KA-3762

Third Year B. C. A. (Sem. V) Examination
September / October – 2012
Paper - 502 : Unix & Shell Programming

Time : **3 Hours**]   [Total Marks : **70**

Instructions :

(1)

નીચે દર્શાવેલ ☞ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☞ signs on your answer book.

Name of the Examination :

☞ **T. Y. B. C. A. (SEM. 5)**

Name of the Subject :

☞ **PAPER-502 : UNIX & SHELL PROGRAMMING**

☞ Subject Code No. : | 3 | 7 | 6 | 2 | ☞ Section No. (1, 2, ...) : | **NIL**

Seat No. :

Student's Signature

(2)   Figure on the **right** indicate marks.

(3)   Take assumption whenever necessary.

1   Answer in short : (any seven)   **14**

    (i)   What command is-a do ?

    (ii)   What do you mean by zombie state of a process ?

    (iii) Which file attribute (permission) changes when you copy a file from other user account ?

    (iv) State why the -r option of rm is dangerous.

    (v)   What does/etc/passwd contains ?

    (vi) Which command of vi editor is used to display line number before each line ?

    (vii) How can you make out whether two files are copies or links ?

    (viii) Explain here document.

2   Answer the following : (any **two**)   **14**

    (i)   List the characteristics of unix file system.

    (ii)   Explain features of Shell

    (iii) Explain functions of Kernel.

3   (a)   Explain types of files in UNIX.   **6**

    (b)   Write a shell script which displays list of all Files in the current directory to which you have read write and execute permissions.   **5**

OR

(b) Write a script that removes only empty files from current directory.   5

(c) Explain tr command.

4 (a) Explain commands for changing file permissions and ownership.   5

OR

(a) Explain conditional parameter substitution giving example.   5

(b) Write commands for following : (any five)   5
     (i) Count number of characters in first five lines of file x1.
     (ii) To replace the word Computer with Computing of file x1.
     (iii) Display lines whose last word is UNIX of file x1.
     (iv) Display lines starting from 10th line to the end of file x1.
     (v) To delete all special characters from the file x1.
     (vi) To display lines beginning with alphabets of a file x1.

(c) Explain any **two** commands from following :   4
     (i) kill
     (ii) more
     (iii) touch.

5 (a) Perform following commands : (any **four**)   4
     (i) To remove a file name as X1 ? (X1 followed by ? character)
     (ii) To run script X1 in background so that its execution continue even user logout from the system.
     (iii) To display last line of a file. X1.
     (iv) To deny execute permission to a group of a file X1.
     (v) To create link between file X1 and X1.link.

(b) Answer the following : (any **two**)   6
     (i) Explain significance of system variable used with awk utility.
     (ii) Explain concept of array in awk utility.
     (iii) Write an awk script to display file contents in reverse. (i.e. last line should be displayed first,...... first line should be displayed last.)

(c) Define Process. Which command is useful to know the status of process ? Explain it giving example. What are the three phases in creation of a process ?   4