# PAPER – XXXII – ELECTIVE – III – DATA WAREHOUSING

### UNIT – I

Introduction – Road map – Delivery process system processes, typical process flow within a data warehouse, Extract & Load process, clean & transform data, Backup & archive process & Query management process – Process Architecture, Load manager, Ware house manager & Query manager.

## UNIT – II

Database schema, star flake schemas, Identifying facts & dimensions, Designing fact tables, Designing Dimension Tables, Designing Star flake Schema, Multi-dimensional schemas – Partition Strategy, Horizontal & Vertical Partitioning – Aggregations Introduction, What is an aggregation? - Data Marting, Designing Marts.

### UNIT – III

Metadata, Data transformation & load, Data Management – System Managers, Data ware house process managers Load manager –Hardware architecture – Server hardware, Network Hardware, Client hardware.

#### UNIT – IV

Security, Performance Impact of Security – Backup Strategies, Testing the Strategy – Service Level agreement, Definition of types of system, Defining the SLA – Operating the data warehouse – Introduction – Capacity Planning Estimating the load.

#### UNIT – V

Tuning the data warehouse, Introduction, Assessing performance, Tuning the data load, Tuning queries – Testing the data warehouse, developing the test plan, testing backup recovery, testing the data base, testing the application, Logistics of the test – Ware house futures.

#### Text Book:

Sam Anahory, Dennis Murray, "Data Warehousing in the real world (A Practical guide for building decision support systems)", 1997.

## **Reference Book:**

C.J.DAJE, "An Introduction to Data Base Systems", Addision – Wesley Publishing Company, New York, 2000.