

ELECTIVE- IT (Information Technology)
DATA BASE MANAGEMENT SYSTEMS

Subject Code- ITM 2

Max. Marks (Ext. Exam): 80

Min. Pass Marks : 32

OBJECTIVES:

This course has been designed to introduce the participants with the applications of systems designed to manage the data resources of organizations. It provides the participants an opportunity to study the hands on implementation of a database in corporate environment.

COURSE CONTENTS :

- UNIT-I Data Processing Concepts; Data Structures; File Processing and Access Methods; Taxonomy of Data Management Systems; Various Data Base Management Models.
- UNIT-II Evaluation of Commercially Available Software Systems with Managerial Emphasis on Tradeoffs Among Cost, Capacity, and Responsiveness.
- UNIT-III Functions of Transaction Processes and their Communications Interface with Database Management Systems; Distributed Data Processing Systems and a Need for Database Environment for such a system. Physical Database Structures; Normalization and Logical Design.
- UNIT-IV Query Languages for Relational Database Management Systems; Study of a Relational Database Management Systems for Successful Implementation of Distributed Systems; Structured Query Language. Distributed Data Base Systems; On-line Data Bases; Object Oriented Data Bases.
- UNIT-V Managerial Issues Related to Data Base Management; Evaluation Criteria; Performance Analysis; Recovery Issues; Re-organization Problems; Implementation and Maintenance Issues; Database Administration.

SCHEME OF EXAMINATION:

Total Marks : (Internal 20, External 80) = 100 marks

PATTERN FOR EXTERNAL EVALUATION:

Sec. A: (Short Answers)	4 out of 8	4 x 8 = 32 Marks.
Sec. B: (Essay type & case)	3 out of 5	3 x 16 = 48 Marks.

SUGGESTED READINGS :

1. Coad, Peter & Edward, Yourdon, 'Object – Oriented Analysis'. 2nd ed. , Englewood Cliff, New Jersey, Yourdon Press, 1991.
2. Kroenke, David M. 'Databases Processing: Fundamentals, Design, Implementation'. 4th ed. New York, McMillan, 1992.
3. McFadden Fred R. & Hoffer, Jeffrey, A. 'Database Management'. 3rd ed. Redwood City, Benjamin-Cummings, 1991.
4. Pratt, Philip J.A. Guide to SQL. Boston, Boyd and Fraser, 1990.
5. Salemi, Joe. Client / Server Data Bases. Emeryville, California, Ziff-Davis Press, 1993.
6. Systems and Developers Manuals for an RDBMS Such as Oracle.