

AMBE18 ADVANCED SURVEYING

UNIT-1 TRIGONOMETRICAL LEVELLING

- 1.1 Introduction, Heights And Distances,
- 1.2 Base Of The Object Accessible, Base Of The Object
- 1.3 Inaccessible: Instrument Stations Not In The Same Vertical Plane As The Elevated Object,
- 1.4 Geodetical Observations,
- 1.5 Axis Signal Correction (Eye And Object Correction),
- 1.6 Determination Of Difference In Elevation,

UNIT-2 TRIANGULATION

- 2.1 Geodetic Surveying,
- 2.2 Classification Of Triangulation System,
- 2.3 Triangulation Figures Or Systems, The Strength Of Figure,
- 2.4 Routine Of Triangulation Survey,
- 2.5 Signals And Towers, Non-Luminous Or Opaque Signals,
- 2.6 Base Line Measurement, Calculations Of Length Of Base,
- 2.7 Measurement Of Horizontal Angles,
- 2.8 Satellite Station: Reduction To Centre, Extension Of Base: Base Net.

UNIT-3 TOPOGRAPHIC SURVEYING

- 3.1 Introduction, Methods of Representing Relief,
- 3.2 Contours And Contour Interval,
- 3.3 Characteristics Of Contours,
- 3.4 Procedure In Topographic Surveying,
- 3.5 Methods Of Locating Contours,
- 3.6 Interpolation Of Contours

UNIT-4 ROUTE SURVEYING

- 4.1 Introduction,
- 4.2 Reconnaissance Survey,
- 4.3 Preliminary Survey,
- 4.4 Location Survey,
- 4.5 Construction Survey.

Reference Books:

1. Advanced Surveying -Total Station, GIS and Remote Sensing by Satheesh Gopi, R.Sathikumar and N. Madhu, Pearson publication
2. Surveying &levelling by R. Subramanian, Oxford Publication. (Best Books for Advanced Surveying)
3. GPS Satelite Surveying-Alfred Leick-Wiley
4. Remote sensing and Geographical Information System, By A. M. Chandra and S. K. Ghosh, Narosa Publishing House. (Best Books for Advanced Surveying)