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## G14

B. Tech. EXAMINATION, May 2019
(Seventh Semester)
(B. Scheme) (Re-appear Only)
(CSE)
CSE453B
Distributed Computing

Time : 3 Hours]
[Maximum Marks : 75
Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt Five questions in all, selecting at least one question from each Unit.

## Unit I

1. (a) How communication in a peer group is different from communication in a hierarchical group ? Explain with example.
(b) Why is it not always a good idea to aim at implementing the highest degree of transparency possible ?

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2. Write and explain any three consistency models used in distributed shared memory.

## Unit II

3. (a) Define physical clock. Explain Berkley's algorithm for synchronization of clocks.
(b) Explain any one RPC call semantics used in a distributed system. 7
4. What is the need of file replication service in a distributed system ? Write and explain the "Primary Copy Replication Algorithm".15

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## Unit III

5. Define the term "Randomization". List and explain the different stages in the life-cycle of a randomization algorithm.
6. List the reasons behind code migration. Explain any two code migration models.

## Unit IV

7. Define the term "Mobile Agent". List any five advantages of mobile agents. Also write any five application areas of mobile agents. 15
8. Explain the importance of EJB. Explain the life-cycle of different types of beans with appropriate diagrams.
