CHAPTER–9 | : Circle

QUIZ PART–06

1. What does Theorem 9.7 state about intersecting circles?
A) Equal radii
B) Perpendicular bisector of the common chord
C) Equal angles at the center
D) Parallel centers (B)
Explanation: The line joining the centers bisects the common chord.

2. What is formed when two chords intersect in a circle?
A) Two triangles
B) Two equal arcs
C) Equal segments
D) Unequal segments (C)
Explanation: The segments formed by intersecting equal chords are equal.

3. In intersecting circles, the common chord is:
A) Perpendicular to the line joining centers
B) Parallel to the line joining centers
C) Equal to the distance between centers
D) Longer than the radius (A)
Explanation: The common chord is perpendicular to the line joining the centers.

4. What does the perpendicular from the center of a circle do to the common chord?
A) Bisects it
B) Divides it unequally
C) Makes it equal to the radius
D) Has no effect (A)
Explanation: The perpendicular bisects the common chord.

5. The line joining centers of two intersecting circles is:
A) Perpendicular to the common chord
B) Parallel to the common chord
C) Equal to the common chord
D) Longer than the common chord (A)
Explanation: The line joining the centers is perpendicular to the common chord.

6. When two circles intersect, the angle between the line joining their centers and the common chord is:
A) 90°
B) 45°
C) 60°
D) 180° (A)
Explanation: The line joining the centers is perpendicular to the common chord.

7. The common chord of two intersecting circles is:
A) Always equal to the radii
B) Always bisected by the center
C) Perpendicular to the line joining the centers
D) Always longer than the radius (C)
Explanation: The common chord is perpendicular to the line joining the centers.

8. In intersecting circles, the common chord's length can be calculated using:
A) Pythagoras' Theorem
B) Angle of intersection
C) Distance between centers
D) Radius of the circles (C)
Explanation: The length of the common chord can be calculated using the distance between the centers.

9. The perpendicular from the center to a chord divides the chord into:
A) Unequal parts
B) Equal parts
C) No parts
D) Two angles (B)
Explanation: The perpendicular bisects the chord into equal parts.

10. In the case of intersecting circles, what is true about the radii?
A) They are equal
B) They are unequal
C) One is half the other
D) They do not affect the chord (A)
Explanation: The radii of congruent intersecting circles are equal.