Revision Notes Chapter –10 Practical Geometry

- In this Chapter, we looked into the methods of some ruler and compasses constructions.
- Given a line 1 and a point not on it, we used the idea of 'equal alternate angles' in a transversal diagram to draw a line parallel to 1.
- We could also have used the idea of 'equal corresponding angles' to do the construction.
- **Construction of Parallel Lines**: Draw a line segment *l* and mark a point A not lying on it.
- Take any point B on *l* and join B to A.
- With B as centre and convenient radius, draw an arc cutting *l* at C and AB and D.
- Now with A as centre and the same radius as in above step draw an arc EF cutting AB at G.
- Place the metal point of the compasses at C and adjust the opening so that the pencil point is at D.
- With the same opening as in above step and with G as centre draw another arc cutting the arc EF and H.
- Now join AH and draw a line m.
- We studied the method of drawing a triangle, using indirectly the concept of congruence of triangles.

The following cases were discussed:

(i) SSS: Given the three side lengths of a triangle.

(ii) SAS: Given the lengths of any two sides and the measure of the angle between these sides.

(iii) ASA: Given the measures of two angles and the length of side included between them.

(iv) RHS: Given the length of hypotenuse of a right-angled triangle and the length of one of its legs.