

# LESSON PLAN

**DEPARTMENT OF TEXTILE TECHNOLOGY, ITT, CHOUDWAR**

**SUBJECT: YARN MANUFACTURING -II**

**Periods: 4/Week**

**SEMESTER: 4th**

**NAME OF FACULTY: Maheswar Bhutia**

**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>	Revision of YM-I
	2 <sup>nd</sup>	Objects of drawing
	3 <sup>rd</sup>	Principle of drafting and doubling
	4 <sup>th</sup>	Passage of material in draw frame
2nd	1 <sup>st</sup>	Study of different parts of draw frame
	2 <sup>nd</sup>	Study of modern drafting system
	3 <sup>rd</sup>	Concept of roller setting, drafting waves
	4 <sup>th</sup>	Top roller weighting, electronic stop motion
3rd	1 <sup>st</sup>	Technological design change in modern draw frame
	2 <sup>nd</sup>	Study of drafting roller arrangement
	3 <sup>rd</sup>	Online monitoring and auto leveling suction arrangement
	4 <sup>th</sup>	Study of auto motion in dofing
4 <sup>th</sup>	1 <sup>st</sup>	Discussion on maintenance schedule in drafting
	2 <sup>nd</sup>	Need for lap preparation
	3 <sup>rd</sup>	Discussion on fiber presentation and pre-comb draft
	4 <sup>th</sup>	Study of sliver doubling and lap doubling
5 <sup>th</sup>	1 <sup>st</sup>	Principle of unilap machine
	2 <sup>nd</sup>	Objects of combing
	3 <sup>rd</sup>	Degree of combing
	4 <sup>th</sup>	Discussion on combing cycle, types feeding
6 <sup>th</sup>	1 <sup>st</sup>	Study of different settings involved in comber
	2 <sup>nd</sup>	Study of clamping line and clamp setting
	3 <sup>rd</sup>	Concept of nips/min and concentric nipper movement
	4 <sup>th</sup>	Performance of combing cycle
7 <sup>th</sup>	1 <sup>st</sup>	Machinery setting
	2 <sup>nd</sup>	Wire geometry
	3 <sup>rd</sup>	Drafting arrangement and calculation related to draft
	4 <sup>th</sup>	Concept of actual draft and mechanical draft
8 <sup>th</sup>	1 <sup>st</sup>	Study of auto leveling
	2 <sup>nd</sup>	Need of modern comber
	3 <sup>rd</sup>	Working mechanism of modern comber
	4 <sup>th</sup>	Costing calculation in combing
9 <sup>th</sup>	1 <sup>st</sup>	Features of modern comber
	2 <sup>nd</sup>	Comparative study of comber and draw frame
	3 <sup>rd</sup>	Production and efficiency calculation

	4th	Sustainable development in combing
10 <sup>th</sup>	1 <sup>st</sup>	Production waste in combing
	2 <sup>nd</sup>	Maintenance schedule in combing
	3 <sup>rd</sup>	Concept of carded yarn, combed yarn
	4th	<b>Doubt clearing/ short fall class.</b>
11 <sup>th</sup>	1 <sup>st</sup>	Objects of speed frame
	2 <sup>nd</sup>	Study of passage of material in a speed frame
	3 <sup>rd</sup>	Study of different parts and function of S/F
	4th	Study of modern drafting system
12 <sup>th</sup>	1 <sup>st</sup>	Principle of twisting, winding
	2 <sup>nd</sup>	Concept of false and actual twist
	3 <sup>rd</sup>	Study of twist and its need
	4th	Concept of package build up
13 <sup>th</sup>	1 <sup>st</sup>	Study of differential motion in S/F
	2 <sup>nd</sup>	Study of modern development in S/F
	3 <sup>rd</sup>	Concept of draft builder, twist driving system
	4th	Contd.... Creel, package size
14 <sup>th</sup>	1 <sup>st</sup>	Contd..... roving tension control, flyer, suction system
	2 <sup>nd</sup>	Roving defects and their remedies
	3 <sup>rd</sup>	Production efficiency assessment
	4th	Calculation related to S/F
15 <sup>th</sup>	1 <sup>st</sup>	Drafting arrangement
	2 <sup>nd</sup>	Concept of back draft
	3 <sup>rd</sup>	Maintenance schedule in S/F
	4th	<b>Doubt clearing/ Revision</b>

Name: Maheswar Bhutia  
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