LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

FIRST SEMESTER - NOVEMBER 2014

CS 1826 - LINUX PROGRAMMING

Time: 01:00-04:00

PART - A

Answer ALL the questions:

 $10 \times 2 = 20$

- 1) List out three condition types.
- 2) What is the default shell in Red hat?
- 3) List the types of device files.
- 4) What is the use of: command?
- 5) What are the functions used to access the environment variables?
- 6) Define: malloc.
- 7) What is process identifier in a process table?
- 8) Define Pipe.
- 9) What is semaphore?
- 10) What are the attributes of Socket?

PART - B

Answer ALL the questions

 $5 \times 8 = 40$

11) a) Write in brief about arithmetic comparison.

OR

- b) Explain briefly about Shell variables.
- 12) a) Write notes on 'open' system call.

OR

- b) Describe about Linux file structure.
- 13) a) Explain briefly about temporary storage files.

OR

- b) Write notes on simple memory allocation.
- 14) a) Describe about Named pipe.

OR

- b) Explain about the lock files with an example.
- 15) a) Explain about shared memory.

OR

- b) Write notes on the following:
 - i) msgsnd
- ii) msgrcv.

PART - C

Answer any TWO questions:

 $2 \times 20 = 40$

- 16) a) Discuss the shell control structures in detail. (10 marks)
 - b) Write a shell script to manipulate environment variables. (10 marks)
- 17) a) Explain the getenv and putenv with suitable examples. (10 marks)
 - b) Explain Client-Server FIFO with a suitable example program. (10 marks)
- 18) a) Write notes on the following
 - i) bind ii) listen iii) accept (10 marks)
 - b) Discuss about the Shell Lists in detail. (10 marks)

