

Code No: 845AD

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**MCA V Semester Examinations, October/ November - 2020**

**DISTRIBUTED DATABASES**

**Time: 2 Hours**

**Max. Marks: 75**

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

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- 1.a) Explain about Reference Architecture for Distributed Databases.  
b) Write short note on Distribution Transparency. [7+8]
- 2.a) Explain about Parametric Queries in distributed database.  
b) Explain about grouping and aggregate function evaluation in distributed database. [7+8]
- 3.a) Explain Timestamp based protocol in distributed databases.  
b) Explain Optimistic Methods for Distributed Concurrency Control. [7+8]
- 4.a) Explain about the following in Distributed Data base:  
i) Check points ii) Cold Restart.  
b) Explain about authorization and protection in distributed database. [7+8]
- 5.a) Explain about various query processing layers in Distributed Multi-DBMS.  
b) Explain about Object Management Architecture CORBA. [7+8]
- 6.a) Define Distributed Data base and explain the various features of distributed database.  
b) What is meant by data fragmentation? Explain the Vertical Fragmentation with an example. [7+8]
- 7.a) List out the different components that are used by query optimizer. Explain.  
b) Discuss how an optimization graph can be drawn for a given query. [7+8]
- 8.a) Explain two-phase locking protocol in distributed database.  
b) Explain Deadlock prevention in distributed databases. [7+8]

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