

III B. TECH II SEMESTER REGULAR EXAMINATIONS APRIL - 2023
DATABASE MANAGEMENT SYSTEMS
(CIVIL ENGINEERING)

Time: 3 hours

Max. Marks: 70

Note: Answer **ONE** question from each unit (**5 × 14 = 70 Marks**)

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UNIT-I

1. a) What is Data modeling? Explain relational model. [7M]  
 b) Explain storage manager component. [7M]

(OR)

2. a) Differentiate between File system and Database System. [7M]  
 b) Demonstrate the activities of different database users. [7M]

UNIT-II

3. a) Explain Weak Entity set with example. [7M]  
 b) Explain different types of attributes in DBMS. [7M]

(OR)

4. a) Summarize the features of ER Model with suitable example. [7M]  
 b) Write in detail about different types of constraints. [7M]

UNIT-III

5. a) Discuss in detail the set operations with suitable example. [7M]  
 b) Discuss the simple and complex queries using relational algebra. [7M]

(OR)

6. a) Write and explain the structure of SELECT statement with suitable example. [7M]  
 b) Describe inner join and outer join with example. [7M]

UNIT-IV

7. a) Write short notes on (i) DDL (ii) DML (iii) DCL. [7M]  
 b) Explain different types of queries with example. [7M]

(OR)

8. a) What is NULL? What is its importance? How are these values handled in relational model? [7M]  
 b) What is the difference between DELETE, TRUNCATE and DROP statements in SQL? [7M]

UNIT-V

9. a) What is multi valued dependency? Illustrate 4NF with an example. [7M]  
 b) Why normalization is needed? Explain the process of normalization. [7M]

(OR)

10. a) What is meant by the closure of functional dependencies? Illustrate with an example. [7M]  
 b) Illustrate various normal forms. [7M]

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