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Roll No. Total Printed Pages - 3

F-3973

B. C. A. (Part - III) Examination, 2022 (Old Course) PAPER FIFTH COMPUTER OPERATING SYSTEM (303)

Time : Three Hours] [Maximum Marks:100 [Minimum Pass Marks:40

Note: Attempt any two part from each unit. All questions carry equal marks.

Unit - 1

1. (a) What is an operating system? Explain the multiprogramming operating system.

- (b) Discuss that operating system is a resource manager.
- (c) Write short notes on:
 - (i) Real Time System
 - (ii) Multiprocessor System

Unit - 2

- 2. (a) Discuss the process state and PCB.
 - (b) Discuss the round robin and multi level queues algorithm.
 - (c) Explain the master slave scheduling.

Unit - 3

- 3. (a) What is virtual memory? Explain the memory demand page.
 - (b) Describe the page replacement algorithm.
 - (c) Write short notes on:
 - (i) Disk scheduling algorithm
 - (ii) Fragmentation

Unit - 4

- 4. (a) Explain the Physical File System.
 - (b) Describe the Index allocation performance.
 - (c) Explain the free space management

Unit - 5

- 5. (a) What is dead locks? Explain how to detect deadlocks?
 - (b) Discuss about dead lock prevention.
 - (c) Explain the combined approach to deadlock handling.