Answers

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

Hints and Solutions

1. There are four (even) and also untouched lining.

2. Out of three figures there are two qualities.

3. In all the figures there are five lining vertically or diagonally except figure (2) which has four lines.

4. There are two pairs group. One is ⊢→ and •—o . But in figure (2) It is not same.

5. In figure (3), a horizontal line with two circles at the end.

6. Black portion is in the inner part.

7. Lining figure ended with adverse direction figure but in the figure (3) it is in the same direction.

8. Circle is on the right side of the triangle but in the figure (3) it is on the left side.

9. A small point is placed at the centre in figure (2), but it is placed in between two lines in others.

10. All four figures are different in (4).

11. Figure (3) is the same as problem figure.

12. Figure (1) is the same as problem figure.

13. Figure (4) is the same as problem figure.

14. Figure (2) is the same as problem figure.

15. Figure (3) is the same as problem figure.

16. Figure (4) is the same as problem figure.

17. Figure (3) is the same as problem figure.

18. Figure (1) is the same as problem figure.

19. Figure (1) is the same as problem figure.

20. Figure (2) is the same as problem figure.

21. Mirror image of the left figure or water image of the upper figure.

22. Mirror image of the left figure or water image of the upper figure.

23. Mirror image of the left figure or water image of the upper figure.

24. Mirror and water image of the left section figure.

25. Mirror image of the left figure.

26. Mirror image of the left figure.

27. Mirror image of the left figure or water image of the upper figure.

28. Mirror image of the left figure.

29. Mirror image of the left figure or water image of the upper figure.

30. Same of left side figure.

31. One line increases respectively.

32. From figure (1) to (2) only triangle adverses its side. Hence, figure (3) to (4) only triagnle will adverse its side.

33. There should be three diameters now.

34. Black circle is 'out and in' is the respective figure. But in the answer figure (1) and (3) black circle is about to touch the line. Hence, answer will be (2).

35. Arrow and all new figures change their direction in the next figure.

36. There should be four touched triangles together.

37. Move the circle clockwise with black and white respectively.

38. Move 45°, 90° and then 135°, so answer figure is (4).

39. There should be four rectangles in the same form.

40. Black circle moves +1 section, +2 sections and now +3 sections.

41. From figure (1) to (2) diagonal lines (×) becomes (+) so, from (3) to answer figure (+) will become (×).

42. Consider (2) = (3), then 2 = answer figure (3)

43. Figure (1) the quarter portion of the next figure 'circle', hence the answer figure will be just four times of the figure (3).

44. From figure (1) to (2) a single line decreases, hence from figure (3) to answer figure, a single line will decrease.

45. From figure (1) to (2) figure (>) has been reduced and adversed move. Hence, in figure (3) a figure of (Δ) will reduced and adversed move. Hence, answer figure (2) will be the answer.

46. A lining big figure converted into three small without lining figure, hence now a big figure but without lining will convert into three small figures with lining.

47. Size of both figures from (1) to (2) interchanges. Hence, figure (3) will be as answer figure (1).

48. Compare the figure from (1) to figure (2), so that the compare the figure from (3) to answer figure (2).

49. Middle circle of figure (1) is placed in figure (2). Hence, middle rectangle of figure (3) will be placed in the answer figure. So (3) is the answer.

50. Both curve lines move clockwise from figure (1) to figure (2). So, both semicircle will move from figure to the answer figure (1).

51. Answer figure (3) will complete the square.

52. Answer figure (1) will complete the square.

53. Answer figure (1) will complete the square.

54. Answer figure (2) will complete the square.

55. Answer figure (4) will complete the square.

56. Answer figure (2) will complete the square.

57. Answer figure (3) will complete the square.

58. Answer figure (1) will complete the square.

59. Answer figure (1) will complete the square.

60. Answer figure (2) will complete the square.

61. The sum of nth term $= \frac{n(n+1)}{2}$. Here, $n = 25$

$$\therefore \text{Sum} = \frac{(1+25)\times 25}{2} = \frac{26\times 25}{2} = 25\times 13 = 325$$

62.
$$\begin{array}{r} 48)\ 144\ (3 \\ \underline{144} \\ \times \end{array}$$

Again,
$$\begin{array}{r} 48)\ 576\ (12 \\ \underline{48} \\ 96 \\ \underline{96} \\ \times \end{array}$$

$\therefore$ HCF = 48

63. $\left(0.50+0.15\times\frac{1}{0.05}\right)\times\frac{2}{7}$

$$= (0.50+3)\times\frac{2}{7} = 3.5\times\frac{2}{7} = \frac{7}{7} = 1$$

64. Approx. value of 16268 = 16270

65. Let the cost price = 100% = ₹ 750

Then, the selling price = 100 + 18 = 118%

$$= \frac{118\times 750}{100} = ₹\ 885$$

66. 6 and 24 becomes 624. Where $6\times 4 = 24$

Hence, 9 and $9\times 4 = 36$ becomes 936

$\therefore$ Next group will be 9, 36, 936.

67. 31st may to 30th June = 30 days

$\therefore$ In 30 days, divided by 7, remainder is 2

$\therefore$ Required day = Thursday + 2 = Saturday

68. Let the sum is 100%, then sum amounted with 13% per annum interest = 100 + 13 = 113%

$\because$ 113% = 2486

$\therefore$ $100\% = \frac{100\times 2486}{113} = ₹\ 2200$

69. Time taken in the journey

= 8 : 15 am of the next day – 5 : 50 pm

= 20 : 15 – 5 : 50 = 14 : 25 = 14 h 25 min

70. $\because$ 40 = 100% $\therefore$ $15 = \frac{15\times 100}{40} = 37.5\%$

71. Arrange it in descending order starting from 9. Hence, required number = 9876

72. 86450 is the greatest number.

73. Required sum = 4006 + 4055 + 44004 + 444

= 52509

74. Number = $17\times 23 + 7 = 391 + 7 = 398$

75. Required number = 12850 – (5618 + 3845)

= 12850 – 9463 = 3387

76. $2408\times 200 = 481600$

77. Required value = 0.008

78. $5-\left[\frac{5}{2}-\frac{3}{4}\right]+\left[\frac{7}{2}-\frac{5}{4}\right]$

$$= 5-\left[\frac{10-3}{4}\right]+\left[\frac{14-5}{4}\right] = 5-\frac{7}{4}+\frac{9}{4}$$

$$= \frac{20-7+9}{4} = \frac{22}{4} = \frac{11}{2} = 5\frac{1}{2}$$

79. Third number $= \frac{7980}{228} = 35$

80. $0.05\% = \frac{0.05}{100} = 0.0005$