LESSON PLAN

Subject: Data Mining and Integration using R   **Subject code: MCA-20-32**

Semester: 3rd

S. NO	Topic	No. of Lectures	CO Covered	Teaching Methodology
1	History, Characteristics, Architecture for a Data Warehouse	1	CO1	PPT
2	Data Mining Introduction, Motivation, Importance, Knowledge Discovery Process	1		PPT
3	Data Mining Functionalities	1		PPT
4	Interesting Patterns	1		WHITE BOARD
5	Classification of Data Mining Systems, Major issues	1		PPT
6	Overview of Data Preprocessing, Data Cleaning	1		PPT
7	Data Integration, Data Reduction	1		WHITE BOARD
8	Data Transformation and Data Discretization, Outliers	1		PPT
9	Clustering- Requirement for Cluster Analysis	1	CO2	PPT
10	Clustering Methods- Partitioning Methods	2		PPT
11	Hierarchical Methods	1		PPT
12	Decision Tree- Decision Tree Induction, Attribute Selection Measures	1		PPT
13	Tree Pruning	1		PPT
14	Association Rule Mining- Market Basket Analysis	1		PPT
15	Frequent Itemset Mining using Apriori Algorithm	1		WHITE BOARD
16	Improving the Efficiency of Apriori	1		PPT
17	Concept of Nearest Neighborhood	1		PPT
18	Neural Networks	2		WHITE BOARD
19	Architecture of Data Integration	1	CO3	PPT
20	Describing Data Sources Overview and Desiderate	1		PPT
21	Schema Mapping Language	1		WHITE BOARD
22	Access Pattern Limitations	1		PPT
23	String Matching ,Similarity Measures	1		PPT
24	Scaling Up String Matching	1		PPT
25	Schema Matching and Mapping Problem Definition, Challenges	1		PPT
26	Matching and Mapping Systems	1		PPT
27	Data Matching Rule Based Matching, Learning Based Matching	1		PPT
28	Matching by Clustering	1		WHITE BOARD
29	R Introduction and Advantages	1	CO4	WHITE BOARD
30	Working with Directories and Data Types in R	1		WHITE BOARD
31	Control Statements, Loops	1		WHITE BOARD
32	Data Manipulation and integration in R	1		WHITE BOARD
33	Data Frames	1		WHITE BOARD
34	R Functions for Data in Data Frame	1		WHITE BOARD
35	Loading Data Frames	1		WHITE BOARD
36	Decision Tree packages AND Issues	1		WHITE BOARD
37	Hierarchical and K-means Clustering functions in R	1		WHITE BOARD
38	Mining Algorithm interfaces in R	1		WHITE BOARD