KARPAGAM ACADEMY OF HIGHER EDUCATION
(Deemed to be University)
(Established Under Section 3 of UGC Act 1956)
Coimbatore – 641 021.

SYLLABUS

DEPARTMENT OF CHEMISTRY

STAFF NAME: Dr. S. SAVITHIRI

SUBJECT NAME: CHEMISTRY PRACTICAL-II SUB.CODE:18BCU413

SEMESTER: IV CLASS: II B.Sc (BIOCHEMISTRY)

18BCU413 CHEMISTRY PRACTICAL-II 3H-2C

Instruction Hours/week :L: 0 T:0 P:3 Marks: Internal:40 External: 60 Total:100
End Semester Exam: 3 Hours

Course Objective

The student on successful completion of the course should learn the principles of volumetric analysis and to estimate the compounds by acidimetry, alkalimetry and permanganometry.

Course Outcomes (CO's)

1. The student learnt the principles of quantitative analysis of inorganic compounds.
2. Learnt the estimation of sample present in a solution by volumetric analysis.

Experiments

Volumetric analysis

A. Acidimetry & Alkalimetry

1. Estimation of sodium carbonate using standard sodium hydroxide.
2. Estimation of sodium hydroxide using standard sodium carbonate.
3. Estimation of sulphuric acid using standard oxalic acid.
4. Estimation of potassium permanganate using standard sodium hydroxide.

B. Permanganometry

1. Estimation of ferrous sulphate using standard Mohr's salt.
2. Estimation of oxalic acid using standard ferrous sulphate.
3. Estimation of calcium-direct method.

SUGGESTED READINGS:

1. Thomas, A.O. (2012). *Practical Chemistry for B.Sc. Main Students.* Cannanore: Kerala, Scientific Book Centre.
2. Ramasamy, R. (2011). *Allied Chemistry Practical Book*. Karur: Priya Publications.
3. Venkateswaran, V., Veeraswamy, R., & Kulandaivelu A. R. (2015). *Basic Principles of Practical Chemistry* (2nd edition). New Delhi: S. Chand Publications.

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LECTURE PLAN

DEPARTMENT OF CHEMISTRY

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SUBJECT NAME: CHEMISTRY PRACTICAL-II SUB.CODE:18BCU413

SEMESTER: IV CLASS: II B.Sc (BIOCHEMISTRY)

S.No.	Lecture Duration Period	Topics to be Covered	Support Material/Page Nos
1	3	Volumetric analysis-Introduction-classification.	R1:138-146
2	3	Estimation of sodium carbonate using standard sodium hydroxide.	R2: 4-28
3	3	Estimation of sodium hydroxide using standard sodium carbonate.	R1:162-163
4	3	Estimation of sulphuric acid using standard oxalic acid.	R1:158-160
5	3	Estimation of potassium permanganate using standard sodium hydroxide.	R2:24-28
6	3	Viva-voce questions discussion-Acidimetry , Alkalimetry & Permanganometry	R1:519-522
7	3	Estimation of ferrous sulphate using standard Mohr's salt.	R1:189-191
8	3	Estimation of oxalic acid using standard ferrous sulphate.	R1:185-187
9	3	Estimation of calcium-direct method.	R1:191-193
10	3	Model Practical Examination.	
	Total No. of Hours Planned For Practical's = 30		

Reference Books:

R1.Thomas, A.O. (2012). *Practical Chemistry for B.Sc. Main Students.* Cannanore: Kerala, Scientific Book Centre.

R2. Ramasamy, R. (2011). *Allied Chemistry Practical Book*. Karur: Priya Publications.

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Pollachi Main Road, Eachanari Post, Coimbatore –641 021.

DEPARTMENT OF CHEMISTRY

Name of the Staff	:	**Dr. S. SAVITHIRI**
Department	:	Chemistry
Title of the Paper	:	**CHEMISTRY PRACTICAL-II**
Paper Code	:	**18BCU413**
Class	:	II-B. Sc-BioCHEMISTRY
Year / Semester	:	II / IV
Batch	:	2018-2021

LIST OF EXPERIMENTS

A. Acidimetry & Alkalimetry

1. Estimation of sodium carbonate using standard sodium hydroxide.
2. Estimation of sodium hydroxide using standard sodium carbonate.
3. Estimation of sulphuric acid using standard oxalic acid.
4. Estimation of potassium permanganate using standard sodium hydroxide.

B. Permanganometry

1. Estimation of ferrous sulphate using standard Mohr's salt.
2. Estimation of oxalic acid using standard ferrous sulphate.
3. Estimation of calcium-direct method.