

Roll No. ....

Total Pages : 2

BT-8/M-20

38003

DISTRIBUTED OPERATING SYSTEM

Paper–CSE-440-E

Time Allowed : 3 Hours]

[Maximum Marks : 75

Note : Attempt five questions in all, selecting at least one question from each Unit. All questions carry equal marks.

UNIT–I

1. (a) Explain the main guidelines and principles that a distributed operating system designer must follow for good performance of a system. 8
- (b) Discuss major characteristics of distributed file system. 7
2. (a) Discuss various issues in distributed operating system. 7
- (b) Describe various Communication primitives used in DOS. 8

UNIT–II

3. Differentiate non-token based algorithm and token based algorithm. Explain generalized non-token based algorithm and Heuristic algorithm. 15

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4. Explain following algorithms :

(a) Lamport algorithm

(b) Tree based algorithm. 2×7½=15

### UNIT-III

5. (a) Discuss various issues in deadlock detection and resolution. 7

(b) Explain, 'how the deadlock handling in a distributed system environment is different from that in conventional environment' with example. 8

6. Describe in detail discretionary and mandatory access control models. 15

### UNIT-IV

7. (a) Discuss various issues in issues in load distribution. 7

(b) Discuss various issues in issues in task migration. 8

8. (a) Discuss various design issues in DFS. 8

(b) What is the significance of log structured file system in DFS. 7