

21PCM108P					Organic Chemistry Practical					
Teaching Scheme					Examination Scheme					
L	T	P	C	Hours/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
0	0	2	1	2	--	--	--	50	50	100

COURSE OBJECTIVES

- To provide a broad foundation in chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective To understand basic principles theories of electrochemistry and their application
- To provide students with the skills required to succeed in graduate school, the chemical industry or professional school
- To expose the students to a breadth of experimental techniques using modern instrumentation

List of Experiments

1. Estimation of Alcohol
2. Estimation of Aldehydes & Ketones
3. Estimation of Phenol
4. Determination of average molecular weight by viscometer
5. Estimation of amines
6. Estimation of aromatics
7. Qualitative analysis of simple Organic compounds.
8. Hydrolysis of Sucrose.
9. To separate mixture of organic compounds by chromatotron.
10. To prepare a sample of p-Nitroacetanilide from acetanilide.
11. Purification of organic compounds by crystallization using the following solvents: Water/Alcohol.

Max. 28 Hrs.

COURSE OUTCOMES

On completion of the course, student will be able to

CO1: Apply the concepts learned in chemistry and engineering to the real-world situations

CO2: Identify the organic functional groups in a given sample

CO3: Identify, analyze and interpret the results from the experiments

CO4: Synthesize organic compounds with knowledge of organic reactions

CO5: Determine the physico-chemical properties of single and multicomponent systems

CO6: Demonstrate safe and proper use of standard chemistry glassware and equipment

TEXT/REFERENCE BOOKS

1. Dipika Jaspal, Arti Malviya., "Engineering Chemistry: Practical Book, Alpha Science, 2015.
2. Vogel's Textbook of Quantitative chemical analysis, J. Mendham et.al. (Pearson Education).
3. Laboratory Manual on Engineering Chemistry, Sudharani (Dhanpat Rai Publishing Company).

END SEMESTER EXAMINATION QUESTION PAPER PATTERN

Max. Marks: 100

Part A: Lab Work - Continuous Assessment

Part B: Lab Exam and Viva

Exam Duration: 3 Hrs.

50 marks

50 Marks