

UNIT – I: DATA WAREHOUSING : Data warehousing Components –Building a Data warehouse–
Data Extraction, Cleanup, and Transformation Tools –Metadata.

UNIT – II: Data Warehouse and OLAP Technology for Data Mining Data Warehouse,
Multidimensional Data Model, Data Warehouse Architecture, Data Warehouse
Implementation.

UNIT – III: Introduction To Data Mining: Fundamentals of data mining, Data Mining Functionalities,
Classification of Data Mining systems, Major issues in Data Mining.

Data Pre-Processing: Needs Pre-processing the Data, Data Cleaning, Data Integration and
Transformation, Data Reduction, Discretization and Concept Hierarchy
Generation.

UNIT – IV: ASSOCIATION RULE MINING AND CLASSIFICATION: Mining Frequent Patterns,
Associations and Correlations – Mining Methods – Mining Various Kinds of Association
Rules – Correlation Analysis Classification- Basic Concepts - Decision Tree Induction
- Bayesian Classification – Rule Based Classification – Classification by Back
propagation – Associative Classification.

UNIT – V: CLUSTERING AND APPLICATIONS AND TRENDS IN DATA MINING :
Cluster Analysis - Types of Data – Categorization of Major Clustering Methods - K- means
– Partitioning Methods – Hierarchical Methods - Density-Based Methods -Clustering
High Dimensional Data- Outlier Analysis.

TEXT BOOKS:

1. Data Mining Concepts and Techniques Jiawei Han and Micheline Kamber Morgan Kaufman Publications.

REFERENCE BOOKS:

1. Data Mining Introductory and Advanced Topics, Margaret H Dunhan, Pearson Education.
2. Data Mining, Ian H. Witten Eibe Frank, Morgan Kaufman Publications.