

## CHAPTER-10 | CIRCLES

QUIZ  
PART-02

1. The length of the tangent from an external point to a circle is:
- Greater than the radius
  - Equal to the radius
  - Less than the radius
  - Cannot be estimated

(A)

*Explanation:* The tangent length is always greater than the radius of the circle.

2. Two concentric circles have radii 5 cm and 3 cm. The length of the chord of the larger circle that touches the smaller circle is:
- 4 cm
  - 5 cm
  - 8 cm
  - 10 cm

(A)

*Explanation:* The length of the chord touching the smaller circle is 4 cm.

3. A point inside a circle has how many tangents passing through it?
- 0
  - 1
  - 2
  - Infinite

(A)

*Explanation:* A point inside the circle has no tangents passing through it.

4. A point on the circle has how many tangents passing through it?
- 0
  - 1
  - 2
  - Infinite

(B)

*Explanation:* A point on the circle has exactly one tangent passing through it.

5. A point outside the circle has how many tangents passing through it?
- 0
  - 1
  - 2
  - 3

(C)

*Explanation:* A point outside the circle has exactly two tangents passing through it.

6. The lengths of two tangents from an external point to a circle are:
- Always equal
  - Always unequal
  - Depends on the radius
  - Cannot be determined

(A)

*Explanation:* The lengths of tangents from an external point to a circle are always equal.

7. Two parallel tangents to a circle have a joining line that is:
- A radius
  - A chord
  - A diameter
  - A secant

(C)

*Explanation:* The joining line of two parallel tangents is a diameter of the circle.

8. The theorem stating the equality of tangent lengths from an external point is:
- Pythagoras Theorem
  - Tangent-Secant Theorem
  - Tangent Length Theorem
  - None of these

(C)

*Explanation:* This is the Tangent Length Theorem.

9. The length of the tangent from an external point P to a circle with center O is:
- OP
  - $OP^2$
  - $\sqrt{(OP^2 - r^2)}$
  - $\sqrt{(OP^2 + r^2)}$

(C)

*Explanation:* The tangent length is  $\sqrt{(OP^2 - r^2)}$ .

10. The angle between two tangents from an external point is:
- $30^\circ$
  - $45^\circ$
  - $60^\circ$
  - $90^\circ$

(D)

*Explanation:* The angle between two tangents from an external point is always  $90^\circ$ .