

Lesson Plan

Name of Faculty: Krishan Chahal

Discipline: Textile Technology Semester: 6th

Subject: ADVANCED YARN MANUFACTURING

Lesson Plan Duration: 15 weeks

Work Load (Lecture / Practical) per week (in hours): Th= 4 per week

Week	Theory	
	Lecture day	Topic (including assignment / test)
1 st	1 st	Fibre properties requirements for different spinning processes
	2 nd	Fibre properties requirements for different spinning processes
	3 rd	Fibre properties requirements for different spinning processes
	4 th	Fibre properties requirements for different spinning processes
2 nd	5 th	Limitations of ring spinning
	6 th	Limitations of ring spinning
	7 th	Limitations of ring spinning
	8 th	Basic elements and principles of Rotor Spinning Machine
3 rd	9 th	Basic elements and principles of Rotor Spinning Machine
	10 th	Basic elements and principles of Rotor Spinning Machine
	11 th	Passage through the Rotor Spinning Frame
	12 th	Passage through the Rotor Spinning Frame
4 th	13 th	Passage through the Rotor Spinning Frame
	14 th	Passage through the Rotor Spinning Frame
	15 th	Range of speed for opening roller and rotor
	16 th	Range of speed for opening roller and rotor
5 th	17 th	Expert Lecture 1
	18 th	Functions of transport channel
	19 th	Functions of transport channel
	20 th	Functions of transport channel
6 th	21 th	Introduction to Air-jet spinning.
	22 th	Introduction to Air-jet spinning.
	23 rd	Sessional 1
	24 th	Principle of yarn formation
7 th	25 th	Principle of yarn formation
	26 th	Introduction to Friction Spinning
	27 th	Introduction to Friction Spinning
	28 th	Principle of yarn formation
8 th	29 th	Principle of yarn formation .
	30 th	Comparison of Ring, Rotor yarn, Air-jet yarn, Friction yarn
	31 th	Comparison of Ring, Rotor yarn, Air-jet yarn, Friction yarn
	32 th	Comparison of Ring, Rotor yarn, Air-jet yarn, Friction yarn
9 th	33 rd	Sessional 2

	34 th	Introduction to texturing process.
	35 th	Introduction to texturing process.
	36 th	Different texturing processes
10 th	37 th	Different texturing processes
	38 th	Expert Lecture 2
	39 th	Different texturing processes
	40 th	Different texturing processes
11 th	41 th	Application and advantages of Textured Yarn
	42 th	Application and advantages of Textured Yarn
	43 th	Application and advantages of Textured Yarn
	44 th	Fibre characteristics required for blending
12 th	45 th	Fibre characteristics required for blending
	46 th	Fibre characteristics required for blending
	47 th	Recommended settings/modification of machinery in man-made fiber and blends
	48 th	Recommended settings/modification of machinery in man-made fiber and blends
13 th	49 th	Recommended settings/modification of machinery in man-made fiber and blends
	50 th	Recommended settings/modification of machinery in man-made fiber and blends
	51 th	Sessional 3
	52 th	Information and objective of post spinning operation in man-made fiber production.
14 th	53 th	Information and objective of post spinning operation in man-made fiber production.
	54 th	Introduction to drawing filament
	55 th	Introduction to drawing filament
	56 th	Expert Lecture 3
15 th	57 th	Introduction and concept of heat setting.
	58 th	Introduction and concept of heat setting.
	59 th	Object of heat setting
	60 th	Object of heat setting

Lesson Plan

Name of Faculty: GF3

Discipline: Textile Technology Semester: 6th

Subject: BASICS OF MANAGEMENT

Lesson Plan Duration: 15 weeks

Work Load (Lecture / Practical) per week (in hours): Th= 3 per week

Week	Theory	
	Lecture day	Topic (including assignment / test)
1 st	1 st	Introduction, definition and importance of management
	2 nd	Functions of Management: Planning, Organizing, Staffing
	3 rd	Functions of Management: Coordinating, Directing, Motivating, Controlling
2 nd	4 th	Concept and Structure of an organization
	5 th	Line organization
	6 th	Functional organization
3 rd	7 th	Line and Functional organization
	8 th	Top, middle and lower level management
	9 th	Departmentalization Introduction and its advantages
4 th	10 th	Introduction and importance of Healthy Work Culture in organization
	11 th	Components of Culture
	12 th	Importance of attitude, values and behaviour
5 th	13 th	Expert Lecture 1
	14 th	Behavioural Science – Individual and group behaviour
	15 th	Professional ethics – Concept and need of Professional Ethics
6 th	16 th	Sessional 1
	17 th	Definition and Need of Leadership
	18 th	Qualities of a good leader
7 th	19 th	Manager vs. leader
	20 th	Definition and characteristics of motivation
	21 th	Factors affecting motivation
8 th	22 th	Maslow's Need Hierarchy Theory of Motivation
	23 th	Maslow's Need Hierarchy Theory of Motivation
	24 th	Job Satisfaction
9 th	25 th	Sessional 2
	26 th	Wage payment - Definition and types
	27 th	Incentives - Definition, need and types
10 th	28 th	Expert Lecture 2
	29 th	Factory Act 1948
	30 th	Minimum Wages Act 1948
11 th	31 th	Human Resource Development: Introduction and objective
	32 th	Manpower Planning, recruitment and selection
	33 th	Performance appraisal methods
12 th	34 th	Introduction, functions and objectives of material management
	35 th	Purchasing: definition and procedure

	36 th	Just in time (JIT)
13 th	37 th	Sessional 3
	38 th	Marketing and Sales: Introduction, importance and its functions
	39 th	Difference between marketing and selling
14 th	40 th	Expert lecture 3
	41 th	Advertisement- print media and electronic media
	42 th	Market-Survey and Sales promotion
15 th	43 th	Financial Management – Introduction
	44 th	Maintenance Management
	45 th	Customer Relationship Management (CRM), Total Quality Management (TQM), Intellectual Property Rights (IPR)

Lesson Plan

Name of Faculty: GF3

Discipline: Textile Technology Semester: 6th

Subject: COMPUTER APPLICATIONS IN TEXTILE TECHNOLOGY

Lesson Plan Duration: 15 weeks

Work Load (Practical) per week (in hours): pr =5

Week	Practical	
	Lecture day	Topic (including assignment / test)
1 st	1 st	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	2 nd	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	3 rd	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	4 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
2 nd	5 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	6 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	7 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	8 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
3 rd	9 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	10 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	11 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
	12 th	Practice on any textile based software such as Textronics Wonder Weave, Scot Weave, Ned Graphics etc.
4 th	13 th	Operating CAD
	14 th	Operating CAD
	15 th	Operating CAD
	16 th	Operating CAD
5 th	17 th	Expert Lecture 1
	18 th	Practical application of computer networks
	19 th	Practical application of computer networks
	20 th	Practical application of computer networks
6 th	21 th	Practical application of computer networks
	22 th	Introduction to Corel Draw/Photoshop (latest)
	23 rd	Introduction to Corel Draw/Photoshop (latest)
	24 th	Introduction to Corel Draw/Photoshop (latest)

7 th	25 th	Introduction to Corel Draw/Photoshop (latest)
	26 th	Introduction to Corel Draw/Photoshop (latest)
	27 th	Introduction to Corel Draw/Photoshop (latest)
	28 th	Introduction to Corel Draw/Photoshop (latest)
8 th	29 th	Introduction to Corel Draw/Photoshop (latest)
	30 th	Introduction to Corel Draw/Photoshop (latest)
	31 th	Introduction to Corel Draw/Photoshop (latest)
	32 th	Introduction to Corel Draw/Photoshop (latest)
9 th	33 rd	Sessional 2
	34 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	35 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	36 th	Demonstration of computer networking its uses and applications in Textile Technology machines
10 th	37 th	Expert Lecture 2
	38 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	39 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	40 th	Demonstration of computer networking its uses and applications in Textile Technology machines
11 th	41 th	Sessional 1
	42 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	43 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	44 th	Demonstration of computer networking its uses and applications in Textile Technology machines
12 th	45 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	46 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	47 th	Demonstration of computer networking its uses and applications in Textile Technology machines
	48 th	Demonstration of computer networking its uses and applications in Textile Technology machines
13 th	49 th	Sessional 3
	50 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	51 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	52 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
14 th	53 th	Expert lecture 3
	54 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	55 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	56 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills

15 th	57 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	58 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	59 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills
	60 th	Demonstration of CAM Computer Aided Manufacturing through visit to mills

Lesson Plan

Name of Faculty: Puneet Garg (Theory), G4 (Practical G1 & G2)

Discipline: Textile Technology Semester: 6th

Subject: TEXTILE TESTING AND QUALITY CONTROL– II

Lesson Plan Duration: 15 weeks

Work Load (Lecture / Practical) per week (in hours): Th= 4 , pr =5

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical day	Topic
1 st	1 st	Fabric strength testing by Tensile Strength Tester	1 st	Tensile Strength Testing of Fabrics
	2 nd	Fabric strength testing by Tensile Strength Tester		
	3 rd	Fabric strength testing by Tensile Strength Tester		
	4 th	Fabric strength testing by Tensile Strength Tester		
2 nd	5 th	Tearing Strength Tester for Umbrella and Parachute failure	2 nd	Find out bursting strength of fabric by Hydraulic Strength Tester
	6 th	Tearing Strength Tester for Umbrella and Parachute failure		
	7 th	Tearing Strength Tester for Umbrella and Parachute failure		
	8 th	Tearing Strength Tester for Umbrella and Parachute failure		
3 rd	9 th	Tearing Strength Tester for Umbrella and Parachute failure	3 rd	Find out bursting strength of fabric by Hydraulic Strength Tester
	10 th	Tearing Strength Tester for Umbrella and Parachute failure		
	11 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester		
	12 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester		
4 th	13 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester	4 th	Find out fabric thickness by thickness tester.
	14 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester		
	15 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester		
	16 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester		
5 th	17 th	Bursting strength testing of fabric by Hydraulic Bursting Strength Tester	5 th	Find out air permeability of fabric by Air Permeability
	18 th	Expert Lecture 1		

				Tester
	19 th	Fabric thickness testing by thickness tester		
	20 th	Fabric thickness testing by thickness tester		
6 th	21 th	Sessional 1	6 th	Find out Crease Recovery of fabric by Crease Recovery Tester
	22 th	Definition of air permeability, air resistance		
	23 rd	Porosity Measurement of permeability by Shirley Air Permeability Tester		
	24 th	Porosity Measurement of permeability by Shirley Air Permeability Tester		
7 th	25 th	Measurement of crease recovery by Shirley Crease Recovery Tester	7 th	Find out serviceability of fabric by abrasion tester - Use of Drapemeter - Stiffness Tester - Drapemeter
	26 th	Measurement of crease recovery by Shirley Crease Recovery Tester		
	27 th	Abrasion resistance and serviceability, wear and abrasion test on fabrics.		
	28 th	Measurement of serviceability by Abrasion Tester		
8 th	29 th	Stiffness, Handle & drape of fabric	8 th	Find out crimp in warp and weft of fabric
	30 th	Definition of crimp		
	31 th	measurement of warp and weft crimp in fabric by crimpmeter		
	32 th	measurement of warp and weft crimp in fabric by crimpmeter		
9 th	33 rd	Sessional 2	9 th	Shrinkage test by Launderometer and Template
	34 th	Fabric shrinkage relaxation and felting		
	35 th	Measurement of fabric shrinkage		
	36 th	Flammability test for fabrics		
10 th	37 th	Flammability test for fabrics	10 th	Flammability test by Flammability Testers
	38 th	Fabric cover and its relation with fabric properties		
	39 th	Fabric cover and its relation with fabric properties		
	40 th	Methods of determination of colour fastness to Washing perspiration (acidic and alkaline)		
11 th	41 th	Methods of determination of colour fastness to Washing perspiration		

		(acidic and alkaline)		
	42 th	Methods of determination of colour fastness to Washing perspiration (acidic and alkaline)	11 th	Colour fastness of fabric: Washing- Launderometer Perspiration – by Persperometer
	43 th	Methods of determination of colour fastness to Washing perspiration (acidic and alkaline)		
	44 th	Methods of determination of colour fastness to Washing perspiration (acidic and alkaline)		
12 th	45 th	rubbing (dry and wet)	12 th	Rubbing (dry & wet) – Crock meter Light – Light fastness tester Sublimation – Sublimation Tester
	46 th	rubbing (dry and wet)		
	47 th	rubbing (dry and wet)		
	48 th	light and sublimation		
13 th	49 th	light and sublimation	13 th	Blend testing by chemical (Solubility) method.
	50 th	Blend tests by solubility methods		
	51 th	Blend tests by solubility methods		
	52 th	Wettability test for fabric water proofing and shower proofing		
14 th	53 th	Wettability test for fabric water proofing and shower proofing	14 th	Findout pilling by ICI pill box (Pilling Tester)
	54 th	Drop penetration test. Spray test		
	55 th	Test for Pilling of Fabric by using Pilling Tester		
	56 th	Test for Pilling of Fabric by using Pilling Tester		
15 th	57 th	Importance of evenness in yarn. Short term	15 th	Uster classmate testing.
	58 th	Importance of evenness in yarn. Short term		
	59 th	Periodic and non -periodic irregularities. Causes and remedies for yarn unevenness		
	60 th	Periodic and non -periodic irregularities. Causes and remedies for yarn unevenness		

Name of Faculty: Puneet Garg (G1: Spinning), Krishan Chahal (G2: Weaving), Sunita Devi (G3: Knitting/ Garmenting)

Discipline: Textile Technology

Semester: 6th

Subject: MAJOR PROJECT

Lesson Plan Duration: 15 weeks

Work Load per Week in Hours (Practical): = 12

Week	Practical	
	Period	Topic
1 st	12 per week	Selection on topic
2 nd	12 per week	Feasibility of study
3 rd	12 per week	Review of literature
4 th	12 per week	Review of literature
5 th	12 per week	Sample preparation testing etc
6 th	12 per week	Sample preparation testing etc
7 th	12 per week	Sample preparation testing etc
8 th	12 per week	Result and discussions
9 th	12 per week	Result and discussions
10 th	12 per week	Report writing and presentation
11 th	12 per week	Report writing and presentation
12 th	12 per week	Presentation, compilation and submission
13 th	12 per week	Presentation
14 th	12 per week	Presentation
15 th	12 per week	Presentation