

B.Tech III Year II Semester (R09) Supplementary Examinations December 2016

**DISTRIBUTED SYSTEMS**  
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) What is URL? What is its use? Explain with the help of different simple examples.  
(b) What are the main features of HTTP?
- 2 With the help of an example, explain the building of client/server programs in java RMI.
- 3 (a) What are the applications that demand peer to peer systems?  
(b) What are the lessons to be learned from Napster?
- 4 (a) Write the criteria for evaluation of algorithms for mutual exclusion.  
(b) Write the limitations of central server algorithm for mutual exclusion.
- 5 (a) Briefly explain two version locking. List out the advantages over ordinary read-write locking scheme.  
(b) What is the basic working principle of hierarchical locks? Explain with supporting examples.
- 6 (a) How recovery is achieved in nested transactions? Explain supporting procedural steps.  
(b) Define replication. List out and explain supporting motivations.
- 7 Explain threats from mobile code. Discuss briefly information leakage.
- 8 (a) Explain the importance of immutable data in DSM with an example.  
(b) Briefly discuss weak consistency model with suitable example.

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