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

B.Tech II Year I Semester Regular Examinations Nov/Dec 2019
DATABASE MANAGEMENT SYSTEMS
(CSE & CSIT)

Time: 3 hours

Max. Marks: 60

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

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| 1 | a Define Entity, Attributes, Entity set, relationship with appropriate notations. | 2M |
| | b Explain the structure of basic form of an SQL query. | 2M |
| | c What is the need for triggers? | 2M |
| | d Define functional dependency. | 2M |
| | e What is the use of RAID? | 2M |

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

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

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| 3 | Explain about Database languages with examples. | 10M |
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UNIT-II

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| 4 | What are the variations in relational calculus? Explain with examples. | 10M |
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| 5 | a Explain in detail about nested queries. | 5M |
| | b Explain about aggregate operators. | 5M |

UNIT-III

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| 6 | a What is meant by multivalued dependency? Explain with example. | 7M |
| | b Write about problems related to decomposition. | 3M |

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| 7 | a Compare and contrast between third normal form and BCNF. | 5M |
| | b Write about loss-less join decomposition with an example. | 5M |

UNIT-IV

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| 8 | a Explain serializability in transaction management. | 8M |
| | b What is a recovery scheme? | 2M |

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| 9 | Explain buffer management in concurrency control system. | 10M |
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UNIT-V

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| 10 | a Discuss about file organizations and indexing. | 5M |
| | b Explain about Index structures. | 5M |

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| 11 | Explain about Delete and Duplicated in Tree Structured Indexing? | 10M |
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END