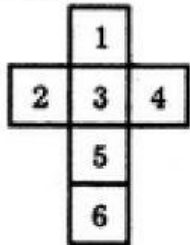


PRACTICE TEST 46

Construction of Boxes:

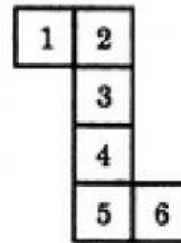
The details of the cube formed when a sheet is folded to form a box:

Form I

**In this case:**

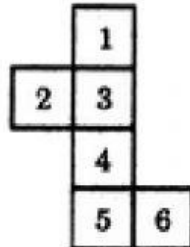
1 lies opposite 5;
2 lies opposite 4;
3 lies opposite 6.

Form II

**In this case:**

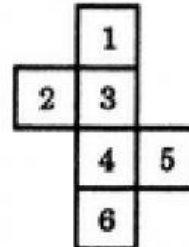
1 lies opposite 6;
2 lies opposite 4;
3 lies opposite 5.

Form III

**In this case:**

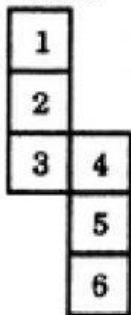
1 lies opposite 4;
2 lies opposite 6;
3 lies opposite 5.

Form IV

**In this case:**

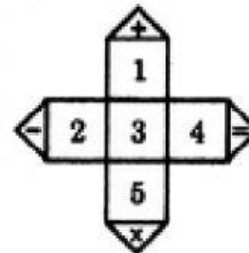
1 lies opposite 4;
2 lies opposite 5;
3 lies opposite 6.

Form V

**In this case:**

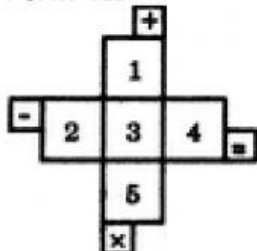
1 lies opposite 3;
2 lies opposite 5;
4 lies opposite 6.

Form VI

**In this case:**

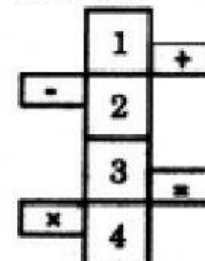
 will be the one of the faces of the cube and it lies opposite 3;
2 lies opposite 4;
1 lies opposite 5.

Form VII

**In this case:**

 will be the one of the faces of the cube and it lies opposite 3;
2 lies opposite 4;
1 lies opposite 5.

Form VIII

**In this case:**

 and  are two faces of the cube that lie opposite to each other.
1 lies opposite 3;
2 lies opposite 4;

1. A dice is numbered from 1 to 6 in different ways.
If 2 is opposite to 3 and adjacent to 4 and 6, then which of the following statements is necessarily true?

A. 1 is opposite to 5
B. 4 is opposite to 6
C. 4 is adjacent to 2 and 6
D. 1 is adjacent to 2 and 3

2. Two positions of a dice are shown below. When number 1 is on the top, what number will be at the bottom?



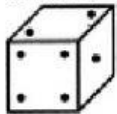
(i)



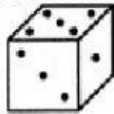
(ii)

A. 2
B. 3
C. 5
D. Cannot be determined

3. Two positions of a cube are shown below. When the number 4 will be at the bottom, then which number will be at the top?



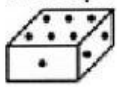
(i)



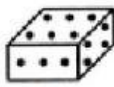
(ii)

A. 3
B. 5
C. 6
D. Cannot be determined

4. Two positions of a block are shown below: When six is at the bottom, what number will be at the top?



(i)



(ii)

A. 1
B. 2
C. 4
D. 5

5. Two positions of a dice are shown below: When 2 is at the bottom, what number will be at the top?



(i)

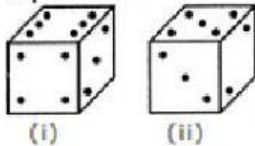


(ii)

A. 6
B. 4
C. 1
D. 5

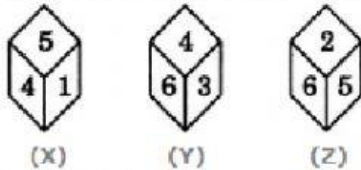
6. A dice is numbered from 1 to 6 in different ways.
If 1 is opposite to 5 and 2 is opposite to 3, then
- A. 4 is adjacent to 3 and 6
 - B. 2 is adjacent to 4 and 6
 - C. 4 is adjacent to 5 and 6
 - D. 6 is adjacent to 3 and 4

7. Two positions of a block are shown below. When 2 is at the bottom, which number will be at the top?



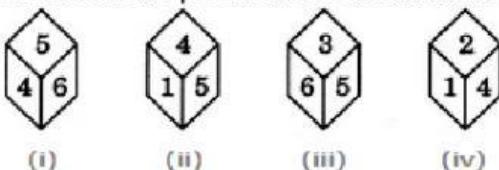
- A. 1
- B. 4
- C. 6
- D. Cannot be determined

8. Three different positions X, Y and Z of a dice are shown in the figures given below. Which numbers are hidden behind the numbers 6 and 5 in the position Z?



- A. 1 and 4
- B. 1 and 3
- C. 4 and 3
- D. 1 and 2

9. Four positions of a dice are shown below. What number must be at the bottom face when the dice is in the position as shown in the figure(iii)



- A. 1
- B. 2
- C. 4
- D. 6

10. Three different positions X, Y and Z of a dice are shown in the figures given below. Which number lies at the bottom face in position Y?



- A. 1
- B. 2
- C. 5
- D. Cannot be determined

11. What is the opposite 3, if four different positions of dice are as shown below?



(i)



(ii)



(iii)



(iv)

A.6
C.3

B.4
D.2

12. The four different positions of dice are given below: Which number is on the face opposite 6?



(i)



(ii)



(iii)



(iv)

A.1
C.3

B.2
D.4

13. A dice is numbered from 1 to 6 in different ways.

If 1 is opposite to 2 and adjacent to 3 and 4, then which of the following statements is necessarily true?

- A.2 is adjacent to 6
B.3 is adjacent to 4
C.4 is opposite to 6
D.3 is opposite to 5

14. Three different positions X, Y and Z of a dice are shown in the figures given below. Which number lies opposite 6?



(X)



(Y)



(Z)

A.1
C.4

B.2
D.5

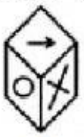
15. A cube has six different symbols drawn over its six faces. The symbols are dot, circle, triangle, square, cross and arrow. Three different positions of the cube are shown in figures X, Y, and Z. Which symbol is opposite the dot?



(X)



(Y)



(Z)

A.Circle
C.Arrow

B.Triangle
D.Cross