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10CS44

## Fourth Semester B.E. Degree Examination, June/July 2019
## Unix Shell Programming

Time: 3 hrs.                                                                      Max. Marks:100

**Note: *Answer FIVE full questions, selecting
at least TWO questions from each part.***

## PART – A

1   a.  Define Shell. Briefly describe the features of UNIX.                          **(08 Marks)**
    b.  With suitable example explain the structure of the man document.              **(06 Marks)**
    c.  Brief about the *ls* command options with examples.                           **(06 Marks)**

2   a.  Assuming that a file's current permissions are rw_r_xr_ _, specify the chmod expression
        required to change them to, (i) rw×rw×rw×        (ii) r_ _r_ _ _ _ _        (iii) _ _ _r_ _r_ _
        (iv) _ _ _ _ _ _ _ _ _, using both relative and absolute methods.            **(08 Marks)**
    b.  Explain with a diagram the different modes of Vi editor.                      **(06 Marks)**
    c.  Specify the Vi commands used for doing the following operations:
             (i)    Combine 5 lines into a single line.
             (ii)   Add / * at the beginning of a line and * /at end.
             (iii)  Copy 5 lines and put below the current line.
             (iv)   Replace has with have in the current line.
             (v)    Save current line through end to another file.
             (vi)   Search a pattern in backward direction.                          **(06 Marks)**

3   a.  Give the significance of escaping and quoting with suitable examples.         **(04 Marks)**
    b.  Explain the phases of process creation mechanism? Also list out the attributes inherited
        during process creation.                                                     **(06 Marks)**
    c.  Explain the list of tasks that can be done in controlling jobs in UNIX.       **(05 Marks)**
    d.  Describe about any five common environment variables of UNIX.                **(05 Marks)**

4   a.  Distinguish between hard links and symbolic links and show these links are created with
        examples.                                                                    **(06 Marks)**
    b.  Describe the find command along with different selection criteria.            **(06 Marks)**
    c.  With suitable examples, explain all the options of sort command.             **(08 Marks)**

## PART – B

5   a.  Give the importance of grep command? Explain the options of grep command with example.
                                                                                     **(08 Marks)**
    b.  Explain with examples line addressing and context addressing.                **(06 Marks)**
    c.  Explain the substitution feature of sed command.                             **(06 Marks)**

6   a.  Write anoninteractive shell script using positional parameters to read a pattern and file name
        and search pattern in the file given.                                        **(06 Marks)**
    b.  Give the syntax of case conditional and write a simple shell script to display a menu that
        shows (i) list of files    (ii) Users of a system    (iii) Todays date    (iv) Quit to UNIX.
                                                                                     **(06 Marks)**
    c.  Along with syntax of for loop explain the possible sources of the list with examples.
                                                                                     **(08 Marks)**

7  a. Explain any four built-in functions of awk with suitable examples.        (08 Marks)
   b. Write an awk script to compute Avg. DA, HRA, Gross of employees.          (06 Marks)
   c. Brief about all the built-in variables of awk.                            (06 Marks)

8  a. Explain with example the string handling functions of perl.              (08 Marks)
   b. Describe about split and join functions of perl.                         (08 Marks)
   c. Briefly explain the file test facility of perl.                          (04 Marks)

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