

III Year - I Semester	L	T	P	C
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ENGINEERING GEOLOGY LAB

Course Learning Objectives:

The objective of this course is:

- To identify the mega-scopic types of Ore minerals & Rock forming minerals.
- To identify the mega-scopic types of Igneous, Sedimentary, Metamorphic rocks.
- To identify the topography of the site & material selection

Course Outcomes:

Upon the successful completion of this course, the students will be able to:

- Identify Mega-scopic minerals & their properties.
- Identify Mega-scopic rocks & their properties.
- Identify the site parameters such as contour, slope & aspect for topography.
- Know the occurrence of materials using the strike & dip problems.

SYLLABUS:

LIST OF EXPERIMENTS

1. Physical properties of minerals: Mega-scopic identification of

- a. Rock forming minerals – Quartz group, Feldspar group, Garnet group, Mica group & Talc, Chlorite, Olivine, Kyanite, Asbestos, Tourmelene, Calcite, Gypsum, etc...
- b. Ore forming minerals – Magnetite, Hematite, Pyrite, Pyralusite, Graphite, Chromite, etc...

2. Megascopic description and identification of rocks.

- a) Igneous rocks – Types of Granite, Pegmatite, Gabbro, Dolerite, Syenite, Granite Poryphery, Basalt, etc...
- b) Sedimentary rocks – Sand stone, Ferruginous sand stone, Lime stone, Shale, Laterite, Conglamorate, etc...
- c) Metamorphic rocks – Biotite – Granite Gneiss, Slate, Muscovite & Biotiteschist, Marble, Khondalite, etc...