

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma in Textile Processing Technology

Semester: 3

Subject Code 332801

Subject Name TECHNOLOGY OF BLEACHING & FINISHING-I

Sr. No.	Course content
1.	Introduction of Grey fabric : 1.1 Identification marks of given fabric. 1.2 Types of given fabric. 1.3 Quality of particular fabric. 1.4 Weaving defects and mechanical damages. 1.5 Stains and other impurities. 1.6 Various dimensions of the fabric.
2.	Stitching and Shearing-Cropping : 2.1 Quality of the fabric. 2.2 Suitable thread for stitching. 2.3 Precaution during stitching. 2.4 Object of shearing and cropping. 2.6 Importance of shearing and cropping. 2.7 Shearing and cropping machine. 2.8 Efficiency of shearing and cropping machine.
3.	Singeing : 3.1 Object of singeing. 3.2 Importance of singeing. 3.3 Classification of singeing machines. 3.4 Gas Singeing machine. 3.5 Comparison of various singeing machines with their merits and demerits. 3.6 Precautions during singeing.
4.	Desizing : 4.1 Object and importance of desizing. 4.2 Classification of the desizing methods. 4.3 Oxidative and hydrlatic desizing methods. 4.4 Process of desizing methods. 4.5 Comparison of desizing methods with their merits and demerits. 4.6 Calculation/evaluation of desizing efficiency.
5.	Scouring : 5.1 Object and imporance of scouring. 5.2 Function of various chemicals used for scouring. 5.3 Scouring process for natural and synthetic fibre fabrics and blends with suitable scouring type of kiers. 5.4 Different machines used for scoring type of kiers. 5.5 Scouring of coloured woven fabric. 5.6 Parameters for effective scouring process. 5.7 Efficiency of scouring process.

	5.8 Weight reduction of polyester fabric by caustic soda with its Advantages and disadvantages. 5.9 Carbonizations of wool. 5.10 Degumming of silk.
6.	Bleaching : 6.1 Object and importance of bleaching processes. 6.2 Classification of bleaching agents. 6.3 Merits and demerits of various bleaching agents. 6.4 Bleaching of cotton, viscose, wool and silk. 6.5 Bleaching of man-made fibres and their blends. 6.6 Various parameters for efficient bleaching. 6.7 Machineries used for bleaching. 6.8 Defects in bleaching and their remedies. 6.9 Objects and importance of scouring process. 6.10 Souring.
7.	Mercerisation : 7.1 Objects and importance of mercerisation. 7.2 Chemicals used for mercerisation-caustic soda-liquid ammonia. 7.3 Mercerisation process for yarn and fabrics 7.4 Factors affecting on mercerisation. 7.5 Machineries used for yarn and cloth mercerisation- - yarn mercerising machine - chain-padding mercerising machine - chainless-padding mercerising machine - chainless-paddless mercerising machine 7.6 Comparison of the various mercersing machines. 7.7 Efficiency of mercerising and absorbency test of mercerised fabric.
8.	Optical Whitening : 8.1 Object and importance of optical whitening 8.2 Principle of optical whitening 8.3 Classification of optical whitening 8.4 Optical whitening processes for different fibre fabrics
9.	Washing : 9.1 Object and importance of washing 9.2 Classification of washing machines 9.3 Mechanism of washing. 9.4 Operation of washing machines.

REFERENCE BOOKS:

Sr. No.	Name of Book	Author
1	Technology of Bleaching	Dr. V. A. Shenai
2	An introduction to Textile Bleaching	J. T. Marsh
3	Bleaching, dyeing, printing and finishing machineries	A. J. Hall
4	Textile Scouring and Bleaching	E. R. Trotmann
5	Textile Processing Machineries	N. D. Patel