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## 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 filenameea dir\_name
  - ii) ls | wc -w
  - iii) who | wc -l. (03 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

**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) :l, 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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