

# Department of Chemistry

## Chemistry Lab (CH-107)

*B. Sc. 1st Year*

### List of Experiments

#### Section –A (Inorganic)

##### Volumetric Analysis

1. Redox Titrations : Determination of  $\text{Fe}^{2+}$ ,  $\text{C}_2\text{O}_4^{2-}$  (Using  $\text{KMnO}_4$ ,  $\text{K}_2\text{Cr}_2\text{O}_7$ ).
2. Iodometric titrations : determination of  $\text{Cu}^{2+}$  (Using standard hypo solution).
3. Complexometric titrations : Determination of  $\text{Mg}^{2+}$ ,  $\text{Zn}^{2+}$  by EDTA.

##### Paper Chromatography

1. Qualitative analysis of any one of the following Inorganic cations & anions by paper chromatography ( $\text{Pb}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{PO}_4^{3-}$ ,  $\text{NO}_3^-$ ).

#### Section– B (Physical)

1. To determine the specific reaction rate of the hydrolysis of methyl acetate/ ethyl acetate catalyzed by hydrogen ion at room temperature.
2. To prepare arsenious sulphide sol and compare the precipitating power of mono, bi and trivalent anions.
3. To determine the surface tension of a given liquid by drop member method.
4. To determine the viscosity of a given liquid.
5. To determine the specific refractivity of a given liquid.



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