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E – 5582

Reg. No. : .....

Name : .....

Eighth Semester B.Tech. Degree Examination, October 2018

(2008 Scheme)

08.804 : DISTRIBUTED SYSTEMS (R)

Time : 3 Hours Max. Marks : 100

PART – A

Answer **all** questions :

1. What are the technological advancements on mobile and ubiquitous computing ?

2. Cloud computing is also coming under distributed system concept. Justify.

3. What are the different physical models of distributed systems ? Explain.

4. Show the role of client and server stub-procedures in RPC.

5. Compare between open and closed groups.

6. Draw and explain server threading architectures.

7. How to make invocations concurrently with asynchronous operation ?

8. What are the requirements of distributed file systems ?

9. State "lost update problem" in concurrency control.

10. What is time stamp ordering concurrency control ? **(10×4=40 Marks)**

P.T.O.

PART – B

Answer **any one full** question from **each** Module.

Module – I

11. a) What are the significant challenges encountered by distributed systems ? How to overcome the challenges ? **10**

    b) How distributed computing is mapped with utility computing ? **10**

OR

12. a) Explain the failure model of distributed system. **10**

    b) Elaborate the IP routing concepts used in the internet. **10**

Module – II

13. a) Explain the working principles of UDP datagram communication. **10**

    b) What is marshalling ? Why is it needed ? **10**

OR

14. a) What are the design issues for RPC ? Discuss them. **10**

    b) Draw and explain the operating system layers. **10**

Module – III

15. a) Write a case study on sun network file system. **10**

    b) What are the needs of locks in transactions and concurrency control. **10**

OR

16. a) Explain two phase commit protocol. **10**

    b) Explain distributed deadlocks with neat diagram. **10**

(3×20=60 Marks)