BCACAC 312

Credit Based Fifth Semester B.C.A. Degree Examination, April/May 2022
(Common to all Batches)
LINUX ENVIRONMENT

Time : 3 Hours

Max. Marks : 100

Note : Answer **any ten** questions from Part – **A** and **any one full** question from **each** Unit in Part – **B**.

PART – A

Answer **any ten** of the following : (10×2=20)

1. a) List any two characteristics of Unix File System.

   b) What is pathname ? Define full pathname and relative pathname.

   c) Write a note on special files.

   d) Differentiate user mode and kernel mode.

   e) Mention any two mechanisms of System V IPC.

   f) Define Socket.

   g) Expand GNOME and KDE.

   h) What do you mean by freeware and free software ?

   i) What is Gedit ?

   j) Define LAN and WAN.

   k) What is Live USB ?

   l) Mention any four Internet applications available in Linux.

PART – B

Unit – I

2. a) Explain the services of Unix Operating System.

   b) Explain the various fields of disk inode.

   c) Explain the kernel architecture of Unix system with a neat diagram.

   (5+7+8)

3. a) Explain the high level architecture of Unix system with diagram.

    b) Explain the fields of Superblock.

    c) Explain the buffer header with a neat diagram.   (7+7+6)

Unit – II

4. a) Explain sockets model with diagram.

    b) Write a note on system configuration.

    c) Explain i) Stream   ii) Process tracing.   (6+6+8)

5. a) Write a note on network communication.

    b) Explain the functions of line discipline.

    c) Explain with syntax the following system calls.
       i) create
       ii) write
       iii) close
       iv) unlink
       v) mount   (4+6+10)

Unit – III

6. a) Write a note on Linux files and folders.

    b) Explain in brief the K Desktop Environment.

    c) Write a note on components of Linux window.   (6+8+6)

7. a) Explain any six features of Linux.

    b) Describe the RPM and Deb based distribution.

    c) Explain Linux file system structure.   (6+8+6)

Unit – IV

8. a) Differentiate P2P networking and client server networking with a diagram.

    b) Explain the services provided by the internet.

    c) How can we differentiate web and website ? Explain with example. (8+6+6)

9. a) How can we write the contents to CD/DVD in Linux ?

    b) Write a note on the powers of an administrator in Linux OS.

    c) Write a note on Ubuntu software center tool.   (8+6+6)