Reg. No. | | | | | | | | | |

Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)

प्रज्ञानं ब्रह्म
Manipal
INSPIRED BY LIFE

KNOWLEDGE IS POWER

VI SEMESTER B.TECH (OPEN ELECTIVE)

MAKE UP EXAMINATIONS, JUNE/JULY 2016

SUBJECT: LINUX BASICS AND PROGRAMMING [CSE 336]

REVISED CREDIT SYSTEM

Time: 3 Hours   08-07-2016   MAX. MARKS: 50

Instructions to Candidates:

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

1A   Differentiate between static libraries and shared libraries. Explain directory files and device files with example.   (1+3)M

1B   Explain with an example for the following features of Unix system: 3M
      i) Multiprogramming
      ii) Multiuser
      iii) Multitasking

1C   How is internal command different from external command? What is the output of $who -Hu?
                                                                                                   (2+1)M

2A   Describe absolute pathname with an example.   2M

2B   What will be the output of following commands when your pwd is examFolder with respect to fig. 2.b.1?   3M
      i) $rm –rf day2Folder
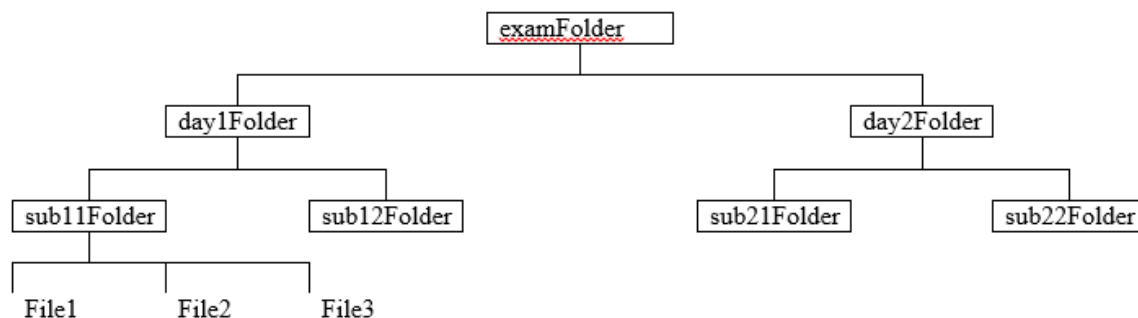   ii) $mv day1Folder day3Folder/sub31Folder
      iii) $file *

fig. 2.b.1

2C   Explain the command used to change the file permissions. Also, describe the different methods in which it can be used with suitable examples.   5M

3A   Explain the different situations where the hard links are used?   3M

3B   Explain find command with proper syntax and example.   2M

3C   Write an interactive shell script to reverse a given number using command line arguments.   5M

4A   Write an interactive shell script which checks whether a given number is prime or not using a
     function.   5M

4B   Explain the functions of tee command with an example.   2M

4C   What is a file descriptor? Explain how these file descriptors are used for redirection?   3M

5A   Explain case statement with example.   3M

5B   Write a command to do the following: (1+1+1)M
     i)   To open last modified file using head command.
     ii) To sort a file containing numbers.
     iii) To delete ';' and '#' in a given file.

5C   Explain how to slit a file vertically column wise and field wise.   4M

6A   What are the different ways,   (2+2)M
     i)   of running a process in the background?
     ii)   to schedule a job to run at a specified time of the day.

6B   What are the activities performed by shutdown command?   3M

6C   Explain the following task performed by cpio command with an example for each: 3M
     i)   Backing up files
     ii) Restoring files
     iii) Displaying the archive