

# PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

## Department of Textile Engineering

Faculty Name: - Ms.Agya Preet

Subject Name: - Yarn Manufacturing-I

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

Subject Code: - PCC-TEX-203A

### LESSON PLAN

S. No.	Topics to be covered	Hours	Total Hours
<b>Unit I</b>	Introduction to Yarn Manufacturing, Process sequence of combed and carded yarn, Impurities in cotton fibre	3	13
	Mixing: Objectives of mixing and blending, Formulation of cotton mixing – scientific bale management	4	
	Blending: Different method of fiber blending along with their advantages and disadvantages	3	
	Tinting & Application of additional spin finish for manmade fibres	3	
<b>Unit 2</b>	Need for opening and cleaning, Objective of Blow room,	2	12 s
	Various types of opener and cleaner devices: construction and working	4	
	Lap forming mechanism, causes of lap defects and their remedies, blow room accessories. Selection of blow room line for different cotton and man-made fibres	3	
	Calculation of production and cleaning efficiency level attainable in blow room, Modern developments in blow room	3	
<b>Unit 3</b>	Carding: Objective & working principle of carding and stripping and brushing action, Comparison of lap feed and flock feed system	4	13
	Design and construction of carding machine, flexible and metallic card clothing	3	
	Machine parameters of carding, Optimization of process parameter of carding.	3	
	Numerical pertaining to draft and production and Modern developments in carding	3	
<b>Unit 4</b>	Draw Frame: Fundamental concept of Ideal drafting, Difference with Actual drafting, Objective and Working principles of draw frame including constructional details.	3	13
	Different types of drafting roller arrangements, Different weighting system in draw frame	2	
	Relation between drafting & doubling, Drafting irregularities, Remedial steps to control the irregularities	3	
	Autolevelling- Types, Working Principal	2	
	Calculation pertaining to draft and production	2	