

MSC-511					Organic Chemistry-I Lab					
Teaching Scheme					Examination Scheme					
L	T	P	C	Hrs/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
0	0	3	1	3				50	50	100

**COURSE OBJECTIVES**

- Learn safety measures while working in the laboratory
- Learn different separation techniques
- Knowledge about different organic transformations
- Synthesize different organic compounds
- To familiarizes with chemicals and instruments

**LIST OF EXPERIMENTS**

1. Separation of various organic compounds using thin layer chromatography.
2. Separation of the given mixture of compounds using column chromatography.
3. To synthesis Phthalic anhydride using Phthalic acid by sublimation method.
4. To prepare Phthalimide using Phthalic anhydride.
5. Preparation of Cinnamic acid by Perkin's reaction.
6. Preparation of p-Nitro Aniline from p-nitro acetanilide.
7. Preparation of Benzoic acid from Benzaldehyde and Benzyl alcohol by cannizaro reaction.
8. Preparation of Dibenzalacetone from acetone.
9. Preparation of 2, 2'-Dihydroxy, 1, 1'-binaphthyl (BINOL) from 2-naphthol.
10. Preparation of Benzoic acid from Toluene using potassium permanganate

**COURSE OUTCOMES**

On completion of the course, student will be able to

- CO1– Separate various organic compounds  
 CO2– Perform different organic reactions  
 CO3– Prepare various organic compounds  
 CO4– Understand different separation techniques  
 CO5– Comprehend Perkin's reaction  
 CO6– Design different organic transformations

**TEXT/REFERENCE BOOKS**

1. Comprehensive practical organic chemistry: Quantitative analysis by V.K Ahluwalia, Renu Aggarwal; Universities press; ISBN 13: 978 81 7371 273 9
2. A. K. Nad, B. Mahapatra & A. Ghosal, An Advanced Course in Practical Chemistry, New Central, 2007. Vogel's Text Book of Practical Organic Chemistry (5th Edn).
3. Finar, I. L. Organic Chemistry (volume 1), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).

**SEMESTER EXAMINATION PATTERN****Max. Marks: 100**

LW(Daily lab performance plus journal maintain each 25 marks)

LE (Viva-voce plus Lab examination each 25 marks)

**Exam Duration: 3 Hrs**

50 Marks

50 Marks