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**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
(AUTONOMOUS)

**B.Tech IV Year I Semester Supplementary Examinations Aug-2022**

**DATABASE MANAGEMENT SYSTEMS**

(Open Elective)

Time: 3 hours

Max. Marks: 60

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

**UNIT-I**

**1** Explain about ER model and Component of ER Diagram. **12M**

**OR**

**2 a** Explain about Views of data. **6M**

**b** Explain about various data models. **6M**

**UNIT-II**

**3 a** Evaluate project, join, select and product set operators with examples. **6M**

**b** Create a sub query to establish the WHERE, ANY, AS and ALL sub queries with example. **6M**

**OR**

**4 a** Explain the structure of basic form of an SQL query with an example. **6M**

**b** Distinguish different types of aggregate operators with examples in SQL. **6M**

**UNIT-III**

**5 a** Compare 3NF and BCNF with example. **6M**

**b** Compare Trivial and Non – Trivial Functional Dependencies with example. **6M**

**OR**

**6 a** Discuss about 4NF/MVD with example. **6M**

**b** Illustrate the types of anomalies with example. **6M**

**UNIT-IV**

**7** Identify the deadlock and 2-phase locking to ensure serializability in concurrency control with locking methods. **12M**

**OR**

**8 a** Define Schedule. What is a serial schedule. **6M**

**b** Discuss different phases of transaction. **6M**

**UNIT-V**

**9** Describe about B+ Trees Dynamic Indexing. **12M**

**OR**

**10 a** Explain about Extendible hasing. **6M**

**b** Explain about linear hashing **6M**

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