

BACHELOR OF COMPUTER APPLICATION
Fifth Semester
LINUX & SHELL PROGRAMMING
(BCA - 21)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer any four from Question no. 2 to 8
Question no. 1 is compulsory.

1. (a) Define and explain Linux architecture in terms of different layers. (6)
(b) Explain Linux file system. (4)
2. (a) What is process? Which command can be used to list the background processes and the suspended processes? (2+3=5)
(b) Explain with an example the use of redirection input and output. (5)
3. (a) What are the modes of operation of vi? What is the difference between :w and :wq command. (4)
(b) How will you perform the following in vi? (6)
 - (i) Append Text.
 - (ii) Insert Text.
 - (iii) Move to beginning of line.
 - (iv) Delete 2 lines at a time.
 - (v) End of line.
 - (vi) Word forward.
4. (a) Write a shell program to find whether the variable 'a' is equal to, greater than or less than 'b'. (4)

- (b) Write a shell program to check a variable whether it is a number, capital letter, small letter or some other special symbol. (6)
5. (a) What are the basic system administration tasks in Linux based on networking system? (6)
- (b) Explain ifconfig and netstat commands with options. (4)
6. (a) How can we install and configure DNS in Linux? (7)
- (b) Explain uname command. (3)
7. (a) What command is used to check disk space in Linux? Explain with options. (1+4=5)
- (b) What command is used to compare two files and convert one file to another? (3+2=5)
8. (a) Which command is used for changing file and directory permissions to users, groups and others? Explain with 3 examples. (1+3=4)
- (b) Write the command to create, remove multiple directories in Linux. What is the command to copy multiple files in a directory? (4+2=6)
