**Credit Based Fifth Semester B.C.A. Degree (Supplementary)
Examination, August/September 2015
(New Syllabus 2014-15 Batch)
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

1. a) List any two characteristics of UNIX file system.   **(10×2=20)**

   b) Write any two reasons for the success of UNIX operating system.

   c) What are Pipes ? Name two types of pipes.

   d) Define device drivers and terminal drivers.

   e) Explain read system call.

   f) Define sockets. What are the layers of Socket Model ?

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

   h) What do you mean by X Window system ?

   i) Mention the purpose of Linux File manager.

   j) What is the purpose of GParted application ?

   k) Name the two types of computer networks.

   l) Mention any four Internet applications available in Linux.

P.T.O.

PART – B

UNIT – I

2. a) Discuss briefly the evolution of UNIX operating system.

   b) Explain the process of reading and writing a disk block using buffer cache.

   c) With the help of a diagram explain the structure of a regular file. **(6+7+7)**

3. a) Explain the high-level architecture of UNIX system with a neat diagram.

   b) Explain the various services of UNIX operating system.

   c) Explain the various fields of a disk i-node.

   d) List any four fields of Superblock. **(5+5+6+4)**

UNIT – II

4. a) Explain with syntax the following system calls
      i) open   ii) mount   iii) link   iv) mknod

   b) Explain the functions of line discipline.

   c) Write a note on Disk Drivers. **(8+6+6)**

5. a) Explain with syntax the following system calls
      i) create   ii) write   iii) pipe   iv) unmount

   b) Write a note on system configuration.

   c) Which are the three mechanisms that make up Unix System V IPC ? List any three common properties of these mechanisms. **(8+6+6)**

UNIT – III

6. a) Explain any five features of Linux.

   b) Explain the components of GNOME Desktop Startup Screen.

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

7. a) Describe RPM and Deb based Linux distributions.

   b) Explain the components of Linux window.

   c) Explain different applications available in Linux Desktop Environments.

   d) How to create files and folders in GNOME ? **(5+7+5+3)**

UNIT – IV

8. a) What are the roles of Super user ?

   b) Explain the steps involved in adding printers.

   c) Write a note on :
      i) Managing drivers and Media in Linux OS
      ii) Managing use and group in Linux OS.

   d) Explain Websites with its structure.   (5+5+5+5)

9. a) Explain different Linux Package Managers.

   b) How to configure computer network in Linux ? Explain.

   c) Explain any six services provided by internet.   (8+6+6)

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