## **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
- **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.