## **Surveying Lab**

Lab-In-Charge: Prof. K. C. Tiwari

**Technical Assistant:** Mr. Anil Agnihotri

**Lab Attendant:** Mr. Inder Singh

## About the Lab:

The laboratory of Surveying is well equipped with all the required instruments and tools that are helpful in the overall understanding and practical knowledge of a student. Students learn techniques for gathering field data with both traditional and modern instruments.

## List of Equipment:

- 1. Vernier Theodolite
- 2. Auto/Digital level
- 3. Prismatic Compass
- 4. Total Station
- 5. Plane Table
- 6. Tripod, Alidade, Plumbing Fork, Spirit level, Trough Compass, U- Frame
- 7. Line Ranger, Optical Square/Cross staff
- 8. Metric Chain

## List of Experiments

- 1. To plot the map of area by chain surveying.
- 2. To run a traverse using a prismatic compass or chain & Tape.
- 3. To run a plane table survey and locate the details of confined area using the method-

Radiation, Intersection, Resection.

- 4. To locate the position of a plane table station on the drawing sheet by two-point method.
- 5. To locate the position of a plane table station on the drawing sheet by three-point method.
- 6. To run a traverse lines & plotted directly on the drawing paper to a suitable scale in the field using a plane table traversing method.
- 7. To find the reduced level of various point using a dumpy level.
- 8. To measure the horizontal angle by repetition method using a theodolite.



Vernier Theodolite

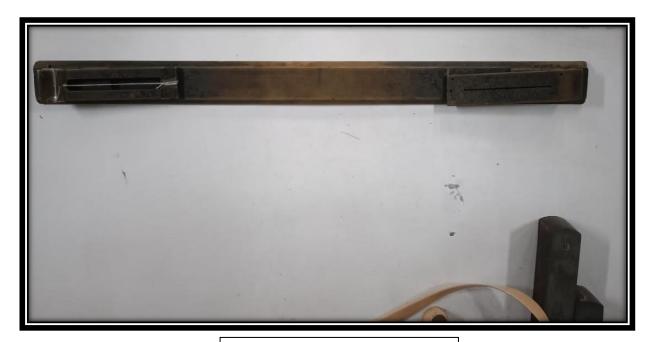
Dumpy level





Chainage

**Trough Compass** 



Alidade





Levelling and Tripod Stand

