ACADEMIC PLANNER & UNITIZATION OF SYLLABUS

Department of Chemistry

Bankura Christian College

ACADEMIC YEAR: 2023-24 (Semester 2nd /4th /6th)

2nd Semester (Hons) Practical (January, 2023 to June, 2023)

Name of faculty member: Dr. Bibekananda Mahanti

Subject: Chemistry

Core P3 - Inorganic Chemistry I Lab

Unit – 1.

Acid and Base Titrations

1. Estimation of carbonate and hydroxide present together in mixture

2. Estimation of carbonate and bicarbonate present together in a mixture.

3. Estimation of free alkali present in different soaps/detergents.

Unit – 2.

Oxidation-Reduction Titrimetric 1. Estimation of Fe(II) using standardized KMnO4 solution

2. Estimation of oxalic acid and sodium oxalate in a given mixture

3. Estimation of Fe(II) and Fe(III) in a given mixture using K2Cr2O7solution.

Unit – 3.

4. Estimation of Fe(III) and Mn(II) in a mixture using standardized KMnO4solution

5. Estimation of Fe(III) and Cu(II) in a mixture using K2Cr2O7.

Unit – 4.

6. Estimation of Fe(III) and Cr(III) in a mixture using K2Cr2O7.

| MONTH/YEAR | WEEK | PORTIONS |
|------------|-----------------|--|
| March 2023 | 2^{nd} | Acid and Base Titrations: 1. Estimation of carbonate and hydroxide present together in mixture |
| | 3 rd | 2. Estimation of carbonate and bicarbonate present together in a mixture. |
| | 4^{th} | 3. Estimation of free alkali present in different soaps/detergents. |
| | 5 th | Class Test-1/ Revision of Unt-1 |
| April 2023 | 1 st | Oxidation-Reduction Titrimetric 1. Estimation of Fe(II) using standardized KMnO4 solution |
| | 2^{nd} | 2. Estimation of oxalic acid and sodium oxalate in a given mixture |
| | 3 rd | 3. Estimation of Fe(II) and Fe(III) in a given mixture using K2Cr2O7solution. |
| | 4^{th} | Class Test-2 |
| May 2023 | 1 st | 4. Estimation of Fe(III) and Mn(II) in a mixture using standardized KMnO4solution |
| | 2^{nd} | 5. Estimation of Fe(III) and Cu(II) in a mixture using K2Cr2O7. |
| | 3 rd | 5. Estimation of Fe(III) and Cu(II) in a mixture using K2Cr2O7. |
| | 4 th | Revision of Unt-3 |
| June 2023 | 1 st | 6. Estimation of Fe(III) and Cr(III) in a mixture using K2Cr2O7. |
| | 2^{nd} | 6. Estimation of Fe(III) and Cr(III) in a mixture using K2Cr2O7. |
| | 3 rd | Class Test-3 |