VISWABHARATI - GUDIVADA

RAPID FIRE ROUND TEST

WORK SHEET – 1

Chapters : **Coordinate Geometry**
Tangents and Secants to a circle
Basic Proportionality Theorem.

Class: X **Time: 1Hr**

Subject: Mathematics **Marks: 25**

Name_____ Class/Sec: _____ Roll No: _____

I. Answer the following Questions. **5 × 4 = 20**

1. Name the type of quadrilateral formed by points (-1, -2) (1,0) (-1, 2) (-3, 0) and give reasons for your answers.
2. Find the area of the triangle formed by joining the midpoints of the sides of the triangle whose vertices are (0, -1) (2,1) and (0,3). Find the ratio of this area to the area of the given triangle.
3. A chord of circle of radius 12cm subtends an angle of 120^0 at the centre. Find the area of the corresponding minor segment of the circle (Use $\pi = 3.14$ and $\sqrt{3} = 1.732$)
4. Prove that the parallelogram circumscribing a circle is a Rhombus.
5. Draw a circle of radius 6cm from a point 10cm away from its centre, construct the pair of tangents to the circle and measure their lengths. Verify by using pythogaras theorems.

II. Answer the questions: **5M**

6. a) Define a regular polygon - 1M
   b) State and prove basic proportionality theorem and mention its another name also - 4M