## Database Management Systems

### Unit-I

**Introduction to DBMS:** Data, Database, Definition & Characteristics of DBMS; Database System Vs File System.

Advantages & Disadvantages of DBMS; Database Users.

### Unit-II

### DBMS Architecture and Types:

Data models, Schemas and Instances. 3-Schema Architecture of DBMS; Data independence;

Database Languages and Interfaces; Introduction to Types of DBMS.

### Unit-III

**Data Modeling:** E-R Model: Concept, ER Modeling Notations: Entity set, attributes, Relationships and keys.

Relational Data Model; Concept and definitions of RDBMS,

Relational model Constraints (Entity Integrity, Referential Integrity, Key Constraints, Domain Constraints),

### Unit-IV

**Relational Database Design:** Introduction to Normalization; Functional dependencies; Transitive dependencies, Normal Forms: 1NF, 2NF & 3NF.

### Introduction to SQL
SQL Data Types.
Basics of SQL:          DDL,DML,DCL,
DDL Commands:       create, alter, drop, truncate
DML Commands:      select, insert, delete and update

### References:

1. **Elmasri, Navathe** "Fundamentals of Database Systems", Pearson Education.
2. **Korth, Silbebschatz, Sudarshan,**"Database System Concepts",TMH.