

**1264/A24**

**MAY 2008**

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**OPERATING SYSTEMS**

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Time : Three hours

Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Discuss the need for the operating system.
2. Explain I/O protection.
3. Write note on scheduling Queues.
4. Explain any two OS schedulers.
5. What are the necessary conditions for the occurrence of deadlock? Explain.
6. Explain in detail about the virtual memory.
7. Explain process control Block.
8. Discuss briefly the multiprogramming.

9. Explain any five DOS commands used to working with Directories.

10. Explain BSD Kernel I/O structure.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. Explain protection requirement for memory and processor.

12. Explain how semaphore s may be used to enforce mutual exclusion.

13. Discuss the role of semaphore with an example.

14. Explain priority based pre-emptive scheduling algorithm.

15. Discuss various DOS commands used to work with files.

16. Describe briefly the history of Unix operating systems.

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. (a) Discuss performance criteria for comparing scheduling algorithms.

(b) Explain an one scheduling algorithm with examples.

18. (a) Explain Optimal replacement and Adhoc page replacement algorithms.

(b) Explain how information is Protected from physical damage and improper access.

19. (a) What do you mean by semaphore? Explain in detail with suitable examples.

(b) Explain various mechanisms that support distributed processing on Windows 2000.