

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034.

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

THIRD SEMESTER

CS3951–DISTRIBUTED COMPUTING

Section – A (10 X 2 == 20 Marks)

Answer all Questions

1. Define distributed system.
2. Define thin client.
3. Draw the structure diagram to show the content of middleware layer.
4. Define RMI.
5. Define address space.
6. Define Cipher text.
7. What is Name Service?
8. Draw the diagram to show the skew between computer clocks in a distributed system.
9. What do you mean by optimistic concurrency.
10. Define Nested transaction.

Section – B (5 X 8 == 40 Marks)

Answer all Questions

11 a) Write about the three main standard technology components on which the web is based.

or

b) Write about the different types of networks.

12 a) Explain about

- i) Inter processor communication
- ii) Sockets

or

b) Write about

- i) Design issues of RMI
- ii) Implementation of RMI

13 a) Explain about the threads of an execution environment.

or

b) Explain the Public key algorithm.

14 a) Explain about Name service design used across internet.

or

b) Explain the NTP.

15 a) Describe nested transaction.

or

b) How transactions are carried out in two phase commit Protocol.

Section – C (2 X 20 == 40 Marks)

Answer any TWO Questions

16 a) Explain with Neat sketch the Fundamental model.

b) Explain in detail about

i). TCP stream communication

ii). UDP Datagram communication.

17 a) Explain about the the following

i). Monolithic kernel

ii). Micro kernel.

b) Explain the following terms

i) Domain Names.

ii) DNS directory tree.

18.a) Explain about Deadlock.

b) Explain in detail about the various protocols used in ISO/OSI network model.