

2018
DISTRIBUTED SYSTEM
CSIT 3.2/CSIT- 502
Full Marks: 80
Time: 3 Hours

The figures in the margin indicates full marks for the questions :

1. Answer the following:(any five) **2×5=10**
- a) Define distributed system.
 - b) What is multicomputer and multiprocessor system?
 - c) Define Omega network.
 - d) What is the multiprocessor and multicomputer system?
 - e) What is access point?
 - f) What is address space?
 - g) What are the properties of true identifier?
2. Answer the following (any ten) **3×10=30**
- a) Describe about the client server communication.
 - b) Difference between synchronous and asynchronous communication?
 - c) What is tightly and loosely coupled system?
 - d) Differentiate between process and thread.
 - e) Define Persistence and Synchronicity in Communication.
 - f) What is meant by group communication?
 - g) Explain Berkeley algorithm for clock synchronization.
 - h) Explain about physical clock and logical clock.
 - i) What is importance of virtualization in DS?
 - j) Differentiate between broadcasting and multicasting.
 - k) Illustrate the architectures for multi-threaded server?
 - l) Explain Names, Identifiers, and Addresses.
 - m) Differentiate between Weak mobility versus strong mobility.

(Any Three Q no- 3 to 6)

3. Explain the various design goals for distributed system with example. **10×3=30**
4. Explain why replication is necessary for DS.
5. What do you mean by Code migration? Explain the Reasons for Migrating Code and also explain models of Code migration.
6. Write in brief about Bully election algorithm.
7. Write short notes (any two) **2×5=10**
 - a) Middleware
 - b) Flat naming.
 - c) System architecture of DS
