

# PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

## Department of Textile Engineering

Faculty Name: - Ms. Sushma

Subject Name: - Fabric Manufacturing I

Year/Semester: - 2<sup>nd</sup>/3<sup>rd</sup>

Subject Code: - PCC-TEX-205A

### LESSON PLAN

S. No.	Topics to be covered	Hour	Total Hours
Unit 1	Introduction to Weaving Process Sequence, definition & concept of basic terminologies related to winding, warping, sizing and fabric weaving	3	14
	Winding: Objectives, types of packages, basic features of winding machines and types yarn tensioners	3	
	Yarn Fault: Classifying system, types of yarn clearer, yarn brake stop motions and patterning reasons & remedies,	3	
	Patterning and package build up, basic features of auto-coner, barber column & murata winding m/c	2	
	Pirn Winding Objectives, Basic Features of Pirn Winding Machine, Yarn Traversing Systems, Automation In Pirn Winding, Standard Pirn Winding Parameter, Pirn Winding Numerical	3	
Unit 2	Warping: Objectives, basic features of warping machine, beaming process, head stock and relation between section height & cone angle	3	9
	Types of creels & leasing System, warping numerical	2	
	Sizing: Objectives, sizing methods & machines, sizing parameters, sizing ingredients, spun and filament yarn sizing, sizing numerical	4	
Unit 3	Drawing In: Objectives, types of heald wires & drop wires, reed, reed count, drawing in order of plain, twill, satin weave	4	10
	Automation in drawing in, knotting and gaiting	2	
	Introduction to looms, classification of looms, primary, secondary and auxiliary motions	2	
	Shedding motion principles, loom timing diagram, effect of shed timing and back rest settings on properties of fabrics	2	
Unit 4	Picking : Picking types, picking accessories picking timing	3	10
	Beating: Function of beating, kinematics of sley, effects of sley eccentricity on beat up force and timing available for shuttle passage, loom bumping	4	
	Mechanics of beat up, effect of yarn irregularity on pick spacing	3	