Circles

Handout-2

- 1. The perpendicular from the centre of a circle to a chord bisects the chord.
- 2. The line drawn through the centre of a circle to bisect a chord is perpendicular to the chord.
- 3. There can be many circles passing through one point or two points.
- 4. There is one and only one circle passing through three given noncollinear points.
- 5. If ABC is a triangle , then there is a unique circle passing through the three vertices A,B and C of the triangle. This circle is called the circum-circle of the triangle ABC. Its centre and radius are called respectively the <u>circumcentre</u> and the <u>circumradius</u> of the triangle.
- 6. The distance of a line from a point is the <u>shortest distance between the</u> <u>point and the line</u>. The perpendicular drawn from the point to the line is the shortest.
- 7. The length of the perpendicular from a point to a line is the distance of the line from the point.
- 8. Equal chords of a circle (or congruent circles) are equidistant rom the centre (or centres).
- 9. Chords equidistant from the centre of a circle are equal in length.