

## MNG 402 D

### DATAMINING FOR BUSINESS INTELLIGENCE

**Credit: 4, Class Hours: 40**

**Module-I:** Data Warehousing Fundamentals Business Intelligence, Data Warehouses, Data mining, Pivot Tables, Relations, attributes, relationships Database Normalization, normal forms, Denormalization of tables, SQL ,Transactional databases vs. data warehouses Multidimensional Model for data warehouses, Differences between traditional star schema and SAP BW star schema ,Dimension and fact tables, Modeling and creating the Info Cube (star schema) in SAP Administrator Workbench, Modeling the Data Ware House Data sources, operational data store, data marts, Characteristics and key figures, Creating Info Objects, Building Info Cubes.

**Module-II:** Extraction from data sources such as SAP ERP, Flat file extraction, Defining and using Persistent staging areas PSA, Data Store Objects DSO, Loading master data, loading transactional data.

**Module-III:** Navigating in reports, Designing queries in the Query Designer, Using Info Providers and Info Objects for queries, Calculated and restricted key figures in BEx, Properties and attributes of characteristics, Hierarchies, Query properties and navigation, Exceptions and Conditions

**Module-IV :** Data Mining Statistical techniques in data mining, Preparing data for mining, Association analysis, market basket analysis, Clustering, Classification, Regression, Decisions Trees; Row vs. columnar databases, In-memory databases.

**Module – V:** The concerned faculty shall have the liberty to define the course contents under this module and teach students accordingly.

#### **Reference Book:**

1. Data Mining: Concepts and Technique, J. Han & M. Kamber, Morgan Kaufmann
2. Mastering Data Mining: The Art and Science of Customer Relationship Management, M. J. A. Berry and G. Linoff, Wiley Computer Publishing