

CH309 GENERAL CHEMICAL TECHNOLOGY – II

Credits: 5 (L = 4, P = 2)

(Pre-requisite: None)

Course Details:

Important inorganic (heavy, medium & small scale) chemical industries in india:

Study of selected inorganic Chemical industries with reference to mineral acids, marine chemicals, refractories, porcelain, electro thermal products, nuclear materials.

Detail 2:

Study of Selected organic chemical industries with emphasis on principles underlying in unit processes, Unit operations and economic factors with reference to wood chemicals, starch, sugar and fermentation products, waxes, soap and detergents, industrial solvents.

Process furnaces and kilns:

Stokers and pulverized coal burners. Furnace refractories. Control of furnace temperature, strength and durability of furnaces.

Biotechnology & its applications to chemical process industries:

Product recovery in biotechnology. Bio-rectors, Enzymes, Fermentation process.

Petrochemicals:

Unit operations, Raw materials for petrochemical industries, Chemical conversions, Manufacture of Petrochemicals. Chemistry & manufacture of basic raw materials - C₂, C₃, C₄, & BTX.

Reference Books:

Chemical Process Industries:

McGraw Hill

George T Austin

Bio-chemical Engineering:

Tata McGraw Hill

Bailey & Ollis