



**BACHELOR OF COMPUTER APPLICATION  
FIFTH SEMESTER [SPECIAL REPEAT]  
LINUX AND SHELL PROGRAMMING  
BCA-501  
[USE OMR SHEET FOR OBJECTIVE PART]**

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

*Choose the correct answer from the following:*

$I \times 20 = 20$

1. Who can change the password of any user?  
a. Everyone                                  b. System Administrator  
c. Supervisor                                d. End-user
2. The prompt of the root user is:  
a. @    b. #  
c. %    d. \$
3. Which of the following is called as the redirection operator for output?  
a. =    b. <<  
c. <    d. >
4. When you are in the command mode, what takes you to the line editing mode in vi editor?  
a. Cursor                                    b. :colon  
c. Esc                                        d. Enter
5. Which command copies the contents of the source file after creating the destination file?  
a. mv                                        b. cat  
c. cp                                        d. rm
6. The..... command will display the contents of the current directory beginning with the letter 'a'.  
a. ls a\*                                    b. ls \*a  
c. la aa\*                                    d. None of the above
7. Which of the following represents read, write and execute permissions for owner and read and execute for all others?  
a. 755                                      b. 022  
c. 733                                      d. 557
8. Given command  
\$ chmod o-w datafile  
a. Sets write permission to everyone for datafile  
b. Sets write permission to others for datafile  
c. Clears write permission to everyone for datafile  
d. Clears write permission to others for datafile
9. The permission -rwxr--r-- represented in octal expression will be:  
a. 777                                      b. 666  
c. 744                                      d. 711

10. Which command is used to change permission of files and directories?
    - a. mv
    - b. chgrp
    - c. chmod
    - d. set
  11. Command used to count number of character in a file is:
    - a. grep
    - b. wc
    - c. count
    - d. cut
  12. Which vi editor command copies the current line of the file?
    - a. yy
    - b. yw
    - c. yc
    - d. None of the above
  13. What command is used to display the characteristics of a process?
    - a. au
    - b. ps
    - c. du
    - d. pid
  14. Which command is used to clear the screen?
    - a. clear
    - b. clrscr
    - c. Either a or b
    - d. None of the above
  15. Which command is used to get help about a command in Linux?
    - a. man
    - b. tar
    - c. None of these
    - d. Both a and b
  16. Which command is/are used to remove directory in linux?
    - a. rmdir
    - b. rm -r
    - c. Both a and b
    - d. None of the above
  17. Pipe symbol is represented by:
    - a. ||
    - b. |
    - c. ^
    - d. \$
  18. What command is used to sort the lines of data in a file in alphabetical order?
    - a. sort -r
    - b. st
    - c. sort
    - d. None of the above
  19. What command is used to terminate a process?
    - a. kill
    - b. cancel
    - c. shutdown
    - d. haltsys
  20. Which command is used to compare the files?
    - a. ccp
    - b. du
    - c. cmp
    - d. comp
- -- --

**(Descriptive)**

Time : 2 hr. 30 mins.

Marks : 50

[ Answer question no.1 & any four (4) from the rest ]

1. What are the basic features of Linux? Explain five different types of Linux. 5+5=10
2. a) Explain the difference between peer-to-peer and client-server model.  
b) What is FTP server and Apache Web server? 5+5=10
3. a) How to create and delete a new user and group in Linux?  
b) Define uname and hostname command with options. 5+5=10
4. Explain ls, cp, cal, echo and cat command with examples. 10
5. a) If the basic salary is less than Rs. 1500, then HRA=10% of basic salary and DA=90% of basic salary. If the salary is either equal to or above 1500, then HRA=500 and DA=98% of basic salary. If the employee's salary is input through the keyboard, write a program to find gross salary.  
b) Write a shell program to check whether a number is even or odd. 6+4=10
6. a) Explain chmod command with all possible options.  
b) Explain Linux file system. 6+4=10
7. a) What is process? Explain process life cycle with diagram.  
b) Define cut, sort and grep commands. 4+6=10
8. Write short notes: (any two).  
a) Kernal  
b) GNOME and KDE  
c) TCP/IP Network 5+5=10

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