## **ORGANIC ANALYSIS**

#### ORGANIC QUALITATIVE ANALYSIS AND ORGANIC PREPARATION

Semester	Subject Code	Category	Lecture Hours		Theory hours		Practical hours		Credits
			Per week	Per sem.	Per week	Per sem.	Per week	Per sem.	
VI	21CCH62	Practical- IV	-	-	-	-	3	45	3

# I. Analysis of Organic compounds containing one functional group and Characterization with a derivative.

Reactions of the following functional groups:

Aldehyde, ketone, carboxylic acid (mono and di), ester, carbohydrate (reducing and non reducing), phenol, aromatic primary amine, monoamide, diamide, nitro compound and anilide.

### II. Organic Preparations

#### Acylation

(a) Acetylation of salicylic acid or aniline.

(b) Benzoylation of aniline or phenol.

#### Nitration

- (c) Preparation of m-dinitrobenzene
- (d) Preparation of p- nitroacetanilide

#### Halogenation

- (e) Preparation of p-bromoacetanilide
- (f) Preparation of 2,4,6-tribromophenol

#### Oxidation

(g) Preparation of benzoic acid from toluene or benzyl chloride

#### Hydrolysis

(h) Hydrolysis of ethyl benzoate (or) methyl salicylate.

#### **TEACHING METHODOLOGY**

- Chalk and Board
- Demonstration
- Conducting Experiments
- Conducting Viva

#### SYLLABUS DESIGNER

- Dr. S. Santha Lakshmi, Assistant Professor of Chemistry
- Dr. S. Sashikala, Assistant Professor of Chemistry

# SCHEME OF VALUATION FOR PRACTICAL EXAMINATIONS PRACTICAL - IV ORGANIC ANALYSIS

Internal assessment: 40 Marks External assessment: 60 marks Total: 100 marks

Record: 10 Marks Viva: 5 Marks Preparation: 15 (Quantity: 10 and Quality: 5) Analysis: 30 Preliminary reaction: 4 Aliphatic/ Aromatic: 4 Saturated/ Unsaturated: 4 Tests for elements: 6 Functional group: 5 Confirmatory tests: 4 Derivative/Coloured reaction: 3