

Elective subject prescribed for M.Tech. (Chemical Technology) (Membrane & Separation Technology) course

2 MST 3 Elective

1) Advance Material Technology

Syllabus is same as per existing syllabus for the subject 2 MST 3 Advance Material Technology

2 MST 3 Elective

2) Advance Surface Coating Technology

Synthesis of surface coating binders like acrylics, silicones, epoxies etc., formulations of binders for different applications, inorganic binders, development in pigments in typical functional applications. Concept of eco-friendly pigments in surface coatings, different testing methods.

Books Recommended :-

- 1) Hydrocarbon Processing : Journal
- 2) Process Design of Equipments, Vol I & II : Dawande D.S., Central Techno Pub., Nagpur.
- 3) Corrosion Engineering : Fontana, M.G., McGraw Hill
- 4) Chemical Engg. : World Journal
- 5) Chemical Age of India.

2 MST 3 Elective

3) Speciality Plastics

Polymer synthesis and characterization for high temp. application, engineering polymers, photo resist polymers in solar energy utilization, biodegradable polymers, hydrolysis and other new types of polymers.

Books Recommended :-

- 1) Chemical Engg. : World Journal
- 2) Process Design of Equipments, Vol I & II : Dawande D.S., Central Techno Pub., Nagpur.
- 3) Hydrocarbon Processing : Journal
- 4) Corrosion Engineering : Fontana, M.G., McGraw Hill
- 5) Chemical Age of India.

2 MST 3 Elective

4) Insulation Coatings

Fundamentals of electrical insulations, classification of electrical insulation from polymeric materials, properties and structural requirements of polymeric electrical insulation, different types of polymers for electrical insulation, ingredients in formulation, formulation principles, other insulations :- thermal, aquatic and vibrational. Testing of electrical insulation and application methods of electrical insulation.

Books Recommended :-

- 1) Corrosion Engineering : Fontana, M.G., McGraw Hill
- 2) Process Design of Equipments, Vol I & II : Dawande D.S., Central Techno Pub., Nagpur.
- 3) Hydrocarbon Processing : Journal
- 4) Chemical Engg. : World Journal
- 5) Chemical Age of India.

Remaining content of syllabi is as per the syllabi of 2009-10 of M.Tech. (Chemical Tech.) (Membrane & Separation Technology)
