

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2064)

14856

MCA 4th Semester Examination
Distributed Operating System
MCA-E41

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Candidates are required to attempt five questions in all selecting one question from each of the sections A, B, C & D. Section E is compulsory.

SECTION - A

1. What are the main reliability issues in designing a message passing system? Describe a suitable mechanism for handling each of these issues. (12)
2. Explain the different issues in designing distributed operating system. (12)

SECTION - B

3. Discuss in detail different communication protocols for remote procedure call. (12)
4. Explain general architecture of distributed shared memory. (12)

SECTION - C

5. Elaborate different clock synchronization algorithms. (12)

14856/30

[P.T.O.]

6. Write a short note on the following:

(i) Task assignment approach

(ii) Process migration

(iii) Load sharing approach

(3×4=12)

SECTION - D

7. (a) What are the desirable features of a naming system?

(6)

(b) Elaborate object locating mechanism.

(6)

8. Discuss different file-caching schemes in detail.

(12)

SECTION - E

9. Write a short note on the following:

(i) Exception handling

(ii) Group communication

(iii) Buffering

(iv) Stub

(v) Threads

(vi) Atomic transactions

(6×2=12)
