2019/TDC/ODD/SEM/CSCSEC–301T/187

TDC (CBCS) Odd Semester Exam., 2019

COMPUTER SCIENCE

(3rd Semester)

Course No. : CSCSEC–301T

(UNIX/LINUX Programming)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

UNIT—I

1. Answer any *three* of the following questions :

1×3=3

(a) What is UNIX?

(b) Define kernel.

(c) What is system call?

(d) Mention two distributions available in the market.

(*Turn Over*)

2. Answer any *one* of the following questions : 2

   (a) Write down the difference between Linux and Unix.

   (b) What are the security features of UNIX?

3. *(a)* Explain the architecture of UNIX operating system. 5

   Or

   (b) Write down the steps to install UNIX operating system. 5

UNIT—II

4. Answer any *three* of the following questions : 1×3=3

   (a) What is external command?

   (b) Write down the purpose of PWD command.

   (c) What is the use of ls-l command?

   (d) Mention the syntax of 'grep' command.

5. Answer any *one* of the following questions : 2

   (a) How can you record your session? Mention the command and its syntax.

   (b) Which command is used to create a process? Explain with example.

6. In UNIX, perform the following : 1×5=5

   (a) Create a directory

   (b) Change the directory

   (c) Crate a file within the directory

   (d) Copy the file to the new location

   (e) Remove the file in old location

OR

7. Explain different process handling commands. 5

UNIT—III

8. Answer any *three* questions as directed : 1×3=3

   (a) Mention different types of user in UNIX system.

(b) _____ command is used to create user.

(Fill in the blank)

(c) _____ command is used for granting rights to user.

(Fill in the blank)

(d) Write down the purpose of 'chmod' command.

9. Answer any *one* of the following questions :   2

(a) Who can change the attributes of a file or directory? How do you list the attributes of the current directory?

(b) Create a file and then assign all permissions to the owner and remove all permissions from others. How do you do that?

10. Explain UNIX file system in detail.   5

OR

11. (a) How does login process work in Linux/ Unix?   2

(b) What is disk quota management in Linux/Unix? Write down the steps to perform disk management.   1+2=3

UNIT—IV

12. Answer any *three* questions as directed :   1×3=3

(a) What is shell script?

(b) How to save a file in Vi editor?

(c) _____ command is used to delete a single character in Vi editor.

(Fill in the blank)

(d) _____ scrolls full page forward in Vi editor.

(Fill in the blank)

13. Answer any *one* of the following questions :   2

(a) Write down the steps to execute shell script.

(b) What is shell variable? Give example.

14. (a) Explain with diagram different modes of operation Vi editor.   2

(b) Write a shell script to find the area of a circle.   3

OR

15. (a) How will you locate fortieth character of a line?   2

(b) How will you insert a line between two lines? 1

(c) How will you quickly move to the fifth word of a line and replace its four characters with something else? 2

UNIT—V

16. Answer any *three* questions as directed : 1×3=3

(a) How can you display the end of the file?

(b) Write down the purpose of 'cut' command.

(c) ____ command is used to sort a file.

(Fill in the blank)

(d) How will you double space a file?

17. Answer any *one* of the following questions : 2

(a) How will you produce a list of all files in the current directory without headers, but in three columns?

(b) Why is 'tr' command used? Explain with syntax.

18. (a) Write a shell script to explain the concept of if-else statement. 3

(b) Mention some special parameters used by the shell. 2

OR

19. Write a shell script to calculate factorial of a number. 5

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