परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
उत्तर कुंजी / Answer Key (2025-26)

कक्षा/Class: VII विषय/Subject: Mathematics माह/Month: August अंक/Marks: 40
दिया गया पाठ्यक्रम/Portion covered: Chapter 05

1. **(a)** Equal **Explanation:** Equal

2. **(a)**On opposite sides of the transversal and inside the two lines

   Explanation:

   On opposite sides of the transversal and inside the two lines

3. **(c)** At least two pairs of vertically opposite angles.

   Explanation:

   At least two pairs of vertically opposite angles.

4. **(d)** 90°

   Explanation:

   90°

5. **(a)**They never meet

   Explanation:

   They never meet

6. **(d)** Transversal

   Explanation:

   Transversal

7. **(a)**Perpendicular to the other line

   Explanation:

   Perpendicular to the other line

8. **(b)**Ruler and set square

   Explanation:

   Ruler and set square

9. **(d)** Intersecting **Explanation:**

   Intersecting

10. **(a)**The perpendicular drawn from one line to the other

    Explanation:

    The perpendicular drawn from one line to the other

Section B

11. **(a)** True

    Explanation: True

12.

(b) False

Explanation:

False

13. perpendicular
14. linear
15. When we fold a square sheet, the folds act like lines. Opposite folds are parallel and adjacent folds forming right angles. This shows perpendicularity. Repeating folds shows patterns and helps us visually understand geometric relationships.
16. Intersecting lines are two lines that cross each other at exactly one point. For example, the hand so far clock at 12:15intersect.

Section C

17. Award 3 marks for correct proof.
18. Award 3 marks for correct proof
19. Award 3 marks for correct proof

Section D

20. Alternate angles are angles on opposite sides of a transversal and inside two lines. If lines are parallel, alternate angles are equal. Relationship between alternate angles , corresponding angles and vertically opposite angles can also be defined.

Section E

21.

1. $\angle ABC = 180° - 132° = 48°$
2. $x = 132°$ $y = 48°$
3. Supplementary angle:

$180° - 32° = 148°$

Complementary angle:

$90° - 32° = 58°$

4. 100°, 80°

22. a.90°

b. By folding a perpendicular to an existing crease and then a gain a perpendicular to that ,through the required point.

c. By checking if both creases form right angles using folding symmetry. If the two folds form perfect 'L' shapes, they are perpendicular.

OR

No, the lines are not perfectly perpendicular. In geometry, precision matters. Slight deviation means they’re approximately, but not truly, perpendicular.