

Unit 11

Loci and Construction

Sr. No.	Questions	A	B	C	D
1	A triangle can be constructed if the sum of the measure of any two sides is _____ the measure of the third side.	less than	greater than✓	equal to	greater than and equal to
2	An equilateral triangle _____.	can be isosceles✓	can be right angled	can be obtuse angled	has each angle equal to 50°
3	If the sum of the measures of two angles is less than 90° , then the triangle is _____.	equilateral	acute angled	obtuse angled✓	right angled
4	The line segment joining the midpoint of a side to its opposite vertex in a triangle is called _____.	median✓	perpendicular bisector	angle bisector	circle
5	The angle bisectors of a triangle intersect at _____.	one point✓	two points	three points	four points
6	Locus of all points equidistant from a fixed point is _____.	circle✓	perpendicular bisector	angle bisector	parallel lines
7	Locus of points equidistant from two fixed points is _____.	circle	perpendicular bisector✓	angle bisector	parallel lines
8	Locus of points equidistant from a fixed line is/are _____.	circle	perpendicular bisector	angle bisector	parallel lines✓
9	Locus of points equidistant from two intersecting lines is _____.	circle	perpendicular bisector	angle bisector✓	parallel lines
10	The set of all points which is farther than 2 km from a fixed-point B is a region outside a circle of radius _____ and centre at B.	1 km	1.9 km	2 km✓	2.1 km

Solution of MCQs

1	Triangle Inequality Theorem states that the sum of any two sides must be greater than the third side.
2	An equilateral triangle is a special case of an isosceles triangle where all sides and angles are equal.
3	If two angles sum to less than 90° , the third angle must be greater than 90° (since total angles = 180°), making it obtuse-angled .
4	Line from midpoint to opposite vertex = <i>median</i>
5	Angle bisectors intersect at one point (incenter)
6	Locus of points equidistant from a fixed point = circle
7	Locus of points equidistant from two fixed points = perpendicular bisector

8	Locus of points equidistant from a fixed line = <i>parallel lines</i>
9	Locus of points equidistant from two intersecting lines = <i>angle bisector</i>
10	Region farther than 2 km from point B = outside circle of radius 2 km

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