DECEMBER 2023 **U/ID 46510/UCC4B**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is an operating system?
2. Define : Cooperating process.
3. What is semaphores?
4. Define : Deadlock Avoidance.
5. What is External Fragmentation?
6. What is Segmentation?
7. Define : Memory management unit.
8. What is Allocation?
9. What is swapping?
10. What is page replacement?
11. Define : Threats.
12. What is a kernel?

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

13. What are the activities of process management in an OS?

14. What are the components of operating system? Briefly explain.

15. Discuss about deadlock prevention.

16. Differentiate external and Internal Fragmentation with examples.

17. Write a note on : Demand paging.

18. Discuss the concept of Interrupt.

19. Write a note on: File management system.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Give a brief account on operating system structure.

21. What is deadlock? Discuss how to avoid deadlocks.

22. Explain briefly the contiguous allocation in memory management.

23. Discuss briefly on free space management in operating system.

24. Explain the kernel I/O subsystem in detail.
