



ASSIGNMENT-16



Marks Obtained: _____

Student's Name: _____ Section: _____

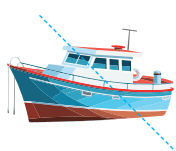
Roll Number: _____ Date: _____

A. Multiple Choice Type Questions

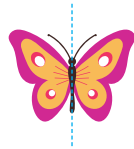
Identify the correct answer.

1. In which of the following figures is the dotted line a line of symmetry?

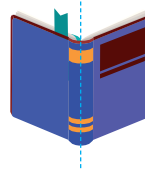
(a)



(b)



(c)



(d)



2. Which shape can tessellate a plane without gaps and has rotational symmetry of order 4?

(a) Equilateral Triangle (b) Rectangle (c) Square (d) None of these

3. The number of lines of symmetry in a semicircle is

(a) 0 (b) 1 (c) 4 (d) None of these

4. Which of the following letters does not have the vertical line of symmetry?

(a) A (b) T (c) F (d) U

5. If a figure has rotational symmetry of order 6, what is the smallest angle of rotation?

(a) 30° (b) 45° (c) 60° (d) 90°

6. Select the letter that possesses both horizontal and vertical lines of symmetry.

(a) E (b) I (c) M (d) N

7. Which shape has four lines of symmetry but no rotational symmetry?

(a) Square (b) Regular Octagon (c) Isosceles Triangle (d) None of these

8. In a rectangle and a rhombus, the number of lines of symmetry is:

(a) Equal (b) Depends on the side lengths
(c) Unequal (d) Always greater for a rhombus

B. Assertion and Reason Type Questions

In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option.

(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

(c) Assertion (A) is true but Reason (R) is false.

(d) Assertion (A) is false but Reason (R) is true.

9. **Assertion (A):** A square has more lines of symmetry than a rectangle.**Reason (R):** A square has four lines of symmetry, whereas a rectangle has only two.10. **Assertion (A):** A circle has an infinite number of lines of symmetry.**Reason (R):** Any line passing through two points on the circumference of a circle is a line of symmetry for the circle.