Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim		
Name of Faculty: Magnolia Aurea Miranda	**Subject:** Geology	
Paper code: GEC 105	**Program: TY BSc**	**Division:**
Academic year: 2024 - 2025	**Semester: V**	**Total Practicals/Labs: 14**
Credits: 2		

Course Objectives:

1. This course will provide knowledge on mainly the optical properties of minerals and their identification

2. It will also provide the general description and distinction of silicate group of minerals.

Expected Course Outcome:

1. Explain to a peer the working of a petrological microscope and differentiate and distinguish from biological microscopes

2. Identify the optical properties and use them in subdividing minerals

3. Distinguish and differentiate between different silicate group minerals

4. Compare the working of various binary systems and their applications to magmatic textures and processes

Student Learning Outcome:

Month	Practicals/ Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books

July	5-7-24	1	MICROSCOPIC IDENTIFICATION OF MINERALS	1. MANUAL OF MINERALOGY- Klein & Hurlbut 2. MINERALOGY- Dexter Perkins 3.Optical Mineralogy – Paul Kerr MINERALOGY- Dexter Perkins
	12-7-24	2	MICROSCOPIC IDENTIFICATION OF MINERALS	
	19-7-24	3	MICROSCOPIC IDENTIFICATION OF MINERALS	
	26-7-24	4	MICROSCOPIC IDENTIFICATION OF MINERALS	
August	2-8-24	5	MICROSCOPIC IDENTIFICATION OF MINERALS	
	9-8-24	6	MICROSCOPIC IDENTIFICATION OF MINERALS	
	16-8-24	7	MICROSCOPIC IDENTIFICATION OF MINERALS	
	20-8-24	8	MEGASCOPIC IDENTIFICATION OF MINERALS	RUTLEY'S ELEMENTS OF MINERALOGY
	27-8-24	9	CALCULATION OF MINERAL FORMULA	1. AN INTRODUCTION TO ROCK FORMING MINERALS- DEER, HOWIE, ZUSSMAN 2. ONLINE RESOURCES
September	3-9-24	10	CALCUATION OF END MEMBERS	
	17-9-24	11	CALCUATION OF END MEMBERS	
	24-9-24	12	CALCULATION OF STRUCTURAL FORMULA	
October	1-10-24	13	CALCULATION OF STRUCTURAL FORMULA	
	8-10-24	14	DETERMINATION OF ORDER OF POLARIZATION, BIREFRINGENCE	1. MINERALOGY- Dexter Perkins 2. Optical Mineralogy – Paul Kerr
	15-10-24	15	SIGN OF ELONGATION, OPTIC SIGN, AN-CONTENT	1. MINERALOGY- Dexter Perkins 2. Optical Mineralogy – Paul Kerr

Assessment Rubrics

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