# ENGINEERING GRAPHICS (BT-105) IMPORTENT QUESTIONS

# Plain scale

1. Construct a plain scale or simple scale to show meters and decimeters, when one metre is represented by 2.5cm and long enough to measure up to 6 meter. Mark 4.8m on it.
2. Construct a scale of 1:10 to show centimeters and long enough to measure up to 5 decimeters. Mark 3.7decimetres on it.
3. Construct a plain scale to show kilometers and hectometers, When 2.5 centimeters are equal to 1 kilometers and long enough to measure up to 6 kilometers. Find the RF and indicate the distance of 4kms and 5 hectometers on the scale.
4. A 2.5 cm line represents a length of 10metres.Extend this line to measure a length up to 60m and show on it units of meter and meters. Show the length of 43m on this line.
5. A room of 1728m3volume is shown by a cube of 216 cm3 .Find the RF and construct a scale to measure up to 42 meters. Mark a distance of 22m on the scale.

# Diagonal scale

# Construct a diagonal scale of RF 3/100 showing metres, decimetres and centimetres and to measure up to 6 meters.

1. Construct a diagonal scale of RF 1/48 showing meters, decimeters and centimeters and measure up to 6 m length. Mark a length of 3.76m on it.
2. On a building plan, a line 15cm represents a distance of 300metres. Calculate the RF. Construct a diagonal scale to read up to 300 meters, showing single meters. Indicate the following distance on the scale 245,160,70and 8 meters
3. On a map, a line 30cm long represents a distance of 450m. Construct a diagonal scale, for this map, showing division of 50m, 5m, and 0.5m and capable of measuring 300m. Show a distance of 175m on this scale.
4. On a map, the actual distance of 5m is represented by a line of 25mm long. Calculate the RF of scale used. Construct a diagonal scale long enough to read 25m and mark distance of 19 and 11m.