

PECI5303 **SURVEYING-II** (3-0-0)

MODULE-I

Tacheometry: General principles of stadia system, determination of tacheometric constants, analytic lens, fixed and movable hair methods, inclined sights with staff vertical, inclined sight with staff normal to the line of sight, tangential system, errors in tacheometer

Curves: Types of curves, elements of curve, different methods of setting out simple circular curves, compound curves, reverse curves, transition curves, types of transition curves, super elevation, vertical curves.

MODULE-II

Triangulation: Classification of triangulation system, operation in triangulation survey, reconnaissance, selection of site for base line, its measurement and extension, correction to base line measurement using EDM and Total station, selection of stations, triangulation figures, scaffolds and signals, marking of stations, inter visibility, strength of figures, reduction to centre.

Theory of Errors: Definitions, law of weight, probable errors, most probable value, distribution of error, normal equations, method of least square

MODULE-III

Setting out of work: Laying out of buildings and sewer lines.

Photogrammetry: Basic concepts, type of photographs, Terrestrial Photogrammetry, Aerial Photogrammetry: stereoscopy and parallax.

Books :

1. Surveying Volume II and III : B.C. Punmia
2. Surveying –Volume II: S.K.Duggal, TMH Publ
3. Advance Surveying : R. Agor