Code: 9A05604 **R09**

B.Tech III Year II Semester (R09) Supplementary Examinations January/February 2014

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 RMI software? Explain.
(b) How the remote objects are activated?

3 (a) What is the difference between flat name space and hierarchic name space?
(b) What are name spaces?
(c) Explain the hierarchic structure of DNS name space.

4 Explain consensus in a synchronous system.

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 What are the consistency issues raised by state transfer in a distributed transactions? Explain the difference between linearizability and sequential consistency, and why the latter is more practical to implement, in general.

7 (a) Why you need different security techniques? Suggest a few guidelines.
(b) Briefly explain the advantages of cryptography.

8 Discuss the update options available in DSM with example.

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