## TILAK MAHARASHTRA VIDYAPEETH, PUNE BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)/ SPECIALIZATION IN CYBER SECURITY (CS) EXAMINATION : DECEMBER - 2023

**SEMESTER - V** 

Sub:Linux/Operating system Linux (BCA-542-20/BCA-CS-542-20)

| Date : 27/12/2023 |   | Total Marks : 60 | Time: 10.00 am to 12.30 pm |
|-------------------|---|------------------|----------------------------|
|                   | <ol> <li>Instructions:         <ol> <li>All questions are compulsory unless and otherwise stated.</li> <li>Bold figures to the right of every question are the maximum marks for that question.</li> <li>Candidates are advised to attempt questions in order.</li> <li>Answers written illegibly are likely to be marked zero.</li> <li>Use of scientific calculators, Log tables, Mollier Charts is allowed.</li> <li>Draw neat and labeled diagrams wherever necessary.</li> </ol> </li> </ol> |                  |                            |
| Q.1.              | Fill in the blanks.   |                  | (05)                       |
| 1.                | directory in Linux contains log files.  |                  |                            |
|                   | a) /home  | b) /var          |                            |
|                   | c) /etc   | d) /boot         |                            |
| 2.                | command is used to list the files and folders in Linux.   |                  |                            |
|                   | a) ls   | b) list          |                            |
|                   | c) show   | d) None of       | above                      |
| 3.                | 3. The name of the administrator in Linux is  |                  |                            |
|                   | a) administrator  | b) admin         |                            |
|                   | c) root   | d) user          |                            |
| 4.                | In Linux to change the owne   | nd is used.      |                            |
|                   | a) change   | b) chown         |                            |
|                   | c) chmod  | d) own           |                            |
| 5.                | command is used to view processes in Linux.   |                  |                            |
|                   | a)ps  | b) process       |                            |
|                   | c) service  | d) viewer        |                            |
| Q.2.              | State True/False.   |                  | (05)                       |
| 1.                | The /etc directory in Linux contains all configuration files.   |                  |                            |
| 2.                | In Linux usernames are case sensitive.  |                  |                            |
| 3.                | The bash shell is command line interface in Linux.  |                  |                            |
| 4.                | PID for system process is one.  |                  |                            |
| 5.                | To view the IP address if config command is used.   |                  |                            |
| Q.3.              | Answer the following. (Sol  | ve any 5)        | (10)                       |
| 1.                | What is the hardware requirement to install Linux operating system.   |                  |                            |
| 2.                | List different process states in Linux.   |                  |                            |
| 3.                | List different commands to restart Linux operating system.  |                  |                            |
| 4.                | What is inode in Linux?   |                  |                            |
| 5.                | List standard I/O channels used in Linux.   |                  |                            |
| 6.                | List various file systems supported by Linux operating system.  |                  |                            |

## Q. 4. Answer the following in detail. (Solve any 6)

- 1. List and explain commands to copy & move files in Linux with options and examples.
- 2. Explain soft links and hard links in Linux. Explain with examples.
- 3. Write a note on VIM editor.
- 4. Explain ACL (Access Control List) in Linux with examples.
- 5. Explain the use of yum command with various options and examples.
- 6. Explain the use of xfsdump and xfsrestore commands with examples.
- 7. List some common redirection operators & explain redirecting input & output.

## Q. 5. Answer the following in detail. (Solve any 1)

(10)

(30)

- 1. Explain the working of following commands 1] ls 2] cat 3] rm and 4] touch with various examples.
- 2. Write a procedure to install Linux operating systems with various steps involved in it.