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DATABASE MANAGEMENT SYSTEMS

Unit-I

1. What is Data model? Explain different types of Data models?

2. What is DBMS? Explain advantages, disadvantages of DBMS?

3. Explain applications of DBMS?

4. Explain about the structure of Database Management system?

5. What is Data Abstraction? Explain three Level Schema architecture?

6. Explain about Client-Server Architecture?

7. Write short notes on 3-Tier Architecture?

8. Discuses any five roles and responsibilities of Database administrator?

9. Differences between DBMS and FLAT file system?

Unit-II

1. Brefly explains about the Concept of Domain?

2. Explain about Different Key Constraints in DBMS?

3. What is SQL? Explain about different data types in SQL?

4. Explain various types of Operators in SQL?

5. Explain about DML and DDL commands in SQL?

6. Write short notes on different types of functions in SQL?

7. Explain about Simple Database Schema?

Unit-III

1. Define Attribute? Explain different types of attributes?

2. What is Relationship? Discuss about Different types of Relationships?

3. Explain about Generalisation and Specialization using ER Model?

4. What is SQL JOIN? Explain types of Joins SQL?

5. Write short notes on SQL Views?

6. Explain set operations in SQL?

7. Explain Relational operations in SQL.

8. What is aggregation? Explain aggregate Functions in details?

9. What is Sub query? Write a suitable example?

Unit-IV

1. What is Normalization? Explain concept of normalization?

2. What is Normal form? Explain about 1NF, 2NF and BCNF?

3. Write short notes on Surrogate Key?

4. Explain about 4NF, 5NF Normal forms?

5. What is Decomposition? Explain various properties of decomposition?

6. What is Functional Dependency? Explain various types of functional dependencies?

Unit-V

1. What is Transaction? Explain various types of transaction states?

2. Explain ACID properties in transaction?

3. Explain concurrent Execution, Serializability and Recoverability?

4. Explain Recovery Algorithm?

5. Explain about Conflict Serializability and view serializability?

6. What is database Recovery? Explain Shadow paging in detail?

7. Explain about the measures that are to be considered for comparing the performance of various file organization techniques.

8. Explain in detail B+ tree file organization.

9. Write short notes on: i) Primary index ii) Clustered index iii) Secondary index.

10. What is static hashing? What rules are followed for index selection?

11. Explain various anomalies that arise due to interleaved execution of transactions with suitable examples.