

## Module-1

### PART A-2 Marks

1. Define the terms Data base and DBMS
2. Distinguish Between Weak and Strong Entity Set
3. What you mean by data independence?
4. Define the terms entity and Attribute.
5. Define Meta Data
6. Who is a Data base Designer?
7. Explain the term Relationship in ER Model
8. Define Data Model
9. Expand DBA
10. Define the terms Schema and Instances
11. What you mean by entity, Entity Type and Entity Set
12. Explain the Relevance of Data Dictionary in Data Base
13. Define attribute and Key Attribute
14. What is Derived attribute? Give Example.
15. Define Schema instance (Instance)
16. What are the three Levels of Data Abstraction?
17. What are the Basic units of ER Diagram?

### PART B-5 Marks

1. What you mean by Data Independence? What are its type?
2. Explain the role of DBA
3. What are the different data models available
4. Explain 3 Schema Architecture
5. Explain the advantages of DBMS
6. Structure of ER Diagram with an Example.

### PART C-15 Marks

1. What are the advantages of using DBMS? Explain
2. Write short Notes on ER Diagrams.
3. Explain the architecture of DBMS

4. What is a data model? Explain the different categories of Data Model.
5. Why data base system is superior than file based System.
6. What is a Data Base Describe the advantages and Disadvantages of DBMS.

## Module-2

### PART A-2 Marks

1. What are the difference between Primary Key and Foreign Key?
2. What is a composite Key?
3. Explain the Term Referential Integrity
4. What is entity Integrity?

### PART B-5 Marks

1. Explain the concept of Relational Data Model
2. Explain integrity Constraints and what is the role of a Foreign Key?
3. Discuss the concept of Referential Integrity. Give Examples.
4. Explain the terms Primary Key, Candidate Key, Super Key with examples.
5. Explain the entity integrity and Referential Integrity Rules. How it is implemented in the Data Base.

### PART C-15 Marks

1. Explain relational data model with its constraints

## Module-3

### PART A-2 Marks

1. What do you mean by View?
2. Write the syntax of Join Operation and why it is used?
3. Write the syntax of select command with an example.
4. Compare DDL and DML
5. Explain nested Query with an example.
6. Explain correlated nested Query with an example.
7. What are SQL Statements?
8. What is Equijoin?
9. Explain the use of Alter command in SQL

10. What are Null Values? How nulls are represented in a Data base system
11. What is the use of Like Operator
12. How do you insert data in the data base
13. How does a View differ from a Table?

#### **PART B-5 Marks**

1. Explain the Various DML Commands with Example
2. Explain the various DDL Commands with example
3. What are the different data types available for attributes in SQL?
4. Explain with Examples UPDATE-EXISTS-BETWEEN-INSERT
5. Explain with Examples EXCEPT-UNIQUE-LIKE
6. Explain the JOIN Operation with an Example.
7. Explain Views in SQL
8. Discuss Aggregate Functions with an Example.

#### **PART C-15 Marks**

1. Explain Views in SQL.(Part of Essay)
2. Explain DDL and DML Commands in SQL

### **Module-4**

#### **PART A-2 Marks**

1. Define Functional Dependency
2. Compare fully functional Dependency with Partial functional Dependency
3. What are the difference between 1NF and 2 NF
4. What is data Redundancy?
5. State BCNF
6. What is an ordered Index?
7. Mention the need for Normalization
8. What are indexes?
9. Explain Transitive Dependency.

**PART B-5 Marks**

1. What you mean by Normalization? Compare 3NF with BCNF. Which is better?
2. Define Normalization. What are the different Normal Forms Used?
3. Discuss Primary Index
4. What is insertion anomaly? Give Example
5. Describe BCNF with an Example.
6. What are the three data anomalies that are likely to occur as a result of Data Redundancy?

**PART C-15 Marks**

1. What is functional Dependency? How can you handle it? Explain with an Example.
2. Explain the various indexing structures used in Files
3. Discuss Normalization with first 3 Normal Forms

**PART A-2 Marks**

1. What are Transactions?
2. Explain the Syntax and usage of Commit and Roll Back Statements.
3. Why are locks used in Transactions?
4. What you mean by granting of privileges
5. What you mean by Revoking a Privilege

**PART B-5 Marks**

1. Explain the ACID Properties of transaction
2. Explain the states of a Transaction
3. Write a short note on Privileges.
4. How the data in the data base is protected

**PART C-15 Marks**

1. Explain Granting and Revoking Privileges
2. Explain the Transaction with its Properties and states.
3. What is Data Base Security? What are the different types of Security?