



- (b) Write a shell script to check whether the given file is empty or not. 5
- (c) Write note on Is command with options and example. 3
- 4 (a) What does it mean by a link? Give the difference between soft link and hard link? Also write disadvantages when using hard link. 6

OR

- (a) Explain command line interpretation of the shell. 5
- (b) Write commands for following : (any five) 5
- (i) To remove duplicate line from a file.
- (ii) To count number of characters in last line of file x1.
- (iii) Display the processes of user 'bca0 I'.
- (iv) List the user from /etc/passwd in the alphabetically sorted order.
- (v) Count the frequency of users who are logged in from more than one terminal.
- (vi) Display string in upper case of the file fl.txt.
- (c) Explain any two commands from following : 4
- (i) Nice
- (ii) Uniq
- (iii) Wall
- 5 (a) Write a command using grep or egrep for the following : (any five) 5
- (i) Write a command to print lines which contain 'Accounts'.
- (ii) Write a command to print lines which do not contain 'Accounts'.
- (iii) Write a command to print line 10 to 15.
- (iv) Write a command to substitute 'doshi' with 'desai'.
- (v) Write a command to print lines with line numbers which contain "Marketing".
- (vi) Write a command to display line which starts with 'The'.
- (b) Write a command using awk for the following : 5
- (any two)
- (i) Write awk script to display the user login ids, their home directories and login shells from the "/etc/passwd" file.
- (ii) Switch the first two fields in each line of a text and put the result in a new file.
- (iii) To only print lines wherein the first field had a numeric value of less than 20
- (c) Explain any two communication commands. 4