

Code No: 825AC

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**MCA V Semester Examinations, April/May - 2019****DISTRIBUTED DATABASES****Time: 3 Hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**5 × 5 Marks = 25**

- 1.a) Discuss the relative advantages of centralized and distributed databases. [5]
- b) Discuss about translation of global queries into fragmented queries. [5]
- c) Explain Deadlocks in distributed database. [5]
- d) Explain about 3-phase commitment protocol. [5]
- e) Explain about multi database concurrency control. [5]

PART - B**5 × 10 Marks = 50**

- 2.a) Explain how to differ the following : fragmentation transparency, replication transparency and location transparency.
 - b) What is meant by data fragmentation in distributed database? [5+5]
- OR**
- 3.a) Explain about integrity constraints in distributed database.
 - b) Explain reference architecture for distributed databases. [5+5]
- 4.a) Discuss how query optimization is done using AHY algorithm.
 - b) Explain the Framework for Query Optimization. [5+5]
- OR**
- 5.a) Explain about Parametric Queries in distributed database.
 - b) Explain about the Evaluation of Aggregate Function. [5+5]
- 6.a) Explain Deadlock prevention in distributed databases.
 - b) Explain the deadlock detection in distributed database. [5+5]
- OR**
- 7.a) Explain about the serializability in distributed database.
 - b) Explain about conservative time stamp method. [5+5]
- 8.a) Explain about 2-phase commitment protocol.
 - b) Discuss about quorum based 3-phase commitment protocol. [5+5]
- OR**
- 9.a) Explain check points and cold restart in distributed database.
 - b) Discuss about distributed database administration. [5+5]
- 10.a) Explain about Distributed Component Object Model.
 - b) Explain the transaction management in Object DBMS. [5+5]
- OR**
- 11.a) Explain the Delivery Schedule Algorithm in Push-based Technologies.
 - b) Discuss between scheme Translation and scheme Integration. [5+5]