

24471

**B.Tech. 7th Semester (F) Scheme (IT) Examination,
December-2018**

DISTRIBUTED OPERATING SYSTEM

Paper-CSE-423-F

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt five questions selecting one question from each section. Question no. 1 is compulsory.

1. Write a short note on :

- (a) Remote Procedure Call 5
- (b) Mutual Exclusion. 5
- (c) Naming Transparency 5
- (d) Differentiate between Logic and Physical clocks. 5

Section-A

- 2. Define Distributed operating system. What are the advantages and disadvantages of Distributed Operating System ? Discuss major design issues of a distributed system. 20
- 3. (a) What is Remote procedure call ? Explain different class of failure that can occur in RPC system and how to deal it. 10
- (b) Explain bus based multiprocessor and bus based multicomputer. 10

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Section-B

4. What do you mean by clock synchronization ?
Explain Election and Ring algorithm in detail. 20
5. (a) What are the ACID properties of transaction ?
Explain atomic transactions. 10
- (b) What is real time distributed system ? **Also explain**
design issues in real time distributed system. 10

Section-C

6. (a) What are latest trends in distributed file system ?
Explain. 10
- (b) Describe Distributed File System design and
implementation issue. 10
7. What is distributed **shared** memory? Explain **Page**
based distributed shared memory in detail. 20

Section-D

8. Write a short note on : 20
- (a) Process management in MACH.
- (b) UNIX emulation in MACH.
9. What is MACH ? Explain its architecture. Describe
the concept of Communication in MACH. 20