

### 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 Outcome

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.

### 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.

### References:

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* (2<sup>nd</sup> edition). New Delhi: S. Chand Publications.

### ESE Marks Allocation

Category	Marks
Experiment	40
Viva-Voce	10
Record	10
<b>Total</b>	<b>60</b>



## KARPAGAM ACADEMY OF HIGHER EDUCATION

*(Deemed to be University Established Under Section 3 of UGC Act 1956)*

Coimbatore – 641 021.

### LECTURE PLAN

#### DEPARTMENT OF CHEMISTRY

Staff Name : Dr. M. Makeswari  
 Subject Name : Chemistry Practical-II  
 Sub.Code : 17BCU613  
 Semester : VI  
 Class : III B.Sc Biochemistry

S.No.	Lecture Duration Period	Topics to be Covered	Support Material
1	4	Introduction and Procedure writing	R1
2	4	Estimation of Sodium carbonate	R1
3	4	Estimation of Sodium hydroxide	R1
4	4	Estimation of Sulphuric acid	R2
5	4	Estimation of Potassium permanganate	R1
6	4	Estimation of Ferrous sulphate	R1
7	4	Estimation of Oxalic acid	R1
8	4	Estimation of Calcium	R1
9	4	Revision and Viva voce	
10	4	Model Practical Examination	
		<b>Total No. of Hours Planned For Practical's = 40</b>	

**References:**

- R1. Venkateswaran, V., Veeraswamy, R., & Kulandaivelu A. R. (2015). *Basic Principles of Practical Chemistry* (2<sup>nd</sup> edition). New Delhi: S. Chand Publications.
- R2. Thomas, A.O. (2012). *Practical Chemistry for B.Sc. Main Students*. Cannanore: Kerala, Scientific Book Centre.
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