## Sheet No: 3

## SCALES

1. Construct a scale of $1: 5$ to show decimetres and centimetres and to read upto 1 metre. Show the lengths of 7.6 dm and 48 cm on it.
2. An area of 144 sq cm on a map represents an area of 36 sq km on the field. Find the RF of the scale for this map and draw a diagonal scale to show kilometres, hectametres and decametres and to measure upto 10 kilometres. Indicate the following distances on the scale a) 5.36 km b) 73 hectametres.
3. Draw a full size vernier scale to read $\frac{1 "}{8}$ and $\frac{1}{64}$ lengths and mark on it lengths of $5 \frac{7 "}{32}, 2 \frac{51^{\prime \prime}}{64}$ and $\frac{29^{\prime \prime}}{64}$.
4. Draw a scale of $1: 50$ showing metres and decimeters, and to measure upto 8 metres. Show the lengths of 740 cm and 32 dm .
5. The distance between two points on a map is 5.75 inch. The points are actually 20 miles apart. Construct a diagonal scale of the map, showing miles and furlongs and to read upto 25 miles.
6. On a building plan, a line 20 cm long represents a distance of 10 m . Devise a vernier scale for the plan to read upto 12 m . Show on your scale the lengths 65.8 dm and 9.14 m .
7. Construct a diagonal scale of $\mathrm{RF}=1 / 80$ to read inches and to measure upto 15 yards. Mark 4 yd $1 \mathrm{ft} 9 \mathrm{in}, 6$ yd 2 ft 3 in and 2 ft 7 in .
8. Construct a vernier scale of $\mathrm{RF}=1 / 32$ showing yards, feet and inches and measure upto 4 yards.
