

LESSON PLAN

DEPARTMENT OF TEXTILE TECHNOLOGY, ITT, CHOUDWAR

SUBJECT: TEXTILE CHEMICAL PROCESSING -I **Periods:** 3 per week **SEMESTER:** 3rd

NAME OF FACULTY: GOUTAMA BHATTACHARYA

No. of weeks/Sem as per SCTE&VT, Odisha Textile Tech/ Engg Syllabus: 15

Week	Class Day	Theory / Practical Topics
1st	1 st	Introduction
	2 nd	Dry & wet processing of Textile materials.
	3 rd	Dry processing like- Pre-cleaning, Mending, Stamping, stitching , Shearing and cropping
2 nd	1 st	Brief idea on Shearing and cropping M/c.
	2 nd	Different methods of singeing (Plate, Roller and Gas Singeing), drawbacks and advantages.
	3 rd	Object of desizing
3 rd	1 st	Classification of desizing methods.
	2 nd	Details and mechanism of removal of starch.
	3 rd	Details and mechanism of removal of starch
4 th	1 st	Efficiency of Desizing
	2 nd	Class for any shortfalls/Revision
	3 rd	Class for any shortfalls/Revision
5 th	1 st	Objectives of Scouring
	2 nd	Mechanism of Cotton scouring
	3 rd	Classification of Kier & working mechanism of Industrial Kier.
6 th	1 st	Classification of Kier & working mechanism of Industrial Kier.
	2 nd	Mechanism of of removal of impurities, recipe and controlling parameters of wool fibres/ yarns/ fabrics
	3 rd	Mechanism of of removal of impurities, recipe and controlling parameters of wool fibres/ yarns/ fabrics
7 th	1 st	Mechanism of of removal of impurities, recipe and controlling parameters of synthetic fibres/ yarns/ fabrics
	2 nd	Degumming of silk.
	3 rd	Degumming of silk.
8 th	1 st	Souring process
	2 nd	Evaluation of scouring efficiency
	3 rd	Class for any shortfalls/Revision
9 th	1 st	Class for any shortfalls/Revision
	2 nd	Objectives of bleaching & classification of bleaching agents
	3 rd	Mecahnism of Hypochlorite bleaching
10 th	1 st	Mecahnism of peroxide bleaching
	2 nd	Mecahnism of chlorite bleaching
	3 rd	Bleaching of cotton textiles by suitable bleaching agents.
11 th	1 st	Bleaching of cotton textiles by suitable bleaching agents.
	2 nd	Bleaching of silk & wool textiles by suitable bleaching agents.
	3 rd	Bleaching of man-made blended textiles by suitable bleaching agents.
12 th	1 st	Principles and application of optical brightening and blueing agents
	2 nd	Principles and application of optical brightening and blueing agents
	3 rd	Classify dyes and pigments used in textile industry

13 rd	1 st	Compare between natural and synthetic dyes
	2 nd	Explain general properties of dyes (solubility, affinity toward, Properties)
	3 rd	State the principles of dyeing.
14 th	1 st	Dyeing of textiles of natural fibres [(Cotton by direct, reactive, vat, azoic& sulphur.
	2 nd	Dyeing of textiles of natural fibres [(Cotton by direct, reactive, vat, azoic& sulphur.
	3 rd	Dyeing of textiles of natural fibres(Silk and Wool by acid dye).
15 th	1 st	Dyeing of textiles of natural fibres(Silk and Wool by acid dye).
	2 nd	Working principles of Winch, Jet & Beam dyeing machine.
	3 rd	Working principles of Hank and Package dyeing machine, Jigger, J-Box etc