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

B.Tech II Year II Semester Supplementary Examinations October-2020

DATABASE MANAGEMENT SYSTEMS

(Common to CSE & CSIT)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 a Discuss about the purpose of Database Systems. 6M
b Demonstrate data abstraction implementation in DBMS. 6M

OR

- 2 a List out the functionalities of DBA. 6M
b Explain the architecture of DBMS with a neat sketch. 6M

UNIT-II

- 3 a Explain various types of Joins available in SQL with examples. 6M
b List out any six operations on relational algebra and explain. 6M

OR

- 4 a Explain the Division operator of Relational algebra with a suitable example. 6M
b What is meant by integrity constraint? Write about complex integrity constraints in SQL. 6M

UNIT-III

- 5 a Explain BCNF and the properties of decompositions. 6M
b Explain Full functional dependency and Partial dependency with suitable example. 6M

OR

- 6 a Define normalization and explain different Normal Forms with examples. 8M
b What is lossless join decomposition with an example? 4M

UNIT-IV

- 7 a Write the need of serializability in transaction management. 6M
b Explain Concurrency control with locking methods. 6M

OR

- 8 a Explain Buffer Management in concurrency control system. 6M
b Discuss the issues in handling concurrent transactions. 6M

UNIT-V

- 9 a How does multilevel indexing improve the efficiency of searching an index file? 8M
b Explain about Composite Search Keys with example. 4M

OR

- 10 a Explain about the measures that are to be considered for comparing the performance of various file organization techniques. 8M
b Write the significance of a clustered index. 4M

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