

CH 386: Chemical Process Industries

L – P – T
3 – 0 – 1

Time : 3 hrs

Theory :100

Sessional: 50

Practical :50

1. Acids – Sulphuric Acid, Hydrochloric Acid, Nitric Acid
2. Chloro alkali industries – Soda ash, Caustic soda, Chlorine and common salt.
3. Cement – Types, Portland cement and special types of cement
4. Fertilizer – Nitrogen, phosphatic, potassium fertilizer
5. Paper – production and processing of pulp, production of different types of paper
6. Fats and Oils – Fats and oils of vegetable and animal origin, processing, fatty acids and fatty alcohol production, hydrogenation, essential oils, soap and detergents
7. Fermentation – process , production of some special products
8. Polymers – Basics, functionality, classification, methods of production, manufacturing of some common polymers like polyethylene, polystyrene, PVC,, polyester, p-f, u-f, m-f resin, Rayon, epoxy resin and rubber

Practical-

1. Oil analysis –
Iodine value, Saponification value, Fatty acid determination
2. Soap analysis
Moisture content and free fatty acid determination
3. Cement analysis

Books-

1. Outlines of Chemical Technology by Dryden
2. Chemical Process Industries by Shreve
3. Chemical Technology by Pandey
4. Text book of Polymer Science by Guwarekar