



QP CODE: 25050583



Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION DECEMBER 2025

First Semester

M Sc OPERATIONS RESEARCH AND COMPUTER APPLICATIONS

Core Courses - CE020104 - INTRODUCTION TO OPERATING SYSTEMS

2019 Admission Onwards

5F42E0A4

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is a computer system?
2. What you mean by workstation computer?
3. What is synchronization in interprocess communication?
4. What are the necessary conditions in deadlock?
5. What is device driver?
6. What is disk cache?
7. What is the use of page table for memory management?
8. What you mean by optimal page replacement?
9. What is virtual file system?
10. Explain file system structure.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What is system software? Explain its features with example.
12. Explain different types of optical input device.
13. What are the functions of Operating system?
14. Explain shortest-job-first scheduling algorithm with example.
15. What is I/O software? What are the goals of I/O software?





16. List out different I/O devices. Explain how to manage I/O devices.
17. How demand paging is used for memory management?
18. What you mean by file system? Explain different types of file operations

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. What are the different types of memories in computer? Explain in detail the uses of each type of memory.
20. What is System calls? Explain its uses and different types of System calls.
21. Explain in detail the principles of I/O Hardware and I/O software.
22. What is the need of managing memory? Explain in detail various memory management strategies.

(2×5=10 weightage)

