

2022
M.Sc. Information Technology
First Semester
MS-66: Linux Administration and Programming

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I – IV.

x-x-x

UNIT – I

- I. a) Discuss installation of Linux from CD-ROM? (6)
b) Differentiate between input redirection and output redirection with suitable examples. (6)
c) What is the purpose of shutdown command? (4)
- II. Explain the following in the context of Linux:
a) Wild Card Characters. (5)
b) Installing and configuring LILO (5)
c) Environment variables used by shell (4)
d) kill command (2)

UNIT - II

- III. a) Write a short note on following Linux file types:-
i) Block devices
ii) Sockets
iii) Hard links (6)
b) What is the difference between absolute path and relative path? (4)
c) Discuss the following bash command
i) alias
ii) history
iii) fg (6)
- IV. a) Discuss the purpose of following commands:-
i) umask
ii) chown
iii) chgrp (7)
b) Discuss important directories in the Linux file system. (6)
c) What is a hidden file in Linux? (3)

UNIT - III

- V. a) Write a shell script which deletes all lines containing the word Perl in the file supplied as argument to this shell script.
b) Write a shell script to reverse a five digit number input through keyboard. (2x8)

P.T.O.

(2)

VI. As a Linux System Administrator, how do you perform the following?

- a) Creating a new file system.
- b) Compressing files
- c) Setting the system name
- d) Setting of DNS

(4x4)

UNIT - IV

VII. a) Write a Perl program to demonstrate replacing elements in an array. (8)

b) What is a function? How arguments are passed to a function? (4)

c) Discuss various assignment operators available in perl? (4)

VIII. Explain the working of following system calls with the help of suitable code

a) umask()

b) create()

c) fork()

d) sleep()

(4x4)

UNIT - V

IX. Attempt the following:-

a) What is the purpose of fdisk command?

b) What is the purpose of netstat command in Linux?

c) What is a root directory?

d) What is the purpose of rm-i command?

e) How will you search and replace text in vi -editor?

f) What are various modes used by vi-editor?

g) Which command is used to setup a Linux client?

h) What is the use of pg command?

(8x2)

X-X-X