Semester Lecture Plan

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

Name of Faculty: Brahmanand N Sawant

Subject: Geology

Paper code: GEC108- SEDIMENTARY PETROLOGY

Program/Course: TY B.Sc.

Division:

Academic year: 2024 - 2025

Semester: VI

Total Lectures: 60

Course Objectives: To understand the formation of various sedimentary rocks, their distribution and mode of formation and to describe economic minerals associated with it.

Course Learning Outcome: To understand physical, chemical and biological processes that generate sediments, Discuss the various sedimentary rocks, their mode of formation, classification and occurrence in nature, to interpret the environments of deposition from the study of nature of sediments & depositional structures.

Month	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	ICT Tools	Reference books
Dec	09/12/2024	14/12/2024	04	Introduction to this paper and syllabus discussion	PPT	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
	16/12/2023	21/12/2023	04	Sedimentary processes Diagenesis of sediments	Powerpoint Presentation	

	2/01/2025 11/01/2025			Size frequency distribution Grain size analysis Fabric and packing in Grains	Powerpoint presentation	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
Jan/Feb	13/01/2025	2/01/2025	04	Fabric in Gravels Sphericity Roundness	PPT	Sedimentary rocks by F, J pettijohn; Introduction to sedimentary rocks by Maurice E Tucker
	20/01/2025	25/01/2025	04	Structure in rocks Bedding and laminations Depositional & Erosional Structures	PPT	
	27/01/2025	1/02/2025	04	Texture in sedimentary rocks Classification of sedimentary rocks Post depositional structures	PPT	
	03/02/2025	08/02/2025	04	Conglomerates Breccias Types of Breccia and conglomerates	PPT	
	10/02/2025	15/02/2025	04	Classification of Rudaceous rocks Textural Maturity Compositional Maturity	PPT	
		/02/2025				

	17/02/2025	22/02/2025	04	Mineralogy of sandstones Litharenites Quartz arenites Arkoses Mineralogy of argillites Classification and diagenesis of Argillites	PPT	
	24/02/2025	1/03/2025	04	Evaporites Phosphatic sediments Siliceous sediments	PPT	
March	3/03/2025	8/03/2025	04	Ferruginous sediments Coal Deposits Residual laterite Bauxites and soils	PPT	
March	10/03/2025	15/03/2025	04	Structural basins Morphological basins Tectonic basins Geosynclines	PPT	Sedimentary rocks by F, J pettijohn; Introduction to sedimentary rocks by Maurice E Tucker
March			04		PPT	Sedimentary rocks by F, J pettijoh;

	17/03/2025	22/03/2025		Different depositional environments and its physical, chemical and organic factors		Introduction to sedimentary rocks by Maurice E Tucker
March	31/03/2025	5/04/2025	04	Flysch and molasses sediments Revision	PPT	Sedimentary rocks by F, J pettijoh; Introduction to sedimentary rocks by Maurice E Tucker
April	7/4/2025	12/4/2025	04	ZTR index, grain size parametres	PPT	

COMPONENT	MAXIMUM MARKS
ISA I	10
ISA II	10
PRACTICAL	50
SEMESTER END EXAM	80
TOTAL	150