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| **POST MIDTERM TEST****CRT-01** |
| **NAME :** | **CLASS: IX - Snowdrop** | **SUBJECT: MATHS** | **DATE:** **30.10.19** |
| **CH: – Circles** | **MARKS:**  | **25** |

1. If O is the centre of the circle, then find the value of x in the given figure. (4)

 

2. A circle has radius $\sqrt{2}$ cm. It is divided into two segments by a chord of length 2 cm. Prove that the angle subtended by the chord at a point in major segment is 45°. (4)

3. In the given figure, AOB is a diameter of the circle and C, D and E are any three points on the semi-circle. Find the value of $∠$ACD + $∠$BED.

  (4)

4. Two chords AB and CD of lengths 5 cm and 11 cm, respectively of a circle are parallel to each other and are on opposite sides of its centre. If the distance between AB and CD is 6 cm, then find the radius of the circle. (4)

5. If circles are drawn taking two sides of a triangle as diameters, then prove that the point of intersection of these circles lie on the third side. (4)

6. A circular park of radius 20 m is situated in a colony. Three boys Ankur, Syed and David are sitting at equal distance on its boundary each having a toy telephone in his hand to talk each other. Find the length of the string of each phone. (4)

7. In the given figure, find the value of x. (1) 