 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **COMPUTER SC.**

THIRD SEMESTER – **APRIL 2012**

# CS 3814 - LINUX PROGRAMMING AND DRIVER DEVELOPMENT

Date : 26-04-2012 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

PART – A

**ANSWER ALL THE QUESTIONS:** **10 X 2 = 20**

1. Define shell.
2. What is the output of the following script,

myVar = “Hello ”

echo ‘$myVar’

echo “$myVar”

1. Define: inode.
2. What is the function of link system call?
3. Define Semaphore.
4. Define Pipe.
5. Define SOCK\_STREAM.
6. What is the usage of COLOR\_PAIR function?
7. Define modules.

10. What is Block device?

PART – B

**ANSWER ALLTHE QUESTIONS : 5 X 8 = 40**

1. a) Explain parameter expansion with a suitable example.

(OR)

b) Write a shell program to trap interrupt signal.

1. a) Explain the Read and Write system call.

(OR)

b) Write a note on mmap.

1. a) Briefly discuss about the low level pipe function.

(OR)

b) Describe about Shared Memory.

1. a) Write a brief note on Socket types.

(OR)

b) What is color pair? Explain.

1. a) Describe the role of device driver.

(OR)

b) Explain the design of the Scull.

PART – C

**ANSWER ANY TWO: 2 X 20 = 40**

1. a) Discuss the control structures in detail. (10)

b) Explain Linux File Structure in detail. (10)

1. a) Discuss the named FIFO with a suitable example. (10)

b) Write a note on the following, (i) bind.(ii) listen. (iii) accept. (10)

1. a) Discuss about splitting the kernel. (10)

b) Explain about shell variables and functions with a suitable example. (10)

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