

5th SEMESTER
SKILL ENHANCEMENT COURSE (SEC)
(GEOLOGY)

GL517S1: GEOLOGICAL MAPPING TECHNIQUES

CREDITS: THEORY: 2, PRACTICAL: 2

THEORY (2 CREDITS)

Unit-1

Basic functioning of GPS and Brunton Compass (location determination, mapping etc.). Reading of Topographic sheets. Reconnaissance Geological Traverse, Actual Geological Mapping, Clinometer compass, Taking front and back bearing from distant objects. Measurement of pitch and plunge.

Unit-2

Determination of True dip and apparent dip and strike of beds. Estimation of thickness, distance and depth of ore body, width of outcrops etc. Determination of Throw/Heave/Stratigraphic separation. Strain analysis of deformed oriented rocks.

PRACTICAL (2 CREDITS)

Unit-1

Identification and analysis of geological structures: faults, folds, joints, unconformities. Measurement of the attitude (dip and strike) of various geological structures

Unit-2

Mapping of the geological structures including faults, folds, joints, unconformities. Elementary structural analysis with use of stereographic methods - Interpretation of Geological and contour maps. Preparation of cross section profile from a geological map.