Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim, Goa		
Name of Faculty: Dr. SAGAR N. PATIL	**Subject: Organic Chemistry I**	
Paper code: CHC 202	**Program: S.Y.BSc.**	**Division:**
Academic year: 2025 - 2026	**Semester: IV**	**Total Practical/Labs: 12 (30 h)**
Credits: 1		

Course Objectives:

- To apply theoretical concepts to experiments.
- To acquire hands on training in organic preparation.
- To acquire hands on training in organic qualitative analysis.

Expected Course Outcome:

At the end of the course students will be able to:

CO1: Estimate the organic compounds.

CO2: Acquire hands on training in organic chemistry preparation methods.

CO3: Analyse and identify organic compounds using classical qualitative analysis.

CO4: Apply theoretical knowledge in understanding laboratory skills.

Student Learning Outcome:

At the end of the course students will be able to:

1. Develop the ability to estimate organic compounds effectively.
2. Gain hands-on training in the preparation of organic compounds using standard laboratory methods.
3. Master classical qualitative analysis techniques to analyze and identify organic compounds.
4. Apply theoretical knowledge to enhance laboratory skills and practices.

Month	Practical/Labs Scheduled Date	No. of Practical /Labs planned	List of Experiments	Reference books
December	01-12-2025	1 (Batch II)	1. Preparation of organic derivatives: Anhydride derivative of phthalic acid.	[1,2,3]
	08-12-2025	1 (Batch II)	2. Preparation of organic derivatives: Acid derivative of benzamide.	[1,2,3]
January	05-01-2026	1 (Batch II)	3. Preparation of organic derivatives: Osazone derivative from Glucose.	[1,2,3]
	12-01-2026	1 (Batch II)	4. Preparation of organic derivatives: Azo dye from Aniline and β Naphthol.	[1,2,3]
	19-01-2026	1 (Batch II)	1.Organic Estimation: Estimation of Acetamide	[1,2]
	26-01-2026	1 (Batch II)	2. Organic Estimation: Estimation of Glucose	
February	02-02-2026	1 (Batch I)	Organic qualitative analysis INTRO, DEMO	[1,2]
	09-02-2026	1 (Batch I)	1. Organic qualitative analysis	[1,2,4]
	16-02-2026	1 (Batch I)	2. Organic qualitative analysis	[1,2,4]
	23-02-2026	1 (Batch I)	3. Organic qualitative analysis	[1,2,4]
March	02-03-2026	1 (Batch I)	4. Organic qualitative analysis	[1,2,4]

	09-03-2026	1 (Batch I)	5. Organic qualitative analysis	[1,2,4]
	16-03-2026	1 (Batch I)	6. Organic qualitative analysis	[1,2,4]
	23-03-2026	1 (Batch I)	Repeat Practical	
	30-03-2026	1 (Batch I)	Repeat Practical	

References:

1. Furniss, B. S., Hannaford, A. J., Smith P. W. G. and Tatchell, A. R., Vogel's Textbook of Practical Organic Chemistry, 5th ed., Pearson Education Ltd. Ltd., London, UK, 2011.
2. Pasto, D., Johnson C. and Miller, M., Experiments and Techniques in Organic Chemistry, 1st ed., Prentice Hall, New Jersey, USA, 1992.
3. Fieser, L. F. and Williamson, K. L., Organic Experiments, 7th ed., D. C. Heath and Company, Massachusetts, USA, 1992
4. Bansal, R. K., Laboratory Manual of Organic Chemistry, 5th ed., New Age International Publishers, New Delhi, India 2009.

*** Assessment Rubrics**	
Component	**Max Marks**
ISA	15
Semester End Exam	60
Practical	25
Total	100