BCACAC 312

Credit Based Fifth Semester B.C.A. Degree Examination, Oct./Nov. 2017
(Common to all Batches) (New Syllabus)
LINUX ENVIRONMENT

Time : 3 Hours

Max. Marks : 100

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

PART – A

(10×2=20)

1. a) Differentiate the user mode and the kernel mode.

   b) Define i-node. Name the fields of i-node.

   c) What is the difference between block device special file and character device special file ?

   d) Define the pipe. Name the types.

   e) What are the three stages of device configuration ?

   f) Define a socket.

   g) Name the different applications of OpenOffice.org.

   h) Name the different wildcard characters used in LINUX.

   i) Define Dolphin and Nautilus.

   j) What is Live USB ?

   k) What is IP address ? Give the difference between IPv4 and IPv6.

   l) Define P2P networking.

PART – B

Unit – I

2. a) Give the structure of the buffer header with a neat diagram.

   b) Explain breada algorithm.

   c) What is the difference between disk i-node and in-core i-node ? Explain the structure of in-core i-node. (5+7+8)

3. a) List out the contents of the super block.

   b) Name any five services of operating system.

   c) Give the structure of a regular file with direct and indirect block. (7+5+8)

Unit – II

4. a) Define and explain the following system calls with syntax.

   i) Read

   ii) Write

   iii) Close

   iv) Create.

   b) What is the difference between mount and link system call ? Explain with syntax and example.

   c) Explain the properties of system V IPC package. (8+6+6)

5. a) Name the functions of the line discipline.

   b) Write a note on disk driver.

   c) Explain socket model with a diagram.

   d) Write a note on network communications. (5+5+5+5)

Unit – III

6. a) Give the difference between RPM based distributions and Deb based distributions with example.

   b) Write a note on components of LINUX window.

   c) Write a note on LINUX distributions. (6+6+8)

7. a) Explain in brief K desktop environment.

   b) Define and explain the components of file manager window.

   c) Write a note on managing files and folders in LINUX.   (8+6+6)

Unit – IV

8. a) How can we differentiate a web and website ? Explain with example.

   b) Write the uses of the following internet applications in LINUX.

      i) aMSN

      ii) Blogtk

      iii) Bluefish

      iv) CheckGMail.   (8+12)

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

   b) Explain the services provided by the internet.

   c) Write a note on Synaptic Package Manager.

   d) Write the uses of the following internet applications in LINUX.

      i) Ekiga

      ii) gFTP.   (5+5+4+6)