

CY-114 ORGANIC CHEMISTRY I

Basic Concepts: Bonding, Reactivity of organic compounds, Oxidation states of carbon, Structure and stability of reactive intermediates, Electrophiles and Nucleophiles, Types of reactions, Factors effecting reactions (reaction mechanism)

Isomerism: Structural, Stereo, Geometrical and Optical isomerism

Chemistry Of Alkanes And Cycloalkanes: Nomenclature, Natural occurrence and Physical properties, Preparation and Reactions of alkane and cycloalkane.

Chemistry of Alkenes And Alkyne: Nomenclature, Natural occurrence, Physical properties, acidity, Preparations and reactions of alkenes and alkynes.

Aromatic Hydrocarbons and Heterocyclic Compounds: Nomenclature, Aromaticity, Preparation and Reactions of aromatic compounds, Electrophilic substitution reactions of benzene, Heterocyclic aromatic compounds (5 and 6 membered), Importance in pharmaceutical industry.

Alkyl Halides: Nomenclature, Classification and physical properties, Preparation of alkyl halides.

Important Industrial Organic Chemicals:

Large scale production and derived products of the following important industrial chemicals: Ethene, Butanes, Butadiene, BTX Chemistry (Benzene, Toluene, Xylene).