91. Why are the writings of Hiuen Tsang considered as relevant?
(1) He had spent sometime in some royal courts
(2) He visited India as a trader and sight-seer
(3) He had travelled to many Asian countries
(4) He was a gentle observer

92. Chinese pilgrims commonly come to visit
(1) mountains
(2) villages
(3) deserts
(4) the native land of Buddha

93. What probably prompted Hiuen Tsang to travel to India?
(1) To study influence of Buddhism on Hindu religion
(2) To spread his religion in India
(3) To undertake pilgrimage and enhance knowledge
(4) To study the powerful cultural force in India

94. In the most ancient times, India was visited by except
(1) scholars (2) tradesman
(3) farmers (4) sight-seers

95. Hiuen Tsang did all of the following travel in India except
(1) travelled in deserts
(2) lived in villages
(3) followed the schedule in Monasteries
(4) taught in the university

Passage 5

Man-made satellites play a very important role in the modern man's world today. It helps in the study of space which has fascinated and inspired people for centuries and also helps us to find out more about the Earth and our Solar system. Advances in satellite technology have diversified to such an extent that it has improved our quality of life. Satellites help us communicate with people anywhere in the world, forecast weather, look at climate change and monitor disaster. Almost everyone today use satellite technology. Paying by credit card, or using an ATM machine-all involve satellite technology. Thus satellites have become an integral part of present-day man.

96. Satellites help in the study of
(1) animals (2) space
(3) plastics (4) bacteria

97. The word 'fascinated' used in the paragraph means
(1) pleased (2) interested
(3) affected (4) enthused

98. Which of the following sequences is correct as mentioned in the paragraph?
(1) Technology—Monitor—Study
(2) Monitor—Study—Technology
(3) Study—Monitor—Technology
(4) Technology—Study—Monitor

99. The phrase 'present-day man' means
(1) man who is present (2) man present everyday
(3) man of everyday (4) man of today

100. Satellite technology cannot be used for
(1) speaking to a friend in America
(2) washing and drying clothes
(3) taking out money from a bank
(4) warning against a storm

Answers

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

Hints and Solutions

1. All figures in serial numbers (1), (3) and (4) have two parallel lines drawn horizontally but in figure (2) the parallel lines are drawn vertically, therefore figure (2) is different from other remaining figures.

2. In the given figures all figures are quadrilaterals but figure (3) is a triangle. Therefore, figure (3) is different from other figures.

3. Considering the positions of two black small circles figure (4) is different from other figures.

4. All figures, have straight lines but figure (4) has a curved line which is different than the other figure.

5. A small circle has been drawn inside the figures in serial number (1), (2) and (4). But in figure (3) a small triangle has been drawn inside the figure (3).

6. Answer figure (3) resembles completely with the given problem figure.

7. In the problem figure the square has been divided into four equal parts by joining the mid points of the opposite sides. A 'W' type figure has been drawn at the centre of the square. Answer figure (2) resembles with the problem figure.

8. In problem figure signs of multiplication and addition are drawn under curved loop. Answer figure (4) resembles with the problem figure.

9. In the problem figure two diagonals of a square have been drawn intersecting each other. Mid point of the portion of the diagonals lying between the point of intersection and the upper are joined with two lines with the opposite vertices. The pattern in answer figure (1) resembles with the problem figure.

10. In the problem figure a blackened circle is followed by an empty circle. An arrow has been drawn horizontally pointing towards empty circle. The same figure pattern has been repeated in answer figure (2).

11. In the given pattern of the problem figure the missing part of this figure can be filled by answer figure (4) without changing the direction.

12. Shift answer figure (2) and put it on the missing part of the problem figure, it will complete the problem figure.

13. In the given positions of blackened circle and empty circle. In answer figure (3) will complete the given problem figure.

14. In the given problem figure answer figure (3) will complete the missing part of the problem figure.

15. Shift answer figure (1) on the missing part of the problem figure, if will complete the problem figure.

16. In problem figures one small lines are increasing in each problem figure. Therefore, answer figure (4) will occupy in the blank space.

17. Answer figure (1) will occupy the blank space.

18. In problem figures circles are moving in clockwise direction. Therefore, answer figure (2) will occupy the blank space.

19. In problem figures one small line and a small circle is increasing by one in subsequent figures. Therefore, answer figure (1) will occupy the blank space.

20. In problem figures the number of black shaded circles are increasing by (1) starting from zero. Therefore, answer figure (1) will occupy the blank space.

21. The square of the problem figure can be completed by turning the answer figure (2).

22. Answer figure (4) will be the correct figure which complete the square of the problem figure.

23. For completing the square of the problem figure, answer figure (2) should be turned and placed on the square.

24. For completing the problem figures, turn answer figure (2) and put it on the problem figure, we get the complete square of the problem figure.

25. Answer figure (3) will complete the square of the problem figure by shifting and turning.

26. As, men wear kurta, in the same way women wear saree.

27. As in problem figure (1) to (2), innermost design getting shade, in the same way changes occur in problem figure (3) to produce answer figure (3).

28. As in problem figure (1) to (2), whole figure rotate in either direction, in the same way changes occurs in problem figure (3) to produce answer figure (1).

29. As in problem figure (1) to (2), there is an increase of one design, in the same way changes occur in problem figure (3) to produce the answer figure (3).

30. As in problem figure (1) to (2), the two smaller lines adjoining main figure is disappeared, in the same way changes occur in problem figure (3), to produce the answer figure (4).

51. Number of sold bananas in March
$= 6 \times 12 \times 5 = 360$ bananas
Number of sold bananas in April
$= 3 \times 12 \times 5 = 180$ bananas
Number of sold bananas in May
$= 5 \times 12 \times 5 = 300$ bananas
Number of sold bananas in June
$= 2 \times 12 \times 5 = 120$ bananas
Number of sold bananas in July
$= 7 \times 12 \times 5 = 420$ bananas
Hence, number of sold bananas
$= 360 + 180 + 300 + 120 + 420$
$= 1380$ bananas

52. Lectures taken by Amit in a day = 2
Lectures taken by Raghav in a day = 5
Total number of lectures by Amit and Raghav
$= 2 + 5 = 7$
Total number of lectures in a week $= 7 \times 6 = 42$
Lectures taken by Gopal in a day = 4
Lectures taken by Pramod in a day = 3
Total number of lectures by Gopal and Pramod
$= 4 + 3 = 7$
Total number of lectures by Gopal and Pramod in a week $= 7 \times 6 = 42$
$\therefore$ Required difference $= 42 - 42 = 0$

53. Side of the square $= \frac{\text{Perimeter}}{4} = \frac{48}{4} = 12$ m
Area of the square = Side $\times$ Side
$= 12 \times 12 = 144\ m^2$

54. Previous total $= 20 \times 18 = 360$
New case $= 360 - 3 \times 20 = 360 - 60 = 300$
$\therefore$ New average $= \frac{300}{20} = 15$

55. Let numbers be $2x$ and $3x$
Then, $\frac{2x + 9}{3x + 9} = \frac{3}{4}$
$\Rightarrow \quad 4(2x + 9) = 3(3x + 9)$
$\Rightarrow \quad 8x + 36 = 9x + 27$
$\Rightarrow \quad 9x - 8x = 36 - 27 \Rightarrow x = 9$
$\therefore$ Numbers are $2 \times 9 = 18$
and $3 \times 9 = 27$

56. Volume of the box $= 3 \times 3 \times 3 = 27$ cu m

57. Time of start from Delhi = 9 : 10 am
Reaching time at Chandigarh = 4 : 20 pm
Time from 9 : 10 to 12 : 00 = 2 h 50 min
From 12 : 00 to 4 : 20 = 4 h 20 min
Total time taken = 7 h 10 min

58. Marks in Ist test = 18
Marks in IInd test = 22
Marks in (I + II) test = 18 + 22 = 40
Max. Marks = 25 + 25 = 50
$\because$ Marks in 50 = 40
$\therefore$ Marks in Percentage $= 40 \times 2 = 80\%$

59. Cost price $= 30 - 10 = ₹\ 20$

$$\text{Percentage profit} = \frac{\text{Profit} \times 100}{\text{Cost price}}$$
$$= \frac{10 \times 100}{20} = 50\%$$

60. $\because$ Empty part of the drum $= 1 - \frac{2}{3} = \frac{1}{3}$
If $\frac{1}{3}$ part requires = 50 L
Then, 1 part requires $= 50 \div \frac{1}{3} = 50 \times 3 = 150$ L

61. Time $= \frac{\text{Distance}}{\text{Speed}} = \frac{350}{75} = \frac{14}{3}$ h $= 4\frac{2}{3}$ h = 4 h 40 min

62. $\because$ Amount = ₹ 24800
Principal = ₹ 20000
$\therefore$ SI = Amount − Principal $= 24800 - 20000$
$= ₹\ 4800$

$$\text{Rate of interest} = \frac{SI \times 100}{P \times T}$$
$$= \frac{4800 \times 100}{20000 \times 2} = 12\%$$

63. Let the total journey be x km.
Then, $\frac{x}{3}$ is covered at 25 km/h, $\frac{x}{4}$ is at 30 km/h
Rest of the distance $= x - \frac{x}{3} - \frac{x}{4}$
$= \frac{12x - 4x - 3x}{12} = \frac{5x}{12}$
at the speed of 50 km/h
$\therefore$ Total time of journey
$= \frac{x}{75} + \frac{x}{120} + \frac{5x}{12 \times 50}$
$= \frac{18x}{600} = \frac{3x}{100}$ h
Average speed $= \frac{x}{\frac{3x}{100}} = \frac{100}{3} = 33\frac{1}{3}$ km/h

64. $\frac{\frac{7}{3} \times \frac{2}{3} \div \frac{3}{5}}{2 + 1\frac{2}{3}} = \frac{\frac{7}{3} \times \frac{2}{3} \times \frac{5}{3}}{2 + \frac{5}{3}} = \frac{\frac{70}{27}}{\frac{11}{3}}$
$= \frac{70 \times 3}{27 \times 11} = \frac{70}{99}$

65. Selling price of washing machine = ₹ 13489

Discount allowed = 18%

Let marked price of washing machine be ₹ x.

$$\therefore \quad x - \frac{18x}{100} = 13489$$

$$\Rightarrow \quad \frac{82x}{100} = 13489$$

$$\Rightarrow \quad x = \frac{13489 \times 100}{82}$$

$$\therefore \quad = ₹\ 16450$$

66. 90% of 300 + 30% of 90

$$= \frac{90 \times 300}{100} + \frac{30 \times 90}{100}$$

$$= 90 \times 3 + 3 \times 9$$

$$= 270 + 27 = 297$$

67. Other number $= \frac{\text{HCF} \times \text{LCM}}{\text{First number}}$

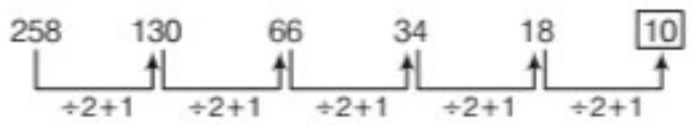
$$= \frac{38 \times 98154}{1558} = 2394$$

68. Total money collected = ₹ 2304 = 230400 paise

As number of students = Money paid by students

$\therefore$ Number of students in school = $\sqrt{230400} = 480$

69.



70. Suppose second decimal = x

Then, $x \times 4.13 = 20.7326$

$$\Rightarrow \quad x = \frac{20.7326}{4.13} = 5.02$$

71. Required percentage $= \frac{500}{725} \times 100 = 68.9 = 70$

72. Average $= \frac{567 + 434 + 323 + 290 + 401}{5}$

$$= \frac{2015}{5} = 403$$

73. B's share in the amount $= \frac{9861 \times 11}{19} = ₹\ 5709$

74. $3450 \times \frac{42}{100} = \frac{144900}{100} = 1449$ got promotion

75. $\frac{x}{20} = 65 \Rightarrow x = 1300$

According to the question, 96 – 69 = 27

$$\therefore \quad \text{New } x = 1300 - 27 = 1273$$

$$\Rightarrow \quad \frac{1273}{20} = 63.65$$