

Question Paper

Exam Date & Time: 17-Apr-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES (SOIS)

SECOND SEMESTER ME - (VLSI DESIGN)

DEGREE EXAMINATION- APRIL/MAY 2018

Tuesday, April 17, 2018

Time : 10.00 am to 1.00 pm

Scripting for VLSI [EDA 612]

Marks: 100

Duration: 180 mins.

Answer all the questions.

- 1)
 - a. Define the term Kernel and Shell (10)
 - b. Write a script to print the current process id, check for the currently running background process, kill it and launch a new process in the background, print its PID Explain the working of the script [2x5=10 Marks]
- 2) Assume that you have several C programs in the directory "cpgms" (names ending in ".c"). Write a Grep command [2X5=10 Marks]
 - a. To print all filenames which is having assignment operator "=="
 - b. To print all the lines starting with "/*" and end with "*/"
 - c. To print all the lines other comment line
 - d. To count total number of empty lines
 - e. To print all the lines matching `<stdio.h>`(10)
- 3) Write the commands and explain using sed [5X2=10 Marks] (10)
 - a. Prints the first 3 lines of a file.
 - b. Replace string A to B, (ignore case)
 - c. Delete the lines from 5 to 8
 - d. Delete contents of file
 - e. Replace string A to B only on lines contain C
- 4) Perform the following functions using AWK by using below (10)

file "awk1.txt": [4X2.5=10 Marks]

SNO	SNAME	ATTENDANCE	MARK1	MARK2
1	Joe	89	45	56
2	Mary	90		
3	Lara	67	56	78

- Calculate average marks
- List students names
- Calculate total number of students whose attendance is > 80%
- Print JOE's record
- Print all the records without marks

5) Explain the utilities in Linux with an example for each given below. [4X2.5=10 Marks] (10)

- Sort
- uniq
- comm
- diff

6) a) Write a shell script get the number from the user and display whether its prime number or not. (10)
b) Write a shell script to get the value from the user and check whether user entered integer or character
[2X5=10 Marks]

7) Write short notes on a) transliteration operator (10)
b) Substitute operator in Perl with relevant examples
[2X5=10 Marks]

8) Write a Perl script to (10)
[5X2=10 Marks]
a. Create an array to store name of the countries.
b. find the first element from the array
c. Replace first and second element with new values
d. sort the values of array based on length of element
e. delete the second element from the array.

9) Write a Perl script using file handling (10)
[2.5X4=10Marks]
a. Get the file name from the user
b. Open the file, if unsuccessful, print error message and

exit

c. Add line numbers to the content.

d. Print the total number of lines in the file

10) Explain the terms with an example with respect to version control (10)
[4X2.5=10 Marks]

a. Repository

b. Checkout

c. Import

d. Commit

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