Code No.: R22CS301PC   R22   H.T.No. [ ][ ][8][R][ ][ ][ ][ ]

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–I–Semester End Examinations (Regular) - February- 2024
DATABASE MANAGEMENT SYSTEMS
(Common for CSE, CSC)

[Time: 3 Hours]   [Max. Marks: 60]

Note: This question paper contains two parts A and B.
      Part A is compulsory which carries 10 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   (10 Marks)

1. a) Define Data Definition Language?   [1M]
   b) What is Data Independence?   [1M]
   c) Define SELECT operation in Relational Algebra?   [1M]
   d) What is an Enforcing Integrity?   [1M]
   e) Define Third Normal Form?   [1M]
   f) What is Normalization?   [1M]
   g) List the Transaction States?   [1M]
   h) Define Multiple Granularity?   [1M]
   i) What is File organization?   [1M]
   j) Discuss about Cluster indexes.   [1M]

PART-B   (50 Marks)

2. Discuss about Levels of Abstraction in a DBMS.   [10M]
OR
3. State and explain various features of E-R Models.   [10M]

4. Discuss in detail about Views? Explain Creating, Altering, Destroying of Views.   [10M]
OR
5. Discuss about Tuple Relational Calculus In detail.   [10M]

6. What is meant by Functional Dependencies? Discuss about Third Normal Form?   [10M]
OR
7. Define Trigger and explain its three parts? Compare row level and statement level Triggers?   [10M]

8. What is Transaction? Explain the ACID Properties of transactions?   [10M]
OR
9. Explain in detail about Timestamp-Based Protocols?   [10M]

10. Explain in detail about Indexed Sequential Access Methods (ISAM)?   [10M]
OR
11. Explain deletion and search operation in B+ trees?   [10M]

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