Chapter-12
Assignment
TOPIC: AREAS RELATED TO CIRCLES,

1) A bicycle wheel makes 5000 revolution in moving 11 km. find the diameter of the wheel.

2) The radius of the wheel of a bus is 70cm, how many revolutions per minute must a wheel make in order to move at a speed of 66 km/h.

3) A wheel has diameter 84cm. Find how many complete revolutions must it make to cover 792 metres.

4) A chord AB of a circle of radius 14cm makes a right angle at the centre of the circle. Find the area of the minor segment. (π = 22/7)

5) Area of a sector of a circle is 1/6 to the area of circle. Find the degree measure of its minor arc (60˚)

6) Area of a sector of a circle of radius 14cm is 154 cm^2. Find the length of the corresponding arc of the sector.

7) If the diameter of a semi circle protractor is 14 cm. Find its perimeter.

8) The circumference of a circle A is 132cm. It is equal to the sum of the circumference of two circles B & C, the radius of the circle B is 14cm. Find the radius of circle C.

9) The area of quadrant is 154sq cm. Find its perimeter.

10) Two circles touch externally. The sum of their areas is 130 Π sq.cm and the distance between their centres is 14cm. Find the radii of the Circles.

11) Find the area of a quadrant of a circle whose circumference is 44cm

12) The perimeter of a sheet of paper in the shape of a quadrant of a circle is 75 cm. Find its area.

13) A circular disc of 6cm radius is divided into 3 sectors with central angles 120˚, 150˚and 90˚.Find the ratio of the areas of 3 Sectors.

14) The difference between circumferences and diameter of a circle is 105 cm. Find the radius of the circle .

15) Find the area of a major sector of a circle of diameter 42 cm and central angle is 60˚.

16) If the area and circumference of a circle are numerically equal, then find the radius of the circle.

17) The length of a rope by which a cow is tethered is increased from 16m to 23m. How much additional area can the cow graze? Now (π =22/7)

18) What will be the increase in area of circle if its radius is increased by 40 % .

19) An arc of a circle is of length 5π cm and the sector it bounds has an area of 20π cm^2 . Find the radius of the circle.

20) The circumference of a circle exceeds the diameter by 16.8cm. Find the radius of circle.

21) The area enclosed between two concentric circles is 770 sq cm. If the radius of outer circle is 21cm. Find the radius of the inner circle.

22) The length of the minute hand of a clock is 7cm. How much area does it sweep in 20minutes.