# Anita's Coaching Classes

(Each carry 1 Mark)

1. Circle having same centre are said to be
(a) Concentric (b) circle (c) chord (d) secant
2. The line which meet a circle in two points is called a
(a) chord of circle (b) diameter (c) radius (d) secant of circle
3. The sum of either pair of opposite angle of cyclic quadrilateral is
(a) $360°$ (b) $90°$ (c) $180°$ (d) $270°$
4. Two circle are congruent if they have equal.
(a) diameter (b) radius (c) chord (d) secant

(Each carry 2 Marks)

5. Prove that ADE is an isosceles triangle if $OD \perp AB$ and $OE \perp AC$


6. If ON and OM are perpendiculars to CD and AB respectively, then find the length of AM in the figure given below.
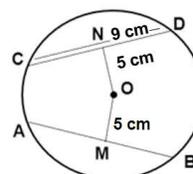
7. In ABCD cyclic quadrilateral diagonal Intersect at $Q. \angle DBC = 70°$ and $\angle CAB = 30°$ so find $\angle BCD$.
8. The chord of a unit (in cm) circle subtends an angle of $120°$ at the centre. Find length of the chord in cm.

(Each carry 3 Marks)

9. ABCD is a quadrilateral in which AD=BC and $\angle ADC = \angle BCD$ show A, B, C, D lie on a circle
10. **If a line intersects two concentric circles (circles with the same centre) with centre O at A, B, C and D, prove that AB = CD.**
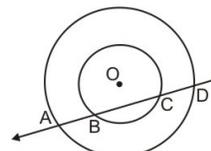
11. Two equal circles intersect in P and Q. A straight line through P meets the circles in A and B. Prove that QA = QB.
12. Find the value of x if A, B, C, D are concylic points
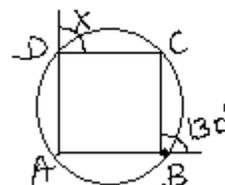
13. Prove that equal chords of a circle subtend equal angles at the centre.
14. Bisector AD of $\angle BAC$ of $\triangle ABC$ passes through the center O of the circumcircle of $\triangle ABC$. Prove that AB = AC.