

2017

M.SC IN CS/IT

PAPER : CSIT-3.2/CSIT-502

DISTRIBUTED SYSTEM

FULL MARKS: 80

Time : 3 hours

{ The figures in the margin indicate full marks for the question. }

1. Answer the following (any five):

2 x 5 = 10

- a) Define distributed system.
- b) What is message oriented transient communication?
- c) What is the multiprocessor and multicomputer system?
- d) What is access point?
- e) What is address space?
- f) What are the properties of true identifier?

2. Answer the following (any ten) :

3 x 10 = 30

- a) Describe about the client server communication
- b) Difference between synchronous and asynchronous communication?
- c) Differentiate between process and thread.
- d) What is meant by group communication?
- e) Explain Berkley algorithm for clock synchronization.
- f) What is the difference between RMI and RPC?
- g) Explain about physical clock and logical clock.
- h) What is importance of virtualization in DS?
- i) Differentiate between broadcasting and multicasting.
- j) Illustrate the architectures for multi-threaded server?
- k) Explain Names, Identifiers, and Addresses.
- l) Differentiate between Weak mobility versus strong mobility.

3. Answer the following questions :(Any Three)

- a) Explain the various design goals for distributed system with example

3 x 10 = 30

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- b) Explain the details about Explain why replication is necessary for DS.
- c) What do you mean by Code migration? Explain the Reasons for Migrating Code and also explain models of Code migration.
- d) Explain about Two phase Commit protocol.
- e) Write in brief about Bully election algorithm.
- 4) Write short notes (any two) : 2 x 5 = 10
- i) Middleware
 - ii) Flat naming.
 - iii) Name Resolution
