

[This question paper contains 2 printed pages.]

5184-D

Your Roll No.

B.Sc. (Prog.) / Sem. I

B

(Concurrent Course)

MATHEMATICAL SCIENCES

CSCT – 301 Linux System Administration

(Admissions of 2011 and onwards)

Time : 3 Hours

Maximum Marks : 75

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

All questions are compulsory.

1. (a) Explain the process of installation of Linux operating system. List any three Linux distributions available in market. (8)
(b) What do you understand by double booting ? How can you set default OS to be loaded ? (5)
2. (a) How can you view the processes that are currently running on your Linux system ? Explain various options available with this command ? (4)
(b) Explain the steps of adding and deleting processes in Linux OS. (4)
3. (a) Explain the role of *init* process and *init* script of Linux OS. (4)
(b) Explain various options and modes of shutting down the Linux system. (4)

P.T.O.

4: (a) Explain the following Linux shell script commands along with examples

- (i) grep
- (ii) case....esac
- (iii) chmod
- (iv) who (4×3=12)

(b) What is the output of each of the following commands? Explain the output.

- (i) grep 'whoami' /etc/passwd
- (ii) tail +20 < du.txt | head -n30 > bsc
- (iii) who | wc -l
- (iv) ls > filename (4×3=12)

5. (a) Write a shell script to display on the screen sorted output of "who" command along with the total number of users. (5)

(b) Write a menu driven shell script to copy the file, move the file and remove the file based on the user's input. (5)

6. Write short notes on any **three** of the following :

- (a) User management in Linux
- (b) Network services in Linux
- (c) LILO and GRUB loader
- (d) Various file systems in Linux
- (e) inode structure (4×3=12)

(300)****