LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – **COMPUTER SCIENCE**

FIFTH SEMESTER – NOVEMBER 2011

CS 5504 - OPERATING SYSTEM

Date : 31-10-2011   Dept. No.   Max. : 100 Marks
Time : 9:00 - 12:00

PART –A

ANSWER ALL THE QUESTIONS   (10 X 2 = 20)

1. Define operating system?
2. Define process.
3. What is multiprogramming?
4. What is critical section?
5. What is fragmentation?
6. State any two advantages of virtual memory management.
7. What is a Direct memory access?
8. What is spooling?
9. List any four file attributes with its purpose.
10. Define fork.

PART – B

ANSWER ALL THE QUESTIONS   (5 X 8 = 40)

11. a) Write short note on layered approach.
              (or)
    b) What is system call? Explain.

12. a) Write briefly about process states.
              (or)
    b) What is process scheduling? Explain round robin process scheduling.

13. a) Compare multiprogramming with fixed and relocation partition.
              (or)
    b)Explain the concept of segmentation.

14. a) Discuss about Disks.
              (or)
    b) Explain about various types of terminals.

15. a) Explain file system implementation.
              (or)
    b) Write short note on i) Directories ii) File operations.

PART – C

Answer any TWO Questions   (2 X 20 = 40)

16. a)Describe client-server model in operating system.   (5 marks)
    b) Explain in detail how to handle synchronization in inter process communication.
                                                                           (15 marks)

17. a) Explain in detail about Dead lock avoidance algorithm for multiple
    instances of resources.   (10 marks)

    b) Discuss in detail about page replacement algorithms.   (10 marks)

18. a) Explain Input / Output Software.   (10 marks)
    b) Discuss in detail about memory management in unix.   (10 marks)

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