[Please write your Exam Roll No.]

Exam Roll No. ...0.145040 2014

END TERM EXAMINATION

Sixth Semester [BCA] May-June 2017

Paper Code: BCA-306   Subject: Linux Environment

Time: 3 Hours   Maximum Marks: 75

Note: Attempt any five questions including Q.no.1 which is compulsory.

Q1   Answer following in brief (any five):   (5x5=25)
     (a) Linux initially was developed for intel X86 architecture but has been ported to other hardware platform than any other Operating System. Elaborate this statement.
     (b) Why Linux Operating system is Virus free? Explain with reason.
     (c) What is BASH? What is the basic difference between BASH and DOS?
     (d) What is an MX record? What is a zombie?
     (e) Does the Ctrl+Alt+Del key combination work on Linux? Justify.
     (f) In Linux, what names are assigned to the different serial ports? Give example.

Q2   (a) What is the core of Linux Operating System?   (6)
     (b) What is the basic difference between UNIX and Linux Operating System?   (6.5)

Q3   (a) What is LILO?   (6)
     (b) What is an INODE? Make a block diagram of I-node and explain various fields.   (6.5)

Q4   (a) What is a swap space? Why it is used?   (6)
     (b) What is the advantages of open source? What is the importance of the GNU project?   (6.5)

Q5   (a) Describe the root account. What is CLI?   (6)
     (b) How can you find out how much memory Linux is using? What is an MX record? Describe the Linux boot-up sequence.   (6.5)

Q6   (a) What are the various permission types for accessing a file? How it can be examined. Explain symbolic method and numeric method for changing permissions.   (6)
     (b) Explain the functioning of following commands with example:
         cd, mv, copy, rm, cat, ps, top, pstree, nice, renice.   (6.5)

Q7   (a) Differentiate between following in brief: (6.5)
         (i) symbolic links and hard links
         (ii) mount and umount command
     (b) Explain in brief following shell scripts commands:
         grep, sed, awk.   (6)

Q8   (a) Explain the various environment variables in brief. What do you understand by sticky bit for a directory? Explain.   (6)
     (b) Explain linux Kernel in brief. How the kernel is installed? Explain the kernel process management in brief.   (6.5)

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