

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		