

(7 pages)

Reg. No. :

Code No. : 8377

Sub. Code : WCAM 12/
VCAC 13

M.C.A (CBCS) DEGREE EXAMINATION,
NOVEMBER 2024

First Semester

Computer Application – Core

LINUX AND SHELL PROGRAMMING

(For those who joined in July 2023 only)

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

Choose the correct answer :

1. Which man page section contains information about file formats and file-related conventions?
- (a) Section 8 (b) Section 7
(c) Section 6 (d) Section 5

2. What command allows you to list files and directories in a human-readable format with file sizes displayed in kilobytes (KB), megabytes (MB), etc.?

(a) ls -l (b) ls -h
(c) ls -s (d) ls -k

3. symbol is used to represent a pipe in Linux command

(a) & (b) >
(c) |* (d) <

4. What is the syntax of a “for” loop in a Bash script for iterating through a range of numbers?

(a) for i in {1..10}
(b) for i= 1 to 10
(c) for i=1;i<1 = 0,i++
(d) for i from 1 upto 10

5. To access the n^{th} command-line argument, which syntax should you use?

(a) \$[n] (b) \$((n))
(c) \${n} (d) \$n

6. What signal is sent to a process when you press Ctrl+C in the terminal to terminate it?

(a) SIGINT (b) SIGTERM
(c) SIGHUP (d) SIGKILL

Page 2

Code No. : 8377



7. What does the "@" symbol often represent when used with arrays in scripting languages?

- (a) The first element
- (b) The current element
- (c) The last element
- (d) All elements of the array

8. What technology is commonly used for creating graphical user interfaces and windows in the Linux desktop environment?

- (a) S DirectX r (b) X Window System
- (c) OpenGL (d) Java Swing

9. Which sed command is used to substitute a specific pattern with another in a text file?

- (a) 's' (b) 'x'
- (c) 'r' (d) 'y'

10. Which command allows you to enter a multiline script directly in the terminal for execution?

- (a) Multiscript (b) Bash
- (c) Sed (d) Execute

11. How can you append the contents of the hold space to the pattern space in sed?

- (a) Using the a command
- (b) Using the h command
- (c) It's not possible to append hold space to the pattern space
- (d) Using G command

12. How can you assign a value to a variable in gawk?

- (a) Use the let keyword
- (b) Use the = operator
- (c) Use the var keyword
- (d) Variabels are assigned automatically in gawk

13. Which command is used to set or modify environment variables in the dash shell?

- (a) export (b) setenv
- (c) env (d) define



14. What scheduling tool is often used in Linux to automate periodic backups?

- (a) backup (b) schedule
- (c) autotask (d) crontab

15. Which command is used to change a user's password in Linux?

- (a) passwd (b) chpasswd
- (c) setpassword (d) changeuser

PART B — ($5 \times 4 = 20$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

16. (a) How do you create script files in Linux? Explain.

Or

(b) Explain how to list files and directories in Linux.

17. (a) Compare and contrast while and for loop in Linux.

Or

(b) Write about passing parameters in Linux.

Page 5

Code No. : 8377

18. (a) List the steps for creating a library.

Or

(b) Explain the 'gawk' text editor.

19. (a) Discuss the multiline command.

Or

(b) Explain the concept of formatted printing.

20. (a) Summarize the core built-in commands in the 'zsh' shell.

Or

(b) How do you create a daily archive script?

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

21. (a) Describe in detail about, file comparison in Linux.

Or

(b) Illustrate working with advanced if-then features using double parentheses and double brackets.

Page 6

Code No. : 8377



22. (a) How do you handle signals in script control? Explain.

Or

- (b) Explain with an example how to use break and continue statement in controlling loop.
23. (a) Explain the 'yesno', 'inputbox', and 'textbox' widgets.

Or

- (b) Illustrate the KDE and GNOME environments.
24. (a) Examine creating 'sed' utilities.

Or

- (b) Demonstrate the creation of user-defined functions and function libraries.
25. (a) Summarize the string manipulation in python.

Or

- (b) Compare dash environment variables and user-defined environment variables.

