



# CBCS SCHEME

15CS35

## Third Semester B.E. Degree Examination, Aug./Sept. 2020 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. Explain the salient feature of UNIX operating system. (06 Marks)
- b. Give the significance of the seven fields of `ls-l` command. (06 Marks)
- c. Explain with example internal and external commands of UNIX. (04 Marks)

OR

- 2 a. Briefly explain the UNIX architecture. (07 Marks)
- b. Explain the following commands with example.  
i) echo ii) `ls` iii) `who` iv) `date` v) `cal`. (05 Marks)
- c. Explain the commands to add and delete user. (04 Marks)

### Module-2

- 3 a. Draw the tree structure of the file system created by the following commands (assume you are in the directory/user/office). Why is it not possible to issue the command `rmdir/user/office/right`.  
`$ mkdir left`  
`$ mkdir middle`  
`$ mkdir right`  
`$ cd left`  
`$ mkdir left middle right`  
`$ cd.../middle`  
`$ mkdir dir1 dir2/user/office/right/dir3`. (08 Marks)
- b. Which command is used for listing file attributed? Explain briefly the significance of each field of the output. (08 Marks)

OR

- 4 a. What is file permission? Explain how to use “`chmod`” command to set the permissions in a relative manner with an example. (08 Marks)
- b. Explain absolute method of changing permissions with example. (08 Marks)

### Module-3

- 5 a. Explain “`grep`” command with all options. (08 Marks)
- b. Explain 3 standard files with respect to UNIX. (08 Marks)

OR

- 6 a. Define wild card, explain shell wild card. (06 Marks)
- b. What are Extended Regular Expression (ERE)? Explain any four ERE set used by “`grep`” and “`egrep`”. (06 Marks)
- c. Explain shell interpretive cycle. (04 Marks)

**Module-4**

- 7 a. Distinguish between hard links and soft links with example. (06 Marks)  
b. Explain the shell features of : (06 Marks)  
i) while ii) "for" with syntax. (04 Marks)  
c. Write a shell script to print first 10 numbers (1 to 10).

**OR**

- 8 a. Discuss head and tail command along with its options. (08 Marks)  
b. Explain the following statement with example : (08 Marks)  
i) "if" ii) while iii) case.

**Module-5**

- 9 a. Briefly explain variables and operators in Perl. (06 Marks)  
b. Explain the following : i) split ii) Join in Perl. (06 Marks)  
c. Write a PERL script to demonstrate the use of "chop" function. (04 Marks)

**OR**

- 10 a. Explain mechanism of process creation. (08 Marks)  
b. Write a Perl script to read letters NEWS from command line and display their abbreviation. (08 Marks)

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