Panipat Institute of Engineering & Technology
Department of CSE-AI&DS
LESSON PLAN

Subject: ASAAI **Subject code: ES-CS-AIDS-304A**
Session: Jan.-June 2023-24 **Semester: 6th**

Sr. No.	Topic	CO Covered	Assignment No.	Teaching Methodology
1	**Unit-1: Introduction** Introduction to basic concepts of Statistics,	CO1	1	On Board
2	The Scientific Method,	CO1	1	On Board
3	Basic Steps of the Research Process,	CO1	1	On Board
4	Experimental Data and Survey Data,	CO1	1	On Board
5	Populations and Samples,	CO1	1	PPT
6	Census and Sampling Method,	CO1	1	PPT
7	Parameter and Statistic,	CO1	1	On Board
8	Independent and Dependent Variables,	CO1	1	On Board
9	Examining Relationships,	CO1	1	On Board
10	Introduction to SPSS Statistics.	CO1	1	On Board
11	Introduction to SPSS Statistics.	CO2	1	On Board
12	**Unit II:** Introduction, Types of Data, Data Transformation,	CO2	2	PPT
13	Summarizing Data: Graphical Methods,	CO2	2	PPT
14	Summarizing Data: Measures of Central Tendency,	CO2	2	PPT
15	Summarizing Data: Measures of Dispersion,	CO2	2	PPT
16	Levels of Measurement, Random Variables and Probability Distributions,	CO2	2	On Board
17	Discrete and Continuous Random Variable,	CO2	2	On Board
18	Making Inferences about Populations from samples,	CO2	2	On Board
19	Estimator and Estimate, Confidence Interval for Population Mean (Large Sample).	CO3	2	On Board
20	**Unit III:** Introduction, Null and Alternative Hypothesis,	CO3	1	On Board
21	Type I and Type II Error, The Procedure of Hypothesis Testing;	CO3	1	On Board
22	Hypothesis Testing of a Population Mean: Sample, a proportion (One Sample),	CO3	1	On Board
23	Population Variance, Population Mean: Two Independent Samples(),	CO3	1	On Board
24	Dependent Samples (Paired Samples),	CO3	1	On Board
25	Two Population Proportion,	CO3	1	On Board
26	Two Population Variances; Analysis of Variance (ANOVA).	CO3	1	On Board
27	**Unit IV:** Introduction, Types of Correlation, Karl Pearson Coefficient Correlation,	CO4	3	On Board

28	Spearman’s Rank Order Correlation,	CO3	3	On Board
29	Partial Correlation,	CO4	3	On Board
30	Residuals and Plots, Simple Linear Regression,	CO4	3	On Board
31	Multiple Regression Model, Repeated Measures,	CO4	3	On Board
32	Non-linear Regression,	CO4	3	On Board
33	Polynomial Regression Models,	CO4	3	On Board
34	Decision Trees,	CO5	3	On Board
35	Neural Networks,	CO5	3	PPT
36	Cluster Analysis,	CO5	3	On Board
37	Factor Analysis.	CO5	3	Video lecture