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Reg. No: ☐☐☐☐☐☐☐☐☐☐☐

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year II Semester Supplementary Examinations Dec 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	Discuss about Database users and Administrators?	5M
	b	Explain about Database languages with examples?	7M

OR

2	a	Draw ER diagram for Ternary Relationship set with suitable example?	5M
	b	Discuss briefly about views?	7M

UNIT-II

3	a	What is meant by integrity constraint? Write about complex integrity constraints in SQL.	6M
	b	What are the variations in relational calculus? Explain with examples.	6M

OR

4	a	Write about relational algebra, Discuss about different operators used in algebra.	8M
	b	Explain in detail about nested queries.	4M

UNIT-III

5	a	Define normalization. List and Explain different normal forms with examples.	7M
	b	If R={A,B,C,G,H,I} and FD's are F={A→B, B→HI, CG→H}. Why R is not in 4NF? Explain.	5M

OR

6	a	Explain about schema refinement in database design	7M
	b	Explain about de-normalization.	5M

UNIT-IV

7	a	Explain ACID properties of transaction management	7M
	b	Explain transaction states with example?	5M

OR

8	a	Explain Time-Stamp based and Thomas Write Rule protocols.	6M
	b	Explain Buffer Management in concurrency control system	6M

UNIT-V

9	a	Explain about B+ Trees Dynamic Indexing?	7M
	b	Explain about linear hashing?	5M

OR

10	a	Compare file organizations?	6M
	b	What is clustered index organization? Illustrate with example?	6M

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