S. S. College, Hailakandi Department of Chemistry HOME ASSIGNMENT CHEMISTRY, C-101-LAB (Inorganic Chemistry- I) Practical FULL MARKS: 30

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3

Assignment No. 1

a. Write a brief account on calibration of apparatus.

b. Calculate the amount of $KmnO_4$ required for preparing 0.1N 250 ml solution. **2** c. Calculate the amount of $K_2Cr_2O_7$ required for preparing 250 ml of centinormal solution. **3**

Assignment No. 2

Outline the method of estimation of Fe (II) by KmnO₄ solution. Write down the theory, procedure and reactions involved in this method. 15

(Seven Marks is allotted for regularity in classes)

CHEMISTRY LAB HONOURS 1ST SEMESTER

Course no. CHEMISTRY-C-102-LAB

Full marks 30 Pass marks 12

| Q.1 Write down the theory and procedure for the determination of the surface tension of an | | |
|---|----------|--|
| unknown solution at different concentrations. | 6+6 = 12 | |
| Q.2 Discuss buffer solution and how buffer works. | 3+3=6 | |
| Q.3 Discuss the theory and procedure for pH metric titration of strong acid versus strong base. | | |

6+6=12

S. S. College, Hailakandi Department of Chemistry HOME ASSIGNMENT CHEMISTRY, C-301-LAB (Inorganic Chemistry- II) Practical FULL MARKS: 30

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Assignment No. 1

Discuss in detail the iodometric method of estimation of Cu (II) using sodium thiosulphate solution. Write down the theory, procedure and reactions involved in this process. 14

Assignment No. 2

| Outline the method preparation of chrome alum. | 7 |
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|--|---|

Assignment No. 3

What are SEM and TEM?

(Four Marks is allotted for regularity in the classes)

5

TDC (CBCS) Odd Sem Practical Exam-2020 CHEMISTRY 3rd Semester (Core) Course No- CHMHCC-302 L

Full Marks: - 30

Pass Marks: - 12

3x10=30

Attempt the following questions:-

- **1.** Write about the qualitative analysis and detection of functional group for compound containing aldehydic (CHO) group. Also write about preparation of one of its derivative. 10
- Write about acetylation of amines. Discuss the laboratory method for the preparation of a derivative of aniline via acetylation.
- **3.** Write about nitration of acetanilide. Discuss the laboratory method for the preparation of m-dinitrobenzene from nitrobenzene. 10

CHEMISTRY LAB HONOURS

Course No. CHEMISTRY-C-303-LAB

Full marks 30 Pass marks 12

Q.1 Discuss the principle and procedure of the study of the equilibrium of the following reaction by the distribution method:

| $I_2(aq) + I^- \rightarrow I_3^-(aq)$ | 6+6=12 |
|--|------------------------|
| Q.2 Explain the theory and procedure of the study of the kinetics of the Integrated reaction Acid hydrolysis of methyl acetate with hydrochloric acid. | rate method: 6+6=12 |
| Q.3 Write a short note on saponification of Ethyl acetate. | 6 |

CHEMISTRY LAB 5th SEMESTER

Course No.CHEMISTRY-DSE-501-LAB

Full marks 30 Pass marks 12

| Q.1 Write about the theory of Paper chromatography and separation of metal ions using paper | |
|---|--------|
| chromatography. | 5+5=10 |
| Q.2 Discuss the pH of the fruit juices, shampoos and soaps. | 10 |
| Q.3 i)Write about the theory of TLC. | |
| ii) Discuss the theory of Flame photometric technique. | 5+5=10 |