

First year Chemistry

Semester-2

Chemistry-2: Inorganic, organic & Physical Chemistry-2 (core)

Block-1: Inorganic Chemistry -2.

Unit – 1: Chemistry of Group- IIIA Elements

Unit – 2: Chemistry of Group IVA elements

Unit – 3: Chemistry of Group VA elements

Unit – 4: Principles of Titrimetry and Gravimetry.

Block-2: Organic chemistry -2

Unit – 5: Alkynes

Unit – 6: Benzene –its Aromaticity

Unit – 7: Arenes

Block-3: Organic chemistry -3

Unit – 8: Halogen derivatives

Unit – 9: Hydroxy Compounds

Unit – 10: Ethers and Epoxides.

Block-4: Physical Chemistry-2.

Unit – 11: Liquid state.

Unit – 12: Solid state

Unit – 13: Phase Rule

Practical: Chemistry-2: Volumetric analysis(Quantitative Analysis- I)

Block – 1: **Acidimetry and Alkalimetry -1**

Unit – 1: Common apparatus used in volumetric analysis.

Unit – 2: Estimation of Carbonate in Washing Soda and Baking Soda.

Unit – 3: Estimation of the amount of Acetic acid from commercial vinegar solution by standard Sodium hydroxide solution..

Block – 2: **Permanganometry and Dichrometry**

Unit – 4: Estimation of Fe(II) using $K_2Cr_2O_7$

Unit – 5: Estimation of Fe(II) using $KMnO_4$ with sodium oxalate as primary standard.

Unit – 6: Determination of Cu(II) using $\text{Na}_2\text{S}_2\text{O}_3$ with $\text{K}_2\text{Cr}_2\text{O}_7$ as primary Standard.