Enrollment No......................................

Faculty of Engineering

End Sem (Odd) Examination Dec-2018

CA5CO16 Linux Programming & Scripting

Programme: MCA   Branch/Specialisation: Computer Application

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Which of below kill command syntax is correct to terminate an ongoing process? **1**
(a) kill <application>   (b) kill <process id>
(c) kill <name>   (d) None of these.

ii. Write a command that will display all .py files alongwith permission. **1**
(a) ls -al *.py   (b) ls -ap *.py
(c) ls –cl *.py   (d) ls –dp *.py

iii. What is sed? **1**
(a) Command line interpreter (b) Configuration file
(c) A hex editor   (d) A non-interactive stream editor

iv. In the shell, by default, all variables are considered and stored as **1**
(a) Float   (b) Integer   (c) String   (d) Character

v. How to get 5th element from each line from a file? **1**
(a) awk '{get $5}'   (b) awk '{print $5}'
(c) get '{awk $5}'   (d) print '{get $5}'

vi. Which of the following data types are preceded by a percent sign (%) in Perl? **1**
(a) Hashes   (b) Scalar   (c) Array   (d) Integer

vii. Which command is record a user login session in a file **1**
(a) Macro   (b) Read   (c) Script   (d) Log

viii. pwd command displays **1**
(a) User password   (b) Present working directory
(c) Password file content   (d) Password Reset

ix. Full form of DHCP? **1**
(a) Dynamic Host Configuration Path
(b) Directory Host Configuration Program
(c) Dynamic Health Configuration Protocol
(d) Dynamic Host Configuration Protocol

x. Which of the below can be used to view the routing table? **1**
(a) ifconfig   (b) netstat   (c) ping   (d) traceroute

Q.2 i. What /usr/local directory contains? **2**
ii. What do you understand by Linux Kernal? **3**
iii. Explain find command with syntax and example to searching the file by name or by extension. **5**
OR iv. Explain unzipping the files using unzip, tar and gunzip by example. **5**

Q.3 i. Enlist the different modes when using vi editor. **2**
ii. Explain different types of shells available. What are the advantages of C Shell over Bourne Shell? Also explain when should shell programming/scripting not to be used? **8**
OR iii. What is loop and explain three different methods of loops in brief. **8**

Q.4 i. Write a Perl program that reads a number, multiplies it by 2, and prints the result. **3**
ii. Explain any seven AWK built-in String functions by example. **7**
OR iii. What is subroutine in perl? Explain how to define & call a subroutine and passing arguments to subroutine. **7**

Q.5 i. What are the kinds of permissions under Linux? **4**
ii. Write note on Manage Group. Also explain chgrp, groupadd, and usermod commands. **6**
OR iii. Explain step-by-step: **6**
(a) Creating a user   (b) Deleting & disabling an user.

Q.6   Attempt any two:
i. Write the step to open Network Configuration Tool. Enlist the various tabs appear on the Configuration Tool dialog box. **5**
ii. Write the steps to connect with remote server using SSH. **5**
iii. What is DHCP and how to configure DHCP in Linux? **5**

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Q.1 i. Which of below kill command syntax is correct to terminate an ongoing process? **1**
(b) kill <process id>

ii. Write a command that will display all .py files alongwith permission. **1**
(a) ls -al *.py

iii. What is sed? **1**
(d) a non-interactive stream editor

iv. In the shell, by default, all variables are considered and stored as **1**
(c) string

v. How to get 5th element from each line from a file? **1**
(b) awk '{print $5}'

vi. Which of the following data types are preceded by a percent sign (%) in Perl? **1**
(a) Hashes

vii. Which command is record a user login session in a file **1**
(c) script

viii. pwd command displays **1**
(b) present working directory

ix. Full form of DHCP? **1**
(d) Dynamic Host Configuration Protocol

x. Which of the below can be used to view the routing table? **1**
(b) netstat

Q.2 i. User binaries, their documentation, libraries, header files, etc **2**
0.5 mark for each **(0.5 mark * 4)**

ii. Meaning of kerne **1 mark** **3**
Feature of the kernel **2 marks**

iii. Syntax **1 mark** **5**
Explanation **3 marks**
Two Examples (0.5 mark * 2) **1 mark**

OR iv. Meaning & explanation **2 marks** **5**
Examples by unzip, tar and gunzip
1 mark * 3) **3 marks**

Q.3 i. Explanation of Command mode **1 mark** **2**
Explanation of Insert mode **1 mark**

ii. Different types of shells **3 marks** **8**
Advantages of C Shell over Bourne Shell **3 marks**
Not to be used **2 marks**

OR iii. Loop **2 marks** **8**
Different methods of loops (2 marks * 3) **6 marks**

Q.4 i. Read **1 mark** **3**
Multiply **1 mark**
Result **1 mark**

ii. Built-in String functions 1 mark for each function **7**
(1 mark * 3) **3 marks**
Distribution for each function: (1 mark * 3) **3 marks**
Function Syntax **0.5 mark**
Example **0.5 mark**

OR iii. What is subroutine in perl? **2 marks** **7**
How to define and call a subroutine **3 marks**
Passing arguments to subroutine **2 marks**

Q.5 i. Permission **1 mark** **4**
Explanation of Read **1 mark**
Explanation of Owner **1 mark**
Explanation of Execute **1 mark**

ii. Manage Group **3 marks** **6**
Explanation of chgrp, groupadd, usermod commands
(1 mark * 3) **3 marks**

OR iii. (a) Creating an user **3 marks** **6**
(b) Deleting & disabling an user. **3 marks**

Q.6 Attempt any two:

i. Step to open Network Configuration Tool **3 marks** **5**
Tabs appear on the Configuration Tool dialog box
2 marks

ii. Steps to connect with remote server using SSH. **5**

Each step 1 mark   **(1 mark * 5)**

iii.   DHCP   **2 marks**   **5**

     Configure DHCP in Linux   **3 marks**

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