

Lesson Plan

Name of Faculty: Jitender Kumar
Subject: Dyeing and Pre-Treatments

Discipline: Textile Technology (2nd Sem)
Work Load (Lecture / Practical) per week (in hours): Th= 3 / Pr. = 4

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Pr.day	Topic
1 st	1 st	Introduction to textile wet processing.	1 st	Desizing of cotton with rot steep, acid steep and enzymes
	2 nd	Natural and added impurities in cotton, wool, silk.		
	3 rd	Singeing, Desizing and Scouring- principle and process.		
2 nd	4 th	Degumming of silk, bleaching of silk with hydrogen peroxide.	2 nd	Scouring of cotton.
	5 th	Bleaching of cotton with Sodium bleaching powder		
	6 th	Bleaching of cotton with hypochlorite		
3 rd	7 th	Bleaching of cotton with hydrogen peroxide.	3 rd	Bleaching of cotton with suitable agent.
	8 th	Scouring and carbonization of wool, bleaching of wool with sodium hypochlorite		
	9 th	Scouring and carbonization of wool, bleaching of wool with hydrogen peroxide.		
4 th	10 th	Mercerization of cotton- Physical and chemical changes during process	4 th	Bleaching of wool, Bleaching of silk.
	11 th	Scouring and bleaching of Polyamides		
	12 th	Scouring of Polyester		
5 th	13 th	1st Sessional Test	5 th	1st Sessional Test
	14 th	bleaching of Acrylic		
	15 th	Scouring and bleaching of Viscose rayon		
6 th	16 th	-do-	6 th	Scouring and bleaching of polyester.
	17 th	Mercerization of cotton- Physical changes during process.		
	18 rd	Mercerization of cotton- chemical changes during process.		
7 th	19 th	Introduction to Dyeing Classification of dyes, General terms used in dyeing	7 th	Dyeing of cotton with Direct and Reactive dyes.
	20 th	Principle of dyeing.		
	21 th	Dyeing of cotton with- Direct dyes,		
8 th	22 th	Dyeing of cotton with- Reactive dyes	8 th	Dyeing of cotton with Sulphur and Vat dyes.
	23 th	Dyeing of cotton with- Sulphur dyes		
	24 th	Dyeing of cotton with- Vat dyes.		
9 th	25 rd	2nd Sessional Test	9 th	2nd Sessional Test
	26 th	Dyeing of wool with- Acid dyes		
	27 th	-do-		
10 th	28 th	Dyeing of wool with- Metal complex dyes.	10 th	Dyeing of wool with Acid dyes. Dyeing of wool with Metal complex dyes.
	29 th	Dyeing of silk with- Acid dyes		
	30 th	Dyeing of silk with- Basic dyes.		
11 th	31 th	Dyeing of acrylic with basic dyes.	11 th	Dyeing of silk with Acid dyes. Dyeing of silk with basic dyes.
	32 th	-do-		
	33 th	Dyeing of polyester with disperse dyes using- Carrier method		
12 th	34 th	-do-	12 th	Dyeing of polyester with disperse dyes.
	35 th	Dyeing of polyester with disperse dyes using- High temperature method		
	36 th	Basic machinery used in dyeing- jigger		

13 th	37 th	Basic machinery used in dyeing- winch	13 th	Dyeing of acrylic with basic dyes.
	38 th	Basic machinery used in dyeing- padding mangle		
	39 th	fiber dyeing machine-principle and working.		
14 th	40 th	3rd Sessional Test	14 th	3rd Sessional Test
	41 th	hank dyeing machine-principle and working.		
	42 th	-do-		
15 th	43 th	Old question papers solve	15 th	Visit of dyeing unit for working of various dyeing machines i.e. jigger, winch and fibre dyeing machine.
	44 th	Revision		
	45 th	Revision		