

This question paper contains 4 printed pages]

Roll No.

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S. No. of Question Paper : 5004

Unique Paper Code : 234163

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Name of the Paper : Computer Science [Linux System Administration] (CSCT-301)

Name of the Course : B.Sc. Mathematical Science (Concurrent)

Semester : I

Duration : 3 Hours

Maximum Marks : 75

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

Question No. 1 is compulsory.

Attempt any five questions from Q. 2 to Q. 8.

1. Answer the following questions :

- | | |
|---|---|
| (a) Which user is called superuser in Linux ? | 1 |
| (b) What is a rescue disk ? | 1 |
| (c) What is the meaning of rwx r-x-r-- in octal method ? | 2 |
| (d) Which Linux command is used to avoid mail disturbance ? | 2 |
| (e) What is the meaning of pwd Linux command ? | 2 |

P.T.O.

- (f) Write a Linux command to check free space on the disk. 2
- (g) Explain the difference between `cat > du.txt` and `cat > du.txt` Linux command. 3
- (h) Explain the main function of kernel. 3
- (i) Give the three variations of date command. 3
- (j) With the help of an example, explain the process of sending a message by a user to other users in Linux. 3
- (k) What is the difference between `ls` and `ls-l` ? Explain. 3
2. (a) What are the minimum hardware requirements for installing Linux operating system on a machine ? 5
- (b) Explain the process of installation of Linux operating system. List any *two* popular distributions available in market. 5
3. (a) Suggest four guidelines for creating a secured password. 4
- (b) List the requisite utility required along with the steps to install the tarball packages on Linux machines. 6

4. (a) Explain various file access permissions in Linux. Give any *two* examples to change the file permission. 5
- (b) Explain how to view the processes that are currently running on your Linux system ?
Write a command to stop these processes. 5
5. (a) Write a shell code to calculate factorial of a number provided on the command line as argument. 5
- (b) Write a shell code to find out the smallest number of three numbers entered at the command line. 5
6. (a) Give the output of the following commands and explain the same : 5
- (i) ac john
 - (ii) quotacheck
 - (iii) finger john
 - (iv) last john
 - (v) uptime.
- (b) Explain the purpose of the following commands in Linux. 5
- (i) ps
 - (ii) kill

7. (a) Explain various file systems supported by Linux. 5
- (b) Explain various modes of shutting down the Linux system. 5
8. (a) Write short notes on the following : 9
- (i) DNS
 - (ii) DHCP
 - (iii) FTP
- (b) What is the use of make command in Linux ? 1