Jawahar Navodaya Vidyalaya (2025)

Entrance Exam Class-VI (Solved Questions)

Held on: 12 April 2025

Section-I: Mental Ability Test

PART-1

DIRECTIONS: In Question Nos. 1 to 4, 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)
- Z
- (b) \[\]

(c)



(d)

- 2.
- (a)



(b) VV

(c)



(d) VVV

3.





(b)

(c)



(d) ___

1





(b)

(c)



(d)



PART-2

DIRECTIONS: In Question Nos. **5 to 8**, a questigure is given on the left side and four answer fig marked (a), (b), (c) and (d) are given on the right select the answer figure which is exactly the same the question figure and darken the circle in the CA Answer Sheet against the number corresponding the question.

5. Question Figure



Answer Figures









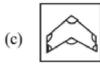
Question Figure



Answer Figures



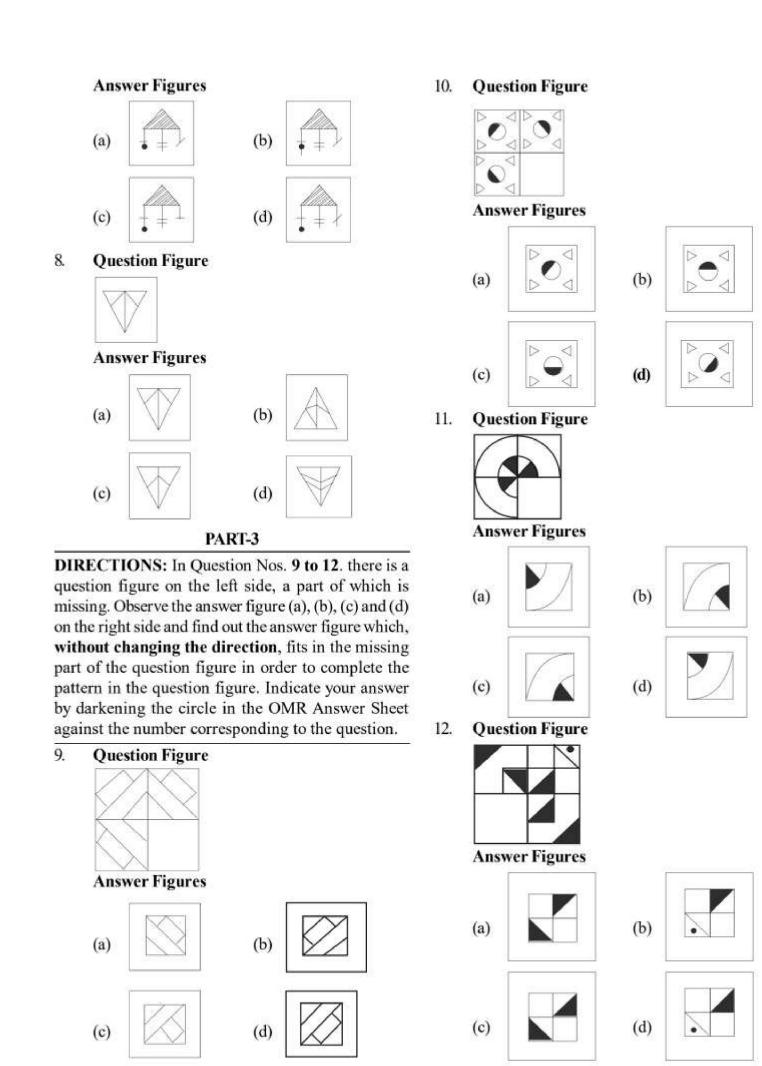






7. Question Figure

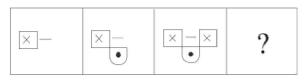




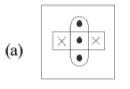
PART-4

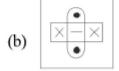
DIRECTIONS: In Question Nos. 13 to 16, there are three question figures on the left hand side and the space for the fourth figure is left blank. The question figures are in a series. Find out one figure from among the answer figures given on the right hand side which occupies the blank space for the fourth figure on the left hand side and completes the series. Indicate your answer by darkening the circle in the OMR Answer Sheet against the number corresponding to the question.

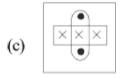
13. **Question Figure**

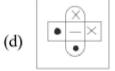


Answer Figures

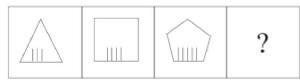




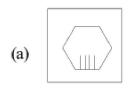


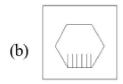


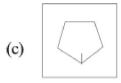
14. **Question Figure**



Answer Figures

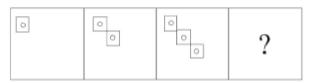




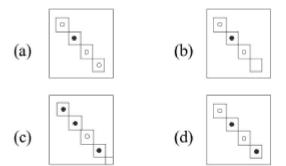




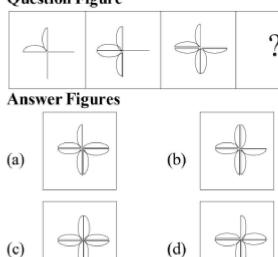
15. **Question Figure**



Answer Figures



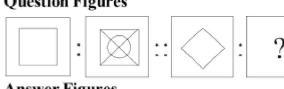
Question Figure 16.



PART-5

DIRECTIONS: In Question Nos. 17 to 20, there two sets of two questions figures each. The sec set has an interrogation mark (?). There exist relationship between the first two question figu Similar relationship should exist between the third the fourth question figure. Select one of the ans figures which replaces the mark of interrogat Darken the circle in the OMR Answer Sheet aga the number corresponding to the question.

17. Question Figures

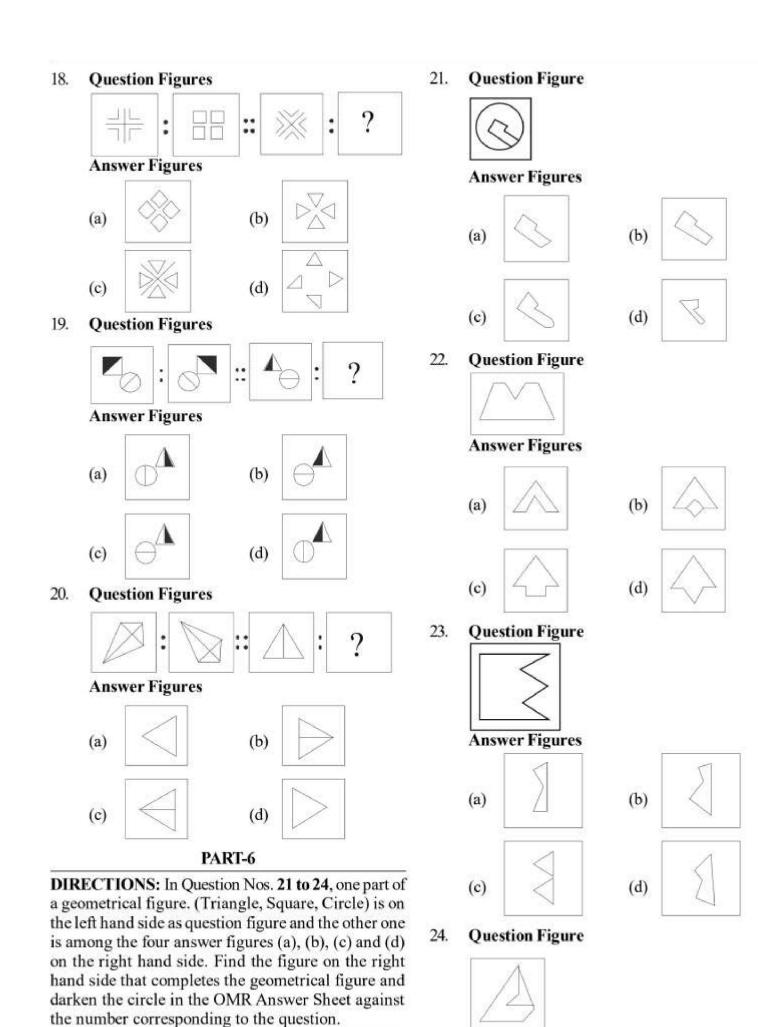


Answer Figures





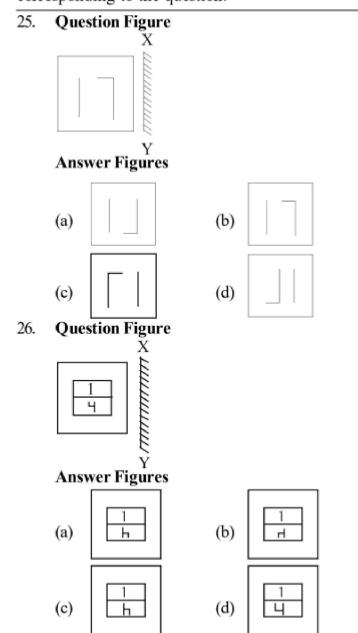




Answer Figures (b) (a) (d) (c)

DIRECTIONS: In Question Nos. 25 to 28, 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. Indicate your answer by darkening the circle to the OMR Answer Sheet against the number corresponding to the question.

PART-7



Question Figure Answer Figures 824 642 (a) (b) 8H2 246 (d) (c) **Question Figure Answer Figures**

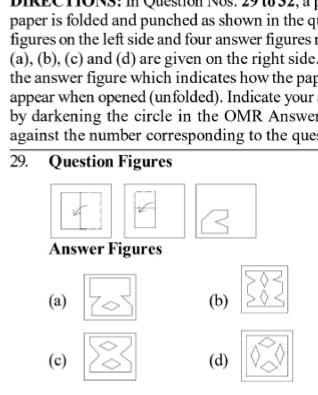
(a)

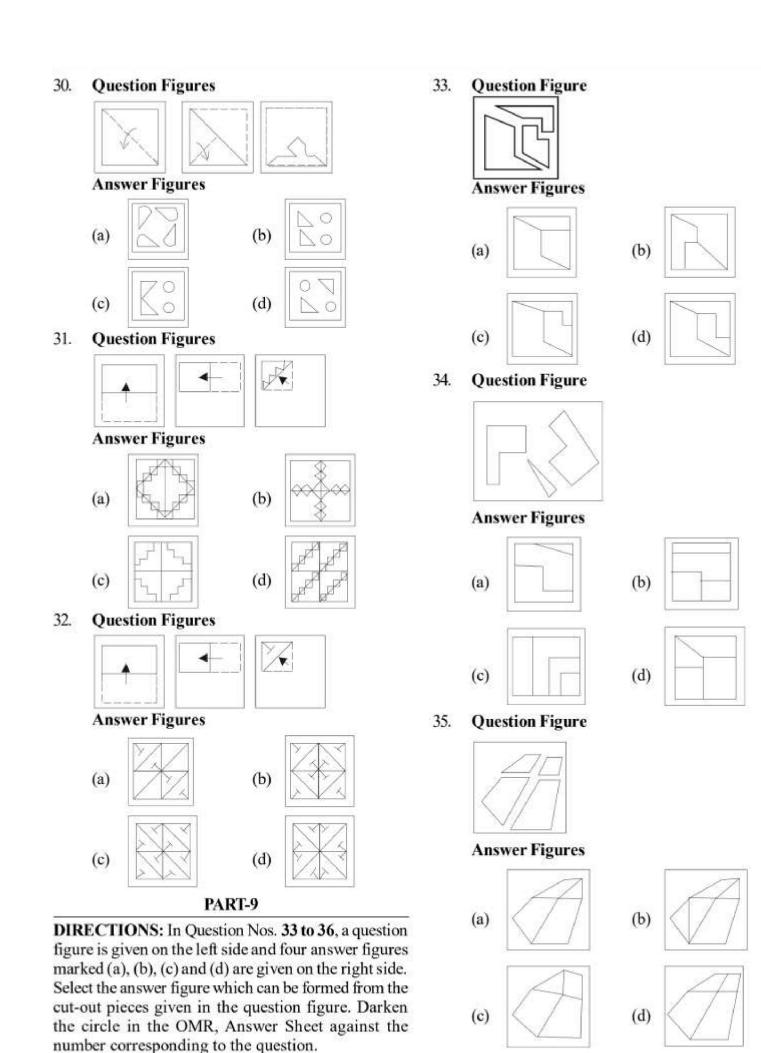
(c)

PART-8 DIRECTIONS: In Question Nos. 29 to 32, a pie paper is folded and punched as shown in the ques figures on the left side and four answer figures ma (a), (b), (c) and (d) are given on the right side. So the answer figure which indicates how the paper appear when opened (unfolded). Indicate your ans by darkening the circle in the OMR Answer S against the number corresponding to the question

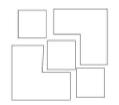
(b)

(d)

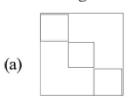


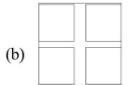


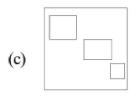
36. Question Figure

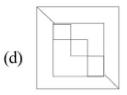


Answer Figures









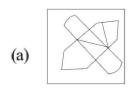
PART-10

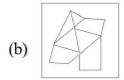
DIRECTIONS: In Question Nos. **37 to 40**, a question figure is given on the left side and four answer figures marked (a), (b), (c) and (d) are given on the right side. Select the answer figure in which the question figure is hidden/embedded. Darken the circle in the OMR Answer Sheet against the number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

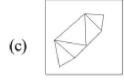
Question Figure 37.



Answer Figures









Question Figure 38.



Answer Figures













39. **Question Figure**



Answer Figures





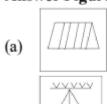




40. Question Figure



Answer Figures





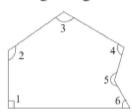




Section-II: Arithmetic Test

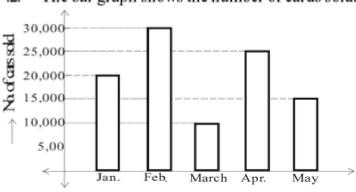
DIRECTIONS: For every question, four prob answers as (a), (b), (c) and (d) are given. Only one of these is correct. Choose the correct answer darken the circle in the OMR Answer Sheet aga the number corresponding to the question.

41. In the given figure, which of the angles greater than a right angle?



- Only 2 and 3
- (b) Only 3, 4 and :
- Only 4, 5 and 6
- (d) Only 2, 3, 4 an

The bar graph shows the number of cards sold.



> Months total From the given bar graph, total number of cars sold in the months of January, March and May is:

- (a) 35,000
- (b) 40,000
- (c) 45,000
- (d) 50,000

43. Measure of the angle between the directions North-East and South-East is:

- (a) 180°
- (b) 90°
- (c) 270°
- (d) 45°

44. The breadth of a floor of a room is 9 m. It requires 7,500 tiles of 15 cm × 12 cm each to cover the floor. Length of the floor of the room (in metres) is:

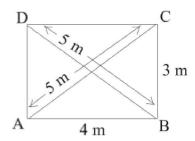
(a) 9

- (b) 10
- (c) 12
- (d) 15

45. A shopkeeper bought some pencils at the rate of ₹48 per dozen and sold them at the rate of ₹4.50 per pencil. His profit per dozen is:

- (a) ₹8
- (b) ₹6
- (c) ₹6.50
- (d) ₹8.50

46. Perimeter of rectangle ABCD is



- (a) 7m
- (b) 14m
- (c) 19 m
- (d) 24m

11,250 square tiles each of side 20 cm have been 47. paved in a rectangular courtyard of length 25 m. The perimeter of the courtyard is:

- (a) 18 m
- (b) 43 m
- (c) 86 m
- (d) 172 m

A shopkeeper gained $\frac{3}{5}$ of its cost price selling a mobile phone for ₹6,000. The cost p of the mobile phone is:

- (a) ₹3,500
- (b) ₹3,750
- (c) ₹4,000
- (d) ₹4,250

If A = 6, then $\frac{A}{A+4} + \frac{A+2}{12-2} - \frac{3}{10}$ is equal to

50. The number of bottles each of capacity 245 which can be filled from a can containing litres of oil is:

- (a) 50
- (b) 60
- (c) 65
- (d) 70

127 hours is equivalent to: 51.

- (a) 3 days 14 hours (b) 5 days 7 hours
- (c) 6 days 1 hour (d) 7 days 2 hours

 $\frac{248}{13} + \frac{168}{26} + \frac{513}{39}$ is equal to:

- (b) $\frac{503}{13}$

Decimal 0.125 written in fraction form is: 53.

- (c)

The decimal form of the fraction $\frac{152}{125}$ is: 54.

- (a) 12.16
- (b) 1.216
- (c) 1.0216
- (d) 0.1216

55. The total number of factors of 36 are:

- (a) 8
- (b) 9
- (c) 6

(d) 18

56. The product of two numbers is 384. If on numbers is 16, then the other number

(a) 6

- (b) 12
- (c) 18
- (d) 24

57. $3.5 + 3.05 + 3.005 + 4 \times 3.05$ is equal to: (a) 15.575

- (b) 15.755
- (c) 21.575
- (d) 21.755

- 58. The fraction equal to 12.0625 is:
 - (a) $\frac{195}{16}$
- (b) $\frac{197}{16}$
- (c) $\frac{193}{16}$
- (d) $\frac{199}{16}$
- 59. The difference between the greatest and smallest 5-digit numbers formed using 2, 1, 9, 0 and 4 is:
 - (a) 92961
- (b) 81720
- (c) 83961
- (d) 89000
- 60. $\frac{1}{7}[17 + 36 \times 3 \times 7 5 \times 2]$ is equal to
 - (a) 114
- (b) 113
- (c) 107
- (d) 109

Section-III: Language Test

DIRECTIONS: There are **four** passages in this Section. Each passage is followed by **five question**. Read the passage carefully and answer the questions that follow. For each question, **four** probable answer as (a), (b) (c) and (d) are given. Only **one** out of these is correct. Choose the correct answer and darken the circle in the OMR Answer Sheet against the number corresponding to the question.

Passage – 1

Nomads are a group of people, who dismantle their homes and move to a new place annually. Most groups of nomads make their homes in the desert where water sources run dry after a while. They live in makeshift tents that are both sturdy yet easily taken apart. What it is time to move, they put all their possessions on camels as they go in search of a new place. They find their way about the endless expanse of sand with the help of the stars and the planets at night and footprints in the day.

Despite their primitive lifestyle, a hierarchical class structure exists among the community. Camels are considered as the symbols of prosperity. The hierarchical structure is based on the number of camels one possesses.

Nomadic life may seem to be without the complications of city life. Yet, they are beset, with their own set of problems.

- 61. Why do nomads move to a new place?
 - (a) They love to travel.
 - (b) Their homes are tents which can be dismantled.
 - (c) They depend on natural resources that exhaust fast.
 - (d) Their camels have to keep moving.

- 62. Which adjective can best describe the nom homes?
 - (a) makeshift
- (b) tents
- (c) sturdy
- (d) sandy
- The hierarchical class structure is based
 - (a) the size of the family
 - (b) the number of tents
 - (c) the number of camels
 - (d) the amount of work done
- 64. What guides the nomads to take a partic direction?
 - (a) Maps
 - (b) Camels
 - (c) Elderly people in the tribe
 - (d) Stars and planets
- 65. What does the word 'beset' mean?
 - (a) affected by
- (b) settle with
- (c) solved
- (d) risk in

Passage - 2

Garbage is a great environment hazard. It br diseases. A lot of trash that is thrown away cont material that can be recycled and reused such paper, metals and glass which can be sent to nearest recycling centre or disposed off to the dealer. It also contains organic matter such as le which can enrich soil fertility. A compost pit can made at a convenient location where the waste be placed with layers of soil and an occasion sprinkling of water. This would help decomposite to make valuable fertilizer. This would also prepollution which is usually caused by burning sorganic waste.

- 66. Which of the following words is a synony 'hazard'?
 - (a) trash
- (b) threat
- (c) junk
- (d) dispose
- 67. Which of the following materials cannot recycled?
 - (a) Paper
- (b) Glass
- (c) Metal
- (d) Plastic
- 68. Which of the following is not an advantage making a compost pit?
 - (a) It prevents pollution.
 - (b) The leaves in a compost pit can make soil fertile.
 - (c) It makes our surroundings beautiful.
 - (d) It creates valuable fertilizer.
- 69. Which of the following words is an antony the word 'valuable'?
 - (a) enrich
- (b) useless
- (c) organic
- (d) disposed

- 70. What happens to the disposed material at the recycling centre?
 - (a) It is thrown away.
 - (b) It is processed for reuse.
 - (c) It is sold to the rag pickers.
 - (d) It is dumped into the ground.

Passage - 3

Dogs are very intelligent animals. Their ability to smell things is many times greater than that of humans. They can easily identify the sniffed thing by smelling it again. Dogs are also used to detect explosives due to their high smelling ability. Their hearing power is five times more than that of humans. Dogs are deaf, blind and toothless when they are born. They like to live in groups, but some prefer to live alone. The breed of dog. Alaskan Malamute, has the ability to withstand temperature up to -70 degrees.

Of course, when dogs are cared for properly and treated with respect, they can be incredibly loving, playful, and intelligent companions.

- Dogs are used by bomb-disposal squads because
 - (a) they have good hearing power
 - (b) they can detect explosives due to their smelling ability
 - (c) they are good friends
 - (d) they are quite loyal and faithful
- The 'Alaskan Malamute' can live in extreme cold climatic conditions because it
 - (a) needs a lot of care
 - (b) can withstand hot and humid weather
 - (c) can withstand temperatures up to -70 degrees.
 - (d) is deaf, blind and toothless
- 73. Dogs also need to be treated with respect because
 - (a) they are living beings
 - (b) they cannot speak and are deaf
 - (c) they can be loyal servants to human beings
 - (d) they can be faithful companions to human beings.
- 74. The antonym of 'faithful' is
 - (a) devoted
- (b) unhesitating
- (c) undependable
- (d) dedicated
- 75. The most appropriate meaning of 'incredible' is
 - (a) impossible to believe
 - (b) likely to happen
 - (c) believable
 - (d) inability to hear

Passage – 4

Birds play a very important part in our environn and are an essential part of our food chain. They maintain a perfect balance of nature. In forests, example, some birds feed on plants whereas of survive on small insects and earthworms. Birds bird eggs, in turn, serve as food for bigger anir such as foxes and snakes. Such food habits relationships prevent any one species from becon too large.

Besides being part of food chain, birds other important roles too. By eating insects, t protect plants against pests. Some nectar feed birds are called pollinators because when they si a flower to such nectar, some pollen gets stuctheir bodies which drops off on another flower w they sit on it. In this way help create new plants

- Which of the following is the correct order the food chain?
 - (a) Birds insects and earthworms fox and snakes – bird eggs
 - (b) Bird eggs birds small insects and earthworms - foxes and snakes
 - (c) Insects and earthworms foxes and sna bird eggs – birds
 - (d) Insects and earthworms birds birds foxes and snakes
- 77. By eating plants and other animals or inse birds help to maintain
 - (a) eco balance

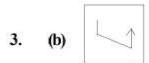
to as 'pollinators'.

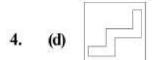
- (b) food chain
- (c) forests
- (d) relationships
- have been refe 78. In the passage,
 - (a) Insects
- (b) Flowers
- (c) Birds
- (d) Snakes
- 79. Which pair of words used in the passage h a similar meaning?
 - (a) essential/important
 - (b) essential/perfect
 - (c) important/balance
 - (d) important/numerous
- 80. Birds help in all of the following areas except
 - (a) maintaining balance in the ecosystem
 - (b) protecting plants against pests.
 - (c) helping in cross-pollination. (d) helping produce honey.

HINTS AND SOLUTIONS

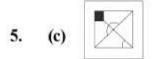
Sol. (1-4)

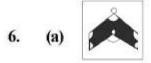
- (c) Except option figure (c) all other figures middle line in cut.
- 2. (c) Figure (c) starting and ending point is downwards.

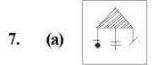


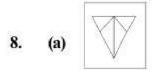


Sol. (5-8)

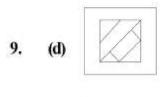


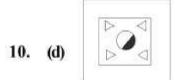


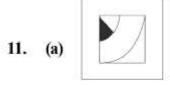


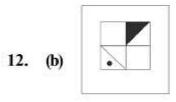


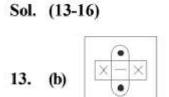
Sol. (9-12)

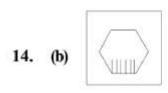


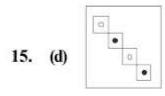


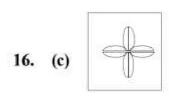




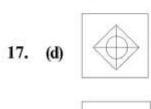




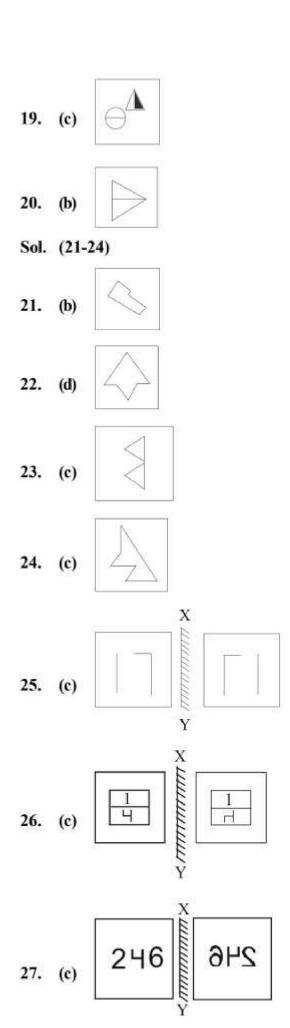


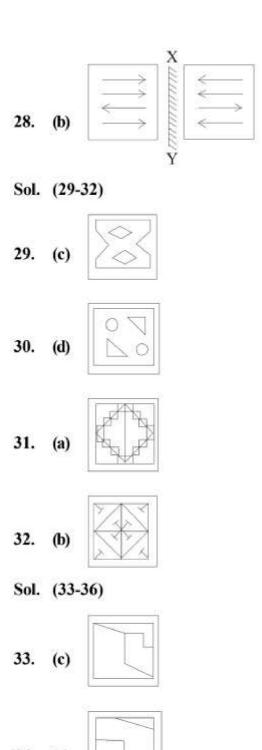


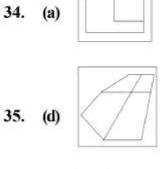
Sol. (17-20)

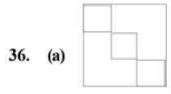








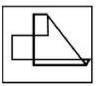








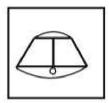
38. (a)



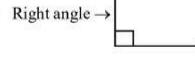
39. (b)



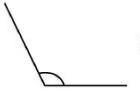
40. (b)



41. (d)



Greater than right angle →



or

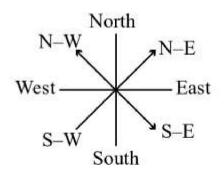


Lesser than right angle \rightarrow

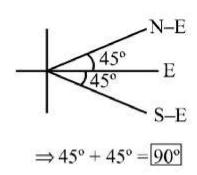
Hence, As shown in the given figure, 2, 3, 4 and 5 angles are greater than right angle.

42. (c) Total number of cars sold in the months of January, March and May
= 20,000 + 10,000 + 15,000

43. (b)



Angle between the directions North-East South-East:



44. (d) Area of rectangle = length \times breadth \underline{ATQ}

Area of one tile = $15 \times 12 = 180 \text{ cm}^2$

Total area covered by 7500 tiles = 7500×180 = 1350000 c

$$= 135 \, \text{m}^2$$

 $[: 1m = 100 \text{ cm } 1m^2 = 10000 \text{ cm}]$

Area of floor = length × breadth

$$135 = length \times 9$$

$$Length = \frac{135}{9} = \boxed{15m}$$

45. (b) Selling price per dozen = 12×4.50 = ₹ :
 Profit per dozen = selling price - cost p
 = 54 - 48 = ₹6

46. (b) Perimeter of rectangle = 2 (length + brea = 2(3+4)

$$=2(7)=14m$$

$$=2\times2=4\,\mathrm{cm}^2$$

Total area covered by 11,250 tiles

$$=11,250 \times 4 \text{ cm}^2$$

$$=45000 \text{ cm}^2 = 450 \text{ m}^2 \text{ [} :: 100 \text{ cm} = 1\text{m} \text{]}$$

Area of courtyard = length \times breadth

$$450 = 25 \times breadth$$

Breadth =
$$\frac{450}{25}$$
 = 18m

Perimeter of courtyard = 2 (length + breadth)

$$=2(25+18)$$

$$= 2 \times 43 = 86m$$

$$Gain = \frac{3}{5} \text{ of cost price (CP)}$$

ATQ

$$SP = CP + Profit$$

Profit =
$$\frac{3}{5} \times CP$$

$$6000 = \text{CP} + \frac{3}{5} \times \text{CP}$$

$$6000 = CP\left(1 + \frac{3}{5}\right)$$

$$6000 = \text{CP}\left(\frac{8}{5}\right)$$

$$CP = \frac{6000 \times 5}{8} = \boxed{3750}$$

49. (c)

ATQ

$$\frac{A}{A+4} + \frac{A+2}{12-2} - \frac{3}{10}$$

$$\Rightarrow \frac{6}{6+4} + \frac{6+2}{12-2} - \frac{3}{10}$$

$$\Rightarrow \quad \frac{6}{10} + \frac{8}{10} - \frac{3}{10}$$

$$\Rightarrow \frac{6+8-3}{10} = \boxed{\frac{11}{10}}$$

50. (b) Number of bottles =
$$\frac{(14.7 \times 1000) \text{ ml}}{245 \text{ ml}}$$

51. (b)
$$24 \text{ hours} = 1 \text{ day}$$

ATQ

$$\Rightarrow \frac{127 \text{ hours}}{24 \text{ hour}} = 5 \text{ days } 7 \text{ days}$$

52. (b)
$$\frac{248}{13} + \frac{168}{26} + \frac{513}{39}$$

$$\Rightarrow \frac{248 \times 3 + 168 \times 2 + 513}{39}$$

$$\Rightarrow \frac{744 + 336 + 513}{39} = \frac{1593}{39}$$

$$= \frac{503}{13}$$

53. (c)
$$0.125 = \frac{125}{1000}$$

$$=\frac{1}{8}$$

54. (b)
$$\frac{152}{125} = \boxed{1.216}$$

55. **(b)** Factors of
$$36 = 2 \times 2 \times 3 \times 3$$

= $2^2 \times 3^2$

Total number of factors = $(2+1) \times (2+1)$

$$=3\times3=9$$

56. (d) Let the other number be
$$x$$

$$\frac{\text{ATQ}}{=\text{x} \times 16 = 384}$$
$$\text{x} = \frac{384}{16}$$

57. (d)
$$3.5+3.05+3.005+4\times3.05$$

 $\Rightarrow 3.5+3.05+3.005+12.2$

58. (c)
$$12.0625 = \frac{120625}{10000}$$
$$= \frac{193}{16}$$

59. (c) Greatest 5-digit number formed using
$$2, 1, 9, 0$$
 and $4 = 94210$

Smallest 5 digit number formed using 2, 1, 9, 0 and 4 = 10249

Difference between both numbers

60. (d)
$$\frac{1}{7}[17+36\times3\times7-5\times2]$$

$$\Rightarrow \frac{1}{7}[17+36\times21-10]$$

$$\Rightarrow \frac{1}{7}[17 + 756 - 10]$$

$$\Rightarrow \frac{1}{7}[763] = \frac{763}{7} = \boxed{109}$$

- 61. (c) The passage states that the nomads live where water sources dry up. So, they move when natural resources like water finish.
- 62. (a) The passage mentions that they live in "makeshift tents", which means temporary and easy to move. So, the best word is "makeshift" here.

- 63. (c) The last lines of the passage clearly st that "The hierarchical structure is be on the number of camels one possess
- 64. (d) The passage says that they use stars planets at night to find their way in desert.
- 65. (a) as the word "beset" is often used to s that someone is surrounded by difficul So, in this context, it clearly me "affected by" problems or challenges
- 66. (b) The passage states that "Garbage great environment hazard", meaning i danger or risk. "Threat" is a di synonym for hazard as it means the sa Other options like "trash" or "disp

refer to waste, not danger.

- 67. (d) The passage mentions that paper, me and glass can be recycled. Plastic is listed, indicating that it cannot be recy in the context of this passage.
- 68. (c) The passage discusses how compost help soil fertility, reduce pollution, create fertilizer. It does not men anything about making surround beautiful. Hence, it is the right fit here
- 69. (b) The word "valuable" means somether that is important, useful, or of great we the direct opposite of this is "useful which means having no use, benefit worth. Hence, it is the right answer.
- 70. (b) The passage says recycled materials paper, metals, and glass can be reused being sent to the recycling centrolling they are processed for reconfirming they are processed for reconfirming they are processed.
- 71. (b) The passage clearly states that dogs used to detect explosives because of the "high smelling ability", making option the most accurate reason.
- 72. (c) As the passage mentions that the Alas Malamute "has the ability to withs temperatures up to- 70 degrees", with directly supports option (c).

- 73. (d) In the passage, it is emphasized that dogs, when cared for properly, become "loving, playful, and intelligent companions." Hence, option (d) best reflects this statement.
- 74. (c) The word "faithful" means loyal and reliable. Its direct opposite is "undependable", which means someone who cannot be trusted, making option (c), the correct antonym.
- 75. (a) The word "incredible" typically means something so extraordinary that it's hard to believe. Hence, "impossible to believe" is the most appropriate meaning.
- 76. (b) The passage states that birds feed on insects and earthworms, while birds and bird eggs are eaten by foxes and snakes. So, the food chain logically begins with bird eggs and birds, then insects and earthworms, and ends with foxes and snakes.

- 77. (a) The passage clearly mentions that be help maintain a "perfect balance of natural which refers to ecological balan specifically not the food chain of fore Hence, "eco balance" is the right fit.
- 78. (c) As the second paragraph of the pass mentions "nectar feeding birds are ca pollinators", so, the correct answe "birds".
- 79. (a) In the first line, birds are described as a "important" and "essential" to environment and food chain. These we are used synonymously in the context.
- 80. (d) The passage discusses how birds proplants, assist in pollination, and main eco balance, but honey production is mentioned. That is typically association with bees, not birds. Hence, birds help all the following mentioned areas extended the honey production.