

## Revision Notes Chapter -11 Perimeter and Area

- **Perimeter** is the distance around a closed figure whereas area is the part of plane occupied by the closed figure.
- **Area** is the measure of the part of plane or region enclosed by it.
- We have learnt how to find perimeter and area of a square and rectangle in the earlier class. They are:
  - (a) Perimeter of a square =  $4 \times \text{side}$
  - (b) Perimeter of a rectangle =  $2 \times (\text{length} + \text{breadth})$
  - (c) Area of a square =  $\text{side} \times \text{side}$
  - (d) Area of a rectangle =  $\text{length} \times \text{breadth}$
- Area of a parallelogram =  $\text{base} \times \text{height}$
- Area of a triangle =  $\frac{1}{2}$  (area of the parallelogram generated from it)  

$$= \frac{1}{2} \times \text{base} \times \text{height}$$
- Area of equilateral triangle =  $\frac{\sqrt{3}}{4} \times (\text{side})^2$
- The distance around a circular region is known as its circumference.
- The ratio of circumference and diameter of a circle is a constant is denoted by  $\pi$  (pi).
- Circumference of a circle =  $\pi d$ , where  $d$  is the diameter of a circle and  $\pi = \frac{22}{7}$  or 3.14 (approximately).
- Area of a circle =  $\pi r^2$ , where  $r$  is the radius of the circle.
- Based on the conversion of units for lengths, studied earlier, the units of areas can also be converted:
  - $1 \text{ cm}^2 = 100 \text{ mm}^2$
  - $1 \text{ m}^2 = 10000 \text{ cm}^2$ ,
  - $1 \text{ hectare} = 10000 \text{ m}^2$