



CBGS SCHEME

17CS/IS35

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

Unix and Shell Programming

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. List and explain features of UNIX Operating System. (10 Marks)
b. Explain "man" documentation and its internal commands. (10 Marks)
- 2 a. Explain how to display and set the terminal characteristics of a Unix OS. (06 Marks)
b. Explain the following commands with examples:
(i) echo (ii) ls (iii) who (iv) date. (04 Marks)
c. With a neat diagram explain the architecture of Unix Operating System (10 Marks)
- 3 a. Illustrate with a diagram typical Unix File system and explain different types of files supported in Unix. (10 Marks)
b. Explain the seven field output of `ls -l` command with example. (10 Marks)
- 4 a. What are different ways of setting file permissions explain in detail? (10 Marks)
b. Name the command used for creating deleting and changing the directory. Explain with the syntax and example. (10 Marks)
- 5 a. List and explain the different modes of Vi editor. Also explain different ways of quitting Vi-editor. (10 Marks)
b. What are wild-card characters? Explain each of them with suitable examples. (10 Marks)
- 6 a. What is the purpose of grep? Explain grep with all options. (10 Marks)
b. Discuss the three standard files supported by Unix. Explain in detail. (10 Marks)
- 7 a. What is shell script? Explain the following statements with syntax and example:
(i) if (ii) case (iii) while (10 Marks)
b. Explain the following with example :
(i) head (ii) tail (iii) cut (iv) paste (v) sort. (10 Marks)
- 8 a. Explain the example set and shift commands in Unix to manipulate positional parameters. (10 Marks)
b. Explain the following :
(i) Hard Link and Soft Links
(ii) /dev/null and /dev/tty files. (10 Marks)
- 9 a. Explain the following commands:
(i) at (ii) cron (iii) nice (iv) nohup (v) kill. (10 Marks)
b. Explain the string handling functions of PERL with examples. (10 Marks)
- 10 a. Write a PERL program, check the given year is leap year or not? (10 Marks)
b. Explain the mechanisms of process creation. (07 Marks)
c. What is an associative array? (03 Marks)

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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.