

**Code No: C7811**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD  
M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY 2012  
DISTRIBUTED DATABASES**

**(COMPUTER NETWORKS AND INFORMATION SECURITY)**

**Time: 3hours**

**Max.Marks:60**

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

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- 1.a) Explain centralized databases and distributed databases with examples?  
b) Define Vertical fragmentation. Explain vertical fragmentation with an example.
- 2.a) Write notes on fragmentation query and canonical expression.  
b) Define Parametric Query. Give an example.
- 3.a) What is Query Optimization? What are the advantages of Query optimization?  
b) Write notes on Join Queries.
- 4.a) Give a brief account on architectural aspects of distributed databases.  
b) Explain how atomicity is achieved in distributed transactions.
- 5.a) What is a timestamp? Explain how concurrency control is achieved using timestamps.  
b) Write notes on serializability.
6. Explain 2-phase commitment protocol with necessary diagrams.
- 7.a) What is a cold restart and explain how coldrestart is helpful in distributed databases.  
b) Why authorization and protection are required in distributed databases? Explain.
8. Write short notes on any **TWO** of the following:
  - a) Object Identifier Management
  - b) Scheme Integration
  - c) CORBA

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