

Code No: 155AY

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, February - 2022

**DISTRIBUTED DATABASES**  
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 75

Answer any five questions  
All questions carry equal marks

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1.a) Explain the various problem areas in DDBS environment.  
b) Discuss the distributed database design issues. [8+7]

2.a) Explain in brief about vertical fragmentation.  
b) Explain in brief architectural models for distributed DBMS. [7+8]

3.a) Discuss the problems in query optimization in DDBs.  
b) Discuss the objectives of query processing. [8+7]

4. Explain any two distributed query optimization algorithms in brief. [15]

5.a) Explain various types of transactions.  
b) Explain the concept of serializability. [7+8]

6. Explain in detail about time-stamp based concurrency control algorithm. [15]

7.a) Discuss the failures in distributed DBMS.  
b) Explain distributed reliability protocols. [7+8]

8.a) Discuss the architectural issues in distributed object DBMS.  
b) Explain in brief about distributed object storage. [8+7]

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