R19

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
MCA II Year I Semester Regular Examinations Feb-2021
DATABASE MANAGEMENT SYSTEM

Time: 3 hours

Max. Marks: 60

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

UNIT-I

1	a	Define Data, Database and DBMS.	6M
	b	Explain the advantages of DBMS.	6M

OR

2	Explain the following attributes with ER Notations: a) Simple b) Multi-Valued c) Composite d) Derived.	12M

UNIT-II

3	a	Explain Division and Assignment Operations with example.	6M
	b	Explain Set intersection and Natural – Join Operations.	6M

OR

4	Explain the steps for converting the E R Diagram to Relational Schema.	12M

UNIT-III

5	a	Explain in detail about Embedded SQL.	6M
	b	List and explain various SQL Join Operations.	6M

OR

6	Classify SQL Functions. Explain numeric functions with explanations.	12M

UNIT-IV

7	Explain the steps to improve the design of a Database in detail.	12M

OR

8	a	Define Normalization.	3M
	b	Compare and explain about 1NF, 2NF with relevant examples.	9M

UNIT-V

9	Explain lock-based concurrency control mechanisms with diagram in detail.	12M

OR

10	a	Write about Index file organization.	6M
	b	List and briefly explain various index structures.	6M

*** END ***