

## Class 10 Maths Chapter 10 Circles MCQs For Practice

1. From a point P which is at a distance of 13 cm from the centre 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
- (a)  $60 \text{ cm}^2$
  - (b)  $65 \text{ cm}^2$
  - (c)  $30 \text{ cm}^2$
  - (d)  $32.5 \text{ cm}^2$
2. \_\_\_\_\_ is the largest chord of a circle.
- (a) Diameter
  - (b) Radius
  - (c) Secant
  - (d) Sector
3. If a, b, c are the sides of a right triangle where c is the hypotenuse, then the radius r of the circle which touches the sides of the triangle is given by r =
- (a)  $(a + b + c)/2$
  - (b)  $(a - b - c)/2$
  - (c)  $(a + b + c)/3$
  - (d)  $(a + b - c)/2$
4. Let s denote the semi-perimeter of a triangle ABC in which BC = a, CA = b, AB = c. If a circle touches the sides BC, CA, AB at D, E, F, respectively, then BD =
- (a) s - a
  - (b) s - b
  - (c) s - c
  - (d) s - (a + c)
5. At one end A of a diameter AB of a circle of radius 5 cm, tangent XAY is drawn to the circle. The length of the chord CD parallel to XY and at a distance 8 cm from A is
- (a) 4 cm
  - (b) 5 cm
  - (c) 6 cm
  - (d) 8 cm
6. If angle between two tangents drawn from a point P to a circle of radius a and centre O is  $90^\circ$ , then OP =
- (a)  $a\sqrt{2}$
  - (b)  $a\sqrt{3}$
  - (c) 2a
  - (d) 3a
7. AB is a diameter of a circle and AC is its chord such that  $\angle BAC = 30^\circ$ . If the tangent at C intersects AB extended at D, then
- (a) AB = BD
  - (b) BC = CA
  - (c) BC = BD
  - (d) AB = AC

8. The distance between two parallel tangents of a circle of radius 5.5 cm is

- (a) 10 cm
- (b) 11 cm
- (c) 15 cm
- (d) 8.5 cm

9. If a chord AB subtends an angle of  $60^\circ$  at the centre of a circle, then angle between the tangents at A and B is also

- (a)  $60^\circ$
- (b)  $80^\circ$
- (c)  $100^\circ$
- (d)  $120^\circ$

10. From a point outside the circle, how many number of tangents can be drawn to that circle?

- (a) 2
- (b) 1
- (c) 3
- (d) 4

\*\*\*\*\* ANSWER KEY \*\*\*\*\*

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|---------|---------|---------|---------|----------|
| 1 - (a) | 2 - (a) | 3 - (d) | 4 - (b) | 5 - (d)  |
| 6 - (a) | 7 - (c) | 8 - (b) | 9 - (d) | 10 - (a) |