

ENGINEERING GEOLOGY LAB

Objective: Engineering Geology helps to understand the nature of geological information which is absolutely essential for a safe design and construction of a civil engineering projects. In all types of heavy construction jobs such as buildings, towers, tanks, dams and reservoir, highway bridges, traffic and hydropower tunnels etc. full geological information about the site of construction (or Excavation) and about the natural materials of construction is paramount importance.



Sections Handled: III Year A&B (R16) II Year A(R19) & I Year A (R20)

Major Equipment Details:

S.No	NAME OF EQUIPMENT/ MAKE/ MODEL NO	QUANTITY
1.	Rocks & Minerals Specimens with Plastic Specimen Trays Make : ALMINROCK INDSCER FABRIKS	250
2.	Structural Geology Models Make : ALMINROCK INDSCER FABRIKS	22
3.	Hardness collection set Make : ALMINROCK INDSCER FABRIKS	2 set
4.	Wooden crystallographic models- Symmetrical Make : GCM Industries	1set (32 No's)
5.	Streak Plates (3''X3''X(1/4'')) Make : ALMINROCK INDSCER FABRIKS	30
	Streak Plates (2''X2'') Make : M/s Amit International	10No's
6.	Cleavage Collection Make : ALMINROCK INDSCER FABRIKS	1 Set
7.	Specific Gravity Collection Make : ALMINROCK INDSCER FABRIKS	1 Set
8.	Lustre Collection Make : ALMINROCK INDSCER FABRIKS	1 Set
9.	Streak Collection Make : ALMINROCK INDSCER FABRIKS	1 Set
10.	Rounded Magnets 36mm Dia Make : ALMINROCK INDSCER FABRIKS	4 No's
11.	Pen Knife Make : ALMINROCK INDSCER FABRIKS	4 No's
	Pocket Knife(Scalper) Make : M/s Amit International	1 No
12.	Pocket Lens Make : ALMINROCK INDSCER FABRIKS	4No's
	Lens with Handle 2'' Make : M/s Amit International	1No
13.	Brunton compass Make : 1. M/s Amit International 2. BEP EDU World	2 No's 1No
14.	Clinometer Compass Make : M/s Amit International	2 No's
15.	Streak Glass copper iron garnet plate set Make : M/s Amit International	1 No

16	Volcano Working Model Make : BEP EDU World	1 No
17	3 D framed fibre Glass Model Rock cycle model Make : BEP EDU World	1 No
18	Glass plate 2”X2” Make : M/s Amit International	30 No's
19	Goniometer Make : M/s Amit International	1 No
20	Rocks and Minerals Chart Make : M/s Amit International	1 No
21	Geology Educational Charts Make : M/s Amit International	1Set (7pcs)
22	Interior of Earth RR 073 (75X100cm) Make : BEP EDU World	1 No
23	Earth Layer Model Make : BEP EDU World	1 No
25	Geological Map of India Make : BEP EDU World	1 No
26	Minerals of the world chart (90X120cm) Make : BEP EDU World	1 No
27	Weathering the changing Land Scale(90X120cm) Make : BEP EDU World	1 No
28	Visual 3d Maps of India BV 005 (24X34 cm) Make : BEP EDU World	1 No
29	Maps of Giant size on Single sheet of India Physical PM 017 (112X162cm) Make : BEP EDU World	1 No
30	3D Raised Relief Models PVC RR 001(75X100cm) Make : BEP EDU World	1 No
31	Rocks and Volcanoes RR 076 (75X100cm) Make : BEP EDU World	1 No
32	Air and Water Pollution RR 078(75X100cm) Make : BEP EDU World	1 No
33	The Volcanic System RR 079(75X100cm) Make : BEP EDU World	1 No
34	Weathering Model RR 099(75X100cm) Make : BEP EDU World	1 No
35	The Earth's Interior RR 097 (75X100cm) Make : BEP EDU World	1 No
36	Geological Map of India GG 002 (90X70cm) Make : BEP EDU World	1 No
37	Deformation of the earth RR091 (75X100cm) Make : BEP EDU World	1 No
38	Fold and Faults RRO 86 (75X100cm) Make : BEP EDU World	1No
39	Geomorphological Models GM -02 GM 09-GM 16(25X35 cm each) Make : BEP EDU World	1No (set of 8)
40	Mineral Map of India GG 003 (90X70cm) Make : BEP EDU World	1No
41	Indian Rock and Mineral Map GG 008 (54X88cm) Make : BEP EDU World	1No
42	Geological Map of India GG 000 (90X70cm) Make : BEP EDU World	1No

43	Indian Rock Type Map GG 009(54X88cm) Make : BEP EDU World	1No
44	Minerals and Rocks LA 080 (70X100cm) Make : BEP EDU World	4No's
45	Contour Maps Printed on Poly art Plastic sheet Set of 2 Charts C 001 (75X100cm Each) Make : BEP EDU World	4No's

Faculty In charge with qualification: **M.VINEELA, M. Tech**

Lab Technician name with qualification: **A.Naga Raju Diploma**

Experiment list as per curriculum:

1. Mega-Scopic identification and description of physical properties of Rock -forming minerals.
2. Mega-Scopic identification and determination of physical properties of Ore - Forming minerals.
3. Mega-Scopic description and identification of Igneous Rocks.
4. Mega-Scopic description and identification of Sedimentary Rocks. 5. Megascopic description and identification of Metamorphic Rocks.
6. Interpretation and drawing of sections for geological maps showing tilted beds, faults, unconformities etc.
7. Solving Simple Structural Geology problems by identification of strike and dip on the profile of the maps.
8. Solving problems related to Bore hole data.
9. Determination of strength of rocks
10. Field work Identification of Minerals, Rocks, Geomorphology & Structural Geology.

Experiment list beyond the curriculum

1. Study and identification of structural models