KARNATAKA NTSE STAGE 1 (2015-16)
GENERAL MENTAL ABILITY TEST

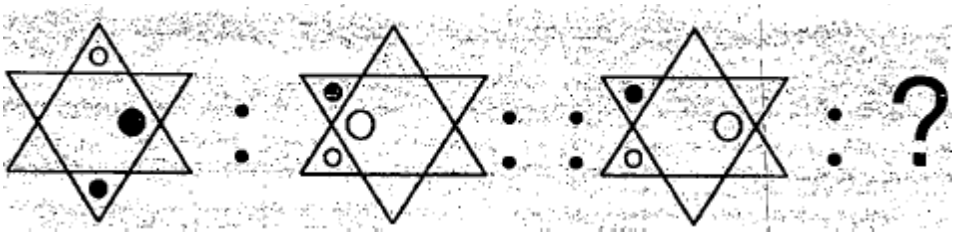
(Questions : 1 – 5)
Directions: Complete the given analogy, by choosing the correct answer from the given alternatives.

1. 80 : 400 : : 100 : ?
   (1) 800 (2) 625
   (3) 600 (4) 525

2. 2 3 5 9 : 3 5 9 17 : : 5 9 17 33 : ?
   (1) 7 15 31 63 (2) 7 13 25 57
   (3) 9 17 33 47 (3) 9 15 31 63

3. E Q O X H A : z s c l j v : : Y F K T D I : ?
   (1) b u p g w r (2) s w g p u l
   (3) b e p g w h (4) r w g p u b

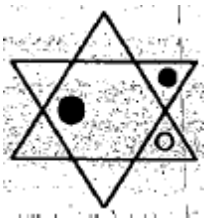
4.



(1)

(2)

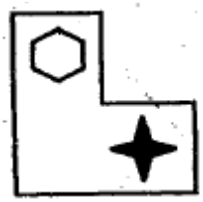
(3)



(4)

5.

(1)



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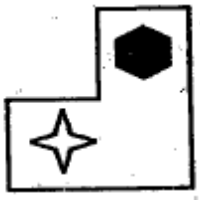
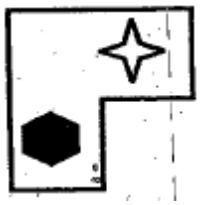
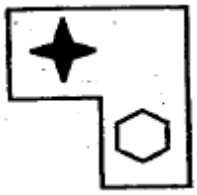


(3)



(4)



(Questions : 6 – 8)
Directions: In the given questions there are groups of numbers/pair of numbers/group of letters of which three are alike and one is different. Find the one which is different.

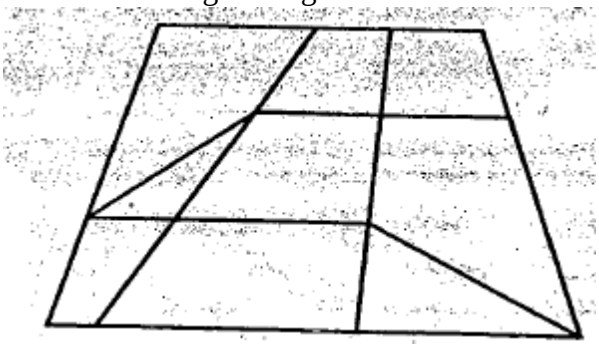
6. 1) 354
   2) 282
   3) 234
   4) 186

7. 1) 273, 189
   2) 255, 195
   3) 247, 171
   4) 221, 153

8. 1) Z W R K
   2) M J E X
   3) T Q L E
   4) I F A V

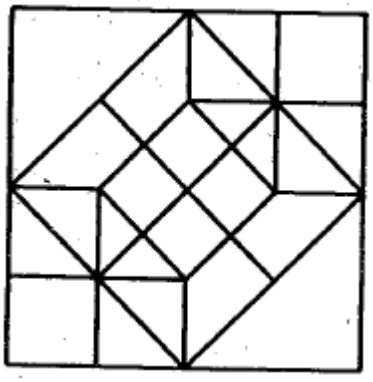
(Questions : 9 -11)
Directions : Identify the number of specified geometric shapes in the given diagram and mark the correct answer.

9. How many Trapeziums are in the given figure?



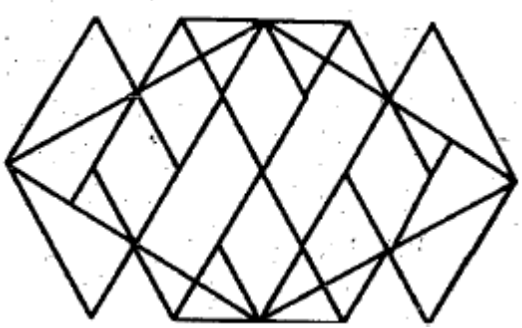
(1) 21 (2) 22
(3) 24 (4) 25

10. How many Squares are in the given figure?



(1) 13 (2) 15
(3) 17 (4) 19

11. How many Rhombus are in the given figure?



(1) 8 (2) 9
(3) 10 (4) 11

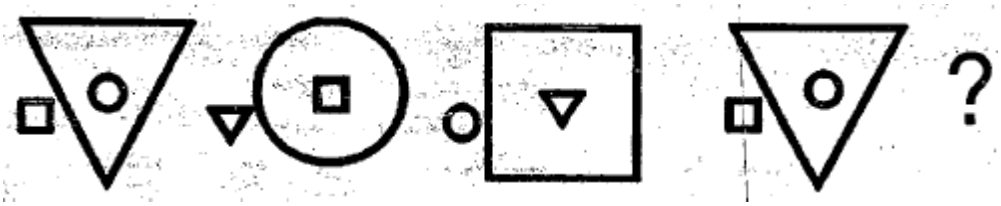
(Questions : 12 – 15)

Directions : Complete the following number/bilateral series by choosing the correct answer from the given alternatives.

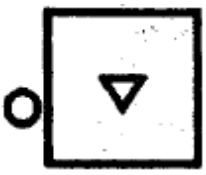
12. 113, 114, 118, ?, 143, 168
  (1) 127
  (2) 129
  (3) 134
  (4) 139

13. 37, 34, 29, 26, 21, ?, ?
  (1) 17, 12
  (2) 16, 13
  (3) 18, 13
  (4) 19, 14

14.



(1)

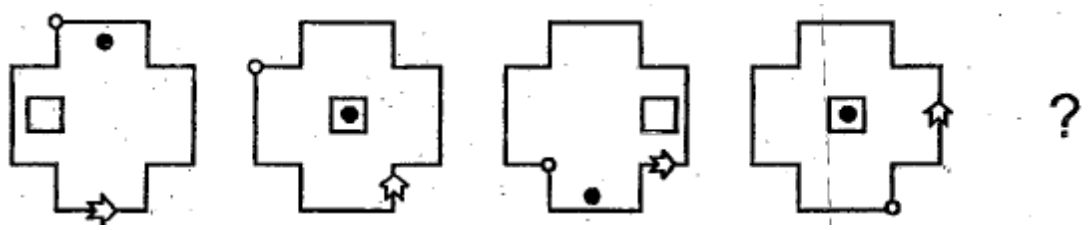


(2)

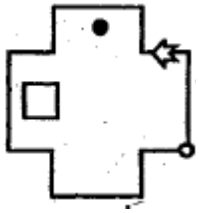
(3)

(4)

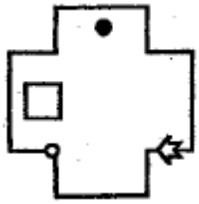
15.



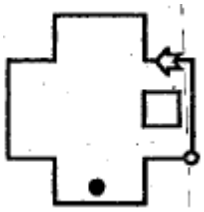
(1)



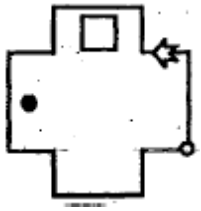
(2)



(3)



(4)



(Question : 16)

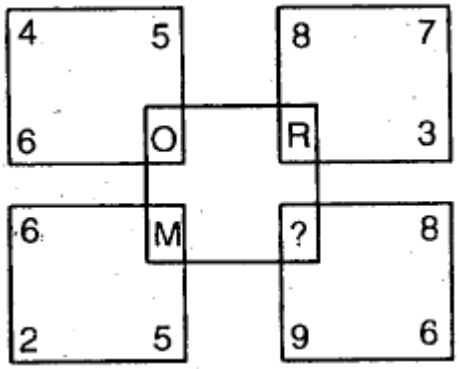
16. If B A N G A L O R E is coded as 25 N 13 T 26 Y 12 E 22, Then S H I M O G A can be written as

(1) 19 U 9 N 15 T 1
(2) 8 S 18 A 12 G 26
(3) 19 S 9 A 15 T 1
(4) 8 U 18 Z 12 T 26

(Question : 17)

Directions : Find the missing letter in the given figure.

17.



(1) U
(2) W
(3) T
(4) V

(Question : 18)

Directions : To get the correct equation choose, which set of signs from the given alternatives to be substituted sequentially places of (*).

18. 72 * 36 * 18 * 3 * 12 * 36
(1) -, ÷, x, =, +
(2) ÷, x, +, -, =
(3) =, +, ÷, x, -
(4) -, x, ÷, =, +

(Questions : 19)

Directions: When interchange of x and =, 7 and 9 are made, find which of the following equations would be correct.

19.
(1) 10 + 9 x 6 = 7
(2) 4 = 7 – 9 x 20
(3) 36 ÷ 4 x 7 = 9
(4) 9 = 3 + 7 x 30

(Questions: 20 – 21)

Directions : Find the wrong number/group of letters in the given series.

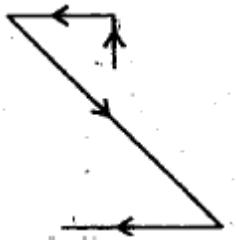
20. 9, 19, 40, 83, 172, 345
(1) 172
(2) 83
(3) 40
(4) 19

21. Z D U I P, L J Q E V, T A P E L, F S J O N, Q J N G K
(1) L J Q E V
(2) T A P E L
(3) F S J O N
(4) Q J N G K

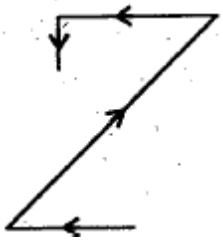
(Question: 22)

22. A person starts from his house, drives his vehicle 1 km towards North and reaches a restaurant. From there he moves 2 km towards East to meet his friend. Then he moves 4 km in the South-west direction to reach the market. From there he moves 3 km towards East and parks his vehicle.
Which of the following figures shows the route covered by him?

(1)

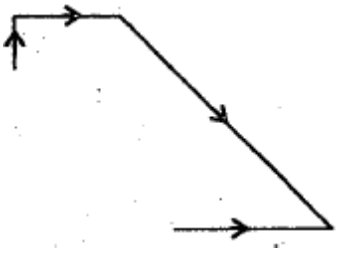


(2)



(3)

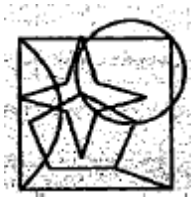
(4)



(Questions : 23 – 24)

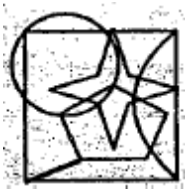
Directions : Find the correct mirror images of the following problem figures choosing from the alternatives.

23.

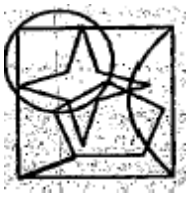


(1)

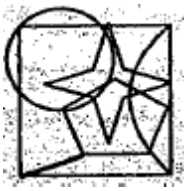
(2)



(3)



(4)



24.

(1)

(2)

(3)

(4)

(Questions : 25 – 26)

Directions : Find the missing number in the given matrices.

25. 40 7 70

24 9 ?

36 5 45

(1) 40
(2) 36
(3) 54
(4) 64

26. 34 44 76

23 54 66

43 ? 86

13 34 56

(1) 94
(2) 84
(3) 74
(4) 64

(Questions : 27 – 29)

Directions: The words are given under Column – I. Their codes are given under Column – II without following the same order as in Column – I. Find the codes for the letters of words in Column – I and find the codes for the given words/numbers in the questions.

Column – I	**Column – II**
C A R	2 9 6
M E N	4 0 1
A C T	3 2 9
T E A M	4 1 3 2

R	U	S	T		7	6	3	8
S	E	N	D		5	0	4	8

27. A S C E N T
  (1) 2 8 9 4 0 3
  (2) 6 3 2 0 1 9
  (3) 2 7 9 1 5 2
  (4) 4 5 6 8 4 7

28. C U S T A R D
  (1) 6 3 5 2 4 7 0
  (2) 9 7 8 3 2 6 5
  (3) 3 6 0 9 3 2 5
  (4) 9 8 4 6 2 3 4

29. 8 2 0 9 3 7 1
  (1) N A S C E N T
  (2) T A N D E M S
  (3) D E S C A N T
  (4) S A N C T U M

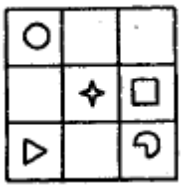
(Question : 30)

30. A, B, C, D, E and F are six students.
Among them,
1. E is taller than F
2. A is taller than B
3. A is shorter than C
4. D is shorter than F
5. B and E are of equal heights
Then, which one of the following represents the tallest and the shortest pair of students?
  (1) A and B
  (2) B and C
  (3) C and D
  (4) E and F

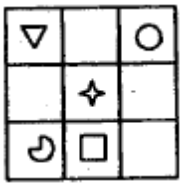
(Questions 31-32)

Directions : Find the figure which is similar to the problem figure, choosing from the given alternatives.

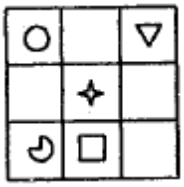
31.



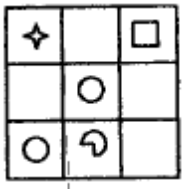
(1)



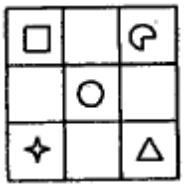
(2)



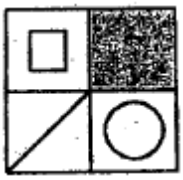
(3)



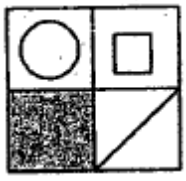
(4)



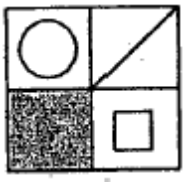
32.



(1)

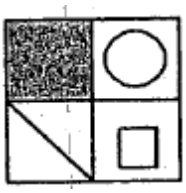


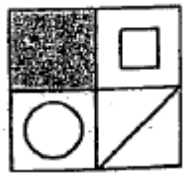
(2)



(3)

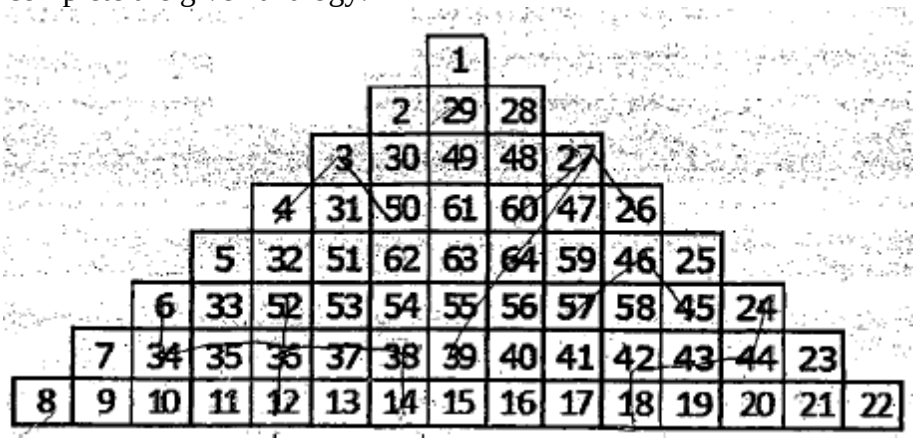
(4)





(Questions : 33-35)

Directions : The following questions are based on the numbers arranged in the pyramid pattern. Study the pattern and complete the given analogy.



33. 4 53 14 : 26 57 16 : : ? : 27 64 39
  (1) 3 32 37
  (2) 3 62 37
  (3) 3 62 39
  (4) 3 51 39

34. 12 35 6 : 18 43 24 : : ? : 16 41 58
  (1) 14 37 52
  (2) 13 36 33
  (3) 14 39 56
  (4) 14 36 52

35. 4 3 50 : 26 27 60 : : 33 32 53 : ?
  (1) 58 59 56
  (2) 45 42 57
  (3) 57 46 45
  (4) 45 46 57

(Question : 36)

Directions :

36. Lata is now 6 years younger to her brother Suraj. After 18 years she will be 4 times her present age. Then what will be the age of Lata after 18 years?

(1) 18 Years
(2) 24 Years
(3) 32 Years
(4) 36 Years

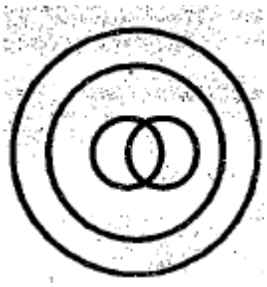
(Question: 37)

Directions: The following Venn diagrams show the relationship among the Four given objects. Indicate the appropriate diagram to show the relationship.

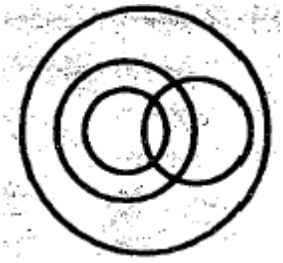
37. Politicians, Ministers, Youth, Humanbeings

(1)

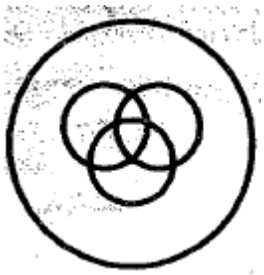
(2)



(3)



(4)



(Question 38)

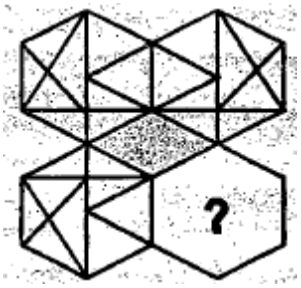
38. There are 48 students in a class. Among them 25 students play cricket, while 20 students play kabaddi. Some of them play both cricket and kabaddi. 14 students do not play any of these games. How many students play both cricket and kabaddi?

(1) 11
(2) 13
(3) 15
(4) 16

(Questions : 39-40)

Directions : Find the missing part of the given figure from the alternatives.

39.



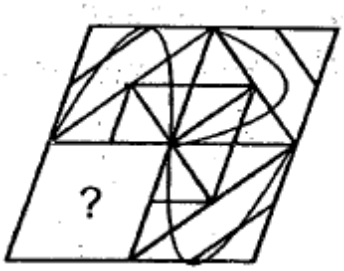
(1)

(2)

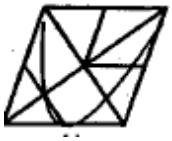
(3)

(4)

40.

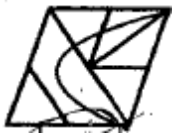


(1)



(2)

(3) 

(4) 

(Questions : 41)

Directions: Take the given statements as true and decide which of the conclusions logically follow from the statements.

41. **Statements:**
1. Some cars are bicycles.
2. All bicycles are buses
3. Some buses are lorries.

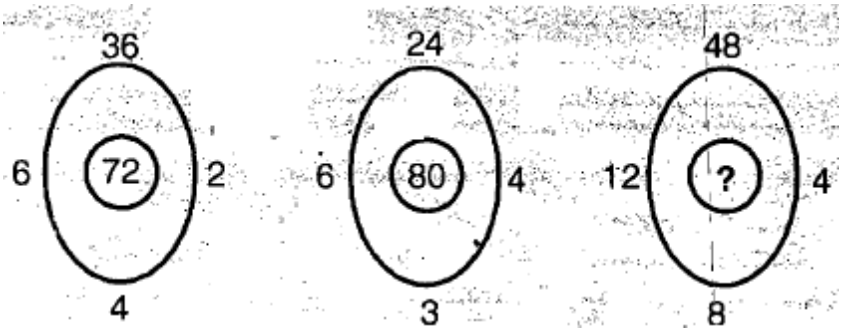
Conclusions:
1. Some buses are cars.
2. Some cars are lorries.

(1) Only conclusion I follows
(2) Only conclusion II follows
(3) Both conclusion I and II follows
(4) Neither conclusion I nor II follows

(Questions: 42 – 43)

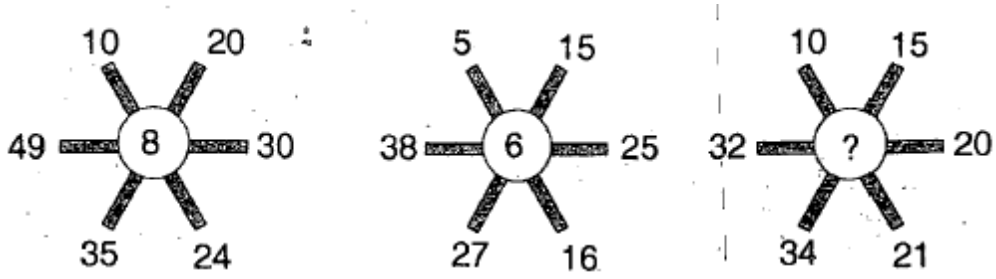
Directions : In the questions below the numbers in the figures are related. Identify their relationship and find the missing numbers in the given figures.

42.



(1) 108
(2) 96
(3) 84
(4) 60

43.



(1) 4
(2) 5
(3) 7
(4) 9

(Questions: 44)

Directions : Question, below is based on three statements I, II and III. Decide whether the data in the statements is sufficient to find the answer to the given question.

44. The comparison of marks scored by A, B, C and D in an examination is as follows.

Statements:

I. A has scored 20 marks less than B.

II. A has scored 30 marks more than C.

III. D has scored 10 marks less than C.

Question:

To find who has scored the highest marks among A, B, C and D

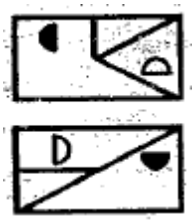
(1) Data in statement I is sufficient
(2) Data in statement II is sufficient
(3) Data in statements II and III are sufficient
(4) Data in all the statements, I, II and III are sufficient

(Question: 45)

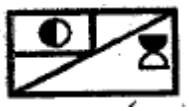
Directions: In the following questions a set of two figures is given as problem figure. Find which one of the following alternative figures would be formed, if the first figure is superimposed on the second figure.

Problem Figures :

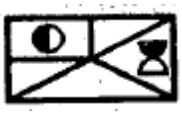
45.



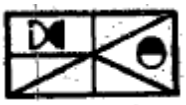
(1)



(2)



(3)

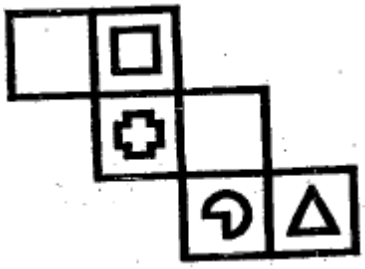


(4)

(Question: 46)

Directions : When the problem figure is folded into a cube, which one of the following cubes will be formed?

46.



(1)

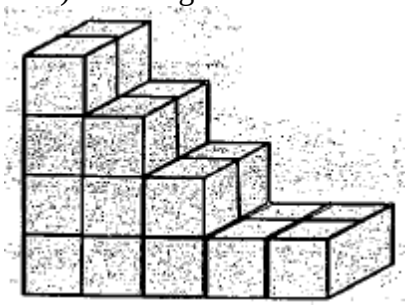
(2)

(3)

(4)

(Question: 47)

47. Few bricks are arranged as shown in the following figure. How many bricks are unseen (that is hidden backside) in the figure.



(1) 9
(2) 8
(3) 7
(4) 6

(Question : 48)

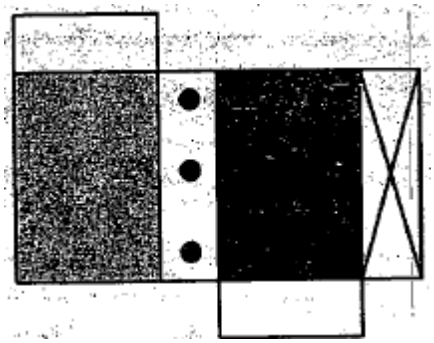
48. Q is father of P and S is R's brother. R is the only daughter of her mother M. If S is P's maternal uncle, how are Q and R related?

(1) Father and Daughter
(2) Brother and Sister
(3) Husband and Wife
(4) Brother-in-law and Sister-in-law

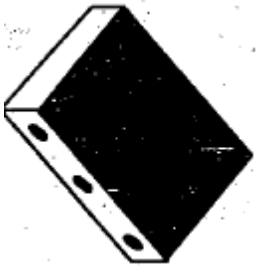
(Question: 49)

Directions: In the following question figure is folded in three dimensional shape, find which one of the shapes among the alternatives appear.

49.



(1)



(2)

(3)

(4)

50. The weight of a bottle completely filled with water is 800 gms. When half of the water is emptied from the bottle, it weighs 500 gms. Then what is the weight of the empty bottle?

(1) 200 gm
(2) 300 gm
(3) 600 gm
(4) 150 gm

STG1 (2015-16)
AT ANSWER KEY

MAT – K -10

1. 2
2. 3
3. 4
4. 1
5. 1
6. 2
7. 4
8. 4
9. 2
10. 3
11. 4
12. 1
13. 3
14. 2
15. 1
16. 4
17. 2
18. 3
19. 4
20. 1
21. 4
22. 3
23. 2
24. 1
25. 3
26. 4
27. 1
28. 2
29. 4
30. 3
31. 1
32. 2
33. 3
34. 1
35. 4
36. 2
37. 3
38. 1
39. 2
40. 4
41. 1
42. 2
43. 3
44. 4
45. 2
46. 1
47. 4
48. 4

49. 1

50. 1