

END TERM EXAMINATION

SIXTH SEMESTER [BCA] MAY-JUNE 2016

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.
Select one question from each unit.

- Q1 Answer **any five** of the following questions briefly:- (5x5=25)
- (a) Write short notes on different Linux Graphical Environments
 - (b) Write down the function of awk filter and how is it different from the Sed.
 - (c) Describe the Architecture of Linux in details.
 - (d) What are the multiple uses of cat command? Explain with examples.
 - (e) How mounting and demounting is performed in Linux? Explain with example.
 - (f) What is the role of GRUB in the booting process of Linux?
 - (g) What are the kernel debuggers in Windows and Linux?

UNIT-I

- Q2
- (a) Write down the commands for file and Directory management in Linux. (6)
 - (b) Describe the architecture of Linux and how is it different from other Operating Systems? (6.5)
- Q3
- (a) What is Journaling? Explain the various types of Journaling with their uses. (6)
 - (b) What are the parameter-wise differences between UNIX and LINUX? (6.5)

UNIT-II

- Q4
- (a) What are the features of Vi Editor? How we create and execute shell script by using Vim? (6)
 - (b) What are the permission modes for a file in Linux? How we represent the permission mode for a file in Linux. Write down the commands for changing the permission for owner and group user for a file. (6.5)
- Q5
- (a) What is pipe? How we use pipe to connect process in Linux. List out the use of pipe with redirection of input and output. (6)
 - (b) Explain the concept of inode in Linux. What is the significance of inode with Directory? Explain with example. (6.5)

UNIT-III

- Q6
- (a) What is awk? What is the significance of selection criteria and action component of awk filter? Write down the commands for splitting a line into fields and format the output by using awk. (7.5)
 - (b) Explain the following commands with example:- (5)
 - (i) su
 - (ii) suid
 - (iii) sgid
 - (iv) cut
 - (v) paste

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- Q7 (a) What is the Environment variable? Explain the different types of Environment variables with their uses in Linux. (6)
(b) What are the internal commands used by sed filter? Explain with example. (6.5)

UNIT-IV

- Q8 (a) Explain the kernel process management in details. (7.5)
(b) Explain the following commands with example:- (5)
(i) ps
(ii) top
(iii) pstree
(iv) nice
(v) renice
- Q9 (a) Explain the various system calls in Linux with example. (6)
(b) What is kernel? Explain the role and components of kernel in details. (6.5)

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