

## SURVEYING FIELD WORK - II

Practical: 3 Periods/Week  
Semester End Exam.: 3 Hrs.

Sessional marks: 40  
Semester End Exam. marks : 60  
Credits : 2

### Course Objectives:

The main objective of this laboratory course is to introduce Total Station instrument for regular field survey purpose

- All of the experiments which are done by mechanical instruments before are now dealt with Total station
- Each and every design/plot related to field survey is carried out by Total Station and required computations are directly made at the site itself
- This course will also present a survey camp after completing the regular lab sessions.

### Course Outcomes:

- Every student can gain required excellence in using the Total Station Instrument
- Students can make accurate designs/plots thus by avoiding any manual errors
- Every student can meet the requirement of knowing the Total Station instrument which is vital for any construction firm
- Not only he/she can work out the experiments inside the institution but also they are trained for the on-site works outside the institution

### Any 8 of the following:

#### 1. Theodolite

1. Traversing and adjustment of traverse
2. Determination of Horizontal and Vertical distances by stadia methods
3. Determination of Elevations and Heights

#### 2. Total Station

4. Study of Instrument – Determination of Distances, Directions and Elevations
5. Determination of Boundaries of a Field and computation of area.
6. Determination of Heights of objects.

#### 3. Setting Out

7. Setting of simple circular curve using tape and chain.
8. Setting of simple circular curve using tape or/and theodolite
9. Setting of a simple circular curve using Total Station.
10. Setting out for Building.

**Survey Camp is to be conducted for a minimum period of seven days to train in one of the following areas:**

- i. Preparation of a contour Plan/ Map.
- ii. Earth work Computations for a high way / canal projects
- iii. Marking of a Sewer line/ Water supply line.
- iv. Any type of Execution works.

**NOTE**

50% Weight- age of total marks of this laboratory is to be given for total survey camp work including for Report submission by each batch.