

Surveying Lab

Objective: Preparation of Engineering detailed plans of Highways, Railways etc., and Determination of Areas, Volumes and other related quantities by Total Station



Sections Handled:II-A,II-B

Major Equipment Details:

Sl.No	Equipment Name	Qty
1.	Metric Chains -20m	12
2.	Metric Chains-30m	12
3.	Metric Tape-15m	6
4.	Metric Tape-30m	6
5.	Ranging Rods-2m	25
6.	Ranging Rods-3m	45
7.	Aluminum Leveling Staff-4m	12
8.	Wooden Cross Staff	12
9.	Optical Square	11
10.	Dumpy Level	6
11.	Tripod Stand	23
12.	Auto Levels	6
13.	Planimeter	4
14.	Prismatic Compass	15
15.	Plane Tables	11
16.	Total Station	2
17.	Prism	1
18.	Theodolite	8
19.	Box Sextant	5
20.	Arrows	100

Faculty In charge with qualification : N.Jagadeesh-M.Tech

Lab Technical name with qualification:B.Siva Rama Krishna-D.C.E

Experiment list as per curriculum:

1. Survey by chain survey of road profile with offsets in case of road widening .
2. Survey in an area by chain survey (Closed circuit).
3. Determination of distance between two inaccessible points by using compass.
4. Finding the area of the given boundary using compass (Closed Traverse).
5. Plane table survey : finding the area of a given boundary by the method of Radiation.
6. Plane table survey : finding the area of a given boundary by the method of intersection.
7. Two Point Problem by the plane table survey.
8. Fly levelling : Height of the instrument method (differential levelling) .
9. Fly levelling : rise and fall method.
10. Fly levelling : closed circuit/ open circuit.
11. Fly levelling : Longitudinal Section and Cross sections of a given road profile.

Experiment list beyond the curriculum

1. Study of Planimeter