

# Question Paper

Exam Date & Time: 03-Jun-2024 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences (MSIS), Manipal  
Second Semester Master of Engineering - ME (VLSI Design ) Degree Examination (Makeup Exam) - June 2024

### Scripting for VLSI [VLS 5203]

Marks: 100

Duration: 180 mins.

Monday, 03 June 2024

Answer all the questions.

- 1) Use Metacharacters/Globbing to do the task given below. (10)
  - Delete file whose name contains numeric values.
  - To list all the directories that start with a,b,c,e use the command
  - Copy all the files that start with "sfvlsi" to the /lesson directory
  - List all the files starts with intel
  - Copy all files that have exactly three characters from /home/test to /home/exam [L3 CO1]  
[5x2=10 Marks]
- 2) Write a shell script sum.sh that takes an unspecified number of command line arguments (up to 9) of integer and finds their sum. Modify the code to add a number to the sum only if the number is greater than 10 [L3 CO1] [1X10=10 Marks] (10)
- 3) Use grep command and regular expression to solve the following task (10)
  - To pick out lines that have at least two p's followed by any number of letters followed by 'ore'. The p's do not have to be next to each other.
  - Begins with a decimal digit: 0 through 9.
  - Begins with a hexadecimal digit: 0 through 9, a through f, or A through F.
  - Entire line is a three-digit, decimal value.[L4 CO2] [1X10=10 Marks]
- 4) Explain the command "s" with respect to sed with examples. (10)  
[L4 CO2] [1X10=10 Marks]
- 5) Compare between the Build-in-variables with respect awk with an example. (10)
  - NR vs. FNR
  - RS vs. FS
  - ORS vs OFS
  - ARGV vs ARGV [L4 CO3] [4X2.5=10 Marks]
- 6) Explain conditional statements in Perl scripting with an example. [L3 CO3] [1X10 =10 Marks] (10)
- 7) Asha, research intern is new to Linux environment. Help her to do the following tasks (10)

- a. To copy a file to a remote Linux host, with the hostname our-server.
  - b. To execute the script "compile.sh" in the background.
  - c. To move background job to foreground with the job id 5.
  - d. Delete all the /tmp files every Sunday 4PM.
- [L3 CO1] [1X10=10 Marks]

8) Write a Regular expression for the given conditions. (10)

- Pick the line that should start and end with the same word.
- Pick the line that contains the date with the pattern "dd/mm/yyyy" Note: d,m,y is numeric value .
- Switch the places of the first and second word on each line.
- Replace all vowels (a,e,i,o,u) with two copies of that same vowel.

[L3 CO3] [4x2.5 = 10 Marks]

9) Create a script called foods.pl that asks the user for their favorite foods. Ask the user to enter at least 5 foods, each separated by a space (or some other delimiter). Store their answer in a scalar. Split the scalar into an array. Once the array is created, have the script do the following: (10)

- Print the array
- Print the number of elements in the array
- Create an array slice from three elements of the array and print the new array

[L3 CO3] [1X10 =10 Marks]

10) Write the commands with respect to git. (10)

- Difference between working directory and staging
- Difference between working directory and repo
- Difference between staging and repo
- List the files in the repo

[L3 CO1 PO1] [1X10 =10 Marks]

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