

## **Name of the laboratory: Surveying lab**

**Objectives of the lab:** The Surveying Laboratory enables students to understand and practice the basic principles of surveying by conducting field exercises using a wide spectrum of surveying equipment ranging from traditional dumpy levels, tilting level, compass, transits, plane table and theodolites to the latest electronic auto level, digital theodolite, Total station .This laboratory covers data collection methods including surveying, profile leveling, contouring, compass traversing, laying out of curves, base line measurement and triangulation.

### **List of the equipment:**

1. Tilting level
2. Dumpy levels
3. Compass
4. Transits
5. Plane table
6. Theodolites
7. Latest electronic auto level
8. Total station

### **List of experiments:**

1. Determine of area using total station
2. Traversing using total station
3. Contouring using total station
4. Determination of remote height using total station
5. Stake out using total station
6. Distance, gradient, differential height between two inaccessible points using total station.
7. Curve settling using total station
8. Resection using total station
9. Setting o ut works for buildings and pipe lines



