

# LESSON PLAN

SUB: Yarn Technology-I(Theory)

BRANCH: - TEXTILE ENGG.


SEMESTER: 3<sup>rd</sup>

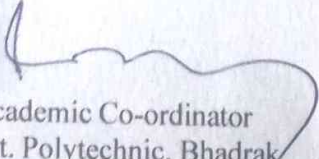
SESSION:2025-26


NAME OF FACULTY: Shreepati Sundar Upadhyay (Lect.S-II, Textile Tech.)



**GOVERNMENT POLYTECHNIC,  
BHADRAK**

  
Academic In-charge,  
Textile Engg. Dept

  
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Govt. Polytechnic, Bhadrak

  
Principal  
Govt. Polytechnic, Bhadrak

### LESSON PLAN

**DEPARTMENT OF TEXTILE ENGG, GOVT. POLYTECHNIC, BHADRAK**

**SUBJECT: Yarn Technology - I Periods: 3 per week SEMESTER: 3rd**

**NAME OF FACULTY: S.S UPADHYAY ACADEMIC YEAR: 2025-2026**

**Semester From date: 14.7.2025 To Date: 15.11.2025 No. of weeks: 15**

Week	Class Day	Theory / Practical Topics
1st	1st	Object of Ginning and Bailing, working principles of roller Gin
	2nd	working principles of roller, McCarthy & Saw Gin,
	3rd	Bailing, Objects of Mixing, Methods of mixing and blending.
2nd	1st	bale management, various processes involve in conversion of fibre into yarn with flowchart.
	2nd	Class for revision
	3rd	Objects of Blow room, Importance of opening and cleaning, Trash content,
3rd	1st	working principles of bale opener, Step cleaner,
	2nd	working principles of Axiflow machine, Three bladed beater.
	3rd	working principles of Kirschner beater, E. R. M. cleaner
4th	1st	working principles of Monocylinder beaters, Concept of cleaning efficiency
	2nd	Class for revision
	3rd	Blow Room lines like Rieter & Trutzschler
5th	1st	Uni mixer, Uni Flock, Blendo Mat, Uni blend, Cleano mat (CVT 123).
	2nd	Method of dust extraction in Blow Room
	3rd	Study of lap forming unit and chute feed mechanism and their comparison
6th	1st	Calculation relating to production, efficiency of machines
	2nd	Objects of carding, passage of material through the card,
	3rd	parts and functions of Feeding system, Licker-in, mote knives, Back plate front plate, Cylinder,
7th	1st	parts and functions of Flats, Doffer, Undercasing
	2nd	Theory of carding actions in a revolving flat card
	3rd	Flexible and metallic card clothing.
8th	1st	Types of clothing wires and its geometry.
	2nd	Calculation of speeds, drafts and productions of card
	3rd	Calculations of production, efficiency, draft and waste percentage.
9th	1st	Objects of Draw Frame, its important parts, their functions and passage of material through drawing frame.
	2nd	Details of Top and Bottom drafting rollers. Principles of doubling and drafting.
	3rd	Roller settings, Drafting wave
10th	1st	Top roller weighting, Electronic stop motion
	2nd	different drafting systems e.g. 2/2, 2/3, 3/3
	3rd	different drafting systems e.g. 2/2, 2/3, 3/3
11th	1st	4/4 and Polar drafting systems.



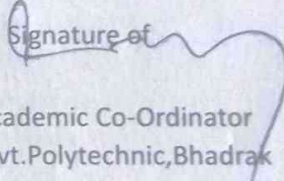
	2nd	Importance and study of Autolevellers,
	3rd	Special features of high speed draw frame, their names and different models.
12th	1st	Defects and remedies in drafting operating.
	2nd	Calculations based on draft & production in draw frame
	3rd	Calculations based on draft & production in draw frame
13th	1st	Brief idea of combing and combing operation. need for lap preparation
	2nd	Lap doubling and function of Unilap Machine
	3rd	Importance of Parts and function of Comber.
14th	1st	Importance of Parts and function of Comber.
	2nd	Combing cycle
	3rd	Combing cycle
15th	1st	types of feed, Calculation on production of comber
	2nd	Class for revision
	3rd	Class for revision

  
Signature of

Lecturer  
Textile Engg.Dept

  
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