

Semester Lecture Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim, Goa-India

Name of Faculty: Delia Cardozo

Subject: Geology

Paper code: GEC 110 Indian Stratigraphy

Program/Course: TY B.Sc.

Division:

Academic year: 2024- 2025

Semester: VI

Total Lectures: 30

Course Objectives:

1. Students will acquire knowledge about stratigraphic principles.
2. Students will acquire knowledge about the distribution, lithology, stratigraphic sequence, structures and economics of different rock formations of India.
3. Students will acquire knowledge about the different geologic changes that occurred in the Indian subcontinent with time and correlate it with the other rock formations in the world.

Course Learning Outcome:

1. Students will be able to understand the mode of formation of different rock formations of India and correlating it with other formations will help in deciphering the geological history.
2. Students will be able to apply this stratigraphic principles during field investigations.
3. Students will be able to propose further refinement if needed in the already established stratigraphy of India.

Month	Lectures From:	Lectures To:	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
December	9/12/2025	14/12/2024	02	Introduction to Stratigraphy		Smartboard, PPT, Videos, Google maps	1. Geology of India,GSI Volumes: Ramakrishnan, M and
				Geological Timescale: Archean			

	16/12/2025	23/12/2024	02	Geological Timescale: Proterozoic and Phanerozoic	
January	02/01/2025	04/01/2025	02	Tectonic and Physiographic divisions of India: Introduction	
				Characteristics and peculiarities	
	06/01/2025	11/01/2025	02	Peninsular India	
				Extra-peninsular India	
	13/01/2025	18/01/2025	02	Indo-gangetic plains	
				Stratigraphy of Peninsular India: Dharwar Supergroup	
	20/01/2025	25/01/2025	02	Dharwar Supergroup: distribution, lithology,	ISA: Assignment-Mapping of Geological formations of India
				Dharwar Supergroup: stratigraphic sequence	
	27/01/2025	01/02/2025	02	Dharwar Supergroup: structures and economics,	
February	03/02/2025	08/02/2025	02	Peninsular Gneissic Complex	
	10/02/2025	15/02/2025	02	Goa Group of Rocks	

Vaidyanathan, R.

2. Dunbars and Rodgers: Principles of Stratigraphy

3. Geology and Mineral Resources of Goa by A G Dessai, New Delhi publishers, 2018.

4. Natural Resources of Goa – A Geological Perspective by Geological Society of Goa (2009).

				Geology and stratigraphy of Goa Group of rocks.		
	17/02/2025	22/02/2025	02	Proterozoics of Peninsular India: Introduction		
	24/02/2025	01/03/2025	02	Cuddapah Supergroup		
March	03/03/2025	08/03/2025	02	Cuddapah Supergroup: their distribution lithology, stratigraphic sequence, structure and economics.		
	10/03/2025	15/03/2025	01	Vindhyan Supergroup: their distribution lithology, stratigraphic sequence, structure and economics.		
	17/03/2025	22/03/2025	02			
	24/03/2025	29/03/2025	02			
April	31/03/2025	05/04/2025	02	Kaladgi Supergroup; their distribution lithology, stratigraphic sequence, structure and economics.		
	07/04/2025	11/04/2025	02			

*** Assessment Rubrics**

Component	Max Marks
ISA 1	10
ISA 2	10
Practical	50
Project	--
Semester End Exam	80