

SEMESTER – I**PHYSICAL AND ORGANIC CHEMISTRY-I****PRACTICAL****Course Code: U20/CHE/DSC/101/ P****Course Type: DSC 1****No. Of credits: 1****Max. Marks: 50****Max. Hours: 30****Hours per week: 3****COURSE OBJECTIVES:**

- To learn the principles involved in volumetric and gravimetric analyses.

COURSE OUTCOMES:

CO 1: Acquire knowledge in standardizing and estimating unknown sample quantitatively.

CO 2: Analyze possible market samples based on the principles involved in volumetry and gravimetry.

PRACTICAL SESSIONS**Volumetric Analysis**

1. Estimation of sodium carbonate.
2. Estimation of sodium carbonate and sodium hydrogen carbonate present in a mixture.
3. Estimation of oxalic acid by titrating it with KMnO_4 .
4. Estimation of water of crystallization in Mohr's salt by titrating with KMnO_4 .
5. Estimation of carbonate in washing soda.
6. Estimation of Acetic Acid in Vinegar.
7. Estimation of alkali content in antacid using HCl .

Gravimetric Analysis:

8. Estimation of chromate as lead chromate.

Reference Books:

1. Svehla, G. Vogel's Qualitative Inorganic Analysis, Pearson Education, 2012.
2. Mendham, J. Vogel's Quantitative Chemical Analysis, Pearson, 2009.

PHYSICAL AND ORGANIC CHEMISTRY-I
MODEL PRACTICAL PAPER

Course Code: U20/CHE/DSC/101/P

Credits: 1

Max. Marks: 50

Max. Time: 2 Hrs

1. Write the principle of the given experiment. **10 M (CO 2)**
2. Estimate the amount of analyte in the given unknown solution by conducting a volumetric analysis. **20M (CO 1)**
3. Viva-Voce **10 M**
4. Record +Attendance **10 M**