Credits: 4:0:0

Objectives:

- To understand the formation of rocks and properties of minerals
- To understand the properties of engineering materials
- To understand the tests to be done on materials

Outcomes:

- Students will be able to carry out engineering investigations
- Students will be able to identify important minerals
- Students will be able to select different building materials according to requirement

Unit I  General Geology and Mineralogy

Unit II  Petrology and Structural Geology

Unit III  Stones, Bricks and Timber :
(iii) Timber : Classification and identification of timber, Fundamental Engineering properties. Defects in timber, seasoning and preservation of timber.

Unit IV  Civil Engineering Materials
Unit V: Gypsum, Lime and Puzzolona:

(i) Gypsum: Forms of gypsum and gypsum plaster, properties of gypsum plaster, building products of gypsum and their uses.

(ii) Lime: Manufacture of lime, classifications of limes, properties of lime.

(iii) Puzzolona: Natural and Artificial fly ash, Surkhi (burnt clay puzzolona), rice husk and ash puzzolona, properties and specifications for use in construction.

Text Books:

Reference Books: