8E8163

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B.Tech. VIII Semester (Main/Back) Examination, April/May-2017

Computer Science & Engineering

8CS3A Distributed Systems

Time : 3 Hours   ersahilkagyan.com   Maximum Marks : 80

Min. Passing Marks : 26

Instructions to Candidates:

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitable be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Unit-I

1. a) State and explain the challenges of distributed system.   (10)

   b) Explain Architecture models.   (6)

OR

1. a) Define the term distributed system and explain with two examples.   (6)

   b) What is theoretical issues in distributed system?   (6)

   c) Explain Distributed Computing Environment (DCE).   (4)

Unit-II

2. Discuss the design and implementation issues in Remote Method Invocation. (16)

OR

2. a) Discuss the detail about communication and invocations   (8)

   b) Where do you need RPC? Explain with suitable example.   (8)

Unit-III

3. a) Classify the type of transparency that a distributed file system should support?   (8)

   b) What is distributed process implementation and also explain static process scheduling with communication.   (8)

OR

3. Write short note on (any two) : अन्जदहस्रेधाड़ (2×8=16)

   a) General parallel file system and wnruow's file system

   b) Andrew and coda file systems

   c) Sun network file system

Unit-IV

4. a) Explain how mutual exclusion is handled in distributed system? (8)

   b) What is the implementation of DSM system? (8)

OR

4. a) Describe mechanism for deadlock detection in distributed system. (6)

   b) What is Dynamic distributed manager algorithm and also explain Thrashing? (10)

Unit-V

5. a) Define Byzantine agreement problem with its solution. What do you mean by agreement protocol? (8)

   b) Discriminate passive replication and active replication. (8)

OR

5. Write short notes on (any two) : (2×8=16)

   a) Atomic Multicast

   b) CORBA RMI

   c) Failure and Recovery in DS

   d) Byzantine faults

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