

R09

Code No: C1510

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY-2012
DATA BASE MANAGEMENT SYSTEM
(MACHINE DESIGN)**

Time: 3hours

Max.Marks:60

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

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1. Draw neatly and explain the Database management system architecture.
2. a) What is conceptual database design and how it could have impact on enterprise.
b) Explain the relationship among the entities in ER diagrams.
3. a) Define Primary key, Secondary key and unique key.
b) What are normal forms? Explain the 1NF, 2NF and BCNF.
4. List out the logical connectivity's? How these connectivity's impact on SQL Constructs? Discuss suitable examples.
5. What are the three phases of ARIES recovery algorithm? Explain each of them.
- 6.a) List out three differences between the B Tree and B+ Tree.
b) Explain the indexed sequential access methods.
7. Explain the specialized locking techniques concurrency without locking.
8. Write short notes on cluster indexing, crash recovery and check points.
