

TEST PAPER: MATHEMATICS

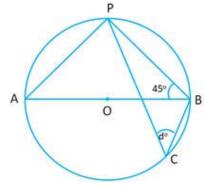
Time: 50 Minutes Class: 9th I.C.S.E.

Max. Marks: 30 Marks Date: 21st November, 2018

<u>Marking Scheme:</u> Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1:

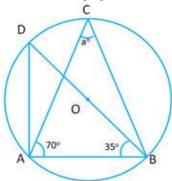
a. In the following figure, find the value of d:



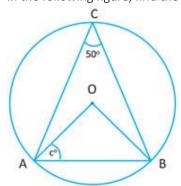
- **b.** What is the length of a chord which is at a distance of 4 cm from the centre of a circle of radius 5 cm?
- **c.** In a circle of radius 17 cm, two parallel chords of length 30 cm and 16 cm are drawn. Find the distance between the chords, if both the chords are on the opposite side of the centre.

Question 2:

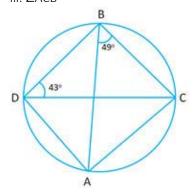
a. In the following figure, find the value of a:



b. In the following figure, find the value of c:



- **c.** In the following figure, find out the value of:
 - i. ∠ADC
 - ii. ∠BAC
 - iii. ∠ADB
 - iii. ∠ACB



Question 3:

- **a.** The radius of a circle is 17 cm and the length of perpendicular drawn from the centre to a chord is 8 cm. Calculate the length of the chord.
- **b.** The radius of a circle is 17 cm. A chord of length 30 cm is drawn. Find the distance of the chord from the centre.
- **c.** A chord of length 24 cm is at a distance of 5 cm from the centre of the circle. Find the length of the chord of the same circle which is at a distance of 12 cm from the centre.