# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.Sc. DEGREE EXAMINATION - COMPUTER SC.

## THIRD SEMESTER - APRIL 2013

## CS 3814 - LINUX PROGRAMMING AND DRIVER DEVELOPMENT

Date: 07/05/2013	Dept. No.	Max.: 100 Marks
Time: 1:00 - 4:00	l	

#### **SECTION-A**

#### ANSWER ALL THE QUESTIONS:

 $(10 \times 2 = 20)$ 

- 1. What is the use of test command?
- 2. Name some parameter variables..
- 3. Mention the usage of chdir and getcwd.
- 4. Differentiate fgets() and gets().
- 5. What is a pipe?
- 6. State the purpose of msgctl().
- 7. What are stream sockets?
- 8. List the library functions used for initialization and termination in curses.
- 9. What is scull?
- 10. Define Kernel space.

#### **SECTION-B**

#### **ANSWER ALL THE QUESTIONS:**

(5 X 8 = 40)

11. a) Explain the looping structures in shell scripts with examples.

(OR)

- b) Write a shell script to explain the usage of user defined functions.
- 12. a) Explain File related system calls with examples.

(OR)

- b) Discuss in brief about formatted input and output.
- 13. a) Explain the library functions used in shared memory.

(OR)

- b) Elaborate the usage of process pipes.
- 14. a) Discuss in brief about the socket connections.

(OR)

- b) Explain the implementation of **Keypad** in curses.
- 15. a) Explain the classes of devices and modules.

(OR)

b) Discuss in brief the Kernel's position in Linux file structure and splitting of the kernel.

#### **SECTION-C**

ANSWER ANY TWO QUESTIONS:	$(2 \times 20 = 40)$
<ul><li>16. (a) Elaborate the usage of Pipes and redirections in Linux. (10)</li><li>(b) Discuss in brief about the file and directory maintenance with examples.(10)</li></ul>	
<ul><li>17. (a) Discuss in detail about Interprocess communication with Named Pipes. (10)</li><li>(b) Explain about the creation and usage of Semaphores. (10)</li></ul>	
18. (a) Elaborate the role and purpose of device drivers. (10) (b) Discuss about the main library functions involved in controlling the movement output of curses in detail. (10)	, deletion and
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