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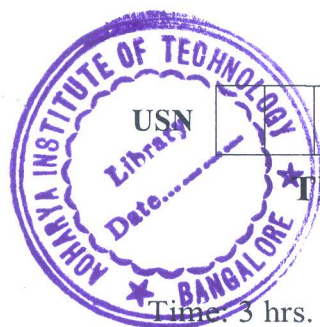**Third Semester B.E. Degree Examination, Aug./Sept.2020**
Unix and Shell Programming

Time: 3 hrs.   Max. Marks: 100

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

Module-1

1 a. Explain how 'man' command helps to get the manual help pages in Unix.   (08 Marks)
   b. Discuss internal and external commands, with suitable examples.   (04 Marks)
   c. Explain features of Unix OS.   (08 Marks)

OR

2 a. Illustrate how to display and set the terminal characteristics of Unix OS.   (06 Marks)
   b. Describe command arguments and options, with suitable examples.   (06 Marks)
   c. How to become a super user? Explain.   i) How to add users to group
      ii) How to delete users from a group   iii) How to create and delete user groups.
                                                                                       (08 Marks)

Module-2

3 a. Illustrate with diagram the typical Unix file system and also explain different types of files
      supported in Unix.   (08 Marks)
   b. With syntax and examples, explain the commands used for creating , deleting and changing
      the directory.   (08 Marks)
   c. List and explain ℓs command and its various options.   (04 Marks)

OR

4 a. What is Pathname? List and explain types of pathnames with examples.   (08 Marks)
   b. What are File Permissions? Describe different ways of changing the file permissions.
                                                                                       (08 Marks)
   c. Give syntax and examples for chown and chgrp commands.   (04 Marks)

Module-3

5 a. With suitable examples, explain all input mode commands in Vi editor.   (08 Marks)
   b. In brief, explain save and exit commands in ex mode.   (08 Marks)
   c. With respect to Vi editor , explain the following commands :
      i) b   ii) w   iii) G   iv) J.   (04 Marks)

OR

6 a. Discuss the three standard files supported by Unix.   (08 Marks)
   b. With the help of examples, explain grep command and list grep options and their
      significance.   (08 Marks)
   c. Write the steps of Shell interpretive cycle.   (04 Marks)

Module-4

7 a. Define a Shell script and design a menu driven shell script which outputs :
      i)   List of files   ii)   Current system display settings.
      iii) Present working directory   iv)   HOME directory of a User.   (08 Marks)

b. Explain how test statement is applicable to numeric and string comparisons. (08 Marks)

c. List all special or positional parameters used by the shell. (04 Marks)

OR

8 a. With syntax, explain following statements in shell script with examples   i) if   ii) case. (08 Marks)

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

c. List all options used by test in file related operations. (06 Marks)

Module-5

9 a. What is Process? Explain different mechanisms of process creation. (06 Marks)

b. Explain i) Running jobs in background (& and nohup) ii) Execute later (at and batch). (08 Marks)

c. Explain find commands with examples and options. (06 Marks)

OR

10 a. Discuss String handling functions of PERL, with examples. (08 Marks)

b. Explain variables and operators in PERL. (06 Marks)

c. Write a PERL program to find whether a given number is odd or even using command line arguments. (06 Marks)

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