



QP CODE: 21002271



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Reg No : .....

Name : .....

**M Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2021****First Semester**

Faculty of Science

M.Sc.Computer Science (Data Analytics)

**CORE - CA030103 - ADVANCED OPERATING SYSTEMS**

2019 ADMISSION ONWARDS

7EEF171B

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)***Answer any **eight** questions.**Weight 1 each.*

1. Differentiate process and program .
2. What are the different types of loadable kernel modules ?
3. What is multi thread?
4. What is FCFS algorithm? Compare it with Priority scheduling algorithm.
5. Explain Mutex locks with its procedure?
6. How can we prevent the occurrence of a deadlock?
7. Distinguish physical address space and logical address space.
8. Define Demand Paging.
9. What is CFS?
10. What are the security concerns of Linux system?

(8×1=8 weightage)

**Part B (Short Essay/Problems)***Answer any **six** questions.**Weight 2 each.*

11. Briefly explain operating system structure .
12. Describe cloud computing with suitable diagram .





13. Discuss the Structure of process in memory.
14. Write a note on process scheduling concept.
15. Explain about System Resource allocation graph with example.
16. Explain multiple instances of resource type algorithm in deadlocks.
17. Explain the working of paging.
18. What are the common features of linux operating system?

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain various services provided by the operating system for the users and the system itself .
20. Explain Interprocess Communication in detail.
21. Explain three different Algorithms for Solving Multiple process Critical section problem?
22. What is fragmentation in memory management? Explain some methods to eliminate various types of fragmentation.

(2×5=10 weightage)

