

**20P265**

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Name.....

Reg. No.....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2021**

(CUCSS - PG)

**CC19P CSS2 C07 - OPERATING SYSTEM CONCEPTS**

(Computer Science)

(2019 Admissions - Regular)

Time: Three Hours

Maximum: 30 Weightage

**PART A**

Answer any *four* questions. Each question carries 2 weightage.

1. Explain different states of threads
2. What is Monitors?
3. Differentiate First fit, Best fit, and Worst fit strategies.
4. Explain the solutions to critical section problem
5. What is deadline scheduling?
6. Explain different process creation and termination reasons
7. Describe Service Oriented Architecture?

**(4 × 2 = 8 Weightage)**

**PART B**

Answer any *four* questions. Each question carries 3 weightage.

8. Explain the different objectives and functions of the Operating system?
9. Describe Dining Philosophers Problem and its solution
10. Explain LRU page replacement algorithm
11. Describe the basic concepts of demand paging.
12. Explain the preemptive scheduling algorithm in detail.
13. Describe the role of Middleware in the client-server system.
14. Explain any two scheduling algorithms in detail.

**(4 × 3 = 12 Weightage)**

**PART C**

Answer any *two* questions. Each question carries 5 weightage.

15. Describe the terms
  - a. Priority Inversion.
  - b. Scheduling Criteria
16. Explain deadlock detection and recovery.

17. Discuss the terms.

a. Thrashing

b. Virtual Memory

18. Explain different types of OS in the evolution stage

**(2 × 5 = 10 Weightage)**

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