Course Code				**23CHMAP232**			
Title of the Course				**ORGANIC PREPARATIONS**			
Offered to: (Programme/s)				B.Sc. Hons Chemistry			
L	**0**	**T**	**0**	**P**	**2**	**C**	**1**
Year of Introduction:	**2024-25**			**Semester:**			**3**
Course Category:	Major			**Course Relates to:**	Global		
Year of Revision:	**2024**			**Percentage:**	**--**		
Type of the Course:				Employability/ Skill development			
Crosscutting Issues of the Course :				Environment and Professional Ethics			
Pre-requisites, if any				**23CHMAP121, 23CHMAP122**			

Course Description: Organic chemistry preparations refer to methods and techniques used to synthesize organic compounds. These methods can range from basic to advanced, depending on the complexity of the molecule being prepared. Acetylation is a chemical reaction where an acetyl group (CH_3CO) is added to a molecule. This process is often used to modify functional groups, such as converting alcohols to acetates or amines to acetamides. Acetylation is commonly achieved using acetyl chloride (CH_3COCl) or acetic anhydride ($(CH_3CO)_2O$) as the acetylating agents. It's widely used in organic synthesis to protect reactive groups or alter physical properties of compounds.

Course Aims and Objectives:

S.NO	COURSE OBJECTIVES
1	Learn fundamental concepts and techniques used in organic synthesis, by green and conventional methods including reaction mechanisms, stereochemistry, and functional group transformations
2	Remember use principles, equipment and chemicals reactions and follow experimental procedures in the laboratory.
3	Study how acetylation is employed in organic synthesis to modify and synthesize various compounds by green and conventional methods
4	Write detailed laboratory reports and present findings clearly and professionally, demonstrating an understanding of the experimental procedures and outcomes
5	Understand to calculate limiting reagent, theoretical yield, and percent yield.

Course Outcomes

At the end of the course, the student will be able to…

CO NO	COURSE OUTCOME	BTL	PO	PSO
CO1	Remember use glassware, equipment and chemicals and follow experimental procedures in the laboratory.	K1	PO2	PSO1
CO2	Remember to calculate limiting reagent, theoretical yield, and percent yield	K1	PO1	PSO1
CO3	Understand principles involved in organic preparations using green and conventional method	K2	PO1	PSO1
CO4	Understand laboratory techniques including reflux, distillation, recrystallization	K2	PO2	PSO2
CO5	Apply the procedure **in** organic preparations using green and conventional method**.**	K3	PO2	PSO3

For BTL: K1: Remember; K2: Understand; K3: Apply; K4: Analyze; K5: Evaluate; K6: Create

CO-PO MATRIX										
CO NO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1		2						2		
CO2		3						2		
CO3	3							2		
CO4		2							2	
CO5		3								2

Use the codes 3,2,1 for High, Moderate and Low correlation Between CO-PO-PSO respectively

Syllabus - Organic preparations (50M)

i. Acetylation of β-naphthol, **Aniline** and salicylic acid by:

a) Using conventional method.

b) Using green approach

c) Preparation of p-Bromoacetnilide from Acetanilide

d) Preparation of P-nitroacetanilide from acetanilide

ii. Preparation of Nerolin

Co-curricular activities and Assessment Methods;

1. Continuous Evaluation: Monitoring the progress of student's learning
2. Class Tests, Worksheets and Quizzes
3. Presentations, Projects and Assignments and Group Discussions:Enhances critical thinking skills and personality
4. SEMESTER -End Examination: critical indicator of student's learning andteaching methods adopted by teachers throughout the SEMESTER.

Reference books:

1. Vogel A.I .Practical Organic Chemistry, Longman Group Ltd.
2. Bansal R.K. Laboratory Manual of Organic Chemistry, Wiley-Eastern.
3. Ahluwalia V. K. and Agarwal R. Comprehensive Practical Organic Chemistry,University press.

References-weblinks

1. https://www.tandfonline.com/toc/uopp20/current1
2. https://ores.su/en/journals/organic-preparations-and-procedures-international/
3. https://faculty.ksu.edu.sa/sites/default/files/vogel-practicalorganicchemistry_longmans-3rdedrevised-1957_.pdf

(A) Semester End Lab Examination

Course Code: 23CHMAP232

Title of the Course: Organic preparations

Offered to: II BSC-Hons Chemistry

Semester: III **Max. Marks: 50 (CIA+SEE)**

Max. Time: 3 Hrs

I. **Answer the following.** **Max. Marks: 30 Marks**

Q1 prepare the -------organic compound and report the yield

Q2

Q3

Q4

Q5

II	**Viva**	**3 Marks**
III	**Record**	**2 Marks**

(B) CONTINUOUS ASSESMENT (Internal) **15 MARKS**

TOTAL: (A) + (B) = **50MARKS**