Data Ware Housing & Data Mining

Theory L/T (Hours per week): 4/0, Credit: 4

MODULE-I

Introduction to Data Mining, Paradigm, Computing Paradigm, Business Paradigm, Business Problem Definition, Operational & informational Data stores, Data Warehouse Definition & characteristics, Data Warehouse Architecture, Client /Server Computing Model & Data Warehouse, Overviews of Client/server Architecture, Server specialization in client/server computing Environment, Server Function, Server H/W Architecture RISC verses CISC, Multiprocessor System, SMP implementation, Parallel Processors and Cluster Systems,

MODULE-II

Distributed Memory Architecture, Cluster System, Advances in Multiprocessing Architecture, Server Operating System, Operating System Implementation
Data Warehousing Component, Overall Architecture, Data Warehouse Database Sourcing, Acquisition, Cleanup &transformation Tools, Metadata, Access Tools, Data Marts, Data Warehouse Administration and Management, Information Delivery System, Business & Data Warehouse,

MODULE-III

Business Consideration :Return& Investment, Design Consideration, Implementation Consideration, Benefits of Data Warehousing, Mapping the Data Warehouse to Multi Processor Architecture, Database architecture for Parallel Processing, Shared Memory Architecture, Shared Disk Architecture, Shared Nothing Architecture, Combined Architecture

MODULE-IV

Introduction to Data Mining, Measuring Data Mining effectiveness: Accuracy , speed & Cost, Embedding Data Mining into your Business Process, Discovery verses Prediction, Comparing the Technology, Business Score Card, Application Score Card, Algorithm Score card, Decision Tree, CART, CHAID, Growing the Tree, When does the Tree stop growing, Strength & Weakness, Algorithm Score Card, Neural Network, Different types of neural N/W, Kohonen feature maps, Nearest Neighbor and Clustering, Business Score Card Where to use clustering & nearest neighbor prediction, Clustering for clarity, Clustering for out layer analysis, Nearest Neighbor for prediction, Application Score Card

Text Books :

Data Warehousing, Data Mining & OLAP by Alex & Stephen, McGraw Hill.