Code No: D7401

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M.Tech II - Semester Examinations, March 2011 DISTRIBUTED DATABASES (PARALLEL COMPUTING)

Time: 3hours Max. Marks: 60

Answer any five questions All questions carry equal marks

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- 1. What is a Distributed Database Management System? What are the necessary components for building a distributed database? [12]
- 2. What is an Operator Graph? How it is used in identification of common sub expressions. [12]
- 3. Explain the basic SDD-1 algorithm for constructing reducer program for relations. [12]
- 4. Explain the following:
 - a) Properties of Transactions.
 - b) Goals of Transaction management.

[6+6]

5. Explain about Distributed Deadlocks in detail.

- [12]
- 6. Explain Concurrency Control based on Time Stamps in distributed databases.

[12]

7. Write the local recovery procedure for 3-Phase commitment.

[12]

- 8. Explain:
 - a) Pointer Swizzling.
 - b) Object query processor architecture.

[6+6]
