



CHAPTER – 9 CONSTRUCTION

NOTES

- In geometrical construction as far as practicable, only two geometrical instruments, namely a ruler and a compass will be used.
- The analysis part of a construction is given only to reveal the clues leading to the construction process. It is not a part of the construction and will be omitted when the steps of construction are self evident.

Constructions to be studied in this chapter:

➤ Division of line segment in a given ratio

There are two methods for dividing a given line segment in a given ratio. They are

- (i) based on the Basic Proportionality Theorem and
- (ii) based on the property of similar triangles.

➤ Construction of a triangle similar to a given triangle as per given scale factor

There are two cases for the construction of a triangle similar to a given triangle. They are

- (i) Scale factor > 1 and
- (ii) Scale factor < 1 .

Note: Scale factor means the ratio of the sides of the triangle to be constructed to the corresponding sides of the given triangle.

➤ Construction of a tangent (a pair of tangents) to a circle from an external point

