

[Total No. of Questions - 9] [Total No. of Pages - 2]
(2126)

16343(D)

M. Tech 3rd Semester Examination

Distributed System

CSE1-E06

Time : 3 Hours

Max. Marks : 100

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 : Attempt five questions in all selecting one from each of the Sections A, B, C & D. Section E is compulsory.

SECTION - A

1. What are different processes managed by distributed system? Explain the following processes:
 - (i) Threads
 - (ii) Virtualization
 - (iii) Code migration (20)

OR

2. Explain the concept of Distributed System with its proper applications. What are its goals and also describe its general architecture. (20)

SECTION - B

3. (a) What are the main issues in designing a transparent RPC? Is it possible to achieve complete transparency of an RPC mechanism? (10)
(b) Give the format of RPC call and Reply messages. (10)

OR

2

16343

4. Discuss the role of naming services in distributed systems. List two navigation schemes that can be used for name resolution in domain name systems. (20)

SECTION - C

5. What is the difference between a file service using the upload/download model and one using the remote access model? (20)

OR

6. Describe the design requirement for a system to synchronize the clocks in distributed system. Justify your answer by taking proper example. (20)

SECTION - D

7. (a) What are different types of caching? How Web proxy cache is different from any other caching? (10)
(b) Write the short note on Apache Web server. (10)

OR

8. How distributed operating systems are different? Discuss the characteristics that distinguish them from operating systems in the light of operating systems you have studied. (20)

SECTION - E

9. Answer the following short questions:
 - (a) Discuss the various consistency models in short.
 - (b) Client Server Communication.
 - (c) What is need for transaction in a file service?
 - (d) Differentiate between structured naming and attribute-based naming. (4×5=20)