## **AREAS RELATED TO CIRCLE**

## PERIMETER AND AREA OF CIRCLE

## EXERCISE

- **Q.1** Find the circumference and area of a circle of radius 4.2 cm.
- **Q.2** Find the circumference of a circle whose area is 301.84 cm<sup>2</sup>.
- **Q.3** Find the area of a circle whose circumference is 44 cm.
- **Q.4** The circumference of a circle exceeds the diameter by 16.8 cm. Find the circumference of the circle.
- **Q.5** A horse is tied to a pole with 28 m long string. Find the area where the horse can graze. (Take  $\pi = 22/7$ ).
- **Q.6** A steel wire when bent in the form of a square encloses an area of 121 cm<sup>2</sup>. If the same wire is bent in the form of a circle, find the area of the circle.
- **Q.7** A plot is in the form of a rectangle ABCD having semi-circle on BC as shown in Fig. If AB = 60 m and BC = 28 m, find the area of the plot.



- **Q.8** A play ground has the shape of a rectangle, with two semi-circles on its smaller sides as diameters, added to its outside. If the sides of the rectangle are 36 m and 24.5 m, find the area of the playground. (Take  $\pi = 22/7$ ).
- Q.9 The outer circumference of a circular race-track is 528 m. The track is everywhere 14m wide. Calculate the cost of levelling the track at the rate of 50 paise per square metre

(Use  $\pi = 22/7$ ).

**Q.10** A rectangular piece is 20 m long and 15 m wide. From its four corners, quadrants of radii 3.5 m have been cut. Find the area of the remaining part.

## **ANSWER KEY**

- **1.** 26.4 cm, 55.44 cm<sup>2</sup>
- **2.** 61.6 cm
- **3.** 154 cm<sup>2</sup>
- **4.** 24.64 cm
- **5.** 2464 m<sup>2</sup>
- **6.** 154 cm<sup>2</sup>
- **7.** 1988 m<sup>2</sup>
- **8.** 1353.625 m<sup>2</sup>

**9.** | 3388

**10.** 261.5 m<sup>2</sup>