## DATABASE MANAGEMENT AND INFORMATION TECHNOLOGY

**Module1:** Database system Design: overview of Database Management 'Storage and file organisation' Index structure entity- relationship model; An architecture of database system; relational model; Relational operators; Functional dependencies & normalization; SQL: A relational database language transaction processing concepts; Concurrency control

**Module 2:** Security and Data Warehousing: Recovery system; Database Security/ authorization; Distributed database; object oriented database; Network model; Hierarchical model; Data warehouse; Environment & Design, Data warehousing & technology, Web-enabled data warehouse.

**Module 3:** Application of Database Management: Data mining process, Management applications of data mining, Spatial, geographic & multimedia database, New applications; Distributed IS& World Wide Web linkages

**Module 4:** Management and Organisation: Relating IT to organizational leadership, culture, structure, policy and strategy; programmer productivity. Managing legacy systems; Evaluation centralization-decentralization issues; IT forecasting.

## **References:**

Date C.J; An introduction to Database Concepts, Addison Wesley, Massachusetts

Desai Bipin; An Introduction to Database System, Galgottia Publications, New Delhi

Elmasri and Nawathe; Fundamentals of Database System, Pearson Education, Asia