

I Year I Semester
Code: 17CS106

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DATAWAREHOUSINGANDDATAMINING

UNIT1: DATAWARE HOUSING:

Dataware housing Components–Building a Data ware house–Mapping the Dataware house to a Multiprocessor Architecture–DBMS Schemas for Decision Support–Data Extraction, Cleanup, and Transformation Tools –Metadata.

UNITII: BUSINESS ANALYSIS:

Reporting and Query tools and Applications–Tool Categories–The Need for Applications–Cognos Impromptu – Online Analytical Processing (OLAP) – Need – Multi dimensional Data Model –OLAP Guidelines – Multi dimensional versus Multi relational OLAP– Categories of Tools – OLAP Tools and the Internet.

UNITIII: DATAMINING:

Introduction – Data – Types of Data – Data Mining Functionalities – Interestingness of Patterns –Classification of Data Mining Systems–Data Mining Task Primitives–Integration of a Data Mining System with a Data Ware house–Issues –Data Preprocessing.

UNITIV: ASSOCIATION RULE MINING AND CLASSIFICATION:

Mining Frequent Patterns, Associations and Correlations–Mining Methods–Mining various Kinds of Association Rules – Correlation Analysis – Constraint Based Association Mining – Classification and Prediction – Basic Concepts – Decision Tree Induction – Bayesian Classification – Rule Based Classification– Classification by Back propagation – Support Vector Machines –Associative Classification– Lazy Learners–Other Classification Methods–Prediction.

UNITV:CLUSTERING AND TRENDS IN DATAMINING:

Cluster Analysis–Types of Data–Categorization of Major Clustering Methods–K-means–Partitioning Methods–Hierarchical Methods–Density-Based Methods–Grid Based Methods–Model-Based Clustering Methods – Clustering High Dimensional Data – Constraint – Based Cluster Analysis– Outlier Analysis – Data Mining Applications.

TEXTBOOKS:

1. Alex Berson and Stephen J.Smith, “DataWare housing, Data Mining and OLAP”, TataMcGraw–Hill Edition, Thirteenth Reprint 2008.
2. Jiawei Hanand Micheline Kamber, “Data Mining Concepts and Techniques”, Third Edition, Elsevier, 2012. AULibrary.com

REFERENCES:

1. Pang-Ning Tan, Michael Steinbach and VipinKumar, "Introduction to Data Mining", Person Education, 2007.
2. K.P.Soman, Shyam Diwakar andV.Aja,"Insight into Data Mining Theory and Practice", Eastern Economy Edition, Prentice Hall ofIndia,2006.
3. G.K. Gupta, "Introduction to Data Mining with Case Studies", Eastern Economy Edition, Prentice Hall of India, 2006.
4. Daniel T.Larose,"Data Mining Methods and Models", Wiley-Interscience,2006.