

E 1257

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Reg. No.....

Name.....

**B.C.A./B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2018**

**Sixth Semester**

Choice Based Core Course—**LINUX OPERATING SYSTEM**

(Common for B.C.A. and B.Sc. Computer Applications [Triple Main])

(2013 Admission onwards)

Time : Three Hours

Maximum Marks : 80

**Part A**

*Answer all questions.*

*Each question carries 1 mark.*

1. What is the core of Linux Operating System ?
2. What command do you use to create Linux file systems ?
3. What is a shell ?
4. Given a file, write a command sequence to find the count of each word.
5. Which command is used to get administrative privilege ?
6. Shadow passwords for groups are stored in which configuration file.
7. What is in an RPM ?
8. How to print last 5 characters of variable in shell script ?
9. What is the command to determine the path of an executable file ?
10. What is the purpose of FTP ?

(10 × 1 = 10)

**Part B**

*Answer any eight questions.*

*Each question carries 2 marks.*

11. How Linux differs from other operating systems like MS Windows ?
12. How will you pass and access arguments to a script in Linux ?
13. Given a file, replace all occurrence of word "ABC" with "DEF" from 5th line till end in only those lines that contains word "MNO".
14. Differentiate between boot block and super block.
15. What is the difference between static library and dynamic library ?

**Turn over**



16. What is the purpose of \$HOME directory ?
17. List different types of shells available in UNIX.
18. Explain about zombie processes.
19. What is the advantage in using command line argument in shell scripting ?
20. Differentiate between grep and egrep.
21. Write short notes on DNS.
22. Write the purpose of cut and sort.

(8 × 2 = 16)

### Part C

*Answer any six questions.*

*Each question carries 4 marks.*

23. What do you mean by i-nodes ? Explain.
24. Write a script to print the first 10 elements of Fibonacci series.
25. Give descriptions of any 4 directories that contain useful configuration files.
26. What are pipes in Linux ? Explain.
27. Write a shell script for calculating the factorial of a given integer number.
28. Write short notes on samba.
29. Explain the process of temporary disabling of a user's account.
30. What is DHCP? Why it is used ?
31. Write note on Telnet. Why we avoid Telnet to administer a Linux system remotely ?

(6 × 4 = 24)

### Part D

*Answer any two questions.*

*Each question carries 15 marks.*

32. (a) With a diagram explain the basic architecture of Unix/Linux system. (10 marks)  
(b) Explain its basic features and advantages. (5 marks)
33. (a) Explain the working of vi editor with its commands. (8 marks)  
(b) Describe about connecting processes with pipe. (7 marks)
34. Briefly explain how the packages are installed and removed in Linux ?
35. With suitable examples, explain the conditional and controls structures in Shell scripting.

[2 × 15 = 30]