

B Sc DEGREE END SEMESTER EXAMINATION - JULY 2021**SEMESTER 2 : COMPUTER APPLICATION****COURSE : 19U2CRCAP3 - OPERATING SYSTEM***(For Regular - 2020 Admission and Supplementary - 2019 Admission)*

Time : Three Hours

Max. Marks: 75

PART A**Answer All (1 mark each)**

1. Define Multiprogramming.
2. What you mean by degree of multiprogramming.?
3. What you mean by cascading termination?
4. Define Pull migration
5. Define dispatcher.
6. What you mean by Priority scheduling?
7. What is the term bounded waiting in critical section?
8. Define fragmentation.
9. Define lazy swapper.
10. Define a file.

(1 x 10 = 10)**PART B****Answer any 8 (2 marks each)**

11. Explain multiprocessing?
12. Explain distributed system?
13. Explain Multilevel Queue scheduling.
14. Differentiate bounded and unbounded capacity buffer?
15. What you mean by safe state?
16. What are the various methods for handling deadlocks?
17. What is a Semaphore? Also give the operations for accessing semaphores.
18. Explain about virtual memory?
19. What you mean by TLB?
20. What are the different operations performed on a file directory

(2 x 8 = 16)**PART C****Answer any 5 (5 marks each)**

21. Explain any three services of an Operating system.
22. Explain about shared memory.
23. Explain about message Passing.
24. Explain about the operations of process.
25. Explain about critical section problem. What are the requirements of solution for the critical-section problem?
26. Write a short note on contiguous memory allocation.
27. Explain different file allocation methods.

(5 x 5 = 25)

PART D

Answer any 2 (12 marks each)

28. Explain batch processing and Time sharing with its advantages and disadvantages?
29. Explain about Non-preemptive scheduling algorithms.
30. Explain deadlock detection and recovery methods.
31. Explain different Page replacement algorithms.

(12 x 2 = 24)