

COMPLEMENTARY CHEMISTRY PRACTICALS

IPH1CMP08 - Chemistry Practical -I

Analytical Chemistry experiments - I

1. Acidimetry and alkalimetry
 - i) Standardisation of HCl with standard Na_2CO_3 solution
 - ii) Standardization of NaOH with standard oxalic acid solution
 - iii) Estimation of any acid using standardised NaOH
 - iv) Estimation of any alkali using standardised HCl
2. Permanganometry
 - i) Standardisation of KMnO_4 using standard oxalic acid solution
 - ii) Standardisation of KMnO_4 solution using standard Mohr's salt solution
 - iii) Estimation of Fe^{2+} in Mohr's salt solution using standard KMnO_4
 - iv) Estimation of Fe^{2+} in crystalline FeSO_4 using standard KMnO_4
3. Dichrometry
 - i) Estimation of Ferrous iron using external indicator
 - ii) Estimation of Ferrous ion using internal indicator

IPH2CMP08 - Chemistry Practical -I

CREDIT -2

Analytical Chemistry experiments – II

1. Iodometry/Iodimetry
 - i) Standardisation of Iodine solution
 - ii) Standardisation of sodium thiosulphate
 - iii) Estimation of KMnO_4
 - iv) Estimation of Copper
2. Determination of melting point of a solid
3. Determination of boiling point of a liquid
4. Thin layer chromatography
5. Column chromatography

IPH3CMP08 - Chemistry Practical -II

Physical Chemistry experiments – I

1. Viscosity-percentage composition of sucrose solution.
2. Determination of Partition coefficient of a non-volatile solute
3. Transition temperature of salt hydrates, eg. Sodium thiosulphate Sodium acetate etc.
4. Critical solution temperature of phenol water system
5. Phase diagram of two component systems

IPH4CMP08 - Chemistry Practical -II CREDIT -2

Physical Chemistry experiments – II

1. Heat of neutralization
2. Heat of Solution KNO_3 , NH_4Cl
3. Determination of equivalent conductance of an electrolyte 2.
4. Conductometric titration of strong acid vs strong base
5. Potentiometric titrations : Fe^{2+} Vs. $\text{Cr}_2\text{O}_7^{2-}$ and Fe^{2+} Vs. KMnO_4
6. Determination of molecular weight by Rast's method. (Using naphthalene, or biphenyl as solvent and acetanilide, p-dichlorobenzene etc.as solute)
7. Kinetics of simple reactions, e.g. Acid hydrolysis of methyl acetate