

**PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES**

**LESSON PLAN**

**Name:- Dr. Balbir Singh**

**Subject Name: Probability & Statistics**

**Branch/ Semester:- 2<sup>nd</sup> Sem.**

**Subject Code:- BS-134A**

Description of Topic	Lecture		Assignments	Target outcome
	Lecture no.	Lecture plan date		
<b>UNIT 3:</b> Mean and related problems on various methods	1	14/2/2023	Assignment-1	CO-1, CO-4
Median, Mode, and related problems	2	16/2/2023		
Quartiles, Geometric mean, and related problems	3	27/2/2023		
Harmonic mean, Range, and Quartile Deviation	4	28/2/2023		
Mean Deviation and related problems	5	02/3/2023		
Standard Deviation and related problems	6	04/3/2023		
coefficient of variation, Skewness, and Kurtosis	7	06/3/2023		
Moments	8	09/3/2023		
Correlation, Coefficient of correlation	9	13/3/2023		
Correlation, Coefficient of correlation contt....	10	15/3/2023		
Correlation, Coefficient of correlation contt....	11	16/3/2023		
Lines of regression	12	20/3/2023		
Lines of regression Contt.....	13	22/3/2023		
Rank correlation.	14	23/3/2023		
Test of Unit 3	15	24/3/2023		
<b>UNIT 1:</b> Introduction	16	31/3/2023	Assignment-2	CO-1, CO-2
Additive law of probability	17	03/4/2023		
Conditional Probability, Independent Events	18	04/4/2023		
Bayes' Theorem	19	05/4/2023		
Problems related to the above topics	20	06/4/2023		
Discrete random variables, the probability distribution	21	10/4/2023		
Probability mass function and distribution function	22	11/4/2023		
Expectation, Moments	23	12/4/2023		
The variance of discrete random variables	24	13/4/2023		
The standard deviation of discrete random variables	25	17/4/2023		

Test of Unit 1	26	18/4/2023		
<b>UNIT 2:</b> Continuous random variables, the probability distribution	27	19/4/2023		
Probability density function and distribution function	28	20/4/2023		
Expectations and related problems	29	21/4/2023		
Moments and related problems	30	24/4/2023		
The variance of Continuous random variables & related problem	31	25/4/2023		
The standard deviation of Continuous random variables & related problems	32	26/4/2023		
Binomial Distribution, - evaluation of statistical parameters for the distributions, and related problems	33	27/4/2023		
Poisson Distribution, - evaluation of statistical parameters for the distributions, and related problems	34	28/4/2023	Assignment-3	CO-1, CO-3
Normal Distribution, - evaluation of statistical parameters for the distributions.	35	01/5/2023		
Normal Distribution, - problems	36	02/5/2023		
Test of Unit 2	37	03/5/2023		
<b>UNIT 4:</b> Curve fitting by the method of least squares: Fitting of a straight line	38-39	04/5/2023		
Curve fitting by the method of least squares: Fitting of second and Higher degree	40	08/5/2023		
Fitting of a geometric or power curve of the form $y = ax^b$	41	10/5/2023		
Fitting of an exponential curve of the form $y = ab^x$	42	11/5/2023		
Test of significance: Basic terminology	43	12/5/2023	Assignment-4	CO-1, CO- 5
Large sample test for single proportion difference of proportions	44	15/5/2023		
single mean, the difference between means	45	16/5/2023		
Small samples test for a single mean, the difference in means	46-47	17/5/2023		
Chi-square test for goodness of fit	48-49	18/5/2023		