B – 2670

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Reg. No. : .....

Name : .....

Eighth Semester B.Tech. Degree Examination, December 2016
(2008 Scheme)
08.804 : DISTRIBUTED SYSTEMS (R)

Time : 3 Hours Max. Marks : 100

PART – A

Answer **all** questions. **(10×4=40 Marks)**

1. What are the main objectives of distributed systems ?
2. Why do we need locational transparency and login transparency in distributed systems ?
3. Differentiate static and dynamic invocation methods.
4. What is external data representation ? What are the various representation formats ?
5. What is marshaling and unmarshaling ?
6. What are the various interprocess communication mechanisms ? Compare.
7. What is the use of RMI registry ?
8. Give examples for group communication mechanisms.
9. What are the different types of distributed file systems available ?
10. What is ACID property of transactions ?

PART – B

Answer **any one full** question from **each** Module. **(3×20=60 Marks)**

Module – I

11. a) State and explain the challenges of distributed systems.

    b) With neat diagram explain the various client server models.

    OR

P.T.O.

12. a) Describe the networking aspects in distributed systems highlighting network heterogeneity and protocol heterogeneity.

    b) Describe the features of world wide web and web services.

Module – II

13. a) Discuss the design and implementation issues in Remote Method Invocation.

    b) Explain how inter process communication is handled in UNIX.

OR

14. What are threads ? Explain the various types of multi-threaded architectures with neat sketch.

Module – III

15. a) What is Deadlock ? What are the various ways of detecting deadlock in distributed environment ?

    b) What is two-phase commit protocol ? Discuss the algorithm with an example. What are its limitations ?

OR

16. a) Explain the requirements of distributed file system.

    b) Explain the architecture and server operation of NFS.