Course Outcomes

Semester-I

Paper – I (Inorganic Chemistry)

CO- 1 : To understand periodic Table with different periodic properties.

CO- 2 : To study Quantum numbers, atomic orbitals and Electronic configuration.

CO- 3 : Study of diagonal relationship of S,P-block Elements and Interhalogen Elements.

Paper – II (Organic Chemistry)

CO- 1 : To understand Localised and delocalized bonds . Also study of different effects which affect on chemical bond.

CO- 2 : Study of type of chemical Reactions, Reactive intermediates , and types of Regards.

CO- 3 : To study the stereochemistry of organic compounds with types of isomerism.

CO- 4 : Understand methods of formation & synthesis of Alkanes and alkenes.

CO- 5 : Study of Hoffmann and Markovnikoff's Rule with Example

CO- 6 : To study the Aromatic copmpounds with Huckel's Rule., and Electrophilic substitution Reaction.

CO- 7 : Study of Polyhalogen compounds and side chain of aryl halides.

Semester - II

Paper – IV (Physical Chemistry)

CO- 1 : To understand the mathematical concepts.

CO- 2 : Study postulates of Kinetics theory of gases and different laws.

CO- 3 : Study of chemical Kinetics, factor affecting on the rate of reaction and catalysis.

CO- 4 : Study of liquid state, solid state, Loops of Crystallography.

CO- 5 : Study of colloids and its classification.

Paper – V (Inorganic Chemistry)

CO- 1 : To understand chemistry of noble gases and compounds of xenon.

CO- 2 : Study of VBT and MOT with Examples.

CO- 3 : Study of nuclear chemistry, Radioactivity and Artificial transmission

CO- 4 : Understand types of titration and indicators how they are used during practical.

- ✶ *Three theory periods per week per semester*
- ✶ *04 practical periods per week per batch of 20 students.*

Semester- III

Paper – VII (Organic Chemistry)

CO- 1 : Understand classification of alcohols, prepration methods of alcohols i.e. monohydric, Dihydric and Trihydric alcohols.

CO- 2 : Understand preparation and chemical reaction of Aldehydes and Ketones.

CO- 3 : To understand preparation methods and Reaction of phenols.

CO- 4 : Understand preparation methods, reaction, chemical and physical properties of carboxylic Acids.

CO- 5 : To understand synthesis ,reactions, physical and chemical proportion of Aromatic Nitrogen Compounds.

Paper – VII (Physical Chemistry)

CO- 1 : To understand first and second law of Thermodynamics.

CO- 2 : Understand Carnot cycle , Gibb's Free energy Entropy of systems, spontaneity of reaction.

CO- 3 : Understand Clausius Claperon Equation and its applications.

Semester - IV

Paper – X (Inorganic Chemistry)

CO- 1 : Understand Physical and chemical proportion of first transition series of elements.

CO- 2 : Understand co-ordination compounds, its Nomenclature , VBT of co-ordinate compound.

CO- 3 : To understand Electronic configuration periodic trends, and chemical properties of Lanthanide and Actinides with its contraction.

CO- 4 : Understand Non-Aqueous solvents and its Application..

Paper – XI (Physical Chemistry)

CO- 1 : To understand phase rule and one or two components system.

CO- 2 : Study of Henry and Rault's Law

CO- 3 : Understand specific and Equivalent conductance Ostwald's diluation Law.

- ✶ *Three theory periods per week per semester.*
- ✶ *04 practical periods per week per batch of 20 students.*

Semester - V

Paper – XIII (Physical Chemistry)

CO- 1 : To understand Elementary quantum mechanics.

CO- 2 : To understand Electromagnetic Radiation.

CO- 3 : To understand Laws of Photochemistry.

CO- 4 : Knowledge of optical Activity, Its measurements and its application.

CO- 5 : Study of introduction of Nanomaterial, method of synthesis by using different methods.

Paper – XIV (Organic Chemistry)

CO- 1 : To understand NMR spectroscopy and its Application.

CO- 2 : Synthesis and reactions of organometalic compounds.

CO- 3 : To understand Keto-enol tautomerism. Reaction and preparation methods of EAA and AAE

CO- 4 : Knowledge of fats, oils and detergents, saponification and Iodine value.

Semester - VI

Paper – XVI (Inorganic Chemistry)

CO- 1 : Understand Metal Ligand bond in transition elements.

CO- 2 : Study of Electronic Spectra of transition metal complex, orgel energy, level Diagram.

CO- 3 : Knowledge of Bio-Inorganic Chemistry.

CO- 4 : To understand organomettalic compounds, its classification and nomenclature.

CO- 5 : Study of Classification of chromatography and its Application

Paper – XVII (Organic Chemistry)

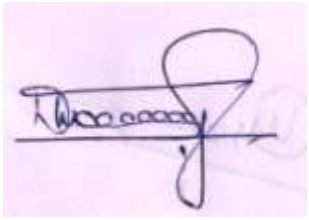
CO- 1 : Study of different heterocyclic compounds, its preparations and reaction..

CO- 2 : Study of carbohydrates, its application.

CO- 3 : Study of preparation and Application of polymers.

CO- 4 : To understand different drugs and dyes with it application.

- ✶ *Three theory periods per week per semester.*
- ✶ *04 practical periods per week per batch of 20 students.*



Head

Department of Chemistry

Principal