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

Subject: Machine Learning with Python   **Subject code:** PC-CS- AIDS-307A

Session: Aug.- Dec 2023-24   **Semester:** 5TH

S No	Topic	CO Covered	Assignment No.	Teaching Methodology
1	Introduction to Python and its usage	CO1	Assignment-1	White Board
2	List	CO2		White Board
3	Dictionaries	CO2		Smart Board, White Board
4	Conditions	CO1		White Board
5	Branching	CO1		Smart Board, White Board
6	Loops	CO1		White Board
7	Functions	CO1		White Board
8	Objects and Classes	CO1		White Board
9	Revision			White Board
10	Introduction to Machine Learning	CO2	Assignment-2	Smart Board, White Board
11	Working with Data in Python	CO2		Smart Board, White Board
12	Reading files with open	CO2		Smart Board, White Board
13	writing files with open	CO2		Smart Board, White Board
14	loading data with Pandas	CO2		Smart Board, White Board
15	working with and Saving data with Pandas	CO2		Smart Board, White Board
16	Applications of Machine Learning, Supervised vs Unsupervised Learning,	CO2		Smart Board, White Board
17	Python libraries suitable for Machine Learning	CO2		Smart Board, White Board
18	Revision			Smart Board, White Board
19	Regression Classification	CO3	Assignment-3	Smart Board, White Board
20	Linear and nonlinear Regression	CO3		Smart Board, White Board

21	Model evaluation methods, K-Nearest Neighbor	CO3		Smart Board, White Board
22	Decision Trees	CO3		Smart Board, White Board
23	Logistic Regression,	CO3		Smart Board, White Board
24	Support Vector Machines, Unsupervised Learning,	CO3		Smart Board, White Board
25	K-Means Clustering, Hierarchical Clustering	CO3		Smart Board, White Board
26	Density-Based Clustering	CO3		Smart Board, White Board
27	Content based recommender systems	CO4		Smart Board, White Board
28	Collaborative Filtering	CO4		Smart Board, White Board
29	Revision			Smart Board, White Board
30	The purpose and the origin of System ML	CO5		Smart Board, White Board
31	List the alternatives to System ML,	CO6		Smart Board, White Board
32	Compare performances of System ML with the alternatives	CO5	Assignment-4	Smart Board, White Board
33	Use ML Context to interact with System ML (in Scala)	CO5		Smart Board, White Board
34	Describe and use a number of System ML algorithms.	CO5		
35	Revision			Smart Board, White Board
36	Revision			