

Practical Plan		
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Name of the college: Government College of Arts, Science & Commerce, Sanquelim		
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Name of Faculty: Magnolia Aurea Miranda	Subject: Geology	
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Paper code: GEO 241	Program: SY BSc	Division:
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Academic year: 2026 - 2027	Semester: III	Total Practicals/Labs: 14
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Credits: 2		
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Course Objectives: 1. Discuss the occurrence of minerals in rocks and the processes involved in their formation. CL2 2. Describe the natural, synthetic, and organic gemstones. CL2 3. Describe the physical and optical properties of crystals and gemstones. CL1.		
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Course Learning Outcome: 1. Explain the Physical and optical properties of crystals/gemstones. CL2 2. Examine imperfections in crystals and gemstones. CL3 3. Identify crystals and gemstones. CL3		
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Student Learning Outcome:		
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Month	Practicals/ Labs Scheduled Date	No. of Practicals/ Labs planned	List of Experiments	Reference books
July	26-6-26	1	Study of minerals	Rutley's Elements of Mineralogy
	03-7-26	2	Study of minerals	
	10-7-26	3	Study of minerals	
	17-7-26	4	Study of minerals	
	24-7-26	5	Study of crystal models	
	31-7-26	6	Study of crystal models / ISA	
August	07-8-26	7	Study of crystal models	Dana's Manual of Mineralogy
	14-8-26	8	Study of crystal models	
	21-8-26	9	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	
	28-8-26	10	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope./ ISA	
	4-9-26	11	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	
September	11-9-26	12	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	Read, P. G., (1991). <i>Gemmology</i>
	25-9-26	13	Description & Identification of cuts in gemstones/ ISA	
	2-10-26		Gandhi Jayanti	
October	9-10-26	14	Practical Exam	

Assessment Rubrics

Component		Max Marks
Theory	ISA 1	5
	ISA 2	5
Practical	ISA 1	5
	ISA 2	5
	ISA 3	5
Project	-	-
Semester End Exam	Theory	20
	Practical	40