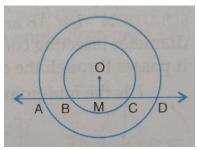
## SARASWATI BAL MANDIR, PASCHIM VIHAR ASSIGNMENT

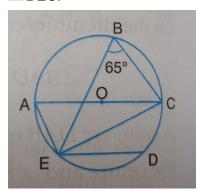
CLASS: IX

## SUBJECT: MATHEMATICS CHAPTERS - CIRCLES

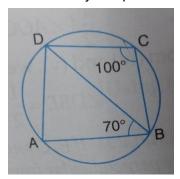
- 1. Find the length of a chord which is at a distance of 5 cm from the centre of a circle of radius 13 cm.
- 2. Two concentric circles with centre O have A,B,C,D as the points of intersection with the line L. If AD = 12 cm and BC = 8 cm find the length of the AB,CD,AC and BD.



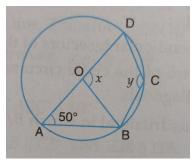
3. The chord ED is parallel to the diameter AC of the circle. Given  $\angle$  CBE = 65°, calculate  $\angle$  DEC.



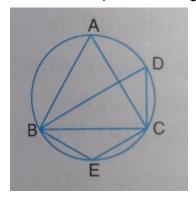
- 4. A quadrilateral ABCD is inscribed in a circle such that AB is a diameter and  $\angle$ ADC = 130°. Find  $\angle$ BAC.
- 5. ABCD is a cyclic quadrilateral.  $\angle$ BCD = 100° and  $\angle$ ABD = 70°. Find  $\angle$ ADB.



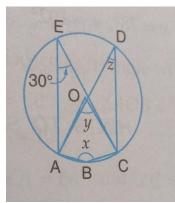
6. O is the centre of the circle and  $\angle DAB = 50^{\circ}$ . Calculate the values of x and y.



7. If ABC is an equilateral triangle . Find  $\angle$  BDC and  $\angle$  BEC.



8. O is the centre of the circle. If  $\angle$  CEA =30°, find the values of x,y and z.



9. ABCD is a cyclic quadrilateral in which AC and BD are its diagonals. If  $\angle$  DBC = 55° and  $\angle$  BAC = 45°, find  $\angle$  BCD.

