

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIFTH SEMESTER – APRIL 2010

CS 5504/CS 5501 - OPERATING SYSTEM

Date & Time: 24/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

PART - A

Answer **ALL** the Questions

(10 x 2 = 20 marks)

1. Narrate the operating system as a Resource Manager.
2. What is a distributed system?
3. What is called as Thread?
4. Mention the differences between short term and medium term scheduling
5. List the advantages of virtual memory
6. Write a note on Demand paging
7. Enumerate any two advantages of Disks
8. What do you mean by controller regarding I/O hardware?
9. What do you mean by Directories?
10. What is the purpose of fork system call in UNIX?

PART – B

Answer **ALL** the questions

(5 x 8 = 40 marks)

11. a) Summarize the types of system calls normally provided by an operating system.
(OR)
b) Discuss the common services provided by an operating system.
12. a) Explain the various operations on process.
(OR)
b) Write a note on inter process communication.
13. a) Discuss the FIFO algorithm which is used for page replacement.
(OR)
b) Write a short note on Segmentation.
14. a) Discuss the principles of I/O software.
(OR)
b) Explain briefly the Graphical user interfaces.
15. a) Discuss briefly the Linux operating system.
(OR)
b) Write a note on file system.

(P.T.O.)

PART – C

Answer any **TWO** questions

(2 x 20 = 40 marks)

16. a) Explain the architecture of an operating system.
b) Explain how deadlock detection is done in a system with many processes and resources.
17. a) Discuss in detail paged memory management scheme.
b) Write a detailed note on Network terminals.
18. a) Describe the common schemes for designing the logical structure of a directory.
b) Explain different file types in Unix.

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