

Code: 9F00405a

MCA IV Semester Regular & Supplementary Examinations May 2018

**DISTRIBUTED SYSTEMS**

(For students admitted in 2011 (LC), 2012, 2013, 2014, 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 Explain in detail about internet protocols in a distributed system.
- 2 (a) Explain external data representation and marshaling in detail.  
(b) Explain the API for the internet protocols.
- 3 (a) What is 'Registry' in Java RMI?  
(b) Give an overview on remote method invocation. What are the differences between RPC and RMI?
- 4 (a) What are the different server threading architecture?  
(b) How the performance of a thread is measured?
- 5 (a) List and explain the requirements of distributed file system.  
(b) Explain in detail about file service architecture.
- 6 (a) Write about the name services and domain name system.  
(b) Give an example and explain Nested transaction.
- 7 (a) Define cryptography. What are the uses of cryptography? Explain the cryptographic algorithms in detail.  
(b) Write a short note on digital signatures.
- 8 Define distributed shared memory. Explain the design and implementation issues.

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