1058

B.E. (Electronics and Communication Engineering)
Sixth Semester
IT-650: Distributed Systems
(May- 2017)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, selecting atleast two questions from each Unit.

x-x-x

UNIT – I

I. Explain with diagrams different types of Operating System structures? Give example for each type. (10)

II. a) Write short note on micro kernel based client server approach?

b) Compare and contrast the techniques of caching disk blocks locally, on a client system and remotely on a server? (5,5)

III. a) Why is Deadlock detection much more expensive in a distributed environment than it is in a centralized environment?

b) How deadlock prevention and avoidance is done in Distributed environment? (5,5)

IV. a) Explain Failure Detection and Recovery in Distributed environment?

b) Describe Ring algorithm for electing new coordinator in case of coordinator failure. (5,5)

UNIT – II

V. a) What are the main differences between capability and access list?

b) A password may become known to other users in a variety of ways. Is there a simple method for detecting that such an event has occurred? Explain your answer? (5,5)

VI. a) What are the benefits of a DFS when compared to a file system in a centralized system?

b) Under what circumstances would a client prefer a location transparent Location independent DFS? Discuss? (5,5)

P.T.O.

VII.   Differentiate between Sun NFS and NTFS?   (10)

VIII.   Write short notes on: Object Request Broker Architecture and Microsoft DCOM
        model.   (5,5)

x-x-x