

## Practical Plan

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

**Name of Faculty:** Shritesh Mhapsekar

**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>Gemmology</i>
	17-10-24	15	Practical Exam	

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**Assessment Rubrics**

<b>Component</b>		<b>Max Marks</b>
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