

Code: 9F00405a

MCA IV Semester Regular & Supplementary Examinations September/October 2014

**DISTRIBUTED SYSTEMS**

(For students admitted in 2009, 2010, 2011 and 2012 only)

Time: 3 hours

Max Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) State differences between distributed and centralized system.  
(b) Explain the types of network in distributed system.  
(c) Discuss about internet protocols in distributed system?
- 2 (a) For IPC, explain client-server communication.  
(b) Explain internal data representation in IPC.  
(c) Write a short note on IPC in UNIX.
- 3 (a) Write a short note on RPC protocol.  
(b) Give a description of Java RMI.  
(c) Define communication between distributed objects.
- 4 (a) What is protection in operating system support?  
(b) Write a short note on operating system architecture.  
(c) Explain the operating system layer.
- 5 (a) What is file-server architecture in DFS?  
(b) Differentiate between Sun network file system and Andrew file system.  
(c) Write a short note on distributed file system.
- 6 (a) What is time stamp ordering?  
(b) Explain logical and physical clock.  
(c) What are directory services? Explain it in content of name services.
- 7 (a) What are distributed deadlocks?  
(b) Explain atomic commit protocols and concurrency control in distributed system.  
(c) How authentication and key distribution is done in distributed system?
- 8 (a) Write a short note on chorus.  
(b) What are different consistency models in distributed shared memory?  
(c) What is sequential consistency and Ivy?

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