

9.00 Theodolite surveying for measurement of horizontal angle
10.00 ① Measurement of horizontal angle

Terms

11.00 ① centering → an Theodolite set and fixed station
12.00

② Transiting of axis about 180° move and operation of Transiting telescope and Horizontal

③ face left → Theodolite and vertical circle
right observer and Reading and Face left
left side and

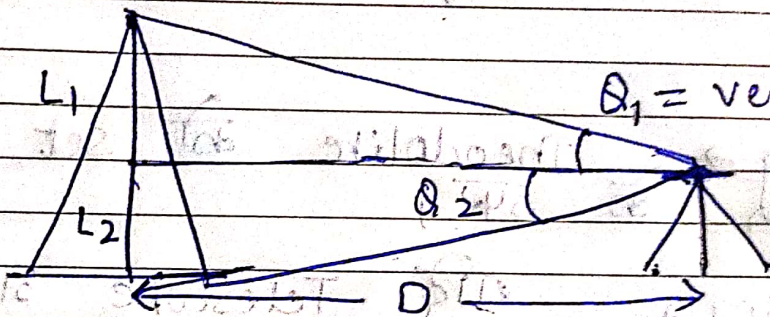
④ Face Right → Theodolite on vertical
circle
Observer at Reading
Right side of face
Right side of face

② Measurement of vertical angle
→ Same as Horizontal angle but
here we will use vertical circle
clamp & tangent screw.

→ For levelling to bring the bubble of
altitude level to central position

(iii)

Measurement of height of Tower/Tree etc if tower is accessible (4/6/21/22)



θ_1 = vertical angle determined by theodolite

Tower (known distance b/w Tower & station)

$$\frac{L_1}{D} = \tan \theta_1 \quad \frac{L_2}{D} = \tan \theta_2$$

$$L_1 = D \tan \theta_1 \quad L_2 = D \tan \theta_2$$

$$L_1 = D \tan \theta_1$$

$$L_2 = D \tan \theta_2$$

height of tower = $L_1 + L_2$

IV >

Sunday • 025-340

Measurement of vertical height of tower if tower is inaccessible

↳ we will study in field.