Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim		
Name of Faculty: Magnolia Aurea Miranda	**Subject:** Geology	
Paper code: GEO 142	**Program: FY BSc**	**Division:**
Academic year: 2025 - 2026	**Semester: II**	**Total Practicals/Labs: 15**
Credits: 2		

Course Objectives:

1. Explain the occurrence and distribution of water on Earth. CL2
2. Discuss the water quality parameters and standards. CL2
3. Recognize the sources of water pollution, types of pollutants and their effects on human health and ecosystems.CL2

Course Learning Outcome:

At the end of the course the student will be able to:
1. Describe the hydrologic cycle and its components. CL2
2. Identify point and non-point sources of pollution. CL3
3. Test important water quality parameters in the field and in the laboratory. CL4
4. Illustrate water quality data graphically. CL3

Student Learning Outcome:

Month	Practicals/ Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
December	05-12-25	4	Graphical Representation of water quality parameters	Hiscock, K. M., & Bense, V. F. (2014). Hydrogeology: Principles and Practice. John Wiley & Sons.
	12-12-25		Graphical Representation of water quality parameters	
January	02-01-26		Graphical Representation of water quality parameters	
	09-01-26		Graphical Representation of water quality parameters	
	16-01-26	3	Water sampling techniques (12 hours)	Online Resources
	23-01-26		-	
	30-01-26		-	
February	06-02-26	2	Estimation of Water Quality Parameters	David, T. (2008). Fundamentals of Hydrology. In Routledge eBooks. Informa. https://doi.org/10.4324/978020393366 Online Resources BIS (2001). Bureau of Indian Standards Catalogue, 2001. WHO (1993b). Guidelines for Drinking-water Quality. World Health Organization
	13-02-26		Estimation of Water Quality Parameters	
	20-02-26	2	Calculation of Water quality parameters	
	27-02-26		Calculation of Water quality parameters	
March	06-03-26	2	Flow net analysis	Hiscock, K. M., & Bense, V. F. (2014). Hydrogeology: Principles and Practice. John Wiley & Sons. Raghunath, H. M. (2007). Ground Water. New Age International
	13-03-26		Flow net analysis	
	20-03-26	2	Visit to water purification plant (8 hours)	-
	27-03-26		-	

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