

## **MISCELLANEOUS EXERCISE – 11**

### **Q.1 Multiple Choice Questions**

Four possible answers are given for the following questions.

1. A 4 cm long chord subtends central angle of  $60^\circ$ . The radial segment of this circle  
(a) 1                   (b) 2  
(c) 3                   (d) 4
2. If an arc of a circle subtends a central angle of  $60^\circ$ , then the corresponding chord of the arc will make the central angle of:  
(a)  $20^\circ$              (b)  $40^\circ$   
(c)  $60^\circ$              (d)  $80^\circ$
3. The semi circumference and the diameter of a circle both subtend a central angle of  
(a)  $90^\circ$              (b)  $180^\circ$   
(c)  $270^\circ$              (d)  $360^\circ$
4. The arcs opposite to incongruent central angles of a circle are always:  
(a) Congruent     (b) incongruent  
(c) parallel       (d) perpendicular
5. If a chord of a circle subtends a central angle of  $60^\circ$ , then the length of the chord and the radial segment are:  
(a) congruent     (b) incongruent  
(c) parallel       (d) perpendicular

6. The length of a chord and the radial segment of a circle are congruent, the central angle made by the chord will be:  
(a)  $30^\circ$              (b)  $45^\circ$   
(c)  $60^\circ$              (d)  $75^\circ$
7. Out of two congruent arcs of a circle, if one arc makes a central angle of  $30^\circ$  then the other arc will subtend the central angle of:  
(a)  $15^\circ$              (b)  $30^\circ$   
(c)  $45^\circ$              (d)  $60^\circ$
8. The chord length of a circle subtending a central angle of  $180^\circ$  is always:  
(a) less than radial segment  
(b) equal to the radial segment  
(c) double of the radial segment  
(d) none of these
9. A pair of chords of a circle subtending two congruent central angles is:  
(a) congruent     (b) incongruent  
(c) overlapping     (d) parallel
10. An arc subtends a central angle of  $40^\circ$  then the corresponding chord will subtend a central angle of:  
(a)  $20^\circ$              (b)  $40^\circ$   
(c)  $60^\circ$              (d)  $80^\circ$

### **ANSWER KEY**

1.	d	2.	c	3.	b	4.	b	5.	a
6.	c	7.	b	8.	c	9.	a	10.	b