

B.E (comp) viii

24/5/13

Distributed computing,

24 : 1st half.13-AM(aa)

Con. 9122-13.

(REVISED COURSE)

GS-3817

(3 Hours)

[Total Marks : 100

**N.B. :** (1) Attempt any **five** questions.  
(2) All questions carry **equal** marks.

1. (a) Explain Absolute Ordering and Causal Ordering process with the help of 10  
example for many to many communication.  
(b) Explain RPC system model in detail. 10
  2. (a) Discuss the need of the co-ordinator. Also give any one algorithm for 10  
co-ordinator selection.  
(b) What is the difference between strict consistency model and sequential 10  
consistency model ? How sequential consistency model is implemented  
in DSM ?
  3. (a) What is physical clock synchronization ? Explain any one algorithm in detail. 10  
(b) Explain deadlock avoidance algorithm in a distributed system. 10
  4. (a) How does light weight RPC work in cross domain architecture ? 10  
(b) Discuss file caching for distributed system. 10
  5. (a) Discuss how processes and resources are bound together. How does process 10  
migration take place in Heterogeneous environment ?  
(b) What are the good features of a Distributed File Systems ? Explain file 10  
sharing semantics of it.
  6. (a) Justify the need of stateful and stateless server in RPC management. 10  
(b) How are failures handled in message passing system in distributed systems ? 10
  7. Write any **two** of the following :— 20
    - (a) Distributed Transaction Management
    - (b) System Oriented Names for Distributed Computing
    - (c) Load Balancing Issues
    - (d) Distributed System Models.
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