



BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – B.Sc.(ANCS)-Hons-2023
Course Name – Linux Administration
Course Code - BNC20104
(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select the right choice when it comes to open-source software.
- | | |
|--|---|
| a) Software that can only be used by a single user | b) Software where the source code is freely available |
| c) Software that is very expensive to use | d) Software that can only be used on Windows |
- (ii) Who created the Linux operating system?
- | | |
|-------------------|---------------------|
| a) Bill Gates | b) Steve Jobs |
| c) Linus Torvalds | d) Richard Stallman |
- (iii) Select the primary function of the Kernel in Linux.
- | | |
|------------------------------|-------------------------------|
| a) Provides a user interface | b) Manages hardware resources |
| c) Runs applications | d) Stores data |
- (iv) Find the command used to create a new local user account in Linux.
- | | |
|------------|---------------|
| a) useradd | b) adduser |
| c) newuser | d) createUser |
- (v) How do you modify the password for a local user account in Linux?
- | | |
|--------------|---------------|
| a) passwdmod | b) usermod -p |
| c) passwd | d) userpass |
- (vi) Find the file that contains information about local user accounts in Linux.
- | | |
|------------------|------------------|
| a) /etc/users | b) /etc/passwd |
| c) /etc/userinfo | d) /etc/accounts |
- (vii) Find the command used to create a SUID directory in Linux.
- | | |
|--------------|--------------|
| a) chmod u+s | b) chmod s+u |
| c) chmod +s | d) chmod u+s |
- (viii) Which command is used to search for files and directories within the file system?
- | | |
|-----------|---------|
| a) locate | b) find |
|-----------|---------|

- c) search
d) filesearch
- (ix) Which command is used to display the contents of a compressed file without decompressing it?
a) gzcatt
b) catt
c) zcatt
d) unzipp
- (x) Choose the command which is used to display the disk usage of files and directories.
a) du
b) diskusage
c) df
d) spacedisk
- (xi) What command is used to find files by name?
a) locate
b) find
c) search
d) filefind
- (xii) Identify the command which is used to mount a file system in Linux.
a) mountfs
b) attachfs
c) mount
d) diskmount
- (xiii) Choose the command, which is used to display the manual page for a command in Linux.
a) man
b) help
c) info
d) manual
- (xiv) Which service is responsible for assigning IP addresses dynamically?
a) DHCP
b) DNS
c) NTP
d) LDAP
- (xv) Choose the default network manager for RHEL 8.
a) ifupdown
b) NetworkManager
c) systemd-networkd
d) Wicd

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Summarize the differences between hardlink and softlink. (3)
3. Explain the significance of the chown command in RHEL. (3)
4. What is the Linux kernel, and what role does it play in the operating system? (3)
5. Describe, how to change the IP address in RHEL. (3)
6. Explain the function of the umount command and how it is used to unmount filesystems. (3)

OR

Briefly explain about swap partitions. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Why is Linux considered more secure compared to other operating systems? (5)
8. Briefly explain the tar command with various options. (5)
9. Distinguish between xfs and ext4. (5)
10. Summarize the function of every field of /etc/shadow file. (5)
11. Describe the different modes of the VIM editor. (5)
12. Explain the significance of the sudo command in RHEL. (5)

OR

Explain the concept of special permissions in RHEL. (5)
