

Subject Code: C5804

M.Tech - I Semester [R09] Regular/Supplementary Examinations, April - 2012

**DATA BASE MANAGEMENT SYSTEMS
(Common to CS, CSE and NN)**

Time: 3 Hours

Max Marks: 60

Answer any FIVE questions. All questions carry EQUAL marks.

1. a. Explain briefly about Data base systems. Differentiate data base system to the file system.
b. Explain ER design attributes, entity sets and their relationships?
2. a. Explain how a table is destroyed or altered with example queries.
b. Explain how selection and projection set operations are done?
c. Explain briefly about domain relational calculus.
3. a. What are aggregative operators and comparison operators which can be used in SQL query? Explain their operation with example queries.
b. Explain about joins and outer joins with examples.
4. a. What is schema refinement?
b. Explain about the problems caused by redundancy.
c. Explain about BCNF.
5. a. Explain about scheduling in transaction management.
b. Explain about lock based concurrency control.
6. a. What is a dead lock? Explain locking techniques.
b. Give an overview about Write-Ahead Log Protocol
7. a. Explain about file organization and indexing.
b. Explain about Hash based indexing.
8. a. Explain about Tree structured indexing.
b. Differentiate Extendable vs linear hashing.

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