

Key Notes

Chapter 10

Circles

- **Circles and its Related Terms : A Review**
 - **Angle Subtended by a Chord at a Point**
 - **Perpendicular from the Centre to a Chord**
 - **Circle through Three Points**
 - **Equal Chords and their Distances from the Centre**
 - **Angle Subtended by an Arc of a Circle**
 - **Cyclic Quadrilaterals**
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- **Circle-** circle is locus of such points which are at equidistant from a fixed point in a plane.
 - **Concentric circle-** Circle having same centre called concentric circle.
 - Two arc of a circle called congruent if they have the same degree measure.
 - If two arc equal then their corresponding chords are equal.
 - The perpendicular from centre to chord of circle, it bisects the chord and converse.
 - There is one and only one circle passing through three non-collinear points.
 - Equal chords of circle are equidistant from centre.
 - The angle subtend by an arc at the centre of circle is twice the angle which subtend at remaining part of circumference.
 - Any two angles in the same segment of the circle are equal.
 - Angle of semicircle is right angle.
 - Equal chords of circle subtend equals angle at the centre of circle.
 - If the all vertices of a quadrilateral lie on the circumference of circle, then quadrilateral called cyclic.
 - In a cycle quadrilateral the sum of opposite angles is 180° and converse.
 - The exterior angle of a cycle quadrilateral is equal to the opposite interior angle.