

- b) Discuss various naming related access control Mechanisms. 7
5. a) Describe the two-phase commit protocol in a distributed DBMS. Why are acknowledgement messages required in 2PC? 7
- b) What is a phantom deadlock? Why does it occur only in DDBMS? 7
6. a) Describe a time stamp-based concurrency control for a distributed DBMS. 7
- b) A typical computer system is designed to prevent virus programs from replicating in an uncontrolled manner but allows worms to run. Suggest a suitable security system. 7
7. a) Compare the relative merit and demerits of various thread models. 7
- b) Enumerate the various issues in clock synchronization. 7
8. Write short note on: 14
- i) SUN Network File system
 - ii) Network principles
 - iii) Distributed Debugging.

MCIT - 202
M.E./M.Tech., II Semester
Examination, June 2014
Distributed Computing

Time : Three Hours

Maximum Marks : 70

- Note :* i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Discuss briefly the various issues related to distributed system design. 7
- b) Discuss the difference between the work station - server and the processor-pool model in terms of availability. 7
2. a) State in brief the various optimization techniques that ensure better performance of RPC. 7
- b) Explain the significance of RMI in distributed system. Also write features of Java RMI. 7
3. a) In a distributed system, processes agree on the order in which events occur and not on the time they occur. Give three reasons to illustrate this statement. 7
- b) How does DFS differ from a file system used for a centralized time-sharing system? 7
4. a) Explain how logical clocks are implemented in a distributed system. 7