

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc (Polymer Science & Technology)
Semester: III
Syllabus with Effect from: June-2013

Paper Code: PS03CPST09	Total Credit: 4
Title Of Paper: Fiber Technology	

Unit	Description in detail	Weightage (%)
I	Introduction to fiber Technology: Defination of fibres, Classification and nomenclature of fibres, Definition of various textiles terms, structure principles of fibre forming polymers, Principles of finishing and dyeing of manmade fibre.	25%
II	Natural & Synthetic fiber: Introduction, Cotton, Rayon, Cellulose acetate, Wool, Polyamide, Acrylic fibre, Polyethylene terephthelate, Polyolefines, Spandex, Glass, Asbestos, Steel fibres.	25%
III	Spinning & Finishing of fiber: Introduction, Melt spinning, Solution spinning, Dry spinning, Gel spinning, Wet spinning	25%
IV	Textile Material for Rubber Reinforcement: Introduction, Basic classification, Definition of fundamental concepts and properties of textile reinforcing material, Production of cord and fabrics, Adhesive and heat treatment, Reinforcing system of individual rubber products, Testing methods for cord and fabrics.	25%

Basic Text & Reference Books:-

- Manmade fibres by R.W. Moncrieff
- Modern Textiles by Dorothy Lyle
- Essentials of Textiles by M.J. Joseph
- Physical Methods of Investigating textiles by R. Meredith and J.W.S. Hearle
- Textile fibres and their use by K.P. Hess
- Textile – Fibre to Fabric by B.P. Corbman
- Dying and chemical technology by E.R. Trotman
- International fibre science and technology series Vol. 5.

