

**R09****Code: 9A05604**

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2015/2016

**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) In what way distributed system is useful for ubiquitous computing?  
(b) What is the role of a global clock in a distributed system?  
(c) How resources are shared in a distributed system?
- 2 (a) What is the role of client and server stub procedures in RPC?  
(b) What is the use of Events in RMI?
- 3 (a) What is the difference between structure and unstructured peer to peer systems?  
(b) What is a squirrel web caching services?
- 4 (a) Explain the central server algorithm for mutual exclusion.  
(b) Briefly explain distributed garbage collection.
- 5 Compare and contrast between concurrency control and optimistic concurrency control.
- 6 (a) What is the optimistic concurrency control? Explain with example.  
(b) Why you need validation rules? List out and explain them in distributed transactions.
- 7 (a) Why you need credentials? Explain them.  
(b) Discuss in detail about Firewalls.
- 8 (a) Explain the granularity of sharing data in DSM.  
(b) What is thrashing? How it occurs? Suggest suitable solutions.

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