U.S.N

P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belgaum)

Seventh Semester, B.E. - Information Science and Engineering
Semester End Examination; Dec. - 2014
Distributed Operating Systems

Time: 3 hrs *Max. Marks: 100*

*Note: Answer any **FIVE** full questions, selecting at least **TWO** full questions from each part.*

PART - A

1. a.	Explain design issues reliability and flexibility in distributed operating system.	10
b.	Explain any three distributed computing system models.	10
2 a.	Explain desirable features of a good message passing system.	10
b.	Explain in detail one-to-many communication scheme.	10
3 a.	Explain the implementation of RPC mechanism with a neat diagram.	10
b.	Explain the different types of call semantics used in RPC system.	10
4. a.	With a neat diagram, explain the general architecture of distributed shared memory systems. Briefly explain the design issues of distributed shared memory.	10
b.	What is Thrashing? Explain how thrashing problems can be solved in distributed shared memory.	10

PART - B

5 a.	What is clock synchronization? Explain centralized clock synchronization algorithm.	10
b.	What is distributed deadlock? Briefly explain any two methods for detecting deadlock in distributed systems.	10
6 a.	Explain the desirable features of a good global scheduling algorithm.	10
b.	Explain the different issues in designing load-balancing algorithms.	10
7 a.	What is process migration? Briefly explain desirable features of a good process migration mechanism.	10
b.	Explain various issues in designing of thread package.	10
8 a.	Explain the desirable features of a good distributed file system.	10
b.	Explain the design issues in file caching schemes.	10

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