Jawahar Navodaya Vidyalaya

Entrance Exam (Class-VIth)

Solved Paper 2022

Exam held on 30/04/2022

SECTION I : Mental Ability Test
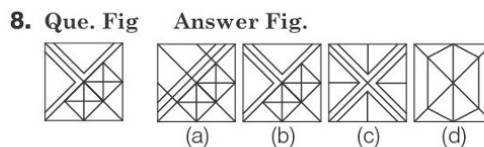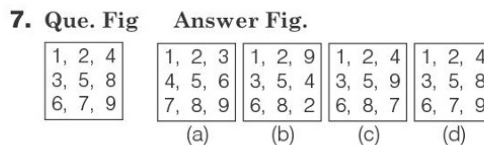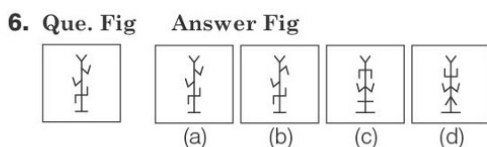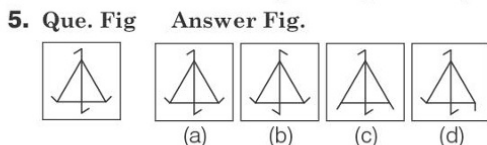
Part I

Directions (Q. Nos. 1-4) *In the given questions four figures* (a), (b), (c) *and* (d) *have been given in each question. Of these four figures three figures are similar in some way and one figure is different. Select the figure which is different. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

1.
   (a)   (b)   (c)   (d)

2.
   (a)   (b)   (c)   (d)

3.
   (a)   (b)   (c)   (d)

4.
   (a)   (b)   (c)   (d)
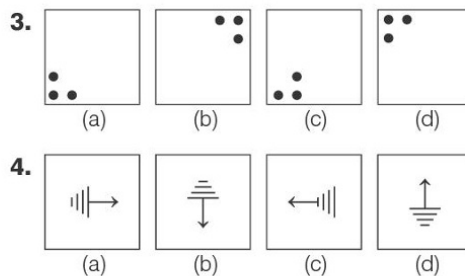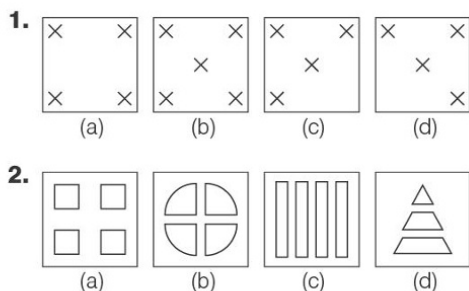
Part II

Directions (Q. Nos. 5-8) *In these questions, a question figure is given on the left side and four answer figures marked* (a), (b), (c) *and* (d) *are given on the right side. Select the answer figure which is exactly the same as the question figure. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*
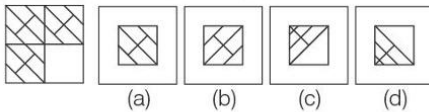
5. Que. Fig   Answer Fig.

   (a)   (b)   (c)   (d)

6. Que. Fig   Answer Fig

   (a)   (b)   (c)   (d)

7. Que. Fig   Answer Fig.

   (a)   (b)   (c)   (d)

8. Que. Fig   Answer Fig.

   (a)   (b)   (c)   (d)

Part III

Directions (Q. Nos. 9-12) *In these questions, there is a question figure on the left side, a part of which is missing. Observe the answer figures (a), (b), (c) and (d) on the right side and find out the answer figure which, without changing the direction, fits in the missing part of the question figure in order to complete the pattern in the question figure. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*
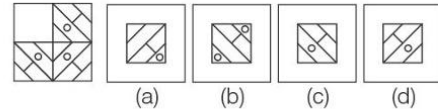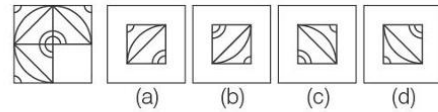
9. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)

11. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
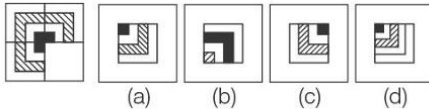
10. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)

**12.** Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)

Part IV

Directions (Q. Nos. 13-16) *In these questions, there are three question figures on the left side and the space for the fourth figure is left blank. The question figures are in a series. Find out one figure from among the answer figures given on the right side which occupies the blank space for the fourth figure on the left side and completes the series. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

13. Question Figures
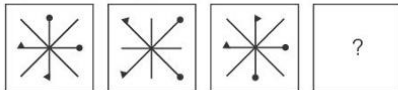
Answer Figures

(a)   (b)   (c)   (d)

15. Question Figures

Answer Figures

(a)   (b)   (c)   (d)

14. Question Figures

Answer Figures

(a)   (b)   (c)   (d)
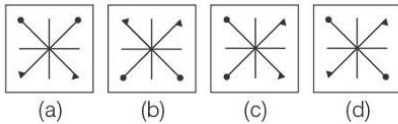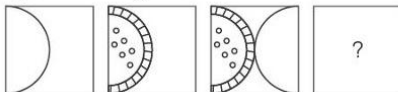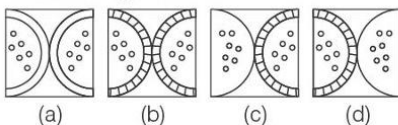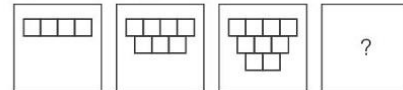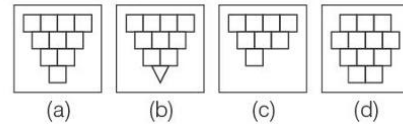
16. Question Figures

Answer Figures

(a)   (b)   (c)   (d)
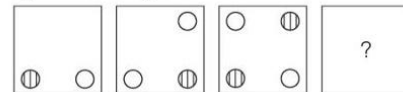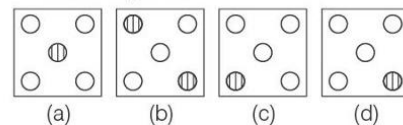
Part V

In these questions, there are two sets of two question figures each. The second set has an interrogation mark (?). There exists a relationship between the first two question figures. Similar relationship should exist between the third and the fourth question figure. Select one of the answer figures which replaces the mark of interrogation. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.

17. Question Figures

Answer Figures

(a) (b) (c) (d)
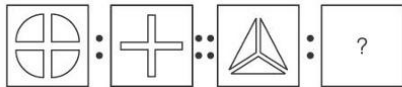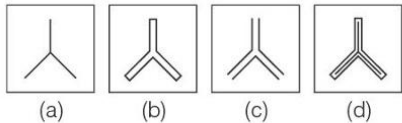
18. Question Figures

Answer Figures

(a) (b) (c) (d)
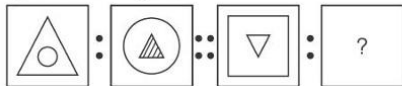
19. Question Figures

Answer Figures

(a) (b) (c) (d)
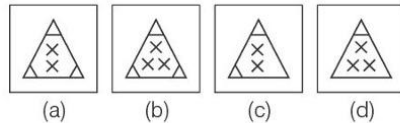
20. Question Figures

Answer Figures

(a) (b) (c) (d)
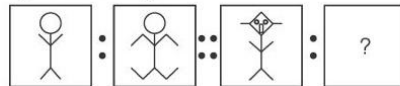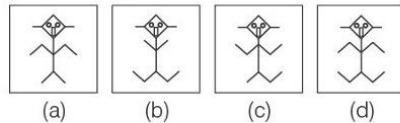
Part VI

In these questions, one part of a geometrical figure (Triangle, Square, Circle) is on the left side as question figure and the other one is among the four answer figures (a), (b), (c) and (d) on the right side. Find the figure on the right side that completes the geometrical figure. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.

21. Que. Fig   Answer Fig.

(a) (b) (c) (d)
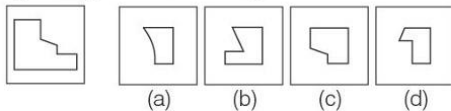
22. Que. Fig   Answer Fig.

(a) (b) (c) (d)
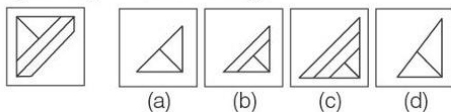
23. Que. Fig   Answer Fig.

(a) (b) (c) (d)
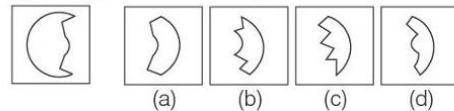
24. Que. Fig   Answer Fig.

(a) (b) (c) (d)
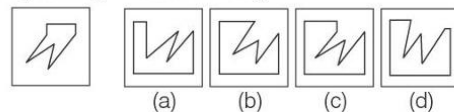
Part VII

Directions (Q. Nos. 25-28) *In these questions, there is a question figure on the left side and four answer figures marked* (a), (b), (c) *and* (d) *are given on the right side. Select the answer figure which is exactly the mirror image of the question figure when the mirror is held at XY. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

**25.** Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
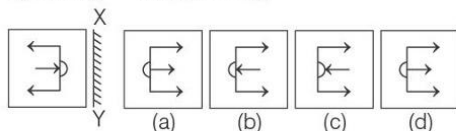
27. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
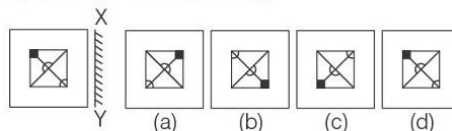
26. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
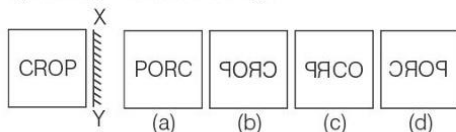
28. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
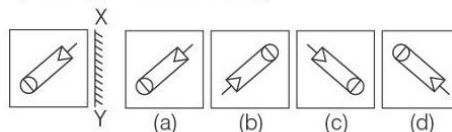
Part VIII

Directions (Q. Nos. 29-32) *In these questions, a piece of paper is folded and punched as shown in the question figures and four answer figures marked* (a), (b), (c) *and* (d) *are given. Select the answer figure which indicates how the paper will appear when opened (unfolded). Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

29. Question Figures

Answer Figures
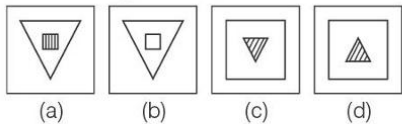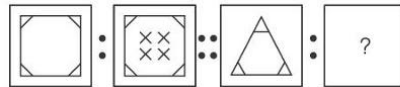

(a)   (b)   (c)   (d)
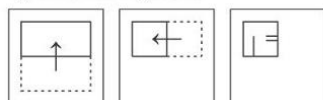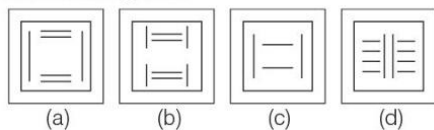
31. Question Figures

Answer Figures

(a)   (b)   (c)   (d)
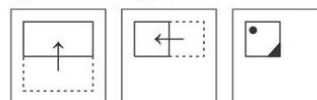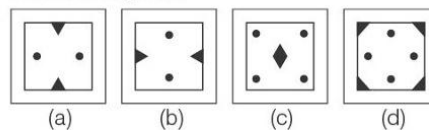
30. Question Figures

Answer Figures

(a)   (b)   (c)   (d)
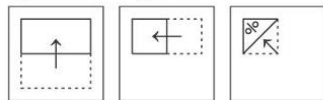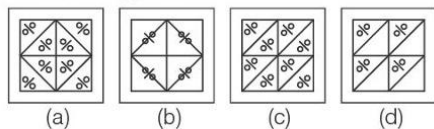
32. Question Figures

Answer Figures

(a)   (b)   (c)   (d)
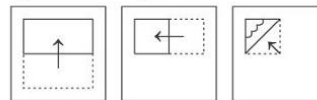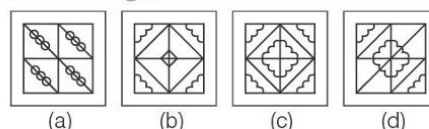
Part IX

Directions (Q. Nos. 33-36) *In these questions, a question figures is given on the left side and four answer figures marked* (a), (b), (c) *and* (d) *are given on the right side. Select the answer figure which can be formed from the cut-out pieces given in the question figure. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

33. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)

Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
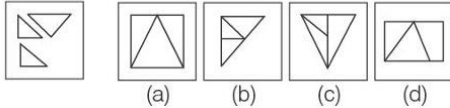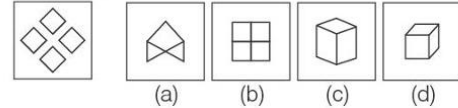
34. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
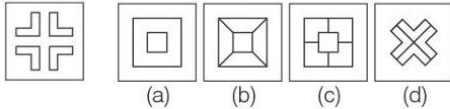
36. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
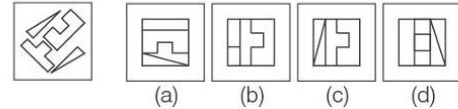
35.

Part X

Directions (Q. Nos. 37-40) *In these questions, a question figure is given on the left side and four answer figures marked* (a), (b), (c) *and* (d) *are given on the right side. Select the answer figure in which the question figure is hidden/embedded. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

37. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
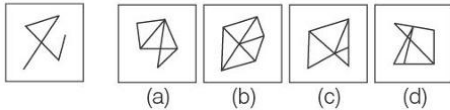
39. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
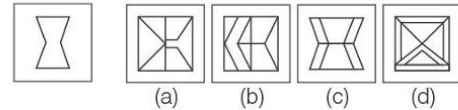
38. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
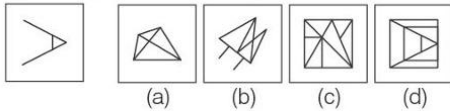
40. Que. Fig   Answer Fig.

(a)   (b)   (c)   (d)
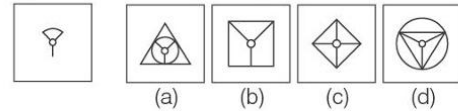
SECTION II : Arithmetic Test

Directions (Q. Nos. 41-60) *For every question, four probable answers as* (a), (b), (c) *and* (d) *are given. Only one out of these is correct. Choose the correct answer. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

**41.** The simplification of the following gives the result

$$2\frac{1}{17} \div \frac{7}{10} \times 1\frac{1}{33}$$

(a) $3\frac{1}{33}$ (b) $2\frac{1}{33}$ (c) $4\frac{1}{22}$ (d) $\frac{100}{17}$

42. Writing 0.0725 in simplest fraction form gives the result

(a) $\frac{29}{4000}$ (b) $\frac{29}{400}$ (c) $\frac{29}{40}$ (d) $\frac{129}{400}$

43. If the HCF of 72 and 180 is 36, then their LCM is

(a) 180   (b) 360   (c) 540   (d) 720

**44.** The sum of the digits of a number is subtracted from the number. The resulting number is always divisible by

(a) 2   (b) 5   (c) 8   (d) 9

45. The number of two digit natural numbers is

(a) 89   (b) 90   (c) 91   (d) 99

46. A decrease of 20% in the price of a cycle, increases its demand by 20%. The effect on the sale of shop is

(a) 4% decrease   (b) 4% increase
(c) 10% decrease   (d) 10% increase

47. A cube of lead with edge 6 cm each is melted to form 27 equal cubes. The length of the edge of each small cube is

(a) 1.5 cm   (b) 2.0 cm   (c) 3.0 cm   (d) 4.0 cm

48. In how many years will ₹ 1500 amount to ₹ 1800 at 8% per annum simple interest?

(a) $1\frac{1}{2}$ yr   (b) 2 yr   (c) $2\frac{1}{2}$ yr   (d) 3 yr

49. The prime factorisation of 2100 is

(a) $2 \times 2 \times 7 \times 15 \times 5$ (b) $2 \times 2 \times 3 \times 5 \times 35$
(c) $2 \times 2 \times 3 \times 5 \times 5 \times 7$ (d) $4 \times 3 \times 5 \times 5 \times 7$

50. A sum of ₹ 600 amounts to ₹ 720 in 4 yr at simple interest. What will it become in 4 yr if the rate of interest is increased by 2%?

(a) ₹ 648   (b) ₹ 768   (c) ₹ 668   (d) ₹ 968

51. The smallest 4-digit number when expressed as a product of primes is

(a) $5 \times 5 \times 5 \times 8$ (b) $5 \times 5 \times 5 \times 4 \times 2$
(c) $5 \times 5 \times 5 \times 2 \times 2 \times 2$ (d) $10 \times 10 \times 10$

52. The LCM of 25, 45 and 75 is

(a) 450   (b) 125   (c) 175   (d) 225

53. What is the sum of 6.6, 6.06, 6.006 and 66.6006?

(a) 74.2666   (b) 85.2666
(c) 84.0606   (d) 84.0666

54. A train starts at 2:15 pm from a station at a speed of 72 km/h. At what time will it reach the other station 90 km away?

(a) 3:00 pm   (b) 3:30 pm
(c) 4:00 pm   (d) 4:30 pm

55. The difference between the length and breadth of a hall is 23 m (length > breadth). If the perimeter of the floor of the hall is 206 m, then area of the floor of the hall (in sq m) is

(a) 2420   (b) 2520
(c) 2640   (d) 2760

56. The value of
$(20 \div 5) \div 2 + (16 \div 8) \times 2 + (10 \div 5) \times (3 + 2)$
is

(a) 12   (b) 15
(c) 16   (d) 18

57. The decimal equivalent of $12\frac{1}{16}$ is

(a) 12.625   (b) 12.6025
(c) 12.0625   (d) 12.0525

58. If a room 15 m long requires 7500 tiles, each 15 cm $\times$ 12 cm to cover the entire floor, then the breadth of the room is

(a) 9 m   (b) 10 m
(c) 12 m   (d) 10.5 m

59. Simplification of
$\frac{1}{13}[7 + 2 \times 5 \times 11 + 2 \times 13]$ equals

(a) 13   (b) 9
(c) 11   (d) 12

60. A piece of wire $2\frac{3}{4}$ m long broke into two pieces. One piece is $\frac{5}{8}$ m longer than the other. The length of the longer wire is

(a) $1\frac{11}{16}$ m   (b) $1\frac{1}{16}$ m
(c) 2 m   (d) $\frac{3}{4}$ m

SECTION III : LANGUAGE TEST

Directions (Q. Nos. 61-80) *There are four passages in this Section. Each passage is followed by five questions. Read each passage carefully and answer the questions that follow. For each question, four probable answers as* (a), (b), (c) *and* (d) *are given. Only one out of these is correct. Darken the circle for the answer in the OMR Answer Sheet against the number corresponding to the question.*

Passage 1

Once we visited a village where many families were selling clay products made by them. What attracted us most were artificial fruits and vegetables made by a certain family. We saw apples, oranges and tomatoes of such fine shapes and colours that we could hardly distinguish them from the real ones. They received much praise from all and sundry.

61. A certain family made .... of clay.
   (a) tables and chairs
   (b) fruits and vegetables
   (c) toys and pots
   (d) piggy bank and balls

62. We could hardly distinguish the .... fruits from the real ones.
   (a) natural   (b) artificial (c) original   (d) actual

63. The word 'such' is a/an ....

   (a) verb   (b) adverb
   (c) adjective   (d) conjunction

64. .... is the synonym of 'differentiate'.
   (a) Distinguish   (b) Mix-up
   (c) Confuse   (d) Mistake

65. .... means the same as 'all and sundry'.
   (a) Specific   (b) Exact   (c) Everyone (d) Few

Passage 2

Milk is the best food. It has water, sugar, fat, vitamins and proteins. People drink milk from different animals. In England and many other cold countries there are cows. In hot dry places like Arabia and the middle of Asia there are camels. In India there are cows as well as buffaloes. At many places there are goats. If people keep cows or other animals they get a lot of milk. From milk they can make butter and cheese. It is essential that the milk we use should be pure and germ-free. Impure milk does more harm than good to the human body.

66. People drink milk from .... animals.
   (a) same   (b) different
   (c) like   (d) alike

67. In .... places there are camels.
   (a) cool   (b) frozen   (c) hot   (d) cold

68. If people keep animals like cows, they get .... of milk.
   (a) little   (b) less
   (c) small   (d) plenty

69. It is .... that the milk we use should be pure.
   (a) necessary
   (b) inessential
   (c) unneeded
   (d) needless

70. 'Harm' means the same as ....
   (a) benefit   (b) repair
   (c) damage   (d) fixed

Passage 3

Snakes belong to a class of animals called reptiles. This group also includes crocodiles, lizards and turtles. Snakes are found almost everywhere, in forests, deserts and lakes. They cannot survive in places where the ground is frozen all through the year. The snake has very poor eyesight. It uses its other senses to escape damage and find food. Some snakes smell with their noses but most of them smell with their tongues. The body of a snake is covered with scales made up of layers of cells. A few times every year a snake sheds the outer layer of dead skin. The cells underneath at once form the outer layer which is a protective covering for the snake.

71. Snakes are called ....

    (a) lizards   (b) scales   (c) reptiles   (d) turtles

72. Snakes cannot survive in ....

    (a) frozen places   (b) deserts

    (c) forests   (d) lakes

73. Snakes have poor ....

    (a) sense of smell   (b) hearing

    (c) sense of touch   (d) eyesight

74. .... protect/protects the snake from injury.

    (a) Tongue   (b) Scales

    (c) Dead skin   (d) Nose

75. The word 'survive' means ....

    (a) live

    (b) move

    (c) escape

    (d) belong

Passage 4

It was a Sunday. Harish was playing in the park with his friends. There was a pond nearby. Harish wanted to swim. He jumped into the pond with a splash. At the other end of the pond there were a few ducks in the water. Harish swam happily enjoying the mild sun and the cold water. Suddenly he heard a loud noise and the water splashed. He looked all around to see if someone had dived into the pond. He could see no one.

76. Harish was playing in the park with his ....

    (a) brothers   (b) classfellows

    (c) friends   (d) team

77. Harish jumped into the pond ....

    (a) to swim

    (b) to catch fish

    (c) to chase the ducks

    (d) to have a bath

78. The weather was ....

    (a) very hot   (b) just warm

    (c) very cold   (d) cool with rain

79. Who else was there in the pond?

    (a) A few ducks   (b) Two boys

    (c) Harish's friends (d) Fishermen

80. The word 'dived' means the same as ....

    (a) slipped   (b) fell

    (c) jumped   (d) climbed

Answers

1	(b)	**2**	(d)	**3**	(c)	**4**	(c)	**5**	(a)	**6**	(a)	**7**	(d)	**8**	(b)	**9**	(a)	**10**	(a)
11	(d)	**12**	(b)	**13**	(b)	**14**	(b)	**15**	(a)	**16**	(b)	**17**	(b)	**18**	(a)	**19**	(b)	**20**	(d)
21	(c)	**22**	(a)	**23**	(a)	**24**	(c)	**25**	(b)	**26**	(b)	**27**	(a)	**28**	(c)	**29**	(a)	**30**	(a)
31	(c)	**32**	(c)	**33**	(b)	**34**	(d)	**35**	(b)	**36**	(c)	**37**	(b)	**38**	(d)	**39**	(c)	**40**	(a)
41	(a)	**42**	(b)	**43**	(b)	**44**	(d)	**45**	(b)	**46**	(a)	**47**	(b)	**48**	(c)	**49**	(c)	**50**	(b)
51	(c)	**52**	(d)	**53**	(b)	**54**	(b)	**55**	(b)	**56**	(c)	**57**	(c)	**58**	(a)	**59**	(c)	**60**	(a)
61	(b)	**62**	(b)	**63**	(c)	**64**	(b)	**65**	(c)	**66**	(b)	**67**	(c)	**68**	(d)	**69**	(a)	**70**	(c)
71	(c)	**72**	(a)	**73**	(d)	**74**	(b)	**75**	(a)	**76**	(c)	**77**	(a)	**78**	(b)	**79**	(a)	**80**	(c)

Hints and Solutions

1. (b) Except option (b), all other figures have 4 symbols (X).

2. (d) Except option (d), all other figures are divide in four equal parts.

3. (c) Except option (c), in all other figures positional order of shaded circles are same.

4. (c) Except option (c), in all other figures horizontal lines shown in descending order.

5. (a) Figure shown in option (a) is similar to question figure.

6. (a) Figure shown in option (a) is similar to question figure.

7. (d) Figure shown in option (d) is similar to question figure.

8. (b) Figure shown in option (b) is similar to question figure.

9. (a) Figure shown in option (a) will complete the given pattern.

10. (a) Figure shown in option (a) will complete the given pattern.

11. (d) Figure shown in option (d) will complete the given pattern.

12. (b) Figure shown in option (b) will complete the given pattern.

13. (b) In each step, figure rotates 45° in clockwise direction.

14. (b) In option (b), right side figure is mirror image of left side figure.

15. (a) In step (1) to (2), three squares increased.

    In step (2) to (3), two squares increased.

    In step (3) to (4), one square increased.

16. (b) In each step one circle will be added. From step (1) to (2) and (3) to (4) number of shaded circle will be same.

17. (b) From question figure (1) to (2), outer image will removed and only middle image remains. Hence, option (b) is correct.

18. (a) From question figure (1) to (2), the inner figure becomes outer figure, outer figure becomes inner figure and being shaded. Hence, option (a) is correct.

19. (b) From question figure (1) to (2), similar to the side of the figure, symbol (x) are added.

20. (d) From question figure (1) to (2), number of symbols (∨) like question will be doubled and inverted.

21. (c) Figure shown in option (c) will complete the question figure.

Question Figure   Answer Figure (c)

22. (a) Figure shown in option (a) will complete the question figure.

Question Figure   Answer Figure (a)

23. (a) Figure shown in option (a) will complete the question figure.

Question Figure   Answer Figure (a)

24. (c) Figure shown in option (c) will complete the question figure.
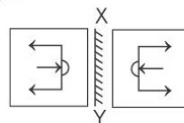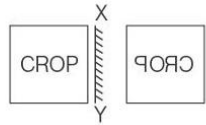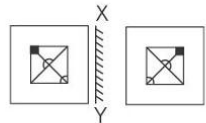

Question Figure   Answer Figure (c)

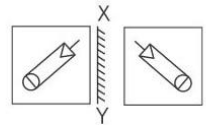25. (b) Figure shown in option (b) will be the correct mirror image.

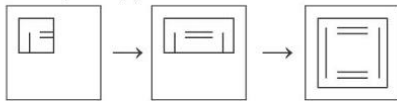**26.** (b) Figure shown in option (b) will be the correct mirror image.

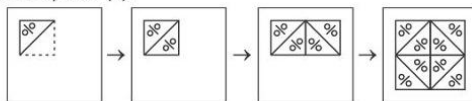**27.** (a) Figure shown in option (a) will be the correct mirror image.

28. (c) Figure shown in option (c) will be the correct mirror image.

29. (a) After unfolding the last fold the paper will look as given in option (a).

30. (a) After unfolding the last fold the paper will look as given in option (a).

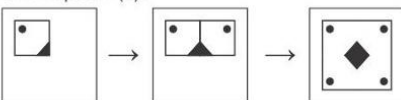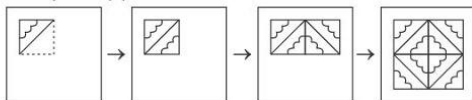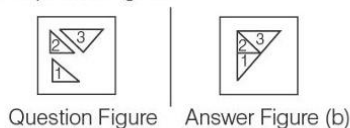**31.** (c) After unfolding the last fold the paper will look as given in option (c).

**32.** (c) After unfolding the last fold the paper will look as given in option (c).

33. (b) Figure shown in option (b) will made by cut-out piece given in question figure.

Question Figure   Answer Figure (b)

34. (d) Figure shown in option (d) will made by cut-out piece given in question figure.

Question Figure   Answer Figure (d)

35. (b) Figure shown in option (b) will made by cut-out piece given in question figure.

Question Figure   Answer Figure (b)

36. (c) Figure shown in option (c) will made by cut-out piece given in question figure.

Question Figure   Answer Figure (c)
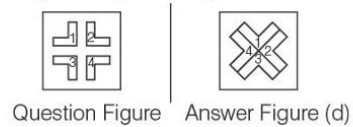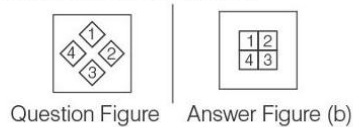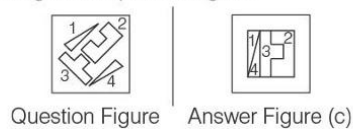
37. (b) By careful observation, we find that the question figure is embedded in option figure (b) as shown below.

Question Figure   Answer Figure (b)
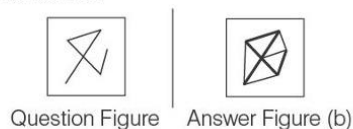
38. (d) By careful observation, we find that the question figure is embedded in option figure (d) as shown below.

Question Figure   Answer Figure (d)
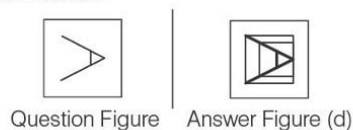
39. (c) By careful observation, we find that the question figure is embedded in option figure (c) as shown below.

Question Figure   Answer Figure (c)

40. (a) By careful observation, we find that the question figure is embedded in option figure (a) as shown below.

Question Figure   Answer Figure (a)

41. (a) $2\dfrac{1}{17} \div \dfrac{7}{10} \times 1\dfrac{1}{33} = \dfrac{35}{17} \times \dfrac{10}{7} \times \dfrac{34}{33}$

$\qquad = \dfrac{100}{33} = 3\dfrac{1}{33}$

42. (b) $0 \cdot 0725 = \dfrac{725}{10000} = \dfrac{25 \times 29}{25 \times 400} = \dfrac{29}{400}$

43. (b) First number = 72

Second number = 180

HCF = 36

$\therefore$ Required LCM $= \dfrac{\text{First number} \times \text{Second number}}{\text{HCF}}$

$\qquad = \dfrac{72 \times 180}{36} = 360$

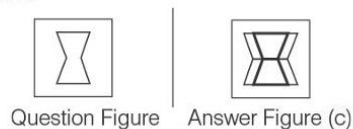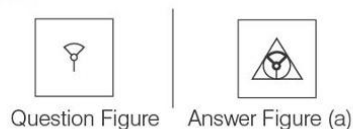**44.** (d) If the sum of digits of a number is subtracted from the number, then the resulting number is always divisible by 9.

For example Let $10x + y$ is a two digit number.

Then, $10x + y - (x + y) = 9x$, it is divisible by 9 and let $100x + 10y + z$ is a three digit number, then $100x + 10y + z - (x + y + z) = 99x + 9y$ or $9(11x + y)$, it is divisible by 9.

45. (b) Two digit natural numbers are 10, 11, 12, … 99.

$\therefore$ The number of two digit natural numbers

$\qquad = 99 - 9 = 90$

46. (a) Let real price of cycle be x and demand of cycle be y.

$\therefore$ Total sale = xy

New price of cycle $= x \times \dfrac{80}{100} = \dfrac{4}{5}x$

New demand $= y \times \dfrac{120}{100} = \dfrac{6}{5}y$

New sale $= \dfrac{4x}{5} \times \dfrac{6}{5}y = \dfrac{24}{25}xy$

$\therefore$ Decrease in sale $= \dfrac{xy - \dfrac{24}{25}xy}{xy} \times 100$

$\qquad = \dfrac{25 - 24}{25} \times 100 = 4\%$

Alternate Method

Required effect on sale of shop $= x + y + \dfrac{xy}{100}$

$\qquad = -20 + 20 + \dfrac{(-20)(20)}{100}$

$\qquad = 0 - \dfrac{400}{100} = -4\%$ (decrease)

Here, (+) and (−) sign show increase and decrease respectively.

47. (b) Let edge of small cube be x cm.

According to the question,

$27 \times$ volume of small cube = volume of big cube

$\Rightarrow 27x^3 = (6)^3 \qquad [\because \text{Volume of cube} = (\text{side})^3]$

$\Rightarrow x^3 = \dfrac{216}{27} \Rightarrow x^3 = 8 \Rightarrow x = 2$ cm

48. (c) Given, P = ₹ 1500, r = 8% and A = ₹ 1800

Let time period be t yr.

$\qquad SI = A - P$

$\Rightarrow \dfrac{Prt}{100} = 1800 - 1500 \Rightarrow \dfrac{1500 \times 8 \times t}{100} = 300$

$\Rightarrow \quad t = \dfrac{300 \times 100}{1500 \times 8} = \dfrac{5}{2} = 2\dfrac{1}{2}$ yr

49. (c) According to the question,

2	2100
2	1050
3	525
5	175
5	35
7	7
	1

$\therefore$ The prime factorisation of 2100

$\qquad = 2 \times 2 \times 3 \times 5 \times 5 \times 7$

50. (b) Given, P = ₹ 600, A = ₹ 720 and t = 4 yr

Let rate of interest be r%.

$\therefore \qquad SI = A - P$

$\Rightarrow \dfrac{Prt}{100} = 720 - 600$

$\Rightarrow \dfrac{600 \times r \times 4}{100} = 120$

$\Rightarrow r = \dfrac{120 \times 100}{600 \times 4} = 5\%$

Now, new rate of interest = 5 + 2 = 7%

$\therefore A = P + \dfrac{Prt}{100} = 600 + \dfrac{600 \times 7 \times 4}{100}$

$\qquad = 600 + 168 = ₹ 768$

51. (c) The smallest 4-digit number = 1000

2	1000
2	500
2	250
5	125
5	25
5	5
	1

$\therefore$ Product of 1000 $= 2 \times 2 \times 2 \times 5 \times 5 \times 5$

or $5 \times 5 \times 5 \times 2 \times 2 \times 2$

52. (d) $25 = 5 \times 5 = 5^2$

$\qquad 45 = 3 \times 3 \times 5 = 3^2 \times 5$

$$75 = 3 \times 5 \times 5 = 3 \times 5^2$$

$$\therefore \text{LCM of 25, 45 and 75} = 3^2 \times 5^2$$
$$= 9 \times 25 = 225$$

53. (b) Required sum = 6.6 + 6.06 + 6.006 + 66.6006
$$= 6.6000 + 6.0600 + 6.0060 + 66.6006$$
$$= 85.2666$$

54. (b) Time taken to cover of 90 km = $\dfrac{90}{72}$
$$\left[\because \text{Time} = \frac{\text{Distance}}{\text{Speed}} \right]$$
$$= \frac{5}{4} h = 1 h \ 15 \ min$$

$\therefore$ Required time = 2 : 15 + 1 : 15 = 3 : 30 p.m.

55. (b) Let the length and breadth of a hall be l m and b m.
According to the question,
$$l - b = 23 \qquad \qquad \dots(i)$$
Perimeter of the floor of the hall = 2 (l + b)
$$\Rightarrow \qquad 206 = 2(l + b)$$
$$\Rightarrow \qquad l + b = 103 \qquad \dots(ii)$$
From Eqs. (i) and (ii), 2l = 126 $\Rightarrow$ l = 63 m
and b = 40 m.
$\therefore$ Area of the hall = l $\times$ b
$$= 63 \times 40 = 2520 \ sq \ m$$

56. (c) (20 ÷ 5) ÷ 2 + (16 ÷ 8) × 2 + (10 ÷ 5) × (3 + 2)
$$= 4 \div 2 + 2 \times 2 + 2 \times 5$$
$$= 2 + 2 \times 2 + 2 \times 5$$
$$= 2 + 4 + 10 = 16$$

57. (c) $12\dfrac{1}{16} = \dfrac{12 \times 16 + 1}{16} = \dfrac{192 + 1}{16} = \dfrac{193}{16}$

```
16 ) 193 ( 12.0625
     16
     ___
     33
     32
     ___
     100
      96
     ___
      40
      32
     ___
      80
      80
     ___
       ×
```

$$= 12.0625$$

58. (a) Let the breadth of room be x m.
According to the question,
Area of room = 7500 × Area of one tile

$$\Rightarrow 15 \times x = 7500 \times \frac{15}{100} \times \frac{12}{100}$$
$$\Rightarrow x = \frac{7500 \times 15 \times 12}{15 \times 100 \times 100} m = 9 \ m$$

59. (c) $\dfrac{1}{13} [7 + 2 \times 5 \times 11 + 2 \times 13]$
$$= \frac{1}{13} [7 + 110 + 26] = \frac{1}{13} \times 143$$
$$= 11$$

60. (a) Let the length of longer wire be x m.
$\therefore$ Then, length of shorter wire = $\left(x - \dfrac{5}{8} \right)$ m.

According to the question,
$$x + x - \frac{5}{8} = 2\frac{3}{4} \Rightarrow 2x = \frac{11}{4} + \frac{5}{8}$$
$$\Rightarrow \qquad 2x = \frac{22 + 5}{8} \Rightarrow x = \frac{27}{16} = 1\frac{11}{16} m$$

61. (b) A certain family made fruits and vegetables of clay.

62. (b) We could hardly distinguish the artificial fruits from the real ones.

63. (c) The word 'such' is a adjective.

64. (a) Distinguish is the synonym of 'differentiate'. Differentiate means recognise or ascertain what makes (someone or something) different.

65. (c) 'Everyone' means the same as 'all and sundry'.

66. (b) People drink milk from different animals.

67. (c) In hot places there are camels.

68. (d) If people keep animals like cows, they get plenty of milk.

69. (a) It is necessary that the milk we use should be pure.

70. (c) 'Harm' means damage.

71. (c) Snakes are called reptiles.

72. (a) Snakes cannot survive in frozon places.

73. (d) Snakes have poor eyesight.

74. (b) The body of a snake is covered with scales made up of layers of cells. So, scales protects the snake from 'injury'.

75. (a) The word 'survive' means 'live'.

76. (c) Harish was playing in the park with his friends.

77. (a) Harish jumped into the pond to swim.

78. (b) The weather was just warm.

79. (a) At the other end of the pond, there were a few ducks in the water.

80. (c) The word 'dived' means the same as 'jumped'.