## **Chapter-11**

## **Constructions**

- "Construction" in Geometry means to draw shapes, angles or lines accurately.
  These constructions use only compass, straightedge (i.e. ruler) and a pencil. This is the "pure" form of geometric construction: no numbers involved.
- Construction should be neat and clean and as per scale given in question.
- Steps of construction should be provided only to those questions where it is mentioned.

## • Used of Construction:

- (i) The perpendicular bisector of a chord of a circle passes through its center.
- (ii) Tangents drawn from an external point to a circle are equal.
- (iii) The angle which tangent makes with a chord of a circle is equal to the angle in its alternate segment.
- (iv) Angles in the same segment are equal.
- (v) The tangent to a circle is perpendicular to the line joining the center and the point of contact.