Question Paper

MANIPAL UNIVERSITY

SCHOOL OF INFORMATION SCIENCES (SOIS)
SECOND SEMESTER MASTER OF ENGINEERING - ME (VLSI DESIGN)
DEGREE EXAMINATION - MAY 2017
Monday, 24, 2017
Time : 10:00 AM - 1:00 PM
Scripting for VLSI [EDA 612]

Marks: 100   **Duration: 180 mins.**

Answer all the questions.

1)   Explain the file system structure in Linux.   (10)
        Briefly explain about the fields of /etc/passwd
        file and /etc/group file.

2)   Write a bash script using grep to do the   (10)
        following task.   [4X2.5=10
        Marks]
        a. Count the total number regular files in the
        current directory
        b. Count the number of directories to be
        changed to reach the "pwd"
        c. Add lines numbers to the file called "file1"
        d. Count the total number of lines that begin
        with a number in the file "file1"

3)   Write the alternative commands of the   (10)
        following using sed and explain   [5X2=10
        Marks]
        a. tail -1 filename
        b. head -1 filename
        c. tr "ABCDE" "abcde" < filename
        d. cat filename
        e. grep '^new' filename

4)   Write short notes on Awk and explain the   (10)
        importance of BEGIN and END block in awk
        with relevant example

5)   a) what is > , >> and 2> symbols used in the   (10)
        following commands

ls > all files
ls >> all files
ls 2> file
 b) Explain the importance of tee utility

6)   a. Write a shell script to get the value from the   (10)
user and find its factorial
b. Develop an interactive script that asks for a
word and a file name and then tells how many
times that word occurred in the file.

7)   Explain the following built in functions with   (10)
relevant examples   [4X2.5=10
Marks]
a)Split
b)Sort
c)Join
d)Splice

8)   Write a perl script to Create an array to store   (10)
name of the countries. [5X2=10 Marks]

a)find the total number of elements from the
array
b)Get the last item from the array
c)delete third and fourth element from the
array
d)Join array elements together in one
continuous string
e)sort the values on the array in alphabetical
order

9)   Explain the importance of Formats in Perl with   (10)
an example.

10)   Briefly explain Perl File attributes with relevant   (10)
examples