

CBCS SCHEME

15CS35

USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Third Semester B.E. Degree Examination, July/August 2021

Unix and Shell Programming

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. With a diagram, explain the architecture of UNIX Operating System. (08 Marks)
b. Explain the following commands with examples : (04 Marks)
i) echo ii) ls iii) date iv) who. (04 Marks)
c. Differentiate between External and Internal commands in UNIX. (04 Marks)
- 2 a. Explain the salient features of UNIX Operating System. (08 Marks)
b. Explain the commands used to add and delete a user with examples. (04 Marks)
c. Write a note on Man documentation. (04 Marks)
- 3 a. Illustrate with a diagram, typical UNIX file system and explain different types of files supported in UNIX. (08 Marks)
b. Name the command used to creating , deleting and changing the directory. Explain them with syntax and example. (08 Marks)
- 4 a. Name the command used for listing file attributes. Explain the significance of each field in the output. (08 Marks)
b. Assuming that a files current permissions are rw - r - xr --. Write the chmod expressions required to change them for the following :
i) rwxrwxrwx ii) r-r----- iii) ---r----- iv) -----
Using both Relative and Absolute methods of Assigning permissions. (08 Marks)
- 5 a. Explain the three different modes in which 'Vi' editor works. (08 Marks)
b. List and explain the navigation commands in Vi editor with example. (08 Marks)
- 6 a. Explain the 3 sources for standard input and standard output with respect to UNIX Operating System. (08 Marks)
b. With suitable example, explain the grep command and its various options. (08 Marks)
- 7 a. Explain the Shell features of 'if' , 'case' , 'while' and 'for' with syntax. (08 Marks)
b. Write a shell program to create a menu which displays and execute the following options :
i) List of files ii) Contents of a file iii) Current date
iv) List of users v) Quit to UNIX. (08 Marks)
- 8 a. Explain the special parameters used by the shell, with example. (08 Marks)
b. Explain the following with example :
i) head ii) tail iii) cut iv) paste (08 Marks)
- 9 a. Explain the mechanism of Process Creation. (08 Marks)
b. Explain the following commands in brief :
i) at ii) cron iii) nice iv) nohup. (08 Marks)
- 10 a. Explain the following string handling functions of PERL with examples :
i) length ii) index iii) substr iv) reverse. (08 Marks)
b. Write a PERL program to determine whether the given year is leap or not. (08 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.