

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.C.A.DEGREE EXAMINATION –COMPUTER APPLICATIONS

FIFTH SEMESTER – APRIL 2018

CA 5504– OPERATING SYSTEM

Date: 27-04-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART A

Answer ALL the questions

10 x 2 = 20 marks

1. List the two different roles of the operating system.
2. What is the use of the fork() statement ?
3. What are the different process states?
4. Define monitors.
5. What is a Translation Look aside Buffer (TLB)?
6. Define degree of multiprogramming.
7. Write the importance of device driver.
8. What are the two categories of I/O devices?
9. What is an I-node?
10. State the role of object manager in Windows 2000.

PART B

Answer ALL the questions

5 x 8 = 40 marks

11. a. Explain the system calls for directory management.
(OR)
b. Define Process. Explain it in detail.
12. a. Discuss on deadlock prevention.
(OR)
b. Write about semaphores.
13. a. Briefly explain about any two page replacement algorithms with suitable examples.
(OR)
b. Explain about memory management with linked list
14. a. Write about Interrupt handlers.
(OR)
b. Discuss on the X window system.
15. a. Explain the fundamentals of memory management in Unix .
(OR)
b. Write about different ways of implementing a file storage.

PART C

Answer any TWO

2 x 20 = 40 marks

16. A. Explain about operating system structure.
b. Discuss on Deadlock Avoidance.
17. a. Write about paging in detail.
b. Explain about the different ways that I/O can be done.
18. a. Explain about directories.
b. Discuss on segmentation in detail.
