

Roll No.

24471

B. Tech. 7th Semester (CSE)

Examination – June, 2016

DISTRIBUTED OPERATING SYSTEM

Paper : CSE-423-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions. Q. 1 is *compulsory*. Select one question from each Section.

1. Write short notes on :

- (a) True distributed system
- (b) Clock synchronization
- (c) Naming transparency
- (d) Shared variable distributed shared memory
- (e) Layered protocol

24471-1300-(P-3)(Q-9)(16)

P. T. O.

SECTION - A

2. (a) What do you mean by Distributed Operating System ? Explain its design issue.
- (b) Explain bus based multiprocessor and bus based multicomputer.
3. (a) What is group communication ? What are the various design issue for it.
- (b) What is RPC ? Explain different class of failure that can occur in RPC system and how to deal it.

SECTION - B

4. (a) What is mutual exclusion ? Compare various algorithm for mutual exclusion.
- (b) Discuss the following election n algorithm :
 - (i) The Bully algorithm
 - (ii) Ring algorithm

5. What is deadlock ? How it can be handled in Distributed system ? Explain.

SECTION - C

6. (a) What is real time distributed system ? Also explain design issue in real time distributed system.
- (b) What is thread ? Describe the thread usage.

7. How distributed file system implemented ? Explain.

SECTION - D

8. What is the need of consistency in distributed system ? Explain various consistency model briefly.
9. Describe the concept of process management in MACH.