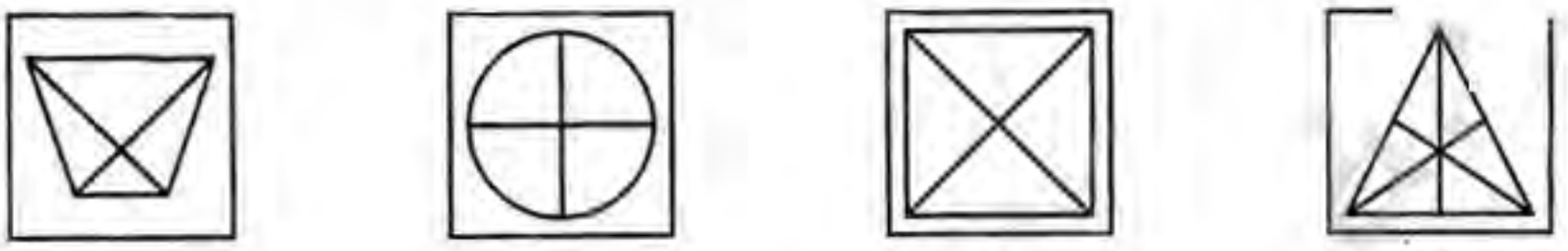
SECTION—I
MENTAL ABILITY TEST
PART—I

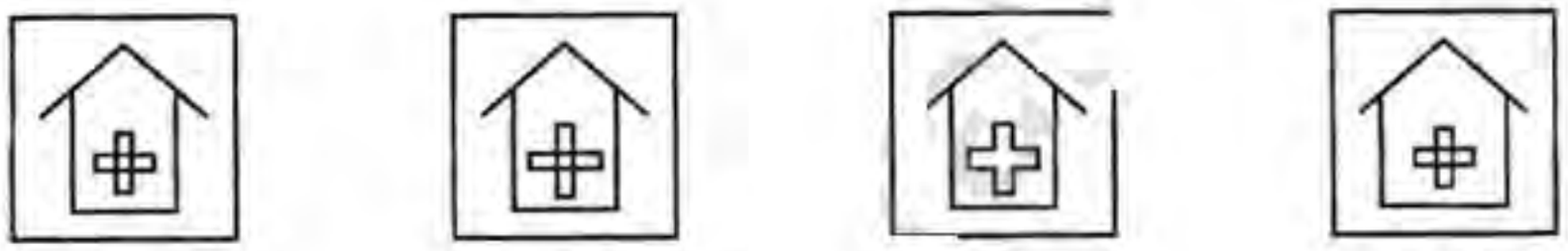
Directions : In Question Nos. **1** to **5**, four figures 1, 2, 3 and 4 have been given in each question. Of these four figures, three figures are similar in some way and one figure is different. Select the figure which is different and write your answer only in English numbers (i.e., 1, 2, 3 or 4) in the box against the number corresponding to the question in the Answer Sheet.

1.



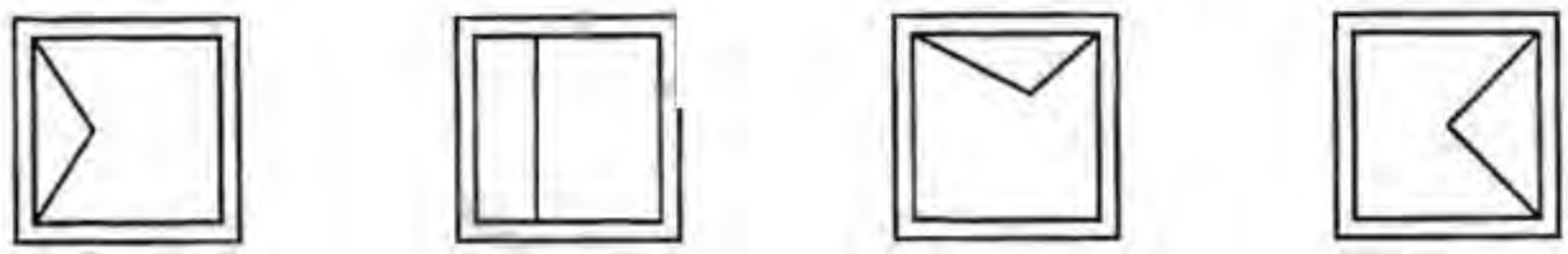
(1) (2) (3) (4)

2.



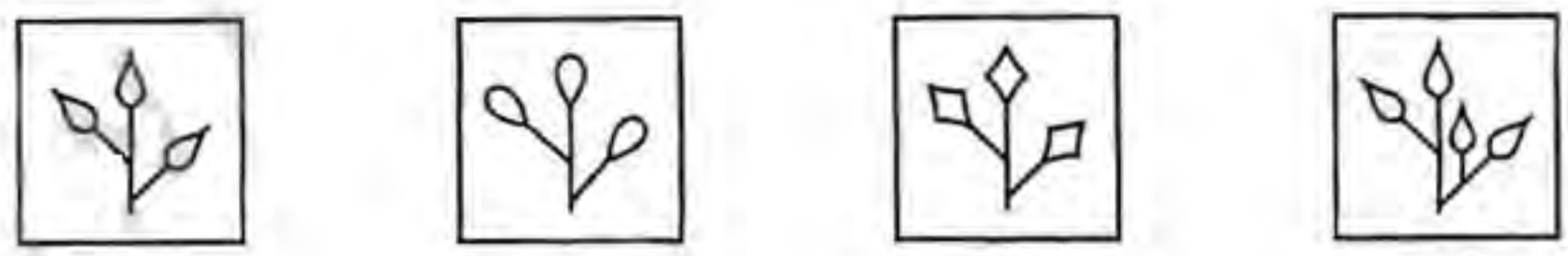
(1) (2) (3) (4)

3.



(1) (2) (3) (4)

4.



(1) (2) (3) (4)

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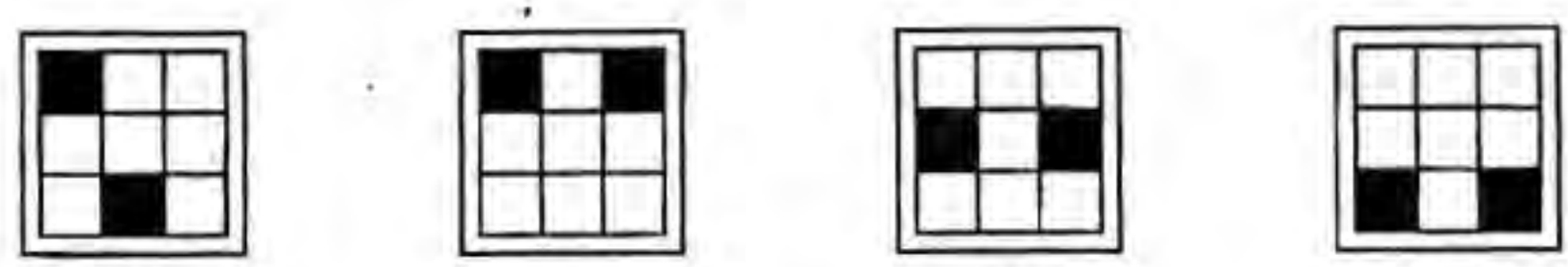
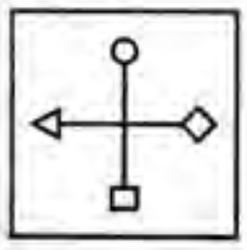
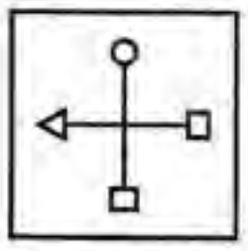
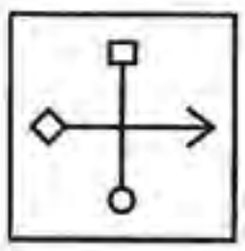
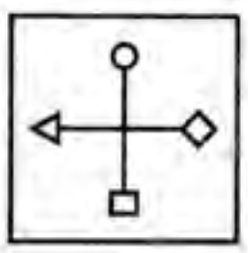
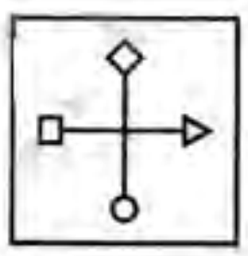
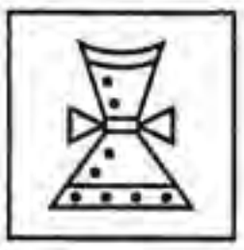
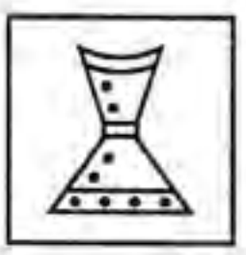
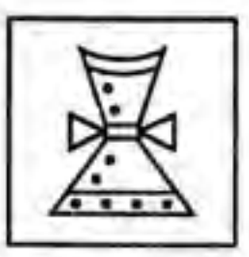
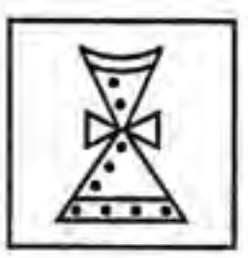
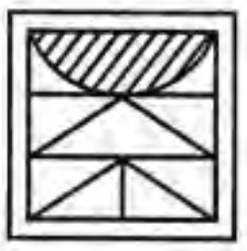
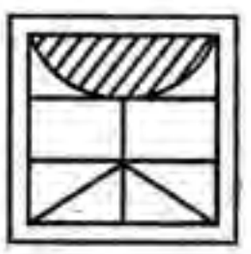


(1) (2) (3) (4)

PART—II

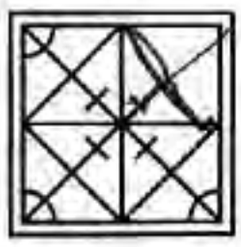
Directions : In Question Nos. **6** to **10**, a problem figure is given on the left-hand side and four answer figures marked 1, 2, 3 and 4 are given on the right-hand side. Select the answer figure which is exactly the same as the problem figure and write your answer only in English numbers (i.e., 1, 2, 3 or 4) in the box against the number corresponding to the question in the Answer Sheet.

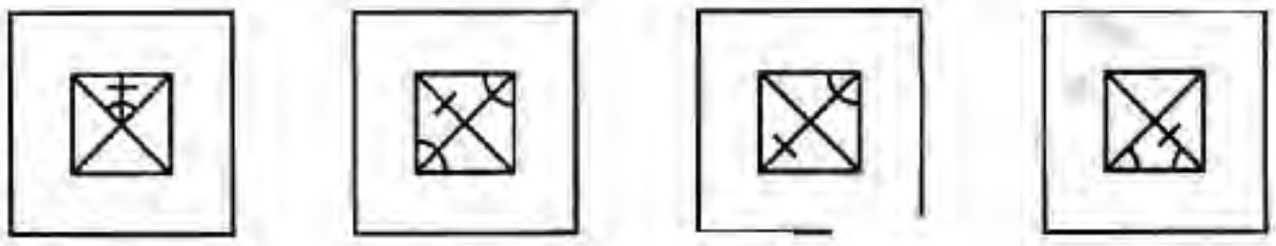
	Problem Figure	Answer Figures			
6.		 (1)	 (2)	 (3)	 (4)
7.		 (1)	 (2)	 (3)	 (4)
8.		 (1)	 (2)	 (3)	 (4)
9.		 (1)	 (2)	 (3)	 (4)
10.		 (1)	 (2)	 (3)	 (4)

PART—III

Directions : In Question Nos. **11** to **15**, there is a problem figure on the left-hand side, a part of which is missing. Observe the answer figures 1, 2, 3 and 4 on the right-hand side and find out the answer figure which, without changing the direction, fits in the missing part of the problem figure in order to complete the pattern in the problem figure. Indicate your answer by the number of the answer figure chosen by you in the box against the number corresponding to the question in the Answer Sheet.

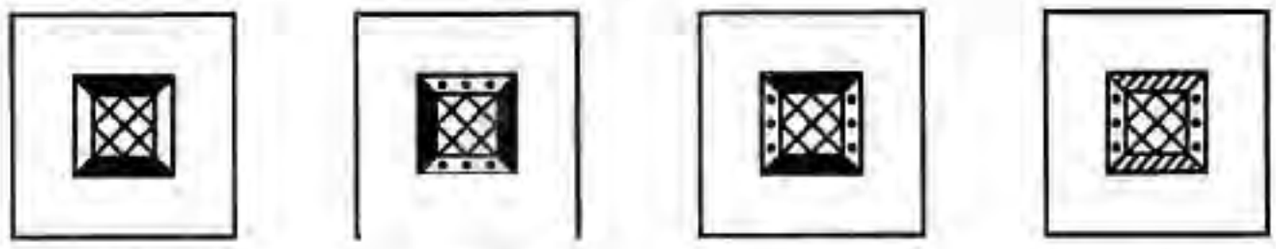
Problem Figure | **Answer Figures**

11. 

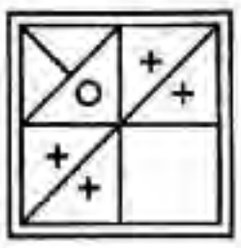


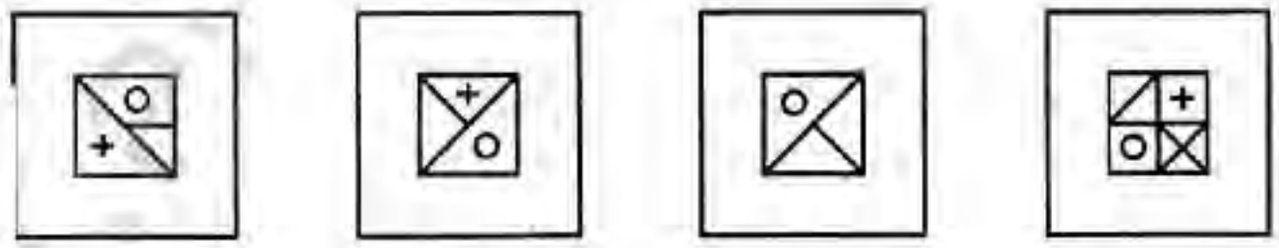
(1) (2) (3) (4)

12. 



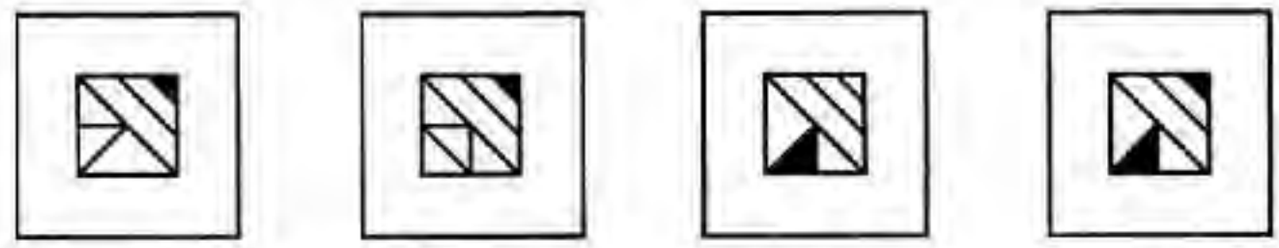
(1) (2) (3) (4)

13. 

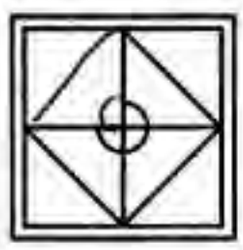


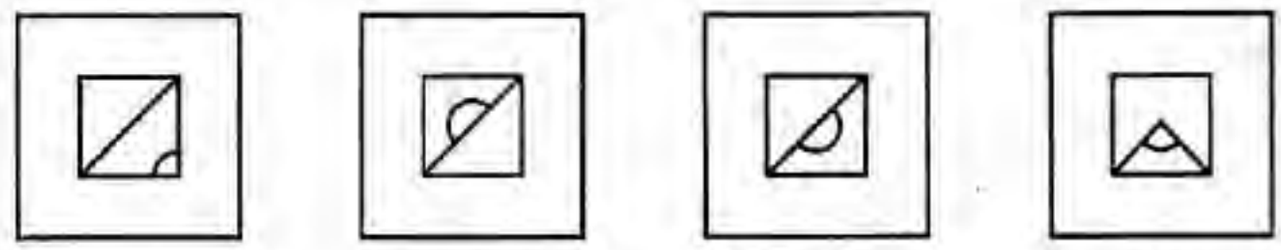
(1) (2) (3) (4)

14. 



(1) (2) (3) (4)

15. 



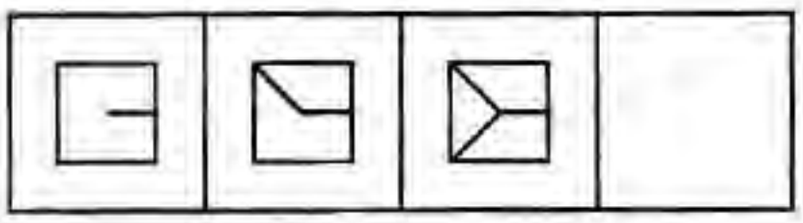
(1) (2) (3) (4)

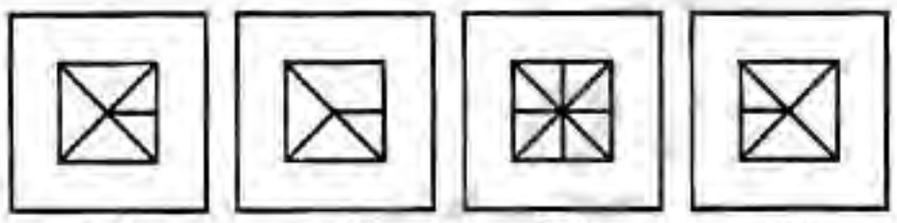
PART—IV

Directions : In Question Nos. **16** to **20**, there are three problem figures on the left-hand side and the space for the fourth figure is left blank. The problem figures are in a series. Find out one figure from among the answer figures 1, 2, 3 and 4 given on the right-hand side which would occupy the blank space for the fourth figure on the left-hand side and which completes the series. Indicate your answer by the number of the answer figure chosen by you in the box against the number corresponding to the question in the Answer Sheet.

Problem Figures | **Answer Figures**

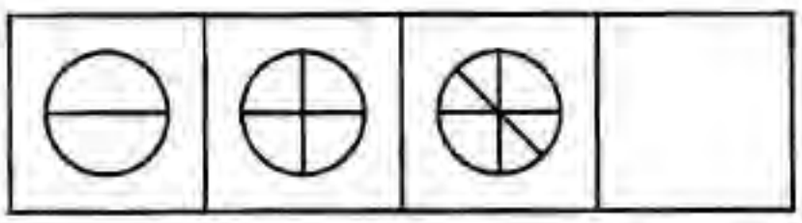
16.

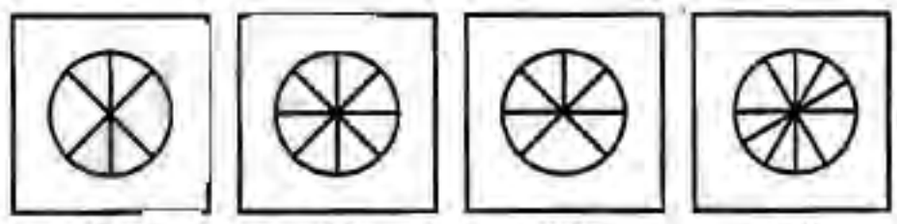




(1) (2) (3) (4)

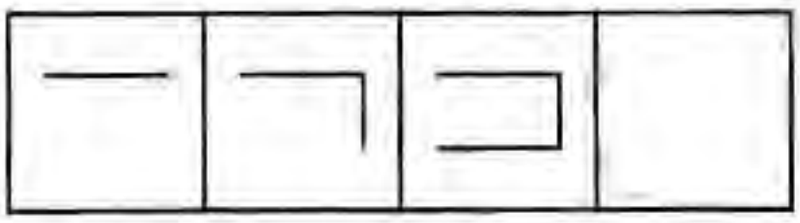
17.

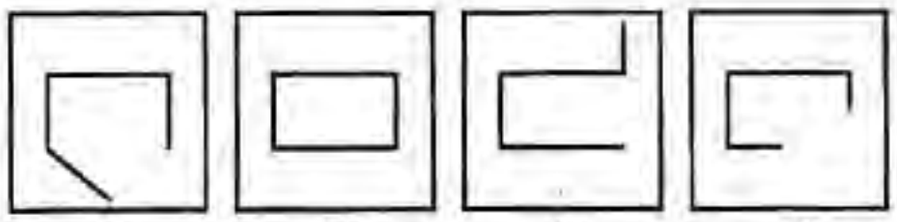




(1) (2) (3) (4)

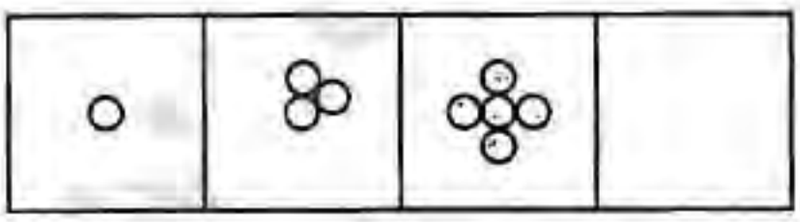
18.

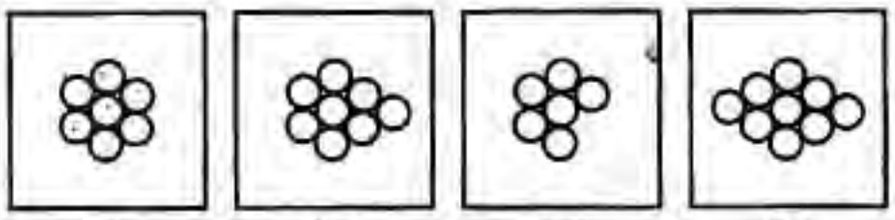




(1) (2) (3) (4)

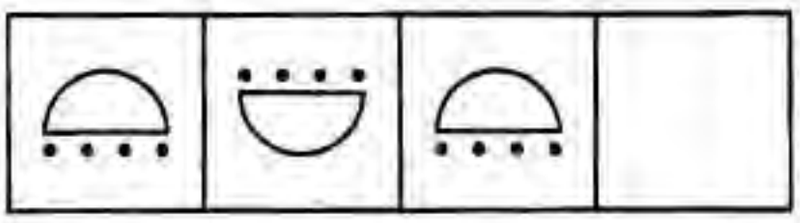
19.

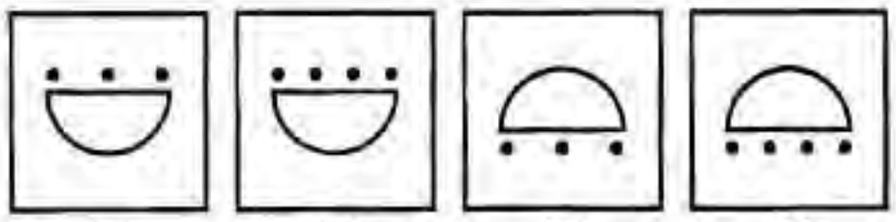




(1) (2) (3) (4)

20.



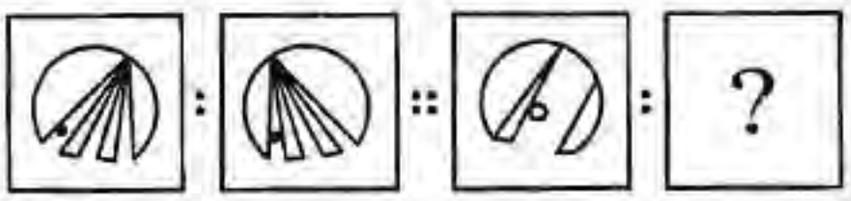


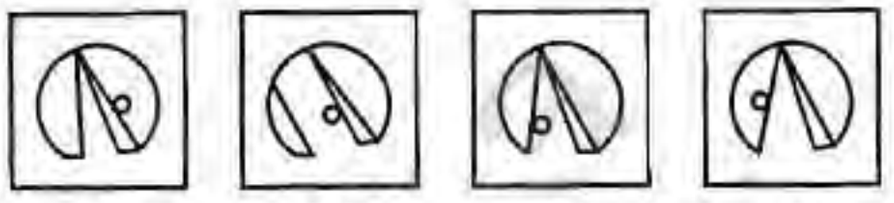
(1) (2) (3) (4)

PART—V

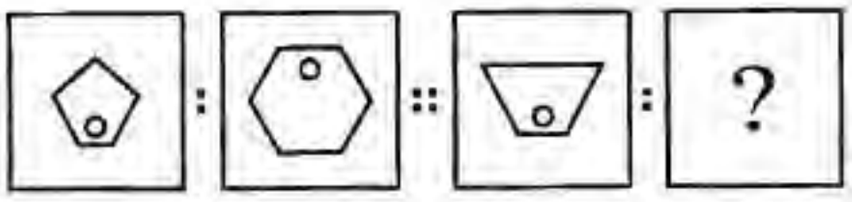
Directions : In Question Nos. **21** to **25**, there are three problem figures followed by a mark of interrogation (?) for the fourth one. There exists a relationship between the first two problem figures. A similar relationship should exist between the third and the fourth problem figures. Select one figure from the answer figures 1, 2, 3 and 4 which replaces the mark of interrogation. Write the number of the answer figure selected by you in the box against the number corresponding to the question in the Answer Sheet.

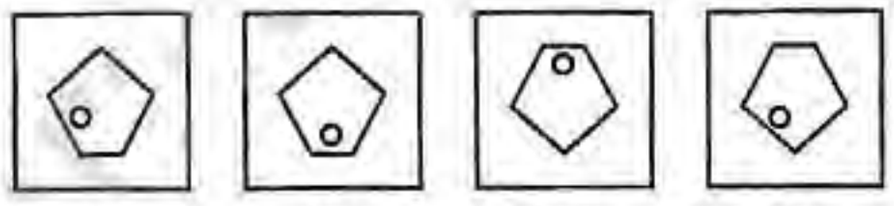
Problem Figures | **Answer Figures**

21. 

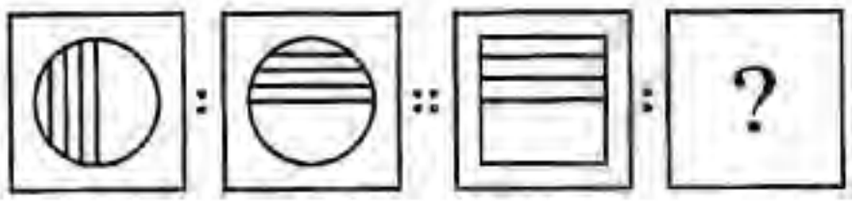


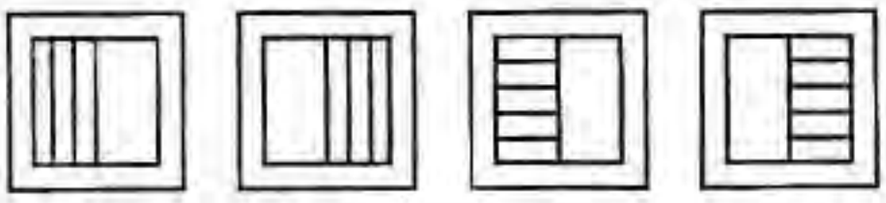
(1) (2) (3) (4)

22. 

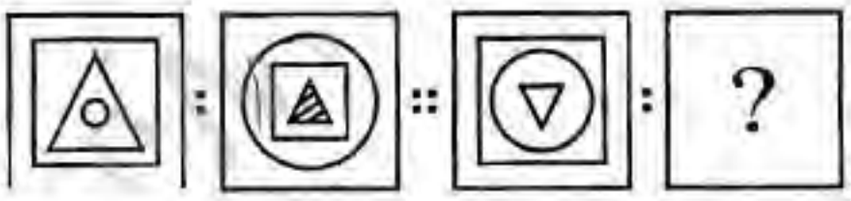


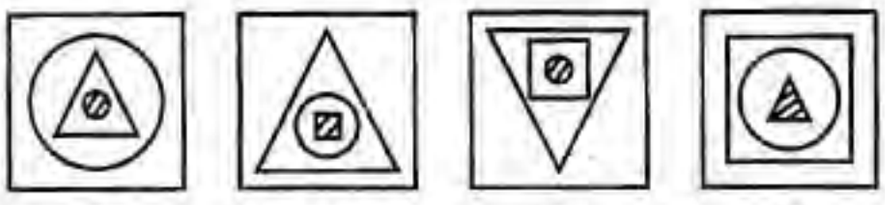
(1) (2) (3) (4)

23. 

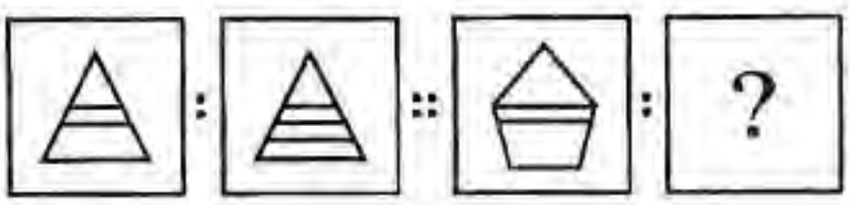


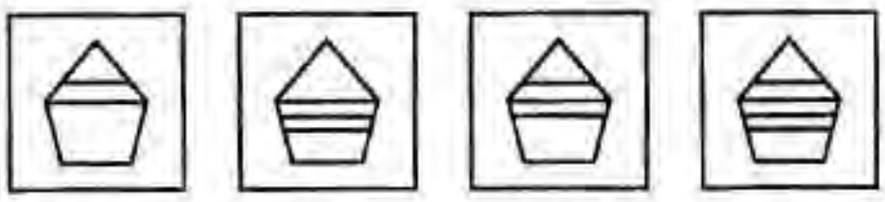
(1) (2) (3) (4)

24. 



(1) (2) (3) (4)

25. 



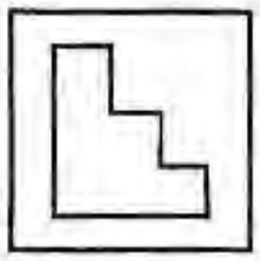
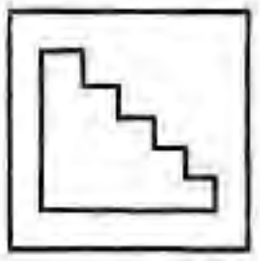
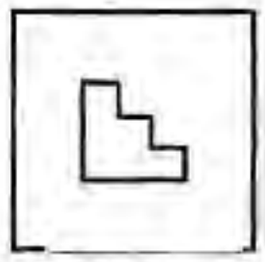
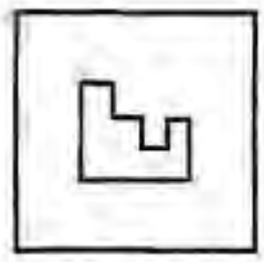
(1) (2) (3) (4)

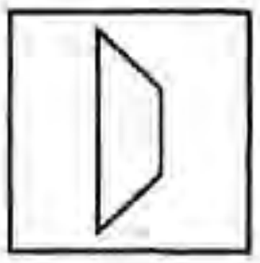
PART—VI

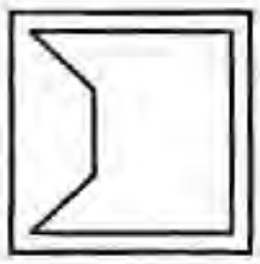
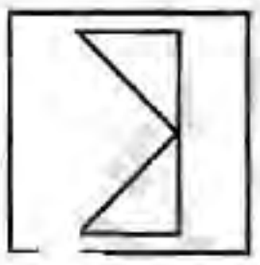
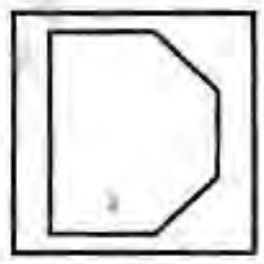
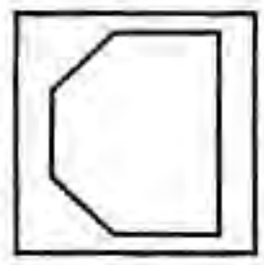
Directions : In Question Nos. **26** to **30**, one part of a geometrical figure is given in the problem figure on the left-hand side and the other one is among the four answer figures 1, 2, 3 and 4 on the right-hand side. Find the figure on the right-hand side that completes the problem figure. Write the number given below that figure in the box against the number corresponding to the question in the Answer Sheet.

Problem Figure | **Answer Figures**

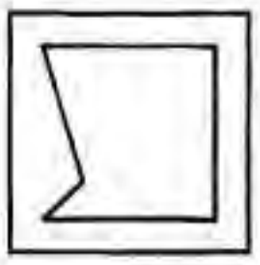
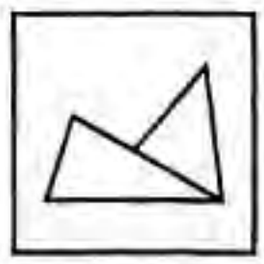
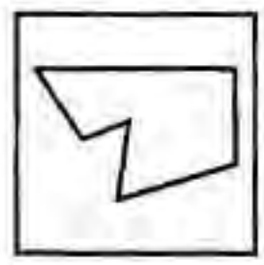
26. 

(1)  (2)  (3)  (4) 

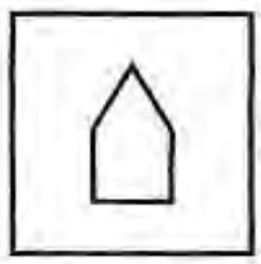
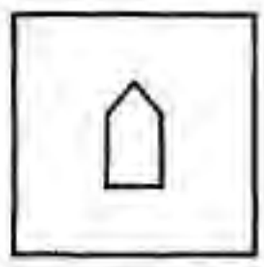
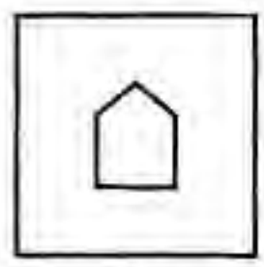
27. 

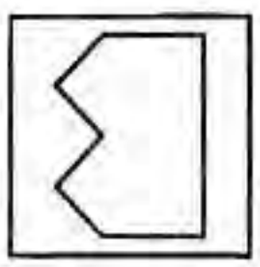
(1)  (2)  (3)  (4) 

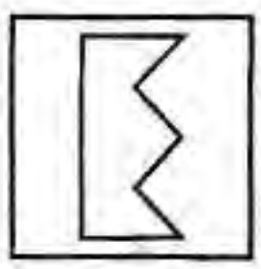
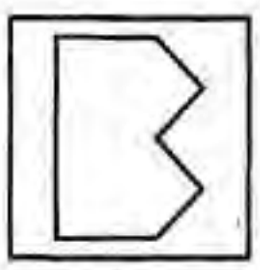
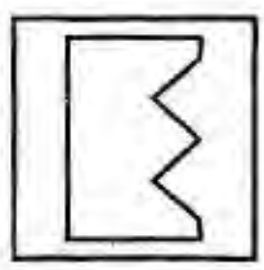
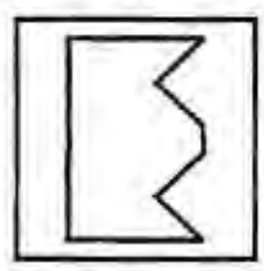
28. 

(1)  (2)  (3)  (4) 

29. 

(1)  (2)  (3)  (4) 

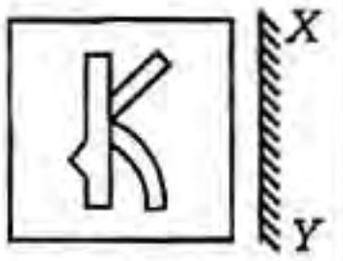
30. 

(1)  (2)  (3)  (4) 

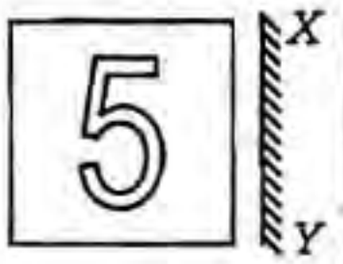
PART—VII

Directions : In Question Nos. **31** to **35**, there is a problem figure on the left-hand side and four answer figures marked 1, 2, 3 and 4 are given on the right-hand side. Select the answer figure which is exactly the mirror image of the problem figure when the mirror is held at *XY* and write your answer only in English numbers (i.e., 1, 2, 3 or 4) in the box against the number corresponding to the question in the Answer Sheet.

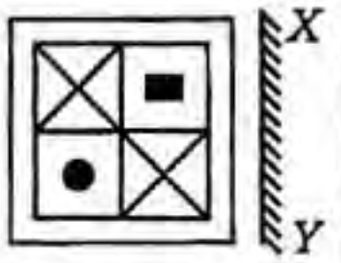
Problem Figure | **Answer Figures**

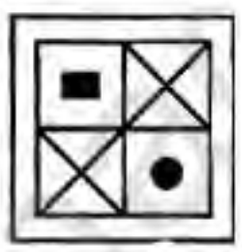
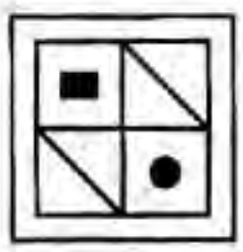
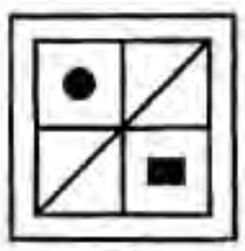
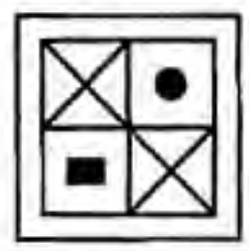
31. 

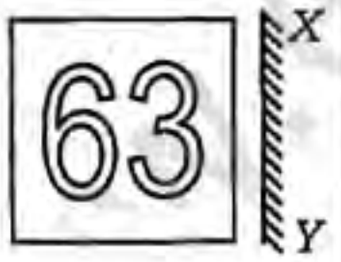
(1)  (2)  (3)  (4) 

32. 

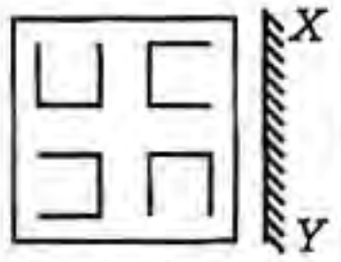
(1)  (2)  (3)  (4) 

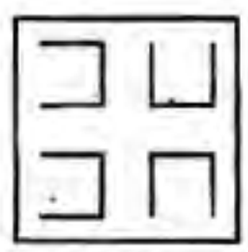
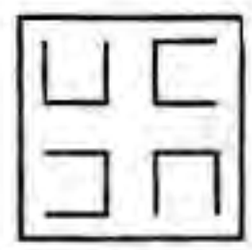
33. 

(1)  (2)  (3)  (4) 

34. 

(1)  (2)  (3)  (4) 

35. 

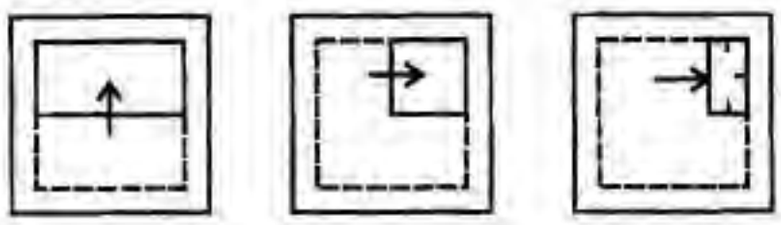
(1)  (2)  (3)  (4) 

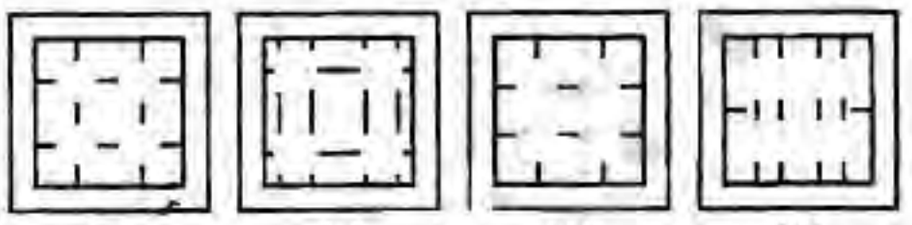
PART—VIII

Directions : In Question Nos. **36** to **40**, a piece of paper is folded and also punched as shown in problem figures on the left-hand side, and four answer figures marked 1, 2, 3 and 4 are given on the right-hand side. Select the answer figure which indicates how the paper will appear when opened (unfolded) and write your answer only in English numbers (i.e., 1, 2, 3 or 4) in the box against the number corresponding to the question in the Answer Sheet.

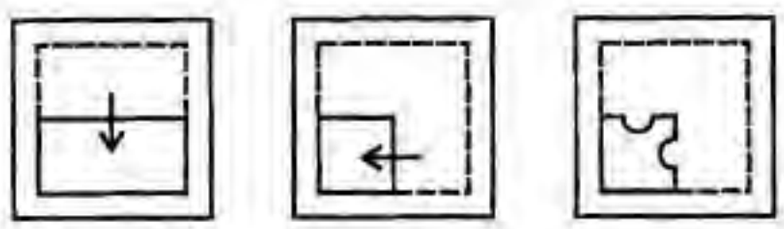
Problem Figures | **Answer Figures**

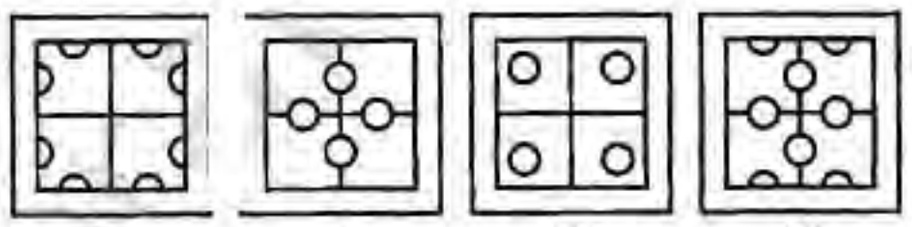
36.



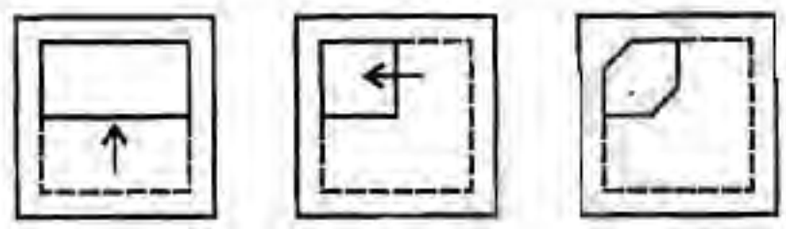


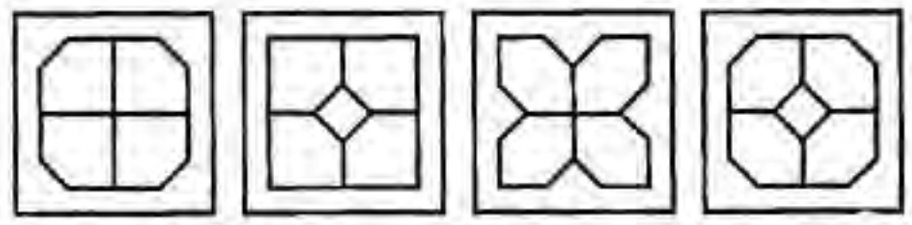
37.



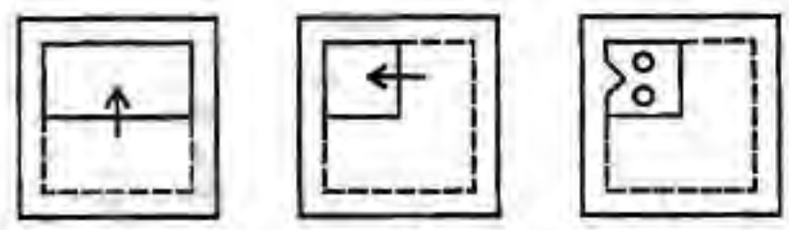


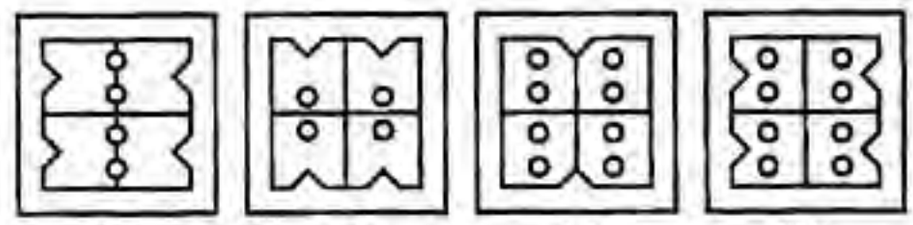
38.



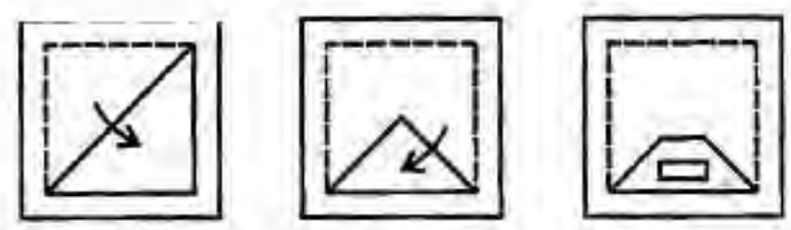


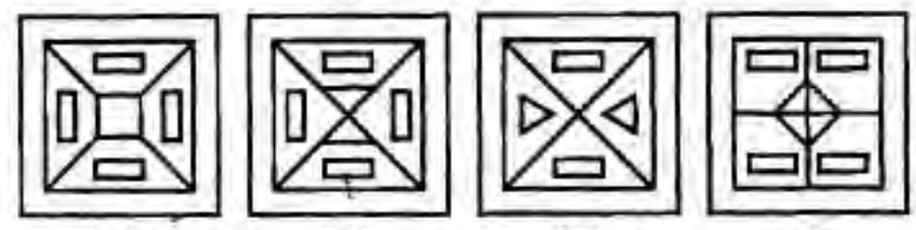
39.





40.



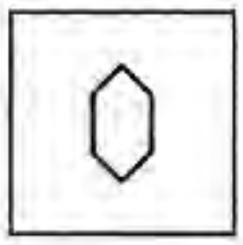


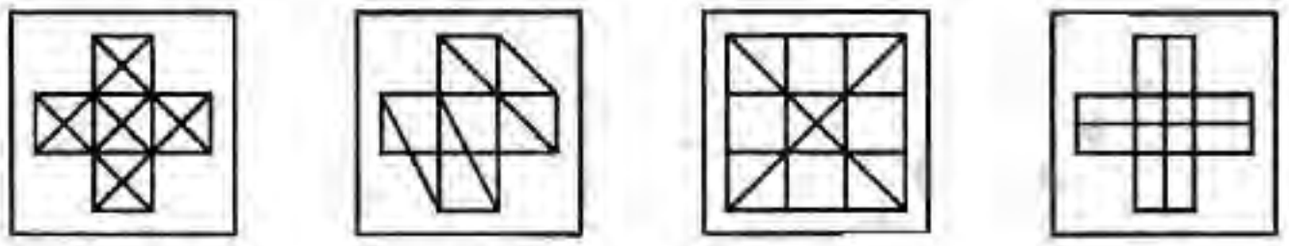
PART—X

Directions : In Question Nos. **46** to **50**, a problem figure is given on the left-hand side and four answer figures marked 1, 2, 3 and 4 are given on the right-hand side. Select the answer figure in which the problem figure is hidden/embedded and indicate your answer by the number of the answer figure chosen by you in the box against the number corresponding to the question in the Answer Sheet.

Problem Figure | **Answer Figures**

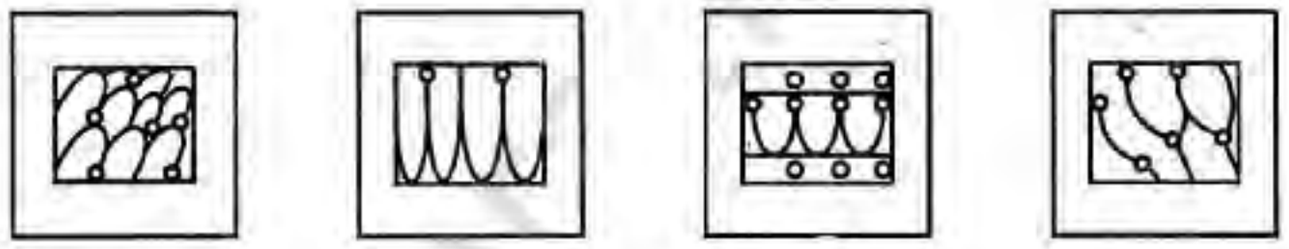
46.





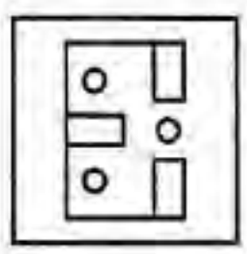
(1) (2) (3) (4)

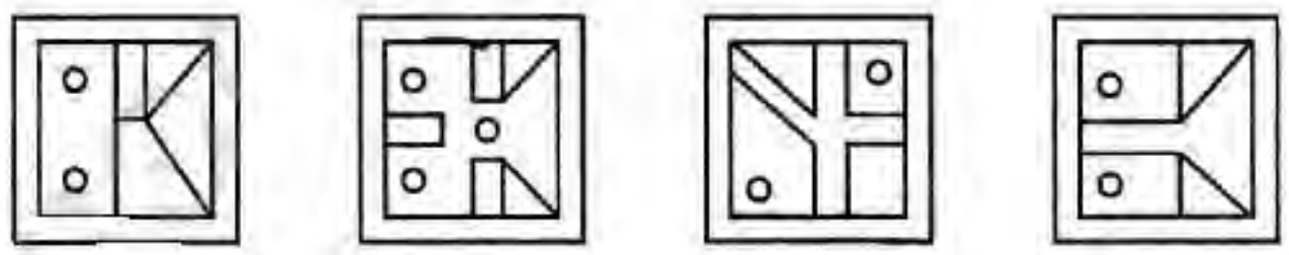
47.



(1) (2) (3) (4)

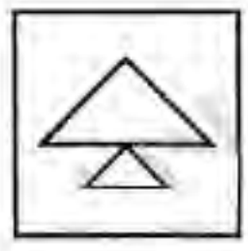
48.

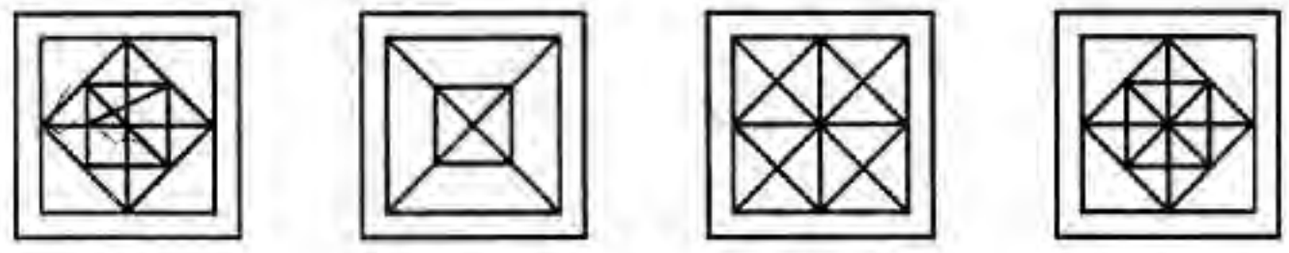




(1) (2) (3) (4)

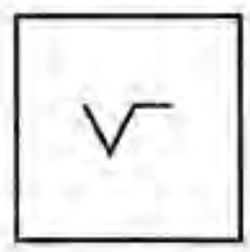
49.

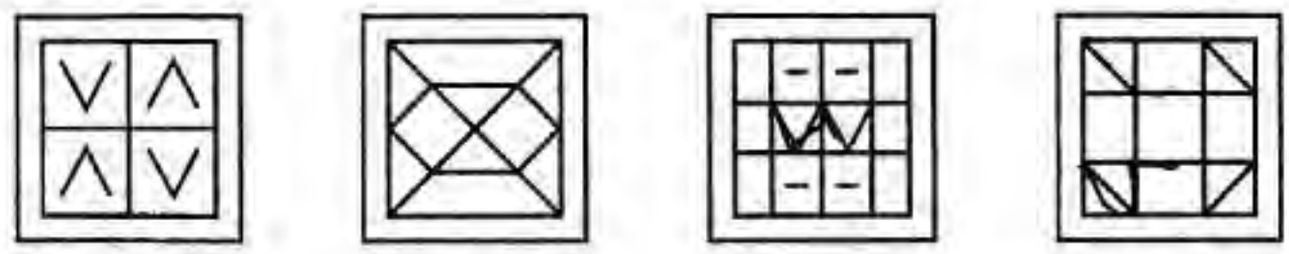




(1) (2) (3) (4)

50.





(1) (2) (3) (4)

SECTION—II
MATHEMATICS

Directions :
For every question, four probable answers bearing numbers 1, 2, 3 and 4 are given. Only **one** out of these is **correct**. You have to select the correct answer and write the number in the box against the number corresponding to the question in the Answer Sheet.

51. What is the sum of the first six multiples of 6?

(1) 36 (2) 72

(3) 108 (4) 126

52. The next term of the sequence 15, 18, 24, 33, ... is

(1) 45 (2) 56

(3) 60 (4) 66

53. What is correct for all the numbers 17, 19, 23?

(1) All are even numbers

(2) All are prime numbers

(3) All are divisible by 17

(4) All are less than 20

54. The sum of 7·7, 7·07, 7·007 and 77·0077 is

(1) 98·7777 (2) 98·7877

(3) 98·7807 (4) 98·7847

55. The length of a rectangle is $\frac{7}{5}$ of its breadth. If its perimeter is 48 cm, then what is its length?

(1) 140 cm

(2) 70 cm

(3) 14 cm

(4) 10 cm

56. A bus from *A* to *B* covers a distance of 308 km at a speed of 112 km/hr. How much time is taken by the bus to reach *B* from *A*?

(1) 3 hours

(2) 2 hours 45 minutes

(3) 2 hours 30 minutes

(4) 2 hours 15 minutes

57. 10 persons can finish a piece of work in 15 days. In how many days the same work can be done by 25 persons?

(1) 6 days

(2) 12 days

(3) 15 days

(4) 18 days

58. A tub can hold 4 times as much water as in a bucket. If the total capacity of a tub and a bucket is 3 L 500 mL, what is the capacity of the bucket?

(1) 700 mL

(2) 875 mL

(3) 1500 mL

(4) 3200 mL

59. A man purchases rice at the rate of ₹ 80 per kg. How much rice can he purchase for ₹ 220?

(1) 3 kg

(2) 2·750 kg

(3) 2·500 kg

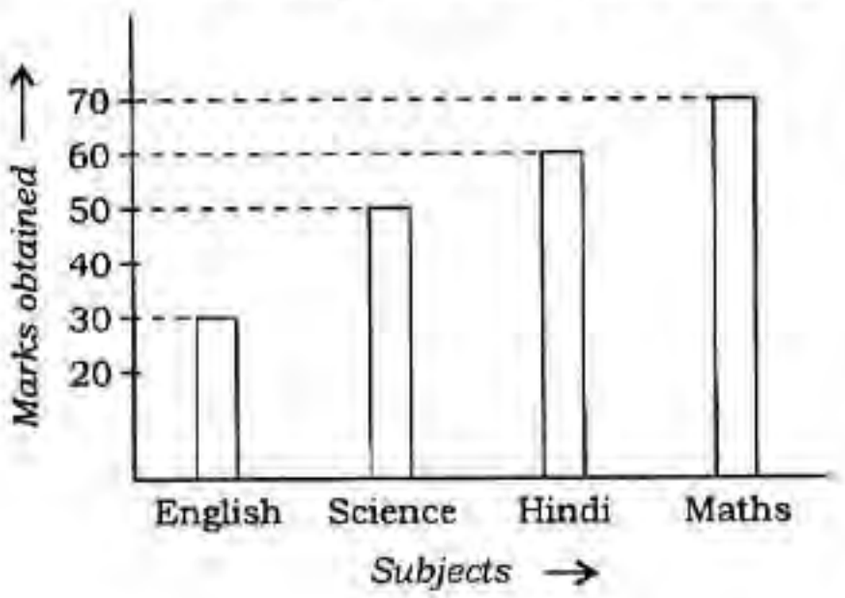
(4) 2·250 kg

60. Amit scored 10 marks less than Joseph in an examination. Ali scored 15 marks more than Joseph. In total they scored 245 marks. What was Amit's score?

(1) 60 (2) 70

(3) 80 (4) 95

61. Read the following bar chart and answer the question given below :



The sum of the marks in Hindi and Mathematics is

(1) 100 (2) 120

(3) 130 (4) 110

62. Ramesh has 22·5 litres of milk and Rohan has 20·2 litres of milk. However they realize that they do not have enough milk, as they require 43·5 litres milk in total to deliver in a restaurant. How much more milk they require to arrange to fulfil the need of the restaurant?

(1) 1·8 litres

(2) 1·5 litres

(3) 0·8 litre

(4) 0·5 litre

63. The following pictograph shows the number of orange boxes sold by a trader in first 3 days of a week :

Monday	□ □ □ □
Tuesday	□ □ □ □ □
Wednesday	□ □ □

(□ shows 30 boxes)

If he still has 140 boxes of oranges left, how many boxes he had initially?

(1) 500 (2) 400

(3) 360 (4) 600

64. The sum of two numbers is 4312. If one of the numbers is three times the other, what is the greater number?

(1) 1078 (2) 2156

(3) 2872 (4) 3234

65. In the following addition, find the missing digits :

$$\begin{array}{r} 9\,8\,2\,0\,4 \\ 6\,1\,\otimes\,\circledast\,8 \\ \hline 16\,*\,1\,9\,2 \end{array}$$

(1) $\circledast = 8,\ \otimes = 8,\ * = 1$

(2) $\circledast = 8,\ \otimes = 7,\ * = 3$

(3) $\circledast = 8,\ \otimes = 6,\ * = 2$

(4) $\circledast = 8,\ \otimes = 9,\ * = 0$

66. What is the sum of the smallest 5-digit number and the largest 6-digit number?

(1) 1009999 (2) 1019001

(3) 1009989 (4) 1009998

67. The HCF of two prime numbers is

(1) their sum

(2) their difference

(3) 1

(4) 0

68. The HCF of 180, 384 and 144 is

(1) 36

(2) 24

(3) 12

(4) 4

69. Which expression results in a value greater than 1?

(1) $\frac{1}{2}+\frac{1}{3}$

(2) $\frac{1}{2}-\frac{1}{3}$

(3) $\frac{1}{2}\times\frac{1}{3}$

(4) $\frac{1}{2}\div\frac{1}{3}$

70. Which of the following is **not** equal to 18?

(1) $12+(8-2)$

(2) $(14-7)+11$

(3) $(23-4)-(3+6)$

(4) $20-(4-2)$

71. If $600\times3\cdot7=2220$, then $222\div37$ equals

(1) 6000 (2) 60

(3) 6 (4) 0·6

72. In Supriya's class, 14 out of 25 students ride a bus to school. What percentage of the students do **not** ride a bus?

(1) 11% (2) 14%

(3) 44% (4) 56%

73. A table was sold at 16% loss for ₹ 1,680. The cost price of the table was

(1) ₹ 1,696 (2) ₹ 1,800

(3) ₹ 2,000 (4) ₹ 2,148

74. At what rate percent per annum a sum of ₹ 1,200 will become ₹ 1,560 in 5 years at simple interest?

(1) 4% (2) 5%

(3) 6% (4) 8%

75. In the division sum, $76\overline{)2345}$, the correct quotient and the correct remainder are

(1) quotient—30 ; remainder—76

(2) quotient—30 ; remainder—55

(3) quotient—30 ; remainder—65

(4) quotient—30 ; remainder—14

SECTION—III
LANGUAGE

Directions :

There are **five** 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 bearing numbers (1), (2), (3) and (4) are given. Only **one** out of these is **correct**. You have to choose the correct answer and write the number in the box against the number corresponding to the question in the Answer Sheet.

PASSAGE—1

Anil had been less than a month in Dehradun when he discovered the pool in the forest. It was the height of summer, and the school he was to join had not yet opened. Having as yet made no friends in the small town in the foothills he wandered about a good deal by himself into the hills and forests that stretched away on all sides of the town. It was hot, very hot at that time of the year, and Anil, aged thirteen, walked about in his vest and shorts, his brown canvas shoes white with the chalky dust that flew up from the ground.

76. What did Anil discover in the forest?

(1) a tiger

(2) a school

(3) a pool

(4) a temple

77. It was the peak of _____ season.

(1) rainy

(2) winter

(3) summe

(4) sp.ing

78. Why did Anil wander about by himself?

(1) He had no friends.

(2) He wanted to be alone.

(3) He had lost his way.

(4) He was looking for someone.

79. Anil's shoes had become white, because :

(1) of walking too much.

(2) he had used white polish.

(3) of chalky dust.

(4) of the heat of the sun.

80. Which word in the passage means the opposite of 'stayed'?

(1) pulled

(2) covered

(3) flew

(4) wandered

PASSAGE—2

The Sun Temple at Konark is on the eastern coast of India near Puri in Odisha. It was built by King Narasimhadeva I of Ganga dynasty. The temple is famous for its gigantic structure and larger than life sculptures. The sculptures in the temple increase its beauty. The large Sun image and the female musicians' figures give a different kind of quality to this temple. They are formed on the terrace above the bottom and middle levels. They have been shown playing with confidence and delight. Each one is shown carrying a musical instrument. The Surasundari is shown with a drum.

81. The Konark Temple :

(1) is on the eastern side of India.

(2) was excavated by a king of the Ganga dynasty.

(3) increases the beauty of the sculptures.

(4) is known for musical instruments.

82. The temple is famous for :

(1) its huge structure

(2) the stones used.

(3) its festival.

(4) its position in the country.

83. The temple is different from other temples, because :

(1) of its size.

(2) it was built by a king.

(3) of the figures of the female musicians.

(4) of the faces of sculpture.

84. Surasundari is :

(1) another name of Konark Temple.

(2) an image of the Sun.

(3) the name of a king.

(4) shown with a drum.

85. 'Larger than life' means :

(1) lifelike

(2) small like humans

(3) very big

(4) moving

PASSAGE—3

The neem tree is one of the most useful trees amongst all India's plants and trees. It grows abundantly throughout tropical Asia. It grows tall and wide; so tired travellers often love to sit and rest in its shade. This tree is unique. All its parts have a medicinal value for human beings. It is like a complete medical pharmacy. Very recently, the United States discovered its use as an effective insecticide.

The umbrella-shaped neem grows to about 50 feet tall. It is an evergreen plant though in some parts of India it may be deciduous. If not cut down, it can survive for about 200 years.

Neem is widely grown in India and most parts of tropical Asia. Lately it has been introduced into Africa too.

The neem tree thrives in most kinds of soil. Its roots go deep down the soil where they not only protect it by anchoring it hard but also increase the soil fertility.

86. Neem is a very useful tree, because :

(1) it gives shade to people.

(2) it can live up to 200 years.

(3) it has many medicinal uses.

(4) it increases soil fertility.

87. The opposite meaning of the word 'abundantly' is :

(1) blooming

(2) richly

(3) plentifully

(4) scarcely

88. Neem tree grows well in countries where the weather is :

(1) hot and humid.

(2) hot and dry.

(3) cold and wet

(4) temperate.

89. Which word in the passage means the same as 'well' as used in the phrase, 'grows well'?

(1) anchors

(2) unique

(3) abundantly

(4) deciduous

90. Which part of the neem tree is considered medicinally useful?

(1) only leaves

(2) all parts

(3) thick bark

(4) old roots

PASSAGE—4

Every animal on earth must eat something in order to stay alive. Many animals eat some parts of plants. Giraffes munch leaves from tall trees on the African plain. Koala bears in Australia eat only eucalyptus leaves in the forest. Even the mighty buffalo in America eats only grass.

Some animals are predators, which means they eat some other animals. Some predators catch and eat small animals like mice and rabbits. Larger fish eat smaller fish. Big predators in Africa like lions and leopards will attack all kinds of big animals, even elephants. Animals that predators eat are called their prey.

With predators all around them, animals need some ways to protect themselves. One form of protection is camouflage. This means that the animal's outside appearance allows it to blend with its surroundings so that it is harder for a predator to find it.

Some predators themselves use camouflage. Predators need camouflage so that prey animals cannot see the predator nearby.

91. Animals need food to :

(1) stay alive.

(2) munch it.

(3) stay active.

(4) run around.

92. Predators are animals which :

(1) only catch small animals.

(2) eat other animals.

(3) only attack other animals.

(4) play with other animals.

93. Giraffes eat :

(1) small fish.

(2) leaves.

(3) rabbits.

(4) lions.

94 What do the koala bears in Australia eat?

(1) eucalyptus leaves

(2) only grass

(3) small animals

(4) all kinds of plants

95. Camouflage means :

(1) to find other animals.

(2) to protect themselves.

(3) to mix with the surroundings.

(4) to hide from enemies.

PASSAGE—5

The shape of a whale is like that of a fish. The whale also lives in water like the fish. When the whale was first discovered, people thought that it was a fish. However, this is not so.

Both fish and whales breathe in oxygen, but they do so in different ways. Fish breathe in oxygen in water through their gills. Whales stick their heads out of water and breathe in oxygen from the air. Whales breathe in through blowholes which are like our nostrils.

The fish are cold-blooded creatures. Their body temperature becomes hotter or colder depending upon their surroundings. However, whales are warm-blooded animals. Like animals and human beings, the body temperature of whales remains the same whether it is cold or hot outside.

Whales give birth to their babies, while most fish lay eggs. Fish usually have scales on their bodies. Whales have smooth bodies. When fish swim, their tails swish from side to side. When whales swim, their tails go up and down.

96. How do the fish breathe in oxygen?

(1) through their gills

(2) from the air

(3) through their blowholes

(4) through their nostrils

97. Why are the whales called warm-blooded creatures?

(1) The body of the whale remains warm even when it is cold outside.

(2) The blood of the whale remains same in winters or summers.

(3) The whale is like an animal.

(4) The body temperature of the whale remains unaffected by the outside temperature.

98. How do the whales breathe in oxygen from the air?

(1) through their gills

(2) through their blowholes

(3) from the air above the water

(4) through their nostrils under the water

99. How are the babies of whales born?

(1) Whale babies hatch out of eggs.

(2) Whales give birth to their babies.

(3) Whales leave their eggs on the seashore to hatch.

(4) Whale babies are born like fish babies.

100. What is the movement of the whale's tail as it swims in the water?

(1) up and down

(2) from side to side

(3) from left to right

(4) from right to left