

Second year

Semester-4

Chemistry-4: Inorganic, organic & Physical Chemistry – 4 (core)

Block-1: Inorganic Chemistry-4

Unit – 1: d – block elements

Unit –2: f – block elements

Unit – 3: Co-ordination Compounds-I

Unit – 4: Co-ordination Compounds-II

Block-2: Organic Chemistry - 5.

Unit – 5: Nitro Compounds (Nitro alkanes, Alkyl nitrites &Aromatic Nitro Hydrocarbons).

Unit – 6: Nitro Compounds – (Amine, Nitriles and Isonitriles)

Unit – 7: Stereochemistry of Carbon compounds.

Block-3: Organic Chemistry - 6.

Unit – 8: Conformational Analysis

Unit – 9: Carbohydrates – I

Unit –10: Carbohydrates - II

Block-4: Physical Chemistry-4

Unit – 11: Thermodynamics-I

Unit – 12: Electro Chemistry-I

Unit – 13: Chemical Kinetics

Practical:Chemistry-4:Inorganic Preparations & Quantitative Analysis – II

Block – 1: Inorganic Preparations

Unit – 1: Preparation Potash Alum

Unit – 2: Preparation Copper-ammonia Complex

Unit – 3: Nickel- DMG complex

Block – 2: Quantitative Analysis – 2.

Iodometry

Unit – 4: Estimation of copper by sodium thiosulphate

Complexometry

Unit – 5: Estimation of Magnesium, Calcium, Nickel by standard EDTA.

Gravimetry

Unit – 6: Estimation of Barium as BaCrO_4 .