

Code No.: AI7210E

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**CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS**

**IV-B.TECH-I-Semester End Examinations (Regular) - November- 2024
DATABASE MANAGEMENT SYSTEMS
(MECH)**

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) Build the structure of DBMS. [2M]
- b) Define attribute and name any two attributes. [2M]
- c) What is Entity Integrity Constraint? [2M]
- d) Explain about Logical Database design. [2M]
- e) Define Triggers. Write the usage of triggers. [2M]
- f) What is Data Redundancy? [2M]
- g) Define View Serializability. [2M]
- h) Explain about Multiple Granularity. [2M]
- i) Discuss about data on external storage. [2M]
- j) What is an Index? Give an example. [2M]

PART-B

(50 Marks)

2. What is Data Model? Discuss types of Data Models. [10M]
- OR**
3. Demonstrate about ER model in detail. [10M]
4. Discuss about types of Integrity Constraints with examples. [10M]
- OR**
5. Discuss in detail about Views and also explain about creating, altering and destroying of views. [10M]
6. Explain with example about a)Aggregate operators b)SET operators. [5M+5M]
- OR**
7. Define Normalization. Explain types of normal forms in detail. [10M]
8. Explain Log Based recovery mechanism from failure state of DBMS. [10M]
- OR**
9. Discuss about Validation Based Protocol in detail. [10M]
10. Explain briefly about Cluster Indexes [10M]
- OR**
11. Discuss in detail about ISAM. [10M]
