

# LESSON PLAN

## DEPARTMENT OF TEXTILE TECHNOLOGY, ITT, CHOUDWAR

SUBJECT: YARN MANUFACTURE-I

Periods: 3/Week

SEMESTER:3<sup>rd</sup>

NAME OF FACULTY: PTGF/ Sri R L Sahoo

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

Week	Class Day	Theory / Practical Topics
1st	1 <sup>st</sup>	Basic concept of Textile
	2 <sup>nd</sup>	Introduction to Yarn manufacturing
	3 <sup>rd</sup>	Concept of natural fiber spinning
2nd	1 <sup>st</sup>	Study of cotton ginning
	2 <sup>nd</sup>	Different types of ginning methods
	3 <sup>rd</sup>	Study of MacCarthy gin, mechanism principle
3rd	1 <sup>st</sup>	Working principle of saw and roller gin
	2 <sup>nd</sup>	Brief idea on baling
	3 <sup>rd</sup>	Object and principle of mixing
4 <sup>th</sup>	1 <sup>st</sup>	Concept of bale opening
	2 <sup>nd</sup>	Preparation for mixing and blending
	3 <sup>rd</sup>	Scientific bale management system
5 <sup>th</sup>	1 <sup>st</sup>	Methods of blending and mixing
	2 <sup>nd</sup>	Machineries involved in bale mixing and blending
	3 <sup>rd</sup>	Calculation on blending
6 <sup>th</sup>	1 <sup>st</sup>	Concept of blow room
	2 <sup>nd</sup>	Process sequence in a blow room
	3 <sup>rd</sup>	Action on blow room line
7 <sup>th</sup>	1 <sup>st</sup>	Cotton bale opening and mixing process
	2 <sup>nd</sup>	Study of various bale opener like mixing bale opener, unifloc
	3 <sup>rd</sup>	Cont.. Bale opener blenmat, monocylinder
8 <sup>th</sup>	1 <sup>st</sup>	Cont.. axiflow cleaner, uniclean
	2 <sup>nd</sup>	Cont... CVT and modern methods
	3 <sup>rd</sup>	Measuring of opening and cleaning efficiency
9 <sup>th</sup>	1 <sup>st</sup>	Dust extraction method in blow room
	2 <sup>nd</sup>	Study of lap forming machine
	3 <sup>rd</sup>	Mechanism of chute feed system
10 <sup>th</sup>	1 <sup>st</sup>	Process parameter of blow room
	2 <sup>nd</sup>	Waste control in blow room line
	3 <sup>rd</sup>	Calculation related to blow room
11 <sup>th</sup>	1 <sup>st</sup>	Efficiency and maintenance schedule in blow room
	2 <sup>nd</sup>	<b>Doubt Clearing Class</b>
	3 <sup>rd</sup>	Objects of carding
12 <sup>th</sup>	1 <sup>st</sup>	Constructional features of carding machine
	2 <sup>nd</sup>	Principle of carding operation
	3 <sup>rd</sup>	Principle of stripping action

13 <sup>th</sup>	1 <sup>st</sup>	Study of different parts and function of carding machine
	2 <sup>nd</sup>	Setting and Gauging of carding machine
	3 <sup>rd</sup>	Production calculation
14 <sup>th</sup>	1 <sup>st</sup>	Draft and speed related to carding
	2 <sup>nd</sup>	Concept of mechanical and actual draft
	3 <sup>rd</sup>	Study of card clothing
15 <sup>th</sup>	1 <sup>st</sup>	Concept of fiber entanglement neps and hooks in carding
	2 <sup>nd</sup>	Card waste management
	3 <sup>rd</sup>	Defects and maintenance in carding