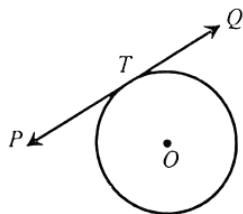


## MISCELLANEOUS EXERCISE – 10

**Q. 1** Four possible answers are given for the following questions.

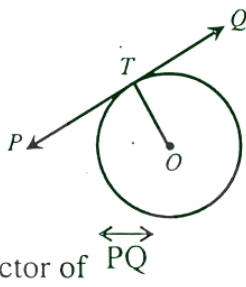
1. In the adjacent figure of the circle, the line  $\overleftrightarrow{PQ}$  is named as.

- (a) an arc
- (b) a chord
- (c) a tangent
- (d) a secant



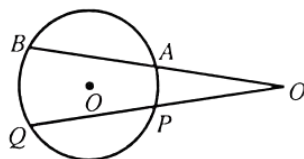
2. In a circle with centre O,  $\overline{OT}$  is the radical segment and  $\overleftrightarrow{PTQ}$  is the tangent line, then

- (a)  $\overline{OT} \perp \overleftrightarrow{PQ}$
- (b)  $\overline{OT} \not\perp \overleftrightarrow{PQ}$
- (c)  $\overline{OT} \parallel \overleftrightarrow{PQ}$
- (d)  $\overline{OT}$  is the right bisector of  $\overleftrightarrow{PQ}$



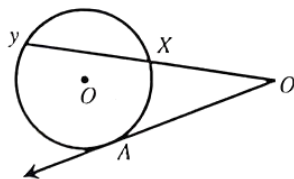
3. In the given diagram find  $m \overline{OA}$  if  $m \overline{OB} = 8\text{cm}$ ,  $m \overline{OP} = 4\text{cm}$  and  $m \overline{OQ} = 12\text{cm}$

- (a) 2cm
- (b) 2.67
- (c) 2.8 cm
- (d) 3cm



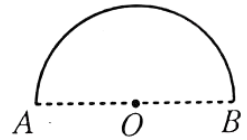
4. In the given diagram find  $m \overline{OX}$  if  $m \overline{OA} = 6\text{cm}$  and  $m \overline{OY} = 9\text{cm}$

- (a) 4cm
- (b) 6cm
- (c) 9cm
- (d) 12cm



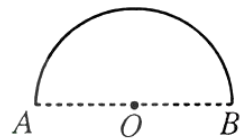
5. In the adjacent figure find semicircular area if  $\pi = 3.1416$  and  $m \overline{OA} = 20\text{cm}$ .

- (a) 62.83sq cm
- (b) 314.16sq cm
- (c) 436.20sq cm
- (d) 628.32sq cm



6. In the adjacent figure find half the perimeter of circle with center O if  $\pi = 3.1416$  and  $m \overline{OA} = 20\text{cm}$ .

- (a) 31.42 cm
- (b) 62.832 cm
- (c) 125.65 cm
- (d) 188.50 cm



7. A line which has two points in common with a circle is called.

- (a) sine of a circle
- (b) cosine of a circle
- (c) tangent of a circle
- (d) secant of a circle

8. A line which has only one point in common with a circle is called

- (a) sine of a circle
- (b) cosine of a circle
- (c) tangent of a circle
- (d) secant of a circle

9. Two tangents drawn to a circle from a point outside it are .....in length

- (a) half
- (b) equal
- (c) double
- (d) triple

10. A circle has only one.

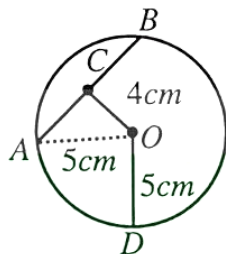
- (a) secant
- (b) chord
- (c) diameter
- (d) centre

11. A tangent line intersects the circle at.

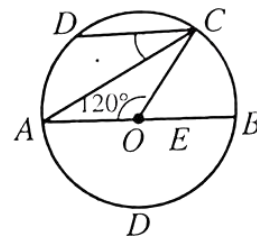
- (a) three points
- (b) two points
- (c) single point
- (d) no point at all

12. Tangents drawn at the ends of diameter of a circle are..... to each other.  
 (a) parallel (b) non-parallel  
 (c) collinear (d) perpendicular
13. The distance between the centres of two congruent touching circles externally is  
 (a) of zero length  
 (b) the radius of each circle  
 (c) the diameter of each circle  
 (d) twice the diameter of each circle
14. In the adjacent circular figure with centre O and radius 5cm. The length of the chord intercepted at 4cm away from the centre of this circle is

- (a) 4cm  
 (b) 6cm  
 (c) 7cm  
 (d) 9cm



15. In the adjoining figure there is a circle with centre O. If  $\overline{DC} \parallel \overline{AB}$  and  $m\angle AOC = 120^\circ$ , then  $m\angle ACD$  is  
 (a)  $40^\circ$   
 (b)  $30^\circ$   
 (c)  $50^\circ$   
 (d)  $60^\circ$



**ANSWER KEY**

|     |   |     |   |     |   |     |   |     |   |
|-----|---|-----|---|-----|---|-----|---|-----|---|
| 1.  | c | 2.  | a | 3.  | b | 4.  | a | 5.  | d |
| 6.  | b | 7.  | d | 8.  | c | 9.  | b | 10. | d |
| 11. | c | 12. | a | 13. | c | 14. | b | 15. | b |