

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet,
Chennai — 600 044.

M.Sc. END SEMESTER EXAMINATION APRIL/NOV - 2021

SEMESTER - III

18PCSCT3007 - Distributed Operating System

Total Duration : 3 Hrs	Total Marks : 75
MCQ : 30 Mins	MCQ : 15
Descriptive : 2 Hrs.30 Mins	Descriptive : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Classify various network types and explain with the neat diagram.
2. Describe the characteristics of interprocess communication.
3. In the distributed environment, Election algorithm is designed to choose a coordinator – Justify your answer.
4. Ascertain a role of threads in distributed systems.
5. In the approach to cache consistency using leases, is it really essential that the clocks are synchronized? if not, what is it that is required ?
6. Assess Load balancing approach in Distributed Shared Memory.
7. Examine the three different ways in handling code migration.
8. Explain the process used in validating the digital signature.

Section C

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Explain the desirable features of a good global scheduling algorithm.
10. Show a comparison of three Mutual Exclusion algorithms.
11. What do you mean by file caching? Describe different key decisions to be addressed in a file- caching scheme for distributed file system.
12. Explain encoding and decoding of message data in detail.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Explain the different types of cryptographic algorithm.