

Reg. No:

--	--	--	--	--	--	--	--	--	--

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year I Semester Regular & Supplementary Examinations March-2023
DATABASE MANAGEMENT SYSTEMS
(Common to CSE, CSIT, CAD & CSM)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- | | | | | |
|-----|--|-----|----|----|
| 1 a | Define Database. Discuss about applications of Database Systems. | CO1 | L1 | 6M |
| b | List out the purpose of Database Systems. | CO1 | L1 | 6M |

OR

- | | | | | |
|-----|---|-----|----|----|
| 2 a | Create the DDL Commands – Table Creation, Altering the table structures, truncating a table and dropping a table. | CO1 | L6 | 6M |
| b | Develop the DML Commands – Insert, Select Commands, update & delete Commands. | CO1 | L6 | 6M |

UNIT-II

- | | | | | |
|-----|--|-----|----|----|
| 3 a | Discuss about Complex integrity constraints in SQL. | CO1 | L2 | 6M |
| b | Create a sub query to establish the WHERE, ANY, AS and ALL sub queries with example. | CO1 | L6 | 6M |

OR

- | | | | | |
|-----|--|-----|----|----|
| 4 a | Illustrate Set comparison operator. | CO1 | L3 | 6M |
| b | Distinguish different types of aggregate operators with examples in SQL. | CO1 | L5 | 6M |

UNIT-III

- | | | | | |
|-----|---|-----|----|----|
| 5 a | Illustrate redundancy and the problems that it can cause. | CO3 | L2 | 6M |
| b | Explain about Functional Dependency. | CO3 | L3 | 6M |

OR

- | | | | | |
|-----|---|-----|----|----|
| 6 a | What is the use of Fourth normal form? Explain by listing some of its major advantages. | CO3 | L2 | 6M |
| b | Differentiate between about 4NF/MVD with example. | CO3 | L4 | 6M |

UNIT-IV

- | | | | | |
|---|---|-----|----|-----|
| 7 | Explain ACID properties and illustrate them through examples. | CO4 | L2 | 12M |
|---|---|-----|----|-----|

OR

- | | | | | |
|-----|---|-----|----|----|
| 8 a | Illustrate Concurrent execution of transaction with examples. | CO5 | L3 | 6M |
| b | Discuss various concurrency control protocols. | CO5 | L2 | 6M |

UNIT-V

- | | | | | |
|---|---|-----|----|-----|
| 9 | Identify the two phase locking protocol and strict two phase locking protocols. | CO5 | L3 | 12M |
|---|---|-----|----|-----|

OR

- | | | | | |
|------|--|-----|----|----|
| 10 a | What are the overview of physical storage media? | CO6 | L1 | 6M |
| b | Explain about failure with loss of non-volatile storage. | CO6 | L2 | 6M |

*** END ***

SIDDHANTH INSTITUTE OF ENGINEERING & TECHNOLOGY :: PUTTUR

(AUTONOMOUS)

B.Tech II Year I Semester Regular Supplementary Examinations March-2023

DATABASE MANAGEMENT SYSTEMS

(Common to CSE, CSE, CAD & ESM)

Max. Marks: 60

Time: 3 hours

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

UNIT-I

- 1- a) Define Database. Discuss about applications of Database Systems. CO1 12 6M
- b) List out the purpose of Database Systems. CO1 12 6M

OR

- 2- a) Create the SQL Command - Table Creation, Altering the table structure, truncating a table and dropping a table. CO1 12 6M
- b) Develop the SQL Command - Insert, select Command, update, delete. CO1 12 6M

UNIT-II

- 3- a) Discuss about Composite integrity constraint in SQL. CO1 12 6M
- b) Create a query to establish the WHERE, AND, OR and ALL and queries with example. CO1 12 6M

OR

- 4- a) Illustrate the arithmetic operators. CO1 12 6M
- b) Distinguish different types of aggregate operation with examples in SQL. CO1 12 6M

UNIT-III

- 5- a) Illustrate redundancy, and the problems that it can cause. CO3 12 6M
- b) Explain about Functional Dependency. CO3 12 6M

OR

- 6- a) What is the use of fourth normal form? Explain by listing some of its major advantages. CO3 12 6M
- b) Differentiate between about 3NF, 4NF with examples. CO3 12 6M

UNIT-IV

- 7- Explain ACID properties and illustrate them through examples. CO4 12 12M

OR

- 8- a) Illustrate Concurrent execution of transaction with examples. CO5 12 6M
- b) Discuss various concurrency control protocols. CO5 12 6M

UNIT-V

- 9- Identify the two phase locking protocol and state two phase locking protocols. CO5 12 12M

OR

- 10- a) What are the overview of physical storage media? CO6 12 6M
- b) Explain about failure with loss of non-volatile storage. CO6 12 6M

END