DECEMBER 2024 **P/ID 16305/PIT2D/ PCAEA**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define multiprogramming.
2. What is process?
3. State the need of Heap memory.
4. What is turnaround time?
5. Define synchronization.
6. What is hold and wait situation?
7. What is logical address space?
8. Define Firstfit.
9. What is textfile?
10. What is sequential file access?
11. Write the functionality of UNIX kernel.
12. What is Remote procedure call?

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions.

13. Explain about the various operations of operating system in detail.

14. Write short notes on File management.

15. Elaborate the Peterson's solution for critical-section problem.

16. Explain segmentation with an example.

17. Discuss disk structure in detail.

18. Explain file attributes in detail.

19. Elaborate the exceptions and interrupts in Windows.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Elaborate Shortest-Job-First Scheduling algorithm with an example.

21. Elucidate semaphores in detail.

22. Explain Paging in detail with an example.

23. Elaborate file operations in detail.

24. Explain the components of UNIX system.

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