



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

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

FIRST SEMESTER – NOVEMBER 2016

**CS 1826 - LINUX PROGRAMMING**

Date: 09-11-2016  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**SECTION-A**

**ANSWER ALL THE QUESTIONS:**

**(10 X 2 = 20)**

1. What is output redirection?
2. Illustrate AND list in Linux.
3. State the purpose of eval command.
4. What are device drivers?
5. Mention any two time and date functions in Linux.
6. Differentiate malloc( ) and calloc( ).
7. Write the syntax of pipe call.
8. What is the use of fork( )?
9. What are the types of sockets?
10. Give the syntax of semop( ) and its purpose.

**SECTION-B**

**ANSWER ALL THE QUESTIONS:**

**(5 X 8 =40)**

11. a) Illustrate Case control statement with pattern matching.  
(OR)  
b) Describe about the creation and execution of shell scripts.
12. a) Explain the types of dialogs available in dialog utility.  
(OR)  
b) Discuss about the file structure in Linux.
13. a) Explain the Environment variables available in Linux with examples.  
(OR)  
b) Explain the temporary files and the functions associated with it.
14. a) Discuss about File locking and its types.  
(OR)  
b) Explain the functions involved in the creation of named pipes.
15. a) Explain about the functions related to message queues.  
(OR)  
b) Elaborate about the accepting and requesting procedures in socket communications.

## SECTION-C

**ANSWER ANY TWO QUESTIONS:**

**(2 X 20 = 40)**

16. (a) Discuss in detail about the creation and usage of User defined functions with examples.

**(10)**

(b) Elaborate about the directory maintenance and scanning directory commands in Linux. **(10)**

17. (a) Discuss about Memory allocation and freeing memory in Linux. **(10)**

(b) Explain Process pipes with `popen( )` and `pclose( )` functions. **(10)**

18. (a) Explain Interprocess communication using shared memory. **(10)**

(b) Discuss about the looping statements in Shell programming in Linux. **(10)**

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