

Practical Plan

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

Name of Faculty: Shritesh Mhapsekar

Subject: Geology

Paper code: GEC107; Igneous Petrology

Program: TYBSc

Division:

Academic year: 2024-25

Semester: V

Total Lectures:15 Practicals

Course Objectives:

1. Students will acquire knowledge about the different types of Igneous rocks and understand their modes of occurrence in nature
2. Students will understand the processes involved in the formation of igneous rocks and their diversity
3. Students will understand the various classifications of igneous rocks based on different criteria
4. Students will acquire knowledge about magmas and their origin in different tectonic settings

Course Outcome:

1. Students will be able to identify common igneous rocks both in hand specimen and thin section
2. Students will be able to identify and describe igneous structures and textures, and infer the geological processes involved in their formation and classify them
3. Students will be able to interpret phase diagrams of common igneous systems

Student Learning Outcome:

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
JULY	July 1, 2024	July 7, 2024	1	Introduction			Winter John: Igneous and Metamorphic petrology 2010.

	July 8, 2024	July 14, 2024	1	Megascopic identification of igneous rocks		
	July 15, 2024	July 21, 2024	1	Megascopic identification of igneous rocks		
	July 22, 2024	July 28, 2024	1	Megascopic identification of igneous rocks		
	July 29, 2024	August 4, 2024	1	Normative analysis of igneous rocks		
AUGUST	August 5, 2024	August 11, 2024	1	Normative analysis of igneous rocks		
	August 12, 2024	August 18, 2024	1	Normative analysis of igneous rocks		
	August 19, 2024	August 25, 2024	1	Normative analysis of igneous rocks		
	August 26, 2024	September 1, 2024	1	Microscopic Identification of igneous rock thin sections.		
SEPTEMBER	September 2, 2024	September 8, 2024	1	Microscopic Identification of igneous rock thin sections.		

	September 9, 2024	September 15, 2024	1	Microscopic Identification of Igneous rock thin sections.		
	September 16, 2024	September 22, 2024	1	Microscopic Identification of Igneous rock thin sections.		
	September 23, 2024	September 29, 2024	1	Microscopic Identification of Igneous rock thin sections.		
OCTOBER	September 30, 2024	October 6, 2024	1	Microscopic Identification of Igneous rock thin sections.		
	October 7, 2024	October 13, 2024	1	Revision		
	October 14, 2024	October 20, 2024	1	Revision		

Assessment Rubrics

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