

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Textile Engineering

Faculty Name: Ms. Astha

Subject Name: Textile Fibre -I

Year/Semester: 2nd/ 3rd

Subject Code: PCC-TEX-201A

LESSON PLAN

S. No	Topic to be covered	Hours	Total Hours
Unit 1	Introduction to fiber, textile fibre, staple fibre, continuous filaments, classification of textile fibres, essential and desirable properties of textile fibres, comparison of natural and manmade fibers	5	13 hours
	Cotton cultivation and harvesting practices, concept of cotton varieties, ginning, grading, morphological structure of cotton, chemical composition of cotton, physical and chemical properties of cotton fibre.	8	
Unit 2	Jute Fiber: Cultivation, production, physical and chemical properties of Jute fibre and end uses	3	12 hours
	Flax Fiber: Cultivation, production, physical and chemical properties of Flax fibre and end uses	3	
	Hemp Fiber: Cultivation, production, physical and chemical properties of Flax fibre and end uses	3	
	Ramie Fiber: Cultivation, production, physical and chemical properties of Ramie fibre and end uses	3	
Unit 3	Silk fibers: Production of silk (raw), morphological structure of silk, chemical composition, physical and chemical properties of silk, various varieties of silk, types of thrown silk, silk degumming	6	12 hours
	Wool fiber: Sheep rearing, wool shearing, grading baling, Morphological structure, physical and chemical properties of wool.	6	
Unit 4	Regenerated fibers– Introduction to regenerated fibres, degree of polymerization, polymer preparation, and spinning process of regenerated fibre	4	14 hours
	Viscose Rayon : Physical and chemical properties, its applications	2	
	Secondary Acetate : Physical and chemical properties, its applications	2	
	Triacetate : Physical and chemical properties, its applications	2	
	Modified viscose rayon, cuprammonium rayon	2	
	A brief introduction of protein regenerated fibre, corn and groundnut fibre	2	