

CIRCLES

CLICK & JOIN



MATHS PRACTICE PAPER 06

Total Marks : 20

I. Choose the Most Appropriate Answers

 $3 \times 1 = 3$

- From a point P which is at a distance of 13 cm from the point O of a circle of radius 5 cm, the pair of tangents PQ and PR to the circle are drawn. Then the area of the quadrilateral PQOR is
 - 60 cm^2
 - 65 cm^2
 - 30 cm^2
 - 32.5 cm^2
- If two tangents inclined at an angle 60° are drawn to a circle of radius 3 cm the length of each tangent is equal to
 - $\frac{3}{2}\sqrt{3} \text{ cm}$
 - 6 cm
 - 3 cm
 - $3\sqrt{3} \text{ cm}$
- If radii of two concentric circles are 4 cm and 5 cm, then the length of each chord of one circle which is tangent to the other circle is
 - 3 cm
 - 6 cm
 - 9 cm
 - 1 cm

II. Solve the following

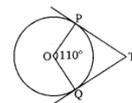
 $2 \times 1 = 2$

- A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that $OQ = 12 \text{ cm}$. Find Length PQ
- Draw a circle and two lines parallel to a given line such that one is a tangent and the other, a secant to the circle

III. Solve the following

 $4 \times 2 = 8$

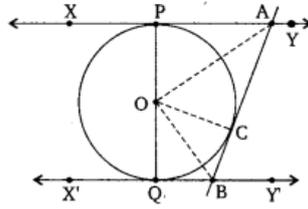
- From a point Q, the length of the tangent to a circle is 24 cm and the distance of Q from the centre is 25 cm, then find the radius of circle
- In figure, if TP and TQ are the two tangents to a circle with centre O so that $\angle POQ = 110^\circ$, then Find $\angle PTQ$
- Prove that the tangents drawn at the ends of a diameter of a circle are parallel.
- If tangents PA and PB from a point P to a circle with centre O are inclined to each other at angle of 80° , then Find $\angle POA$.



IV. Solve the following

1 x 3 = 3

10. In figure, XY and X'Y' are two parallel tangents to a circle, x with centre O and another tangent AB with point of contact C intersecting XY at A and X'Y' at B. Prove that $\angle AOB = 90^\circ$.



V. Solve the following

1 x 4 = 4

11. Two concentric circles are of radii 5 cm and 3 cm. Find the length of the chord of the larger circle which touches the smaller circle

