

ALLIED CHEMISTRY PRACTICALS

Semester	Subject Code	Category	Lecture hours		Theory hours		Practical hours		Credits
			Per week	Per sem.	Per week	Per sem.	Per week	Per sem.	
II	21CACH21	Practicals	-	-	-	-	3	45	2

VOLUMETRIC ANALYSIS

ACIDIMETRY

- 1) Estimation of hydrochloric acid using standard hydrochloric acid
- 2) Estimation of Borax using standard Borax
- 3) Estimation of NaOH using standard sodium carbonate
- 4) Estimation of oxalic acid using standard oxalic acid
- 5) Estimation of sodium carbonate using standard sodium carbonate

PERMANGANOMETRY

- 6) Estimation of Ferrous ammonium sulphate using standard Ferrous ammonium sulphate
- 7) Estimation of Oxalic acid using standard Oxalic acid

Students must write short procedure for the given estimation in the examination and submit the paper for evaluation.

ORGANIC ANALYSIS

Systematic analysis of organic compounds containing one functional group and characterization by confirmatory tests - Aldehyde (aromatic), carbohydrate, carboxylic acid (mono and dicarboxylic), phenol, aromatic primary amine and diamide will be given for analysis.

TEACHING METHODOLOGY

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

SYLLABUS DESIGNER

- Dr.S. Sashikala, Assistant Professor of Chemistry
- Dr. R. Arunadevi, Assistant Professor of Chemistry

SCHEME OF VALUATION FOR ALLIED CHEMISTRY PRACTICALS

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

Allied Practicals

Max.marks: 60
Record: 10 marks
Viva : 5

Volumetric Analysis : 25 marks
Organic Analysis : 20 marks

Volumetric Analysis	: 20 marks (Maximum)
Procedure	: 5 marks
Error upto 2%	: 20 marks
2.1 to 3%	: 15 marks
3.1 to 4%	: 10 marks
4.1 to 5	: 5 marks
>5%	: 3 marks
Arithmetic error	: To deduct 1 mark
Wrong calculation	: To deduct 20% of marks scored
No calculation	: To deduct 40% of marks scored

Organic Analysis	: 20 marks
Preliminary Reactions	: 2 marks
Aliphatic or Aromatic	: 4 marks
Saturated or unsaturated	:

4 marks

Tests for 3 elements	: 6 marks (3 x 2)
Tests for functional group	: 4 marks.

QUESTON PAPER PATTERN FOR THEORY PAPERS

Section-A	Answer ALL the Questions	$10 \times 2 = 20$ marks
Section-B	Answer ALL the Questions (Either Or Pattern. Each question from each Unit)	$5 \times 5 = 25$ marks
Section-C	Answer any THREE out of FIVE questions (One Question from each Unit)	$3 \times 10 = 30$ marks
Total		= 75 Marks

QUESTON PAPER PATTERN FOR NM/SB/VE PAPERS

Section-A	Answer ALL the Questions	$10 \times 2 = 20$ marks
Section-B	Answer any THREE out of FIVE questions (One Question from each Unit)	$3 \times 10 = 30$ marks
Total		= 50 Marks