Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim, Goa		
Name of Faculty: Dr. Dipesh Sakharam Harmalkar	**Subject: Skills in Qualitative Organic Analysis (Skill)**	
Paper code: CHC 142	**Program: F.Y.BSc.**	**Division:**
Academic year: 2024 - 2025	**Semester: I**	**Total Practical/Labs: 15 (60 hours)**
Credits: 2		

Course Objectives:

- To translate certain theoretical concepts learnt earlier into experimental knowledge by providing hands on experience of basic laboratory techniques required for chemistry.
- To introduce the fundamentals and basic techniques of volumetric and gravimetric estimations.

Expected Course Outcome:

At the end of the course students will be able:

CO1: to perform the systematic qualitative analysis of the organic compounds.

CO2: to purify and separate the given organic compounds.

Student Learning Outcome:

At the end of the course students will be able:

LO1: to systematically perform qualitative analysis to identify organic compounds.

LO2: to demonstrate the ability to purify and separate organic compounds using appropriate techniques.

Month	Practical/Labs Scheduled Date	No. of Practical /Labs planned	List of Experiments	Reference books
June	29-06-2024	1 (Batch II)	Purification of organic compounds: Solids by recrystallization process using water and ethanol as solvent and determination of melting point.	[1]
July	06-07-2024	2 (Batch II)	Purification of organic compounds: i) Simple distillation of acetone and determination of boiling point. ii) Sublimation of naphthalene/ anthracene/ camphor and determination of melting point.	[1]
	13-07-2024	1 (Batch II)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1]
	20-07-2024	1 (Batch II)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1]
	27-07-2024	1 (Batch II)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1]
August	03-08-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
	10-08-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
	17-08-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
	24-08-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
	31-08-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
September	14-09-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]

	21-09-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
	28-09-2024	1 (Batch II)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1]
October	05-10-2024	1 (Batch II)	Identification of unknown organic compounds (Liquids: Water miscible neutral, water immiscible)	[1]
	12-10-2024	1 (Batch II)	Identification of unknown organic compounds (Liquids: Water miscible neutral, water immiscible)	[1]
	19-10-2024	1 (Batch II)	Repeat	[1]

References:

[1] A.I. Vogel, A., R. Tatchell, B. S. Furniss, A.J. Hannaford, Vogel's Textbook of Practical Organic Chemistry, 5thEd., Prentice Hall; 2011.

*** Assessment Rubrics**	
Component	**Max Marks**
ISA	15
Practical	25
Semester End Exam	60