# **DBMS IMPORTANT TOPICS**

## Module 1:

- Characteristics of DBMS
- Structured, semi-structured & unstructured data
- 3 schema architecture
- Attributes and its types
- Strong & Week entity

#### Module 2:

- E-R diagram to table
- Relational algebra operations
- DDL Commands

#### Module 3:

- DML Commands
- Nested Queries
- Aggregation, grouping, views,
- Problem of bfr
- Indexing & types of indexing
- B trees & B+ trees
- Hashing & typs of hashing

### Module 4:

- Normalization
- Lossy & Lossless decomposition (algorithms)
- Functional dependency

## Module 5:

- Transaction ACID properties states
- System log
- Serial schedule concurrent serializable
- Recoverable cascadeless schedule
- Locking 2phase locking
- Log based recovery and deferred DB modification
- NO SQL; main characteristics of key value & document DB
- Characteristics of column DB & graph DB