

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 (SEC)	
Paper code: CHC 142	Program: F.Y.BSc.	Division:
Academic year: 2026 - 2027	Semester: I	Total Practical/Labs: 15 (60 hours)
Credits: 1+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	25-06-2026	2 (Batch I)	Purification of organic compounds: i) Simple distillation of acetone and determination of boiling point. ii) Sublimation of camphor and determination of melting point.	[1-2]
July	02-07-2026	1 (Batch I)	Purification of organic compounds: Solids by recrystallization process using water and ethanol as solvent and determination of melting point.	[1-2]
	09-07-2026	1 (Batch I)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1-2]
	16-07-2026	1 (Batch I)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1-2]
	23-07-2026	1 (Batch I)	Identification of unknown organic compounds (Water soluble solids: Acid and Neutral)	[1-2]
	30-07-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
August	06-08-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
	13-08-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
	20-08-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
	27-08-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
September	03-09-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]

	10-09-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
	17-09-2026	1 (Batch I)	Identification of unknown organic compounds (Water insoluble solids: Acid, Base, Phenol and Neutral)	[1-2]
	24-10-2026	1 (Batch I)	Identification of unknown organic compounds (Liquids: Water miscible neutral, water immiscible)	[1-2]
October	01-10-2026	1 (Batch I)	Identification of unknown organic compounds (Liquids: Water miscible neutral, water immiscible)	[1-2]
	08-10-2026	1 (Batch I)	Repeat	[1-2]

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.
 [2] N. K. Vishnoi, Advanced Practical Organic Chemistry, third edition, 2010.

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