

## CHAPTER - 14 PRACTICAL GEOMETRY

This chapter deals with methods of drawing geometrical shapes.

- We use the following mathematical instruments to construct shapes:
  - (i) A graduated ruler
  - (ii) The compasses
  - (iii) The divider
  - (iv) Set-squares
  - (v) The protractor
- Using the ruler and compasses, the following constructions can be made:
  - (i) A circle, when the length of its radius is known.
  - (ii) A line segment, if its length is given.
  - (iii) A copy of a line segment.
  - (iv) A perpendicular to a line through a point on the line not on the line.
  - (v) The perpendicular bisector of a line segment of given length.
  - (vi) An angle of a given measure.
  - (vii) A copy of an angle.
  - (viii) The bisector of a given angle.
  - (ix) Some angles of special measures such as
    - (a) 90°
    - (b) 45°
    - (c)  $60^{\circ}$
    - (d)  $30^{\circ}$
    - (e) 120°
    - (f) 135°