25. (4)
26. (1) 27. (4) 28. (5) 29. (3) 30. (1) 31. (4) 32. (5) 33. (3)
34. (4) 35. (2) 36. (1) 37. (2) 38. (3) 39. (5) 40. (4) 41. (2)
42. (2) 43. (5) 44. (3) 45. (3) 46. (4) 47. (4) 48. (4) 49. (1)
50. (5) 51. (4) 52. (4) 53. (3) 54. (1) 55. (3) 56. (5) 57. (1)
58. (1) 59. (3) 60. (3) 61. (1) 62. (3) 63. (3) 64. (3) 65. (4)
66. (1) 67. (4) 68. (3) 69. (2) 70. (3) 71. (2) 72. (1) 73. (4)
74. (4) 75. (5) 76. (3) 77. (1) 78. (5) 79. (2) 80. (4) 81. (3)
82. (4) 83. (5) 84. (1) 85. (4) 86. (4) 87. (2) 88. (3) 89. (5)
90. (1) 91. (1) 92. (3) 93. (2) 94. (4) 95. (5) 96. (1) 97. (3)
98. (2) 99. (5) 100. (5)

REASONING

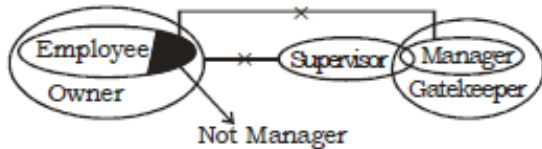
Solutions (1-5) :

(1-3) :



1. (4) 2. (4) 3. (5)

(4-5) :



4. (2) 5. (2)

Solutions (6-12) :

6. (5) 7. (1) 8. (2)
9. (4) 10. (3) 11. (3)
12. (1)

Solutions (13-17): In the first step one word is rearranged and in the second step one number is rearranged. These two steps are repeated alternately until all the words are arranged alphabetically in the reverse order and all the numbers are arranged in descending order.

13. (4)

Input : glass full 15 37 water now 85 67
Step I : water glass full 15 37 now 85 67
Step II : water 85 glass full 15 37 now 67
Step III : water 85 now glass full 15 37 67
Step IV : water 85 now 67 glass full 15 37
Step V : water 85 now 67 glass 37 full 15
Step V is the last step.

14. (4)

Step II : ultra 73 12 16 mail sort 39 kite
Step III : ultra 73 sort 12 16 mail 39 kite
Step IV : ultra 73 sort 39 12 16 mail kite
Step V : ultra 73 sort 39 mail 12 16 kite
Step VI : ultra 73 sort 39 mail 16 12 kite
Step VII : ultra 73 sort 39 mail 16 kite 12

15. (4) From the given step, Input cannot be determined.

16. (1)

Step II : tube 83 49 34 garden flower rat 56
Step III : tube 83 rat 49 34 garden flower 56
Step IV : tube 83 rat 56 49 34 garden flower
Step V : tube 83 rat 56 garden 49 34 flower
Step VI : tube 83 rat 56 garden 49 flower 34

17. (1)

Input : hunt for 94 37 good 29 48 book
Step I : hunt 94 for 37 good 29 48 book
Step II : hunt 94 good for 37 29 48 book
Step III : hunt 94 good 48 for 37 29 book
Step IV : hunt 94 good 48 for 37 book 29

Solutions (18-22) :

@ - ≥ \$ - ≤ % - > # - < © - =

18. (4)

Statement :

$A \geq B < C \leq D$

Conclusions :

I. $D > A$ II. $C > A$

19. (2)

Statement :

$M \leq N \geq P > Q$

Conclusions :

I. $P = M$ II. $Q < N$

20. (4):

Statement :

$E > F < G \geq H$

Conclusions :

I. $H < F$ II. $E > G$

21. (3)

Statement :

$J = K \leq L > M$

Conclusions :

I. $L = J$ II. $L > J$

22. (1)

Statement :

$W < X > Y = Z$

Conclusions :

I. $Z < X$ II. $Y < W$

| Date | Day | Exam | Time Duration |
|------------|-----------|-----------|---------------|
| 12th April | Wednesday | History | 65 mins |
| 13th April | Thursday | Maths | 55 mins |
| 14th April | Friday | English | 95 mins |
| 15th April | Saturday | Hindi | 105 mins |
| 16th April | Sunday | Off | Off |
| 17th April | Monday | Economics | 75 mins |
| 18th April | Tuesday | Science | 45 mins |

23. (5) 24. (2) 25. (4)

26. (1) 27. (4)

[28-32] :

28. (5) 29. (3) 30. (1)

31. (4) 32. (5)

[33-35] :

33. (3) Condition of the architectural structure can be improved by way of adequate finance, hence action III, that grant should be given to improve the condition of the structure, is the right course of action.

34. (4) In the statement, celebration of teacher's day in today's materialistic world is in question which means that the role and responsibilities of teachers should be seen in today's perspective. Hence, action III is the right course of action.

35. (2) The statement speaks of the failure of housing and urban development policies of the government. Hence, the policies in regard to urban housing should be reviewed.

Maths

36. (1) 64% of 950
 $? = 475 + 608 - 900 = 1083 - 900 = 183$

37. (2)

38. (3) $? = 534.596 + 61.472 - 496.708 - 27.271$
 $? = 596.068 - 523.979 = 72.089$

39. (5) $? = 16 \times 12 - 672 \div 21 + 211$
 or $? = 192 - 32 + 211$
 or $? = 160 + 211 = 371$

40. (4) $(\sqrt{5} - 2)^2 = ? - \sqrt{80}$

41. (2) The given series is
 $+(13 \times 1), +(13 \times 2), +(13 \times 4), +(13 \times 8), +(13 \times 16)$

42. (2) The given series is
 $+(-1)^3, +(2)^2, +(-3)^3, +(4)^2, +(-5)^3$

43. (5) The given series is
 $+(11 \times 1), +(11 \times 3), +(11 \times 5)^2, +(11 \times 7), +(11 \times 9)$ so next no. is 302.

44. (3) The given series is
 $-(9 \times 9), -(9 \times 8), -(9 \times 7), -(9 \times 6), -(9 \times 5)$

45. (3) The given series is
 $+(14)^2, +(13)^2, (12)^2, +(11)^2 + (10)^2$

46. (4) Approximate value can be given as
 $9230 - 5020 + 1500 = 10730 - 5020 = 5710$
 $\gg 5700$

47. (4) Approximate value can be given as
 $(1002 \div 92 \gg 20) \times 99 - 1300$
 $= 1980 - 1300 = 680 \gg 700$

48. (4) Approximate value can be given as
 $30\% \text{ of } 260 + 60\% \text{ of } 510 - 103$
 $= 78 + 306 - 103 = 384 - 103 = 281 \gg 280$

49. (1) Approximate value can be given as
 $(22)^2 (25)^2 + (13)^2 = 484 + 169 - 625$
 $= 653 - 625 = 28 \gg 25$

50. (5) Approximate value can be given as
 $\sqrt{2498} \gg \sqrt{2500} = 50$
 $\sqrt{626} \gg \sqrt{625} = 25 \quad \sqrt{99} \gg \sqrt{100} = 10$
 $? = 50 \times 25 \div 10 = 50 \times \frac{5}{2} = 125$

51. (4) I. $x^2 - 10x + 21 = 0$
 or $(x - 3)(x - 7) = 0$
 $x = 3, 7$

II. $y^2 - 16y + 63 = 0$
 or $(y - 9)(y - 7) = 0$
 $y = 9, 7$

$\square x < y$

52. (4) I. $x^2 - (16)^2 = (23)^2 - 56$

$\square x = \sqrt{729} = \pm 27$

II. $y^{1/3} - 55 + 376 = (18)^2$

$\square y = (3)^3 = 27$

$\square y \geq x$

53. (3) I. $\frac{12}{\sqrt{x}} + \frac{8}{\sqrt{x}} = \sqrt{x}$
 $20 = x$

II. $y - \frac{(18)^{9/2}}{\sqrt{y}} = 0$

$\square y = 83$

$\square x < y$

54. (1) I. $\sqrt{36x} + \sqrt{64} = 0$

or $x = -\frac{4}{3}$

II. $\sqrt{81y} + (4)^2 = 0$

or $y = -\frac{16}{9}$

$\square x > y$

55. (3) I. $\frac{25}{\sqrt{x}} + \frac{9}{\sqrt{x}} = 17\sqrt{x}$

or $34 = 17x$

$\square x = 2$

II. $\frac{\sqrt{y}}{3} + \frac{5\sqrt{y}}{6} = \frac{3}{\sqrt{y}}$

$\square y = \frac{3 \cdot 18}{21} = \frac{18}{7}$

$\square x < y$

56. (5) Side of the square = $\sqrt{1,024 \text{ cm}^2} = 32 \text{ cm}$
 Length of rectangle = $32 \times 2 \text{ cm} = 64 \text{ cm}$
 Breadth of rectangle = $32 - 12 = 20 \text{ cm}$
 Required ratio = $64 : 20 = 16 : 5$

57. (1) Sachin's score = $442 - 76 - (76 - 12) - 102 = 200$

58. (1) Let the length of Train B be $2x$ and that of Train A be x .

$$\text{Speed of Train A} = \frac{x}{20}$$

$$\text{Speed of Train B} = \frac{2x}{60} = \frac{x}{30}$$

$$\text{Ratio} = \frac{\text{Speed}_A}{\text{Speed}_B} = \frac{x \cdot 30}{20 \cdot x} = \frac{3}{2} = 3 : 2$$

59. (3) Cost of 1 kg of mangoes = $\frac{456}{19} = ₹24$

$$\text{Cost of 1 kg of apples} = 2 \times 48 = ₹96$$

$$\text{Cost of 1 kg of almonds} = \frac{50 \cdot 96}{8} = ₹600$$

$$\text{Cost of 3 kg of almonds and 4 kg of apples} = 3 \times 600 + 4 \times 96 = ₹2184$$

60. (3)

61. (1) Percentage decrease = $\frac{(6.4 - 5.3)}{6.4} \times 100 = 17.18$

62. (3) Girls in school B in 2009 = 590
 Boys and girls in school E in 2006 = $550 + 360 = 910$

$$\text{Percentage} = \frac{590}{910} \times 100 = 64.83\% \text{ (approx)}$$

63. (3) Average number of girls in school A over the years = $\frac{360 + 420 + 690 + 960 + 1290 + 1440}{6} = \frac{5160}{6} = 860$

64. (3) Required ratio = $\frac{\text{Boys in school C in 2009}}{\text{Girls in school A in 2009}} = \frac{870}{1290} = 29 : 43$

65. (4)

| Year | Total number of students |
|------|--------------------------|
| 2005 | 1310 |
| 2006 | 910 |
| 2007 | 510 |
| 2008 | 1110 |
| 2009 | 1330 |
| 2010 | 2350 |

66. (1) Male teachers in District F = 100
 Female teachers in District C

$$= \frac{28}{100} \cdot 4500 - 600 = 1260 - 600 = 660$$

$$\text{Female teachers in District B} =$$

$$\frac{16}{100} \cdot 4500 - 400 = 720 - 400 = 320$$

$$\text{Total} = 100 + 660 + 320 = 1080$$

67. (4) Female teachers in District D

$$= \frac{15}{100} \cdot 4500 - 100 = 675 - 100 = 575$$

$$\text{Total number of teachers in District A}$$

$$= \frac{14}{100} \times 4500 = 630$$

$$\text{Percentage} = \frac{575}{630} \times 100 = 91.2\% \gg 90\%$$

68. (3)

69. (2) Female teachers in District F

$$= \frac{6}{100} \cdot 4500 - 100 = 270 - 100 = 170$$

$$\text{Total number of teachers in District E}$$

$$= \frac{21}{100} \times 4500 = 945$$

$$\text{Difference} = 945 - 170 = 775$$

70. (3) $\frac{\text{Male teachers in District C}}{\text{Female teachers in District B}} = \frac{600}{320} = \frac{15}{8}$

ENGLISH LANGUAGE

96. (1) Replace 'on' with 'at'.
 97. (3) It should be 'into' in place of 'beneath'.
 98. (2) It will be only 'dissolve' in place of 'dissolving of'.
 99. (5) Note that 'to' is a preposition here.
 100. (5)