

**GENERAL AWARENESS COURSE II: 3A12CSC DATABASE MANAGEMENT
SYSTEM**

SEMESTER	COURSE CODE	HOURS PER WEEK	CREDIT	EXAM HRS
3	3A12CSC	3	3	3

COURSE OUTCOME

CO1: Familiar with organized data collection.

CO2: Able to design data bases.

CO3: Skilled to normalize the data bases.

CO4: Capable to frame queries for various purposes

Unit I:

Introduction – purpose of Database systems. View of Data, Data Models, transaction management, database structure, DBA, Data Base Users.

(10 Hrs)

Unit II:

E-R model, Basic concepts; design issues; Mapping Constraints; Keys; Primary, Foreign, candidate, E-R diagram; Weak entity set; Extended E-R features. Normal forms – 1NF, 2NF, 3NF and BCNF; functional dependency, Normalization.

(15 Hrs)

Unit III:

SQL: database languages; DDL- create, alter, drop; DML- Insert , Select, update, Delete; DCL ,TCL,SQL Functions, Data types in SQL; Creation and deletion of database and user .Developing queries and sub queries; Join operations in Detail .

(15 Hrs)

Unit IV:

Integrity constraints, views, Trigger and Sequences, Relational model – Structure of Relational database. Relational Algebra; Fundamental operations; Relational calculus; Tuple and domain calculus.

(14 Hrs)

Books for Study:

1. Database System Concepts; Silberschatz, Korth and Sudarsan, 5th Edn; McGraw Hill.
2. The Database Book: Principles and Practice Using MySQL; Gehani; University Press.

Books for Reference:

1. Fundamentals of Database systems, E. Navathe, 7th edn, Pearson Education.
2. Introduction to data base systems ITL Education Solutions Limited
3. DBMS and ORACLE, Dr. S.B Kishor, 2nd Ed, DAS GANU Prakashan.

Marks including choice:

Unit	Marks
I	13
II	17
III	14
IV	16