

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

June, 2015

00630

**BICS-026 : UNIX INTERNALS AND SHELL
PROGRAMMING**

Time : 3 hours

Maximum Marks : 70

Note : Answer any *seven* questions. All questions carry equal marks.

1. Explain the pipes concept in detail. How is it used for redirection of files ? 10
2. Discuss the following : 5+5
 - (a) LINK
 - (b) UNLINK
3. Write a shell program to find the Greatest Common Divisor (GCD) for any two given numbers. 10
4. Write UNIX commands for the following : 10
 - (a) Remove a directory which consists of 10 files.
 - (b) Display total number of users who have logged on UNIX.

- (c) Make a link of a file named test.c in the same working directory.
 - (d) Write the contents of three files into a single file.
 - (e) Change all the permissions of three files into a single file.
5. Write an algorithm and then draw the flow chart for calculating the sum of the digits of a 'n' digit number. 10
6. What is the use of make command ? Explain with the help of an example. 10
7. Explain mounting and unmounting the file system in UNIX. 10
8. What is paging ? Explain how the addresses are mapped in paging, with the help of a block diagram. 10
9. What is an inode ? What is its significance in UNIX file system ? What is the information that is stored in it ? 10
10. What is a socket ? Write a socket program to transfer a file from server to multiclient. 10
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