Data Warehousing and Data Mining

UNIT - I	INTRODUCTION	Hrs
Data Warehouse - Multidimensional Data Model - Data Warehouse Architecture - Steps for the Design and Construction of Data Warehouse - A Three-Tier Data Warehouse Architecture - OLAP Server Architecture - Data Warehouse Implementation.		9
UNIT - II	DATA PREPROCESSING	Hrs
Data Preprocessing: An Overview - Data Cleaning - Data Integration - Data Reduction - Data Transformation - Data Discretization and Concept Hierarchy Generation		9
UNIT - III	CLASSIFICATION	Hrs
Basic Concepts - Decision Tree Induction - Attribute Selection Measures - Tree Pruning - Bayesian Classification Methods: Baye's Theorem - Naive Bayesian Classification - Rule-Based Classification: Using IF-THEN Rules for Classification - Rule Extraction from a Decision Tree - Techniques to Improve Classification Accuracy		9
UNIT - IV	CLUSTERING	Hrs
Cluster Analysis - Requirements for Cluster Analysis - Basic Clustering Methods - Partitioning Methods - k-Means - k-Medoids - Hierarchical Methods - Agglomerative Versus Divisive Hierarchical Clustering - BIRCH -ROCK - Chameleon - Density-Based Methods - DBSCAN - OPTICS - Grid-Based Methods - STING - DENCLUE - Clustering High Dimensional Data -CLIQUE - PROCLUS - Evaluation of Clustering		9
UNIT - V	DATA MINING METHODOLOGIES, APPLICATIONS AND TRENDS	Hrs
Mining of Complex Data Objects - Other Methodologies to Data Mining - Data Mining Applications - Data Mining and Society - Data Mining Trends		9
Total: 45 hours		