OPERATING SYSTEMS

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.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

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

10. Explain BSD Kernel I/O structure.

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

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

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

(b) Explain an one scheduling algorithm examples.

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

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

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

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