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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech II Year II Semester Regular & Supplementary Examinations May 2019****DATABASE MANAGEMENT SYSTEMS**

(CSE & CSIT)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)**UNIT-I**

- 1 a Explain about integrity constraints over relations with examples 6M
b Write about logical database design (ER to Relational) with suitable examples? 6M

OR

- 2 a Define Database? Discuss about applications of Database Systems? 7M
b Define Instance and Schema? List different data models and explain? 5M

UNIT-II

- 3 a What is a join operator? Explain about conditional join and natural join with syntax and example. 8M
b Write about triggers and active databases. 4M

OR

- 4 a How can we compare using null values? Explain about logical connectives with examples. 7M
b Discuss about outer joins with examples. 5M

UNIT-III

- 5 a Explain the following with suitable example. 7M
i) Full functional dependency ii) Partial dependency
b Prove that a relation which is in 4NF must be in BCNF. 5M

OR

- 6 a What is meant by multivalued dependency? Explain with example. 7M
b What is redundancy? What are the problems caused by the redundancy? 5M

UNIT-IV

- 7 a What is database Recovery? Explain Shadow paging in detail. 7M
b Explain transaction management with relevant concept? 5M

OR

- 8 a Explain Lock based concurrency control protocols. 8M
b Explain Validation based protocols. 4M

UNIT-V

- 9 a Explain about RAID levels. 7M
b Discuss about static hashing? 5M

OR

- 10 a Explain about Search and Insert in Tree Structured Indexing? 7M
b Explain about Composite Search Keys? Illustrate with example? 5M

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