Babu Madhav Institute of Information Technology, Uka Tarsadia University

5 years Integrated M.Sc. (IT) (4th Semester)

060010410 - CC12-Linux and Shell Programming

Unit Test 2

Duration: 90 minute Max. Marks: 30

Date: 28/02/2018

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks allocated to that question.
- 4. Draw diagrams/figures whenever necessary.

Q-1 (A) Do as directed.

[1*4=4]

- I) How to run job in background? How to switch background job to foreground?
- II) If I am not specifying number in head command then how many lines displayed from file?
- III) Signify usage of \$? variable with example.
- IV) State the key difference between "cat" and "paste" command.

Q-1 (B) Answer the following in brief. (Any 3)

[2*3=6]

- I) Draw the flowchart of grep command.
- II) What is an interpretation of following command?

\$tr "aeiou" "AE?"

\$tr -c "aeiou" "*"

III) What is output of the following commands? Why?

IV) Which token is use as default delimiter by cut command? Write a command that cut 5th column from aa.txt file; delimiter in file is ":".

Q-2 Answer the following

[5*2=10]

A) Write a shell script that simulate the functionality of wc command. (Do not use wc).

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A) Write a shell script that simulate the functionality of head – tail command. (Do not use head - tail).

B) Do as directed. Write grep command for following questions. Use file abc.txt.

- 1) Select lines which do not start with capital letter and do not end with digit.
- 2) Select lines which having first and last similar character.
- 3) Select lines which having at least two digits without any other character in between.
- 4) Copy the file to monitor, but delete blank lines.
- 5) Select the lines from file which having only one word and word is "LINUX".

<u>OR</u>

B) Do as directed.

- 1) Copy content of file1.txt to file2.txt. Do not use cp command.
- 2) Sort a files in current directory as per file size.
- 3) Write a command that count duplicate lines from file.
- 4) Cut filed 5 and 2 from file1.txt. File having @ character as delimiter.
- 5) Write a command that count number of lines, words from file1.txt.

Q-3 Answer the following in detail. (Any 2)

[5*2=10]

- I) Write a detail note on redirection with appropriate example.
- II) Why it is recommended to put variable in double quote ("")? List and explain three quotes used by the Linux.
- III) What are two building block of regular expression? Explain any four operators used in regular expression with appropriate example.