



Reg. No. :

Name :

**Eighth Semester B.Tech Degree Examination, May 2013
(2008 Scheme)**

08.804 DISTRIBUTED SYSTEMS (R)

Time : 3 Hours

Max. Marks : 100



PART – A

(Answer **all** questions. **Each** question carries **4** marks)

1. Can firewalls prevent denial of service attack. What other methods are available to deal with such attacks ?
2. Distinguish between buffering and caching.
3. What is the effect of timing failure in communication of video and audio ?
4. Define Quality of Service.
5. Name the participating objects in distributed event notification.
6. Struct person {string name; string place; long year;}; Describe with sample data, how CORBA represents the above structure ?
7. What is a flat file service operation ?
8. Explain "process migration".
9. What are the differences between flat and nested transactions ?
10. How can we detect distributed deadlock ? **(10×4=40 Marks)**

PART – B

(Answer **any one** question from **each** module. **Each** question carries **20** marks)

Module – I

11. a) What is meant by Network Address Translation (NAT) ? Explain how NAT – enabled routers work ? **(5)**



b) Explain the significance of failure model of distributed system design. (15)

OR

12. a) What do you understand by location transparency ? Discuss the extent to which an HTTP URL is location transparent ? (10)

b) What are the design requirements of a distributed system architecture ? (10)

Module – II

13. a) 'Remote object reference' is an identifier for remote object in a distributed system. Explain. (5)

b) Explain request – reply protocol with HTTP as an example. (15)

OR

14 a) Describe how RPC is implemented ? (8)

b) Explain events and notifications. (12)

Module – III

15. a) Explain the architecture of AFS with specific faces on distribution of processes in the file system. (15)

b) When do 'cascading aborts' take place in distributed transactions ? Explain how this condition can be avoided ? (5)

OR

16. a) What are the disadvantages associated with locking when used for concurrency control ? (5)

b) Explain the architecture of sun NFS. (15)