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|  **CHOITHRAM SCHOOL MANIKBAGH INDORE****CLASS IX, SESSION: 2019-20****Subject: MATHEMATICS Assignment No: 4****Allotment Date: 10/01/2020 Submission Date: 15/01/2020** |
| **S.No** | **QUESTION** | **MARKS** | **LEVEL** |
|  | **OBJECTIVE TYPE** |  |  |
| 1 | In a circle the region between the chord and its corresponding arc is called (A) Sector (B) Circumference (C) Diameter (D) *segment* | 1mark | Knowledge |
| 2 | With the help of ruler and compass, it is possible to construct an angle of (A) $32.5$0 (B) $42.5$0 (C)$45$0 (D) $55$0 | 1mark | Understanding |
| 3 | AD is a diameter of a circle and AB is a chord. If AD = 34 cm, AB = 30 cm, the distance of AB from the centre of the circle is :(A) 17 cm (B) 15 cm (C) 4 cm (D) 8 cm | 1mark | H.O.T. |
|  | **SHORT ANSWER TYPE I** |  |  |
| 4 | Prove thatthe perpendicular from the centre of a circle to a chord bisects the chord. | 2 Marks | Knowledge |
| 5 | Construct the following angles and bisect them.1. ) $135$0 (b) ) $75$0
 | 2 Marks | Understanding |
| 6 | Draw a line segment AB of 7 cm, take a point P on it which is 3 cm away from A and draw a perpendicular at P.  | 2 Marks | logic |
| 7 | The area of a triangle whose each angle is $60$0 is 16$√3$ m2 find its perimeter. | 2 Marks | H.O.T. |
|  | **SHORT ANSWER TYPE II** |  |  |
| 8 | Prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle*.* | 3 Marks | Understanding |
| 9 | ABCD is a cyclic quadrilateral whose diagonals intersect at a point E. If DBC = 700, BAC is 300, find BCD. Further, if AB = BC, find ECD. | 3 Marks | Multi-Conceptual |
| 10 | Construct a $∆ABC$ in which BC = 9 cm, AB = 4 cm, and $∠B=45$0. Also draw an altitude AD from vertex A on side BC. | 3 Marks | Multi-Conceptual |
| 11 | Three girls Reshma, Salma and Mandip are playing a game by standing on a circle of radius 5m drawn in a park. Reshma throws a ball to Salma, Salma to Mandip, Mandip to Reshma. If the distance between Reshma and Salma andbetween Salma and Mandip is 6m each, what is the distance between Reshma and Mandip? | 5 Marks | H.O.T. |
| 12 | Construct a $∆PQR$ whose perimeter is equal to 14.5 cm, $∠P=45$ 0 and $∠Q=60$0. | 5 Marks |  Logic |