

106/A-20

SEAT No. _____

Total No. of pages : 2

SARDAR PATEL UNIVERSITY
M.C.A.(IV Semester) Examination
PS04CMCA07 The Linux Operating System
Thursday, 1st November, 2018

Time : 2:00 PM to 5:00 PM

Total Marks : 70

1. Select most appropriate option for each of the following questions : 8

- (i) Which vi command can be used to delete 7 lines starting from the current line ?
(A) 7d (B) 7dd (C) d7 (D) None of these.
- (ii) Which of the following is **not** a valid I/O redirection operator ?
(A) 1<< (B) 1>> (C) >> (D) None of these.
- (iii) Which system call is used to create a child process ?
(A) create (B) crprocess (C) fork (D) None of these.
- (iv) Which command can be used to display the last line of a file ?
(A) cat file | tail (B) cat file | tail -n 1 (C) cat file | tail | tail -1
(D) None of these.
- (v) Which of the following is used in a case statement in the shell scripting language to define the default case ?
(A) *) (B) default (C) default : (D) None of these.
- (vi) The system variable that shows the sequence in which various directories will be searched to locate a command is _____
(A) PWD (B) PATH (C) HOME (D) None of these.
- (vii) Which file is used to store the encrypted password of a user on modern Linux systems ?
(A) /etc/password (B) /etc/shadow (C) /etc/passwd
(D) None of these.
- (viii) What is the full form of sed ?
(A) stream editor (B) spring editor (C) string editor
(D) None of these.

2. Answer the following questions in brief (ANY SEVEN) : 14

- (i) Define a shell. List any two examples of shells.
(ii) Define a filter. Give at least two examples of filters.
(iii) Explain the -l option of the ls command.
(iv) Which commands are used to copy and delete a file ?
(v) What is a system call ? What does the open() system call return ?
(vi) Explain the use of the wc command with any two options.

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(P.T.O.)

- (vii) What is the use of the /etc and /dev directories in the standard UNIX file system hierarchy ?
- (viii) Which command is used to get information about the currently logged-in users ? Which command is used to get information about the currently running processes ?
- (ix) Which vi command can be used to yank 5 lines from the current line and paste them at a different place in the same file ?
- 3.(A) Write a short note on the **history of the Linux operating system.** 6
- (B) Write a short note on the **if statement** taking suitable examples. 6
- OR**
- (B) Write a short note on **I/O redirection.** 6
- 4.(A) Explain the syntax of the **for loop** and **while loop** with examples. 6
- (B) Explain the **test command** with appropriate examples. 6
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- OR**
- (B) Explain the **expr** command in detail. 6
- 5.(A) Write a short note on various **file permissions.** 6
- (B) Write a short note on **grep.** 6
- OR**
- (B) Explain the following commands:
(i) sort (ii) cut 6
- 6.(A) Explain any two **system calls.** List any two **configuration files** in the /etc directory. 6
- (B) Write the important features of the **awk command.** 6
- OR**
- (B) Write the important features of the **sed command.** 6

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