LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.C.A. DEGREE EXAMINATION - COMPUTER APPLICATIONS

SECONDSEMESTER - APRIL 2017

CA 2807- OPERATING SYSTEMS

Date: 03-05-2017 Time: 01:00-04:00

Dept. No.

Max.: 100 Marks

PART-A

Answer ALL questions:

10*2=20

- 1. What is the role of System calls?
- 2. Illustrate the main role of file descriptor?
- 3. What are the fields in group file and mention the name of the group file.
- 4. Comment on i-node.
- 5. What are the different stages of a Process?
- 6. What is the use of fcntl?
- 7. Compare compile time and load time in OS.
- 8. What are the Non-preemptive scheduling algorithm
- 9. Mention all the functions of Session layer.
- 10. What are the limitations of raw sockets?

PART – B

Answer ALL questions:

11.a) Describe UNIX Architecture in detail.

(or)

b)Explain any two system calls used in UNIX.

12. a) Explain the different types of File.

(or)

b) Explain any two functions related I/O operations in UNIX.

13. a) Explain the concept of Thread and its related functions

(or)

b) Describe the various conditions to arise the Deadlock.



5*8=40

14. a) write short notes on Non preemptive scheduling policies in detail.

(or)

b) Discuss the concept of Segmentation in detail.

15. a) Explain Raw socket and its functions.

(or)

b) Write short notes on DNS.

PART-C

Answer any TWO questions

2 * 20 = 40

16. a) Explain the syntax of all the Looping statement in Shell programming.

b) Discuss the operations of v-node and i-node in File system.

17. a) Discuss Single contiguous allocation of memory in detail

b) Discuss any two Preemptive scheduling algorithms in detail

18. Discuss in detail about the different functions for TCP sockets

\$\$\$\$\$\$\$\$