Note: All questions carry 1 mark each.

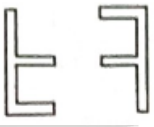
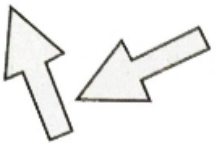
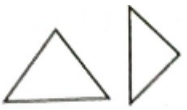
1. If a figure is folded about its axis of symmetry, then the two halves will
   (a) coincide (b) be of same shape and size
   (c) be congruent (d) All of these
2. Identify the pair of the alphabets, which have no line of symmetry.
   (a) A,B (b) F, G (c) O,H (d) M, W
3. Which of the following has two lines of symmetry?
   (a) X (b) T (c) A (d) E
4. Which of the following triangles has no line of symmetry?
   (a) Equilateral (b) Isosceles (c) Scalene (d) None of these
5. Which of the following has no line of symmetry?
   (a) A semi–circle (b) An angle (c) A line segment (d) A parallelogram
6. A kite is symmetrical about
   (a) only one diagonal (b) both diagonals (c) all the sides (d) None of these
7. A regular pentagon has____ lines of symmetry.
   (a) 2 (b) 1 (c) 5 (d) 4
8. A rectangle is symmetrical about
   (a) a line joining the mid–point of its opposite sides
   (b) its diagonals
   (c) Both (a) and (b)
   (d) None of these
9. How many axes of symmetry does a circle have?
   (a) 0 (b) 1 (c) 2 (d) infinite
10. Rotation by 90° means
    (a) half turn (b) three fourth turn
    (c) quarter turn (d) full turn
11. The order of rotational symmetry in the figure given below is

    (a) 4 (b) 8 (c) 6 (d) Infinitely many

12. Which of the following has a line of symmetry?

(a)  (b)  (c)  (d) 

13. Which of the following are reflections of each other?

(a)  (b)  (c)  (d) 

14. Assertion :A regular hexagon has six lines of symmetry.

Reason : A regular shape has as many lines of symmetry as the number of sides.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.

15. Assertion : An isosceles triangle has a line of symmetry but it does not have rotational symmetry.

Reason : If a figure has rotational symmetry of order 1 , then the figure has no rotational symmetry.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.

16. Assertion :A parallelogram has 2 lines of symmetry and its order of rotation is 4 .

Reason : A regular polygon has as many lines of symmetry as it has vertices.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If Assertion is false but reason is true.