Class 10 Maths Chapter 11 Areas Related to Circles MCQs For Practice

1. If the circumference of a circle and the perimeter of a square are equal, then
(a) Area of the circle = Area of the square
(b) Area of the circle > Area of the square
(c) Area of the circle < Area of the square
(d) Nothing definite can be said about the relation between the areas of the circle and square

2. If the sum of the circumferences of two circles with radii R_1 and R_2 is equal to the circumference of a circle of radius R, then
(a) $R_1 + R_2 = R$
(b) $R_1 + R_2 > R$
(c) $R_1 + R_2 < R$
(d) Nothing definite can be said about the relation among R_1, R_2 and R.

3. The diameter of a circle whose area is equal to the sum of the areas of the two circles of radii 24 cm and 7 cm is
(a) 31 cm
(b) 25 cm
(c) 62 cm
(d) 50 cm

4. If the area of a sector of a circle of radius 36 cm is 54 π cm², then the length of the corresponding arc of the sector is
(a) 2π cm
(b) 5π cm
(c) 3π cm
(d) 4π cm

5. The radius of a circle whose circumference is equal to the sum of the circumferences of two circles of radii 15 cm and 18 cm will be
(a) 33 cm
(b) 23 cm
(c) 16.5 cm
(d) 66 cm

6. The area of a sector of a circle of radius 28 cm and central angle 45° is
(a) 308 cm²
(b) 294 cm²
(c) 322 cm²
(d) 318 cm²

7. In a circle of radius 7cm, an arc subtends an angle of 30° at the centre, the length of the arc is
(a) 11 cm
(b) 11/3 cm
(c) 22/3 cm
(d) 22 cm

8. A cow is tied with a rope of length 14 m at the corner of a rectangular field of dimensions 20m × 16m. The area of the field in which the cow can graze is

(a) 144 cm^2

(b) 169 cm^2

(c) 77 cm^2

(d) 154 cm^2

9. The length of the minute hand of a clock is 14 cm. The area swept by the minute hand in 5 minutes is equal to

(a) 88 cm^2

(b) 145/3 cm^2

(c) 154/3 cm^2

(d) 154 cm^2

10. The area of the circle that can be inscribed in a square of side 7 cm is

(a) 36π cm^2

(b) 49π cm^2

(c) 25π cm^2

(d) 10.25π cm^2

* * * * * * * * * ANSWER KEY * * * * * * * * * *

1 - (b)	2 – (a)	3 - (d)	4 - (c)	5 - (a)
6 - (a)	7 - (b)	8 - (d)	9 - (c)	10 - (b)