

SYLLABUS

DATA MINING CONCEPTS & TECHNIQUES-Sem 3

UNIT I: AN IDEA ON DATA WAREHOUSE

Data mining-KDD versus data mining, Stages of the Data Mining Process-Task primitives.. Data Mining Techniques Data mining knowledge representation.

UNIT II: DATA MINING QUERY LANGUAGES

Integration of Data Mining System with a Data Warehouse- Issues, Data pre-processing - Data Cleaning, Data transformation - Feature selection - Dimensionality reduction

UNIT III: CONCEPT DESCRIPTION

Characterization and comparison What is Concept Description, Data Generalization by Attribute-Oriented Induction(AOI), AOI for Data Characterization, Efficient Implementation of AOI.

Mining Frequent Patterns, Associations and Correlations: Basic Concepts, FrequentItemset Mining Methods: Apriori method, generating Association Rules, Improvingthe Efficiency of Apriori, Pattern-Growth Approach for mining Frequent Item sets.

UNIT-IV: CLASSIFICATION BASIC CONCEPTS

Basic Concepts, Decision Tree Induction: Decision TreeInduction Algorithm, Attribute Selection Measures, Tree Pruning. Bayes Classification Methods.

UNIT-V: CLASSIFICATION BY BACK PROPAGATION

Multi-Layer Feed Forward Neural Network. Support Vector Machines: Cases when the data are linearly separable and linearly inseparable.

Cluster Analysis: Cluster Analysis, Partitioning Methods, Hierarchal methods, Density based methods-DBSCAN.