

Code No: A0506, A5806

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY-2012

DATABASE MANAGEMENT SYSTEMS

(COMMON TO COMPUTER SCIENCE, COMPUTER SCIENCE & ENGINEERING)

Time: 3hours

Max. Marks: 60

**Answer any five questions
All questions carry equal marks**

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- 1.a) What is the role of transaction manager in DBMS?
- b) Discuss the conceptual design for large enterprises with an example.

- 2.a) Explain division operation in relational algebra. Give its equivalent in primitive operators.
- b) What is a materialized view?
- c) Write a note on assertion.

- 3.a) Describe variants of outer join.
- b) What is meant by active database?
- c) Discuss the necessity of triggers.

- 4.a) What is the need for schema refinement? Explain with examples.
- b) Describe the properties of decomposition.

- 5.a) Explain the transaction support in SQL.
- b) Does two phase locking protocol ensure serializability? Justify your answer.

- 6.a) Write about lock conversion.
- b) What is a latch?
- c) Discuss media recovery mechanisms.

- 7.a) Explain various file organizations and compare them.
- b) Distinguish between clustered and unclustered indices.

- 8.a) Explain page formats with examples.
- b) Discuss bulk loading of B+ tree with illustrations.
