Lecture Plan

Name of the College: Government College of Arts, Science and Commerce. Sanquelim - Goa

Name of Faculty: Shritesh Mhapsekar	**Subject:** Geology	
Paper code: GEO-221, Introduction to Engineering Geology	**Program: BSc**	**Division:**
Academic year: 2024-25	**Semester: IV**	**Total Lectures: 15**

Course Objectives:

1. Explain the engineering properties of rocks. CL2
2. Discuss methods of geological investigations for selection of sites for engineering projects. CL2
3. Describe various techniques for the improvement of sites. CL3

Course Outcome:

1. Compare engineering properties of rocks and determine its suitability for various engineering projects. CL4
2. Select the appropriate sites for engineering projects.CL5
3. Suggest remedial measures for the improvement of sites.CL4
4. Calculate of RQD and RMR. CL3

Student Learning Outcome:

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
December, 2024	December 9, 2024	December 15, 2024	1	Introduction to the engineering geology			1. Bell F. G. (2007).Engineering Geology, Second Edition, ButterworthHeinemann. 2. Blyth, F. G. H., & De Freitas, M. H. (1967).

	December 16, 2024	December 22, 2024	1	Scope			Geology for engineers. http://ci.nii.ac.jp/ncid/BA07203247
January, 2025	December 30, 2024	January 5, 2025	1	Role of geologists in engineering projects			
	January 6, 2025	January 12, 2025	1	Role of geologists in engineering projects			
	January 13, 2025	January 19, 2025	1	Engineering properties of rocks			
	January 20, 2025	January 26, 2025	1	Engineering properties of rocks			
	January 27, 2025	February 2, 2025	1	Engineering properties of rocks			
February, 2025	February 3, 2025	February 9, 2025	1	Rock as material for construction			
	February 10, 2025	February 16, 2025	1	Rock as material for construction			
	February 17, 2025	February 23, 2025	1	rock as site for construction			
	February 24, 2025	March 2, 2025	1	rock as site for construction			
March, 2025	March 3, 2025	March 9, 2025	1	Geological Investigations and methods of investigation (geophysical).			
	March 10, 2025	March 16, 2025	1	Geological Investigations and methods of investigation (geophysical).			1. Bell F. G. (2007).Engineering Geology, Second Edition, ButterworthHeinemann. 2. Blyth, F. G. H., & De Freitas, M. H. (1967). Geology for engineers. http://ci.nii.ac.jp/ncid/BA07203247
	March 17, 2025	March 23, 2025	1	Geological Investigations and methods of investigation			

				(geophysical).			
	March 24, 2025	March 30, 2025	1	Geological Investigations and methods of investigation (geophysical).			
April, 2025	March 31, 2025	April 6, 2025	1	Revisio n			
	April 7, 2025	April 13, 2025	1	Revisio n			

Assessment Rubrics

Component	**Max Marks**
ISA 1	7.5
ISA 2	
Practical	
Project	
Semester End Exam	