

--	--	--	--	--	--	--	--	--	--

B.TECH.**THEORY EXAMINATION (SEM-VI) 2016-17****DISTRIBUTED DATABASE****Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.****SECTION – A****1. Explain the following:****10 x 2 = 20**

- (a) What is a cascade less schedules?
- (b) State serializability. How it is tested?
- (c) Differentiate strict two phase locking protocol and rigorous two phase locking protocol.
- (d) What are the timestamps associated with each data item?
- (e) Define replication.
- (f) What is Fragmentation? Give its types.
- (g) Provide the Concepts in Orphan in distributed database.
- (h) How database recovery can be done?
- (i) What the difference is between distributed and replicated database?
- (j) Define Distributed Deadlock detection.

SECTION – B**2. Attempt any five of the following questions:****5 x 10 = 50**

- (a) Compare conflict and view serializability with example.
- (b) Explain timestamp based concurrency algorithms in detail.
- (c) State the purpose of 2PC protocol. Explain 2PC in detail.
- (d) Explain the need for the two-phase commit protocol. Then describe the two phases.
- (e) Illustrate the cost based query optimization for Distributed Database in detail.
- (f) Mention about Recovery in Message Passing System. Explain concept of inconsistent states.
- (g) What are Multiversion Schemes? Explain its importance in Multiversion Protocol.
- (h) Describe query optimization algorithms.

SECTION – C**Attempt any two parts of the following questions:****2 x 15 = 30**

- 3 Explain how the transactions are managed in a distributed database. Also differentiate between Homogeneous and Heterogeneous Database.
- 4 Brief about Traditional recovery techniques with example.
- 5 What are the objects of distributed query processing? Explain.