



# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE**

**THIRD SEMESTER – NOVEMBER 2016**

**CS 3951 – DISTRIBUTED COMPUTING**

Date: 11-11-2016  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

## Part A

Answer ALL questions

10 x 2 = 20

1. Define protocols.
2. What is the use of proxy server?
3. What is the need of Marshalling?
4. What are Events?
5. What are primary need for execution environment?
6. What do you mean by Monolithic kernel?
7. Write the use of URL.
8. What is Skew?.
9. Expand ACID.
10. List the advantage of Nested transaction.

## Part B

Answer ALL questions

5 x 8 = 40

11 a) Write the characterization of Distributed systems.

(OR)

b) Explain about the various architectural models used in Distributed computing.

12 a) Explain the client-server communication with neat diagram.

(OR)

b) How the communication between Distributed objects taken place. Explain.

13 a) Describe the OS architecture in detail.

(OR)

b) Give a brief notes on various Symmetric Cryptographic algorithms.

14 a) Write the global states properties with consistence cuts.

(OR)

b) Explain about the Domain name system with relevant examples.

15 a) Explain nested Transactions in distributed computing.

(OR)

b) Discuss the Time stamp ordering mechanisms with Bank system.

## Part C

Answer any TWO questions

2 x 20 = 40

16 a) Elaborately write about the Networking and internet principles.

b) Explain about the distributed objects and remote invocation mechanism.

17 a) Explain, about processes and threads.

b) Explain the Global Name Service.

18 a) Write about the Concurrency control in Distributed transactions.

b) Explain Deadlocks in Distributed system with diagrams.

\*\*\*\*\*