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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year I Semester Regular Examinations Feb-2021

DATABASE MANAGEMENT SYSTEMS

(Common to CSE & CSIT)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Write about logical database design (ER to Relational) with suitable examples. 4M
 b Give an example of an Attribute and List various types of attributes. 4M
 c Define Relationship set. 4M

OR

- 2 a Describe truncating a table and dropping a table. 6M
 b Implement the DML Commands – Insert, Select Commands, and update & delete Commands. 6M

UNIT-II

- 3 a Illustrate project, join, select and product set operators with examples. 6M
 b Describe the SET operators with examples. 6M

OR

- 4 Define Join. Explain different types of joins in detail. 12M

UNIT-III

- 5 a Explain the following with suitable examples: 6M
 (i) Non- Loss decomposition (ii) Prime Attributes
 b Illustrate redundancy and the problems that it can cause. 6M

OR

- 6 a Define functional dependencies. How are primary keys related to FD's? 6M
 b What is redundancy? What are the problems caused by the redundancy? 6M

UNIT-IV

- 7 a Demonstrate Conflict Serializability. 6M
 b Illustrate Concurrent execution of transaction with examples. 6M

OR

- 8 Determine the deadlock and 2-phase locking to ensure serializability in concurrency control with locking methods. 12M

UNIT-V

- 9 a Explain different types of locks. 6M
 b Describe Times tamp based locking protocols. 6M

OR

- 10 a What are the factors to be taken into account when choosing a RAID level? 6M
 b Distinguish between fixed length records and variable length records. 6M

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