CBCS Scheme

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15CS35

Third Semester B.E. Degree Examination, Dec.2017/Jan.2018
UNIX and Shell Programming

Time: 3 hrs.

Max. Marks: 80

Note: *Answer any FIVE full questions, choosing
ONE full question from each module.*

Module-1

1   a.   List and explain features of UNIX operating system.   **(07 Marks)**
    b.   Discuss internal and external commands, with suitable examples.   **(06 Marks)**
         Write the outputs of the following commands :
         i)   cal 8 1947
         ii) echo 'Todays date is `date`'
         iii) date + "Date is : %a/%h/%Y".   **(03 Marks)**

OR

2   a.   Explain "man" documentation, and its internal commands.   **(08 Marks)**
    b.   Describe command arguments and options with suitable examples.   **(04 Marks)**
    c.   How an ordinary user can become a super user and vise versa? Explain with suitable commands.   **(04 Marks)**

Module-2

3   a.   What is a file system? Explain Unix file system with neat diagram, also explain parent and child relationships with suitable examples.   **(08 Marks)**
    b.   What is pathname? List and explain types of path-names with an examples.   **(06 Marks)**
    c.   Write the command line to perform the followings :
         i)   Change current directory to home directory
         ii) Change to parent of parent directory.   **(02 Marks)**

OR

4   a.   What are file permissions? Describe different ways of changing the file permissions.   **(07 Marks)**
    b.   Explain CP and Od commands with options.   **(06 Marks)**
    c.   Write the output for the following command lines.
         i)   mv filenamea dir_name
         ii) ls ¦ wc -w
         iii) who ¦ wc -ℓ .   **(03 Marks)**

Module-3

5 a. List and explain the different modes of Vi editor, also explain different ways of quitting Vi editor. **(08 Marks)**

b. Discuss the following commands with respect to Vi editor.
   i) b   ii) w   iii) ¦   iv) G   v) :1, 5w ab.txt   vi) h   vii) J   viii) abbr. **(08 Marks)**

OR

6 a. What are wild cards characters? Explain each of them with suitable examples. **(08 Marks)**

b. What is the purpose of grep? Explain grep with all options. **(06 Marks)**

c. Explain tee command with an example. **(02 Marks)**

Module-4

7 a. Explain test command for handling strings. **(04 Marks)**

b. Write a shell script using case to perform all arithmetic operations. **(06 Marks)**

c. Explain for loop, also possible sources of argument list. **(06 Marks)**

OR

8 a. Explain cut command with all options, with examples. **(05 Marks)**

b. What are links? How to create different types of links? And list their differences. **(06 Marks)**

c. Discuss umask and default file permissions. **(05 Marks)**

Module-5

9 a. Discuss how to execute commands periodically with suitable example. **(05 Marks)**

b. Explain find command in detail. **(06 Marks)**

c. What is process? Explain different mechanisms of process creation. **(05 Marks)**

OR

10 a. Explain string handling functions in PERL. **(07 Marks)**

b. Write a PERL programs check the given year is leap year or not. **(07 Marks)**

c. Explain split function in PERL briefly. **(02 Marks)**

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