

Paper : II CHN-702-(O) Organic Chemistry

Unit : 1

- Ⓜ Synthetic Industries based on petroleum :
 - Coal, petroleum, natural gas, organic chemicals from coal distillation refining of crude oil for industrial fuels, C1,C2,C3,C4 and aromatic chemicals.
 - Textile fibers classification, manufacture of important polyamide, poly ester fibers.

Unit :2

- Ⓜ Industries Paint and varnish- Classification of paints manufacture of paints. Methods of applying paints. Application. Varnish – Raw materials, manufacture of varnishes types of varnishes.
- Ⓜ Explosives, Propellants and toxic Chemical Agents :
 - Types of Explosives, Characteristics of explosive, Industrial explosives, Propellants, Rockets and Missiles, Propellants for Rockets, Miscellaneous industrial Explosives uses, Pyrotechniques, Military explosives, Incendiaries, Toxic chemical agents (Weapons)

Unit :3

- Ⓜ Industrial Polymers :
 - Polyethylenes – Introduction, Manufacture, low and high density polyethylene co-poly-mers of ethylene and application.
 - Monomers – Dacron, orlon, Bakelite, Nylon 6,6, Teflon polymer reactions – Hydrogenation, Addition and substitution, aldehyde and ketonic group reactions. Cyclization reaction, Cross linkage reaction.
 - Resins – Introduction preparation, Mechanism type of resin, Applications
 - Acrylic Polymer
 - (1) Poly acrylated and polymethyl acrylate.
 - (2) Poly methylmeth acrylate.
 - (3) Poly acrylo nitrile.

Unit :4

- Ⓜ Selected small scale industries: safety matches, Agarbatties, naphthalene balls, candles, shoe polish, Gum paste, pen ink, removal of stains, Phenyl disinfectant, soaps, detergents.