

# Question Paper

Exam Date & Time: 24-Apr-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 - April / May 2024

### Scripting for VLSI [VLS 5203]

Marks: 100

Duration: 180 mins.

Wednesday, April 24, 2024

Answer all the questions.

- 1) Create a shell script to do the following task and explain the script. (10)
  - List all the files where the file name starts with numeric.
  - Print the kernel version.
  - Print the default shell.
  - Give read, write and execute permission to owner, execute and write permission to group, only execute permission to the guest to all the file name starts with "a".
  - Delete all the filenames that ends with "z".[L3 CO1] [1X10=10 Marks]
- 2) Write a shell script that takes a name of a folder, and delete all sub folders of size 0.[L3 CO1] (10)  
[1X10=10 Marks]
- 3) Use grep command and regular expression to solve the following task (10)
  - Line has at least one period.
  - Line has a human-readable IP address
  - Count the total number of "pattern" present in the file
  - List all the file name which have the "pattern" in the file[L3 CO2] [4X2.5=10 Marks]
- 4) Write the commands and explain using sed to (10)
  - Delete lines that do not contain the word "run"
  - Print alternate lines from line 3
  - Replace the "clk" with "reg" only in the 3rd occurrence.
  - remove all the occurrences of the word "jhon" except the first one in a line with in the entire file?[L4 CO2] [4X2.5=10 Marks]
- 5) Explain how awk is used in reporting with an example. [L3 CO3] [1X10=10 Marks] (10)
- 6) Write a Perl script (10)
  - To get the filename from the user and check the file exists or not.
  - Compare chop and chomp with an example. [L3 CO3] [1X10 =10 Marks]
- 7) Asha, research intern is new to Linux environment. Help her to do the following tasks (10)
  - Identify all processes that you own on the host.
  - Kill the process with id "5126"
  - Send the foreground job to background

- Check the disk space every Monday 4AM. [L3 CO1] [1X10=10 Marks]

- 8) Write a regular expression to (10)
- Find all patterns that begins with g or any digit from
  - Find all patterns that begins with "clk"
  - Find lines in a file where the pattern "clk" occurs at least twice
  - Find the line in a file where the pattern "clk" or "buf" occurs at least twice [L3 CO3] [1X10=10 Marks]
- 9) Write a program in perl to read a string and a number and prints the string the number of times indicated by the number, on separate lines and explain the script.[L3 CO3] [1X10 =10 Marks] (10)
- 10) Write the commands with respect to git (10)
- List the branches
  - Move to the branch "b1"
  - Find out the current branch name
  - List out the files of the committed branch[L3 CO1 PO1] [1X10 =10 Marks]

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