

VI SEMESTER B.TECH (OPEN ELECTIVE)

END SEMESTER EXAMINATIONS, MAY 2016

SUBJECT: LINUX BASICS AND PROGRAMMING [CSE 336]

REVISED CREDIT SYSTEM

Time: 3 Hours

16-05-2016

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ANY FIVE FULL** questions.
- ❖ Missing data, if any, may be suitably assumed.

- 1A Differentiate between header files and library files. Explain regular file with example. (1+3)M
- 1B Explain the Unix architecture with a neat diagram. 3M
- 1C Explain the command structure in Unix system. Write a command to record and append a login session to the file created by the user. (2+1)M
- 2A What is the output of the following commands? 2M
- i) `$cd ../`
 - ii) `$cd ../../`
 - iii) `$mkdir exam/day1 exam/day2`
 - iv) `$/bin/date`
- 2B Write a command for the following actions to be executed in the shell: 4M
- i) Delete everything in the current directory and below
 - ii) To rename a directory *folder1* to *folder2* in the present working directory
 - iii) To check whether two files *examfile1.txt* and *examfile2.txt* are same or not
 - iv) Compress and decompress file using gcc command
- 2C What does `$ls -l` display? Explain all the attributes displayed by this command. 4M
- 3A What are the different directory permissions? Explain with an example for each. 3M
- 3B Explain touch command with proper syntax and an example. 2M
- 3C Write a shell script to read the input through command line and print first N prime numbers. 5M
- 4A Write an interactive shell script which counts the number of odd digits in a given number using a function. 5M

4B What is the output of the following command: 2M
i) \$echo 'who | tee /dev/tty | wc -l'
ii) cat examPaper.txt | cmp user.txt -

4C Explain the standard input and standard output files with its respective source and destination. 3M

5A Explain if statement and its types with example. 4M

5B Write a command to do the following: (2+2+1)M

i) To copy the contents of *exam1.txt* to *exam2.txt* after skipping first 1023 bytes.

ii) To copy the contents of *file1.txt* which is shown in the fig 5.b.1 to *file2.txt* as shown in fig 5.b.2.

Student1
120900001
student1@manipal.edu
Student2
120900002
student2@manipal.edu

Student1 | 120900001 | student1@manipal.edu
Student2 | 120900002 | student2@manipal.edu

Fig 5.b.2

Fig 5.b.1

iii) Select all the employees whose salary are greater than or equal to 7000 but less than 9000.

5C What is the significance of -f and -u options of \$ps? 1M

6A Explain the phases of process creation. What are the attributes inherited by the child process? 4M

6B Explain df and du commands with example. 3M

6C What are the privileges given to the administrator? 3M