Practical Plan

Name of the college: Government College of Arts, Science and Commerce Sanquelim		
Name of Faculty: Dr. Sagar Narayan Patil	**Subject: Chemistry**	
Paper code: CHC 142 : Skills in Qualitative Organic Analysis	**Program: FY BSc**	**Division: (Batch II)**
Academic year: June2025– 2026	**Semester: I**	**Total Practicals/Labs: 15**
Credits: 01		

Course Objectives:

- To learn the purification techniques for organic compounds.
- To get hands on experience for the systematic qualitative analysis of the organic compounds.

Student Learning Outcome:

- techniques for organic compounds
- hands on experience for the systematic qualitative analysis of the organic compounds

Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
June	27/06/2025	1	**Purification of organic compounds:** i) Solids by recrystallization process using water and ethanol as solvent and determination of melting point.	1. J. Mendham, R. C. Denney, J. D. Barnes, M. Thomas, B. Sivasankar, Vogel's Textbook of Quantitative Chemical Analysis, 6th Edn. Pearson Education. 2. G. Marr and B. W. Rockett, Practical inorganic Chemistry, Van Nostrand Reinhold Company, London. (1972)
July	1/7/2025 to 31/07/2025	4	ii) Simple distillation of acetone and determination of boiling point. iii) Sublimation of naphthalene/ anthracene/ camphor and determination of melting point. **Identification of unknown**	1. J. Mendham, R. C. Denney, J. D. Barnes, M. Thomas, B. Sivasankar, Vogel's Textbook of Quantitative Chemical Analysis, 6th Edn. Pearson Education. 2. G. Marr and B. W. Rockett, Practical

			organic compounds based on water solubility, chemical type, elemental analysis, group test and physical constants(organic spotting) i) Water soluble solids (Acid and Neutral) *–Any 2*	inorganic Chemistry, Van Nostrand Reinhold Company, London. (1972)
August	01/08/2025 to 30/08/2025	4	(organic spotting) i) Water soluble solids (Acid and Neutral) *–Any 1* ii) Water insoluble solids (Acid, Base, Phenol and Neutral) *–(4)Two compounds to be analysed of each category.*	1. J. Mendham, R. C. Denney, J. D. Barnes, M. Thomas, B. Sivasankar, Vogel's Textbook of Quantitative Chemical Analysis, 6th Edn. Pearson Education. 2. G. Marr and B. W. Rockett, Practical inorganic Chemistry, Van Nostrand Reinhold Company, London. (1972)
September	5/09/2025 to 26/09/2025	4	ii) Water insoluble solids (Acid, Base, Phenol and Neutral) *–(4)Two compounds to be analysed of each category.* iii) Liquids: Water miscible neutral, water immiscible (base/ neutral)	3. S. W. Rajbhoj and T. K. Chondhekar, Systematic Experimental Physical Chemistry, Anjali Publication, Second Edition 2000. 4. Khosla, B. D.; Garg, V. C. & Gulati, A. Senior Practical Physical Chemistry, R. Chand & Co.: New Delhi, 2018.
October	16/10/2025	3	Liquids: Water miscible neutral, water immiscible (base/ neutral) revisions	3. S. W. Rajbhoj and T. K. Chondhekar, Systematic Experimental Physical Chemistry, Anjali Publication, Second Edition 2000. 4. Khosla, B. D.; Garg, V. C. & Gulati, A. Senior Practical Physical Chemistry, R. Chand & Co.: New Delhi, 2018.