R18

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B. Tech II Year I Semester Supplementary Examinations August-2021
DATABASE MANAGEMENT SYSTEM
(Common to CSE & CSIT)

Time: 3 hours   Max. Marks: 60

PART-A
(Answer all the Questions 5 x 2 = 10 Marks)

1	a	What are composite attributes?	2M
	b	Define Primary key and Candidate key.	2M
	c	What are axioms?	2M
	d	Define transaction management.	2M
	e	Define query optimization.	2M

PART-B
(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

2	a	Define Database. Discuss about applications of Database Systems.	5M
	b	Discuss about the purpose of Database Systems.	5M

OR

3	a	Draw ER diagram for Ternary Relationship set with suitable example.	5M
	b	Discuss about key constraints for Ternary Relationships.	5M

UNIT-II

4	a	Explain in detail about nested queries.	5M
	b	Explain about aggregate operators.	5M

OR

5		How to list and update row in a table? Explain with syntax and examples.	10M

UNIT-III

6	a	Discuss multivalued dependencies with fourth normal form with an example.	5M
	b	Explain join dependencies with fifth normal form with an example.	5M

OR

7	a	Define BCNF. How does BCNF differ from 3NF? Explain with example.	6M
	b	Explain 3NF. Give one example.	4M

UNIT-IV

8		Explain concurrency control with lock based protocols.	10M

OR

9		Explain Based Protocols and Timestamp Based Protocols.	10M

UNIT-V

10	a	What is clustered index organization? Illustrate with example.	5M
	b	Explain about Composite Search Keys. Illustrate with example.	5M

OR

11	a	Explain about linear hashing.	5M
	b	Compare Extendible vs Linear hashing.	5M

END