



FACULTY OF ENGINEERING  
B.E. 4/4 (CSE) I Semester (Main) Examination, Dec. 2011  
DISTRIBUTED SYSTEMS

Time: 3 Hours]

[Max. Marks: 75

**Note :** Answer **all** questions from Part A. Answer **any five** questions from Part B.

PART – A

(25 Marks)

1. Define distributed system. Give any two examples. 2
2. What is the use of Reflection in Implementation of RMI ? 3
3. What is distributed Garbage collection ? 2
4. Differentiate between RPC and LRPC. 3
5. Explain the Berkeley Algorithm. 3
6. What is Global state ? 2
7. What are dirty reads ? 2
8. What is the distributed shared memory ? 3
9. Define nested transaction. 2
10. What are the uses of Group Communication ? 3

PART – B

(50 Marks)

11. a) What is transparency ? List out the different levels of transparency and explain. 5  
b) Explain the architectural models of Distributed system. 5
12. a) What are the different ways of Invocations in Distributed system. Explain. 5  
b) What is meant by object serialization ? Explain. 5
13. a) Write the design issues of RMI. 5  
b) Write short notes on DNS. 5
14. a) Explain about distributed debugging. 5  
b) Write the central server and ring based algorithms for distributed mutual exclusion. 5
15. a) What is the time stamp ordering ? Explain. 5  
b) What is distributed Deadlock ? Explain about Edge chasing. 5
16. Describe the architecture of SUN NET WORK file system. 10
17. Write short notes on :  
a) Active replication. 5  
b) Elections. 5