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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.

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P.T.O.

Unit I

- (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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- 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.

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.15
- 6. List the reasons behind code migration. Explain any *two* code migration models.15

Unit IV

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

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180

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