Examination Roll No.................

YMCA UNIVERSITY OF SCIENCE& TECHNOLOGY, FARIDABAD
MCA 5TH SEM EXAMINATION (REAPPEAR) Scheme-2016
DISTRIBUTED OPERATING SYSTEM (MCA-16-307)

Time: 3 Hours

Max. Marks:60

Note:
1. It is compulsory to answer the questions of Part -1. Limit your answers within 20-40 word in this part.
2. Answer any four questions from Part -2 in detail.
3. Different parts of the same question are to be attempted adjacent to each other.

PART -1

Q1 (a) Define Logical Clock? (2)

  (b) What do you mean by Transparency? (2)

  (c) What is the purpose of Election algorithm? (2)

  (d) Define Lamport's rule. (2)

  (e) What are Groups in Group Communication? (2)

  (f) What are advantages of diskless over diskfull workstations? (2)

  (g) Define Kernel? (2)

  (h) What is the function of Bootstrap port? (2)

  (i) What is Locking? (2)

  (j) What is Write delay protocol? (2)

PART -2

Q2 What are different communication protocols in Distributed system? Explain Client server in detail. (10)

Q3 Differentiate between the following:
    a) Distributed system and Network Distributed system
    b) User-level and Kernel-level threads (2*5)

Q4 (a) What do you mean by Deadlock Prevention? Explain. (5)
   (b) What is the need of Clock Synchronization in Distributed System? How it can be achieved? (5)

Q5 What is the need of Processor Allocation Algorithm? What are its design Issues? Explain any two heuristic processor allocation algorithms. (10)

Q6 (a) Explain Workstation model. (5)
   (b) Explain Process Management in MACH? (5)

Q7 What is Distributed Shared Memory? Explain Bus-Based DSM in detail. (10)
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