



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS**

SECOND SEMESTER – APRIL 2018

**CA 2807- OPERATING SYSTEMS**

Date: 25-04-2018  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART – A**

**Answer ALL questions**

**10\* 2 = 20**

1. Define Operating system.
2. Write UNIX command used for Networking.
3. Write the syntax *for-do-while* loop in shell programming
4. Distinguish between *open* and *creat* functions?
5. What is the use of fork function?
6. What are the methods for Deadlock avoidance?
7. Define Thread.
8. Draw the Process state transition diagram.
9. What is Throughput?
10. Write any four basic socket functions

**PART – B**

**Answer ALL questions**

**5\* 8 = 40**

11. a) Explain file access permissions in UNIX.  
(or)  
b) Explain *if-else statement* in Shell programming with an example
12. a) Discuss File Sharing in UNIX.  
(or)  
b) Explain different types of buffering in UNIX.
13. a) Explain the concept of FIFO for Inter-Process Communication.  
(or)  
b) Write short notes on the following  
i) Password file ii) Group File
14. a) Explain Single contiguous allocation of memory  
(or)  
b) Discuss the Non-preemptive Scheduling policies in detail.
15. a) Write short notes on Raw sockets  
(or)  
b) Discuss OSI reference model in detail.

**PART – C**

**Answer any TWO questions**

**2 \* 20 = 40**

16. a) Explain the Architecture of UNIX operating system with a neat diagram.  
b) Discuss the different File types in detail
17. a) Discuss the concept of thread synchronization with an example.  
b) Discuss the concept of Paging in detail
18. Discuss all the functions of TCP sockets – 20 Marks

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