

C.U.SHAH UNIVERSITY

Winter Examination-2019

Subject Name : Distributed Systems

Subject Code : 4TE08DSY1

Branch: B.Tech (CE)

Semester : 8

Date : 01/10/2019

Time : 10:30 To 01:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

- Q-1 Define Following Terms. (14)**
- a) Granularity
 - b) Network Operating System
 - c) Thrashing
 - d) Message Passing Mechanism
 - e) Transparency
 - f) Inter Process Communication-IPC
 - g) Cache Memory
 - h) Thread
 - i) Kernel
 - j) Fault Tolerance
 - k) DOS
 - l) Deadlock
 - m) Mutable File System
 - n) Disk-full workstation

Attempt any four questions from Q-2 to Q-8

- Q-2 Attempt all questions (14)**
- a) List all transparency and explain different types of transparency.
 - b) Draw and Explain in Details microkernel and monolithic kernel approach.
- Q-3 Attempt all questions (14)**
- a) What is process migration? What are the main steps involved in process migration.
 - b) Explain different Addressing Techniques of Client-Server Model.
- Q-4 Attempt all questions (14)**
- a) Briefly explain Load-Balancing approaches.
 - b) Briefly define Distributed System. What are the advantages of Distributed System?



- Q-5** **Attempt all questions** (14)
- a) Explain Processor-pool & Workstation Server Models of Distributed System.
 - b) What is DNS? Name the type of organization of the Given DNS domain name com, edu, org, net, gov, mil, arpa.
- Q-6** **Attempt all questions** (14)
- a) Which are the characteristics features of system oriented name in naming system?
 - b) Differentiate tightly coupled and loosely coupled system.
- Q-7** **Attempt all questions** (14)
- a) Explain various types of file sharing semantics.
 - b) What is ostrich algorithm? Explain Bully Election algorithm in detail.
- Q-8** **Attempt all questions** (14)
- a) What is Real Time Distributed System? Explain the types of Real Time Distributed System.
 - b) Briefly explain DSM (Distributed Shared Memory)

