

2.14 30316 PETROCHEMICAL ENGINEERING

UNIT-1 INTRODUCTION:

Growth and prospects of petrochemical industry in India. Introduction to technology Of Dehydrogenation, Oxidation, Hydration, Sulphonation, Alkylation, etc.

UNIT-2 SYNTHESIS OF GENERATION:

Synthesis gas generation through steam reforming and partial oxidation of liquid and Gaseous feedstock. Manufacture of Menthol, Ox alcohol.

UNIT-3 MANUFACTURE OF OLEFINS:

Naphtha parolysis and Gas cracking, Manufacture of Acetylene, Ethylene, Propylene, Butanes and their derivatives such as vinyls, Ethylene oxide, Propylene oxide, Isopropyl Alcohol and Acetone, Acrylonitrile and Butadiene.

UNIT-4 MANUFACTURE OF AROMATICS:

Products of benzene, Toluene and xylenes from liquid and Gaseous feed stock.

UNIT-5 CHEMICALS USED IN DETERGENT INDUSTRY:

Manufacture of Linear Alkyl Benzene.

UNIT-6 MANUFACTURE OF CHEMICALS FOR USE IN FIBRE MAKING:

Caprolactum, dimethyl pathalate, polyester, phthalic anhydride.

UNIT-7 MANUFACTURE OF POLYMERS:

Polyethylene (Low and High density), Polypropylene, Polymethyl Methacrylate, Polystyrene, Teflon, etc.

UNIT-8 MANUFACTURE OF CHEMICALS:

Dyes, Pharmaceutical, Intermediates and Textile auxiliaries.

Reference Books:

1. Petrochemical Process Technology” by I D Mall
2. Petrochemical Industries Technology and Processes” by C R Lahiri