LESSON PLAN

SUB: FABRIC TECHNOLOGY-1

BRANCH: - TEXTILE ENGG.

SEMESTER:3rd

SESSION:2025-26

NAME OF FACULTY: Manisha Roul(GF)

GOVERNMENT POLYTECHNIC, BHADRAK

Academic (I/C)
Textile Engg

Academic Co-ordinator

Principal
Govt. Polytechnic,
Bhadrak

LESSON PLAN

DEPARTMENT OF TEXTILE ENGG, GOVT. POLYTECHNIC, BHADRAK

SUBJECT: Fabric technology-1 Periods: 3 per week **SEMESTER:** 3rd

NAME OF THE FACULTY: Manisha Roul **ACADEMIC YEAR:2025-2026**

SEMESTER FROM DATE:14.07.2025 TO DATE:15.11.2025

Week	Class Day	Theory / Practical Topics
1st	1st	Objects of warp and weft winding.
	2nd	Types of winding (precession winding).
	3rd	Types of winding (non precession winding).
2nd	1st	Features of warp and weft winding machine (anti patterning device, knotters)
	2nd	Features of warp and weft winding machine (splicers, electronic clearers, slub catchers)
	3rd	Features of warp and weft winding machine (yarn tensioners, waxing)
3rd	1st	Features of warp and weft winding machine (different types of traverse mechanisms)
	2nd	Class for revision
	3rd	Classification of yarn faults
4th	1st	Package defects and their remedies.
	2nd	Modern developments in winding machine.
	3rd	Modern developments in winding machine.
5th	1st	Calculations related to winding (related to traverse ratio, winding angle, winding speed
	2nd	Calculations related to winding (yarn tensioner, production of machines)
	3rd	Class for revision
6th	1st	Objects of warping. Types of warping machine (direct warping machine).
	2nd	Types of warping machine (sectional warping machine).
	3rd	Passage of yarns through High Automatic beam warping.
7th	1st	Features of high speed direct and sectional warper (types of creel, stop motions, tensioners, different mechanisms at head stock).
	2nd	Features of high speed direct and sectional warper (types of creel, stop motions, tensioners, different mechanisms at head stock).
	3rd	Package defects and their remedies.
8th	1st	Recent developments in warping machine.
	2nd	Calculations related to warping
	3rd	Calculations related to warping
9th	1st	Class for revision
	2nd	Objects of sizing, Sizing ingredients-- their properties and functions.
	3rd	Preparation of size paste—formulation, cooking equipment and storing.
10th	1st	Slasher sizing machine – general description ,Different types of creel
	2nd	Slasher sizing machine – Design of size box ,heating and temperature control, level control
	3rd	Slasher sizing machine – immersion rollers, squeeze rollers, wet splitting.

11th	1st	Application of size of cotton warp (types of sizing, factors governing pick up of size)
	2nd	Drying equipments (cylinder drying, hot air drying, radiation drying)
	3rd	Drying equipments (cooling of warp sheet, single end sizing)
12th	1st	Class for revision
	2nd	The head stock (dry splitting, beam pressing roller, measuring and marking motions).
	3rd	Tension on warp sheet and its control (factors governing tension)
13th	1st	Tension on warp sheet and its control (methods of measuring stretch, control of stretch)
	2nd	Modern developments in sizing.
	3rd	Brief idea on drawing & denting.
14th	1st	Class for revision
	2nd	Passage of yarns through plain looms, Defination of Shedding, Classification, Type of shedding devices and Type of Sheds.
	3rd	Tappet sheeding,picking and checking mechanism.
15th	1st	yarn numbering system and its conversions.and beat-up mechanism
	2nd	Indirect system and direct system.
	3rd	Timing and setting of shedding, picking and beating, basic calculation related to loom.

Manisha Roy.
Signature of
Lect.Textile Engg

Academic (H/C)
Textile Engg.

Signature of
Academic co-ordinator.