

SUBJECT NAME – SURVEING AND LEVELLING

SUBJECT CODE – 3336203

FOCUS:

To develop the knowledge and skill relative to surveying and leveling principles and practice

CONTENTS:

- Introduction of subject, basic terms, definition and terminologies. Classification and Division of survey, units of measurements.
- Chain Surveying: Linear measurement, principle of chain surveying, frame work, instruments used, field work.
- Compass Survey: Introduction to traversing, principle used, types of meridian, WCB & RB system.
- Methods of Area and Volume Measurements: Introduction to various methods of measuring area between chain line & boundary, calculation of area using trapezoidal & Simpson's formula, use of planimeter to calculate area, other approximate methods.
- Introduction to Leveling & Contour: Introduction to leveling & RL, How to get the RL. Understanding of contours, basic characteristics & uses of contour, study of contour map- identification of ridge line, valley line, etc. Calculation of volume for cutting & filling using contour map.
- Setting out of Building: Setting out of building on the ground- Methods for setting out buildings by horizontal and vertical control.
- Introduction to Remote sensing and GIS: Introduction to various terminology & reading of map.

SUGGESTED BOOKS

- Surveying Vol -1 by Dr. B. C Punmia
- Surveying and Leveling (Vol -1) by Kanetkar TP and Kulkarni SV
- Surveying and Leveling by S C Rangwala