Code No: R6-31-MCA

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD MCA-III Semester Regular Examinations, February 2010 DATABASE MANAGEMENT SYSTEMS

Time: 3hours Max.Marks:60

## Answer any Five questions All questions carry equal marks

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- 1.a) What is data abstraction? Describe various levels in it.
  - b) Differentiate between DML and DDL.
- 2. Define and explain about domain relational calculus. Give example queries in it.
- 3.a) Explain built-in aggregate functions in SQL. Also give example for each.
  - b) Explain various domain types in SQL.
- 4. Define third normal form. Give an algorithm for finding dependency- preserving lossless-join decomposition into 3NF. Explain with an example.
- 5.a) Discuss about transaction-support in SQL.
  - b) Explain the ACID properties of transaction in detail.
- 6.a) Elaborate on Media recovery.
  - b) Discuss about crash recovery in detail.
- 7. Discuss various methods of file organization in detail.
- 8. Write short notes on the following:
  - a) Static Hashing
- b) Log-based recovery
- c) Integrity constraints

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