

PANIPAT INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Textile Engineering

Faculty Name: - Ms. Neha

Subject Name: - Statistics Analysis

Year/Semester: - 4th/7th

Subject Code: - OEC-TEX-417A

Lesson Plan

Unit No.	Topics To Be Covered	Hours	Total Hours
Unit I	Basic concepts of statistics, Collection sampling	2	11
	Classification and graphical representation of data	1	
	Measures of central tendency	2	
	Numerical problems	1	
	Population and sample, Types of sampling, Sampling classification	3	
	Control charts	2	
Unit II	Measures of dispersion quartile deviation, standard deviation	4	15
	Moments (Definition, properties and associated numerical only)	2	
	Skewness and Kurtosis(Definition, properties and associated numerical only)	2	
	Theory of Probability Different approaches to probability	3	
	Additive and Multiplicative, Laws of probability, Baye's theorem	4	
Unit III	Definition of Statistical hypothesis	1	11
	Null hypothesis, type I and II errors and levels of significance	2	
	Standard error and sampling distribution	1	
	Tests of significance for large and small samples	2	
	Problems based on χ^2 -test for goodness of fit	2	
	Definition of Statistical hypothesis, Student's t-Test	1	
	Analysis of variance (one way and two way classifications.	2	
Unit IV	Karl Pearson's coefficient of correlation, factorial design and analysis	2	6
	Rank correlation coefficient and lines of regression	2	
	Numerical problems, factorial design and analysis	2	