

Practical Plan

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

Name of Faculty: Magnolia Aurea
Miranda

Subject: Geology

Paper code: GEO 241

Program: SY BSc

Division:

Academic year: 2024 - 2025

Semester: III

**Total
Practicals/Labs:
15**

Credits: 2

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.

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

**Student Learning
Outcome:**

Month	Practicals/ Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
July	4-7-24	1	Study of crystal models and minerals	Dana's Manual of Mineralogy Rutley's Elements of Mineralogy
	11-7-24	2	Study of crystal models and minerals	
	18-7-24	3	Study of crystal models and minerals	
	25-7-24	4	Study of crystal models and minerals	
August	1-8-24	5	Study of crystal models and minerals	
	8-8-24	6	Study of crystal models and minerals	
	22-8-24	7	Study of crystal models and minerals	
	29-8-24	8	Study of crystal models and minerals	
September	5-9-24	10	Description & Identification of cuts in gemstones	Read, P. G., (1991). <i>Gemmology</i>
	19-9-24	11	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	Read, P. G., (1991). <i>Gemmology</i>
	26-9-24	12	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	Read, P. G., (1991). <i>Gemmology</i>
October	3-10-24	13	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	Read, P. G., (1991). <i>Gemmology</i>
	10-10-24	14	Identification of gemstones using Dichroscope, Polariscope, Spectroscope, Refractometer, Ultra Violet lamp, Gemological Microscope.	Read, P. G., (1991). <i>Gemology</i>
	17-10-24	15	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