

MANIPAL ACADEMY OF HIGHER EDUCATION
SCHOOL OF INFORMATION SCIENCES

FIRST SEMESTER MASTER OF ENGINEERING – ME (EMBEDDED SYSTEMS)
DEGREE EXAMINATION – APRIL 2018

SUBJECT: ESD 615.2 (ELECTIVE 1) –LINUX & SCRIPTING LANGUAGES

Thursday, April 19, 2018

Time: 10.00 – 13.00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions

1. A. Explain ***touch*** and ***help*** command with examples
B. Write short notes on exit status and trap with relevant examples
(2x5=10 Marks)

2. Write one line script and explain the resultant scripts
 - A. List all files whose 1st letter is upper case character
 - B. List all the file name with single character
 - C. Give only write permission to the owner or user of all the files starts with “a”
 - D. Delete all the files with extension .c and .cpp in the current working directory interactively
 - E. Delete the all the empty directory(5x2=10 Marks)

3. Solve the following task using grep command
 - A. Print all the lines containing the pattern “script ” in the file “file1”
 - B. Count total number of lines in the file “file1” containing “bash” or “Bash”
 - C. Print the line number and file names which containing “bash “in the current the current directory
 - D. Print all the lines not containing only “bash” in the file “file1”
 - E. Print all the lines ends with either . [dot] or question mark [?] in the “file1”(5x2=10 Marks)

4. Write the alternative commands of the following using sed and explain

- A. tail -1 filename
- B. head -1 filename
- C. tr "ABCDE" "abcde" < filename
- D. cat filename
- E. grep '^new' filename

(5x2=10 Marks)

5. Using dialog utility create a menu which need to have options

- i) Open a file;
- ii) Remove a file;
- iii) Copy a file;
- iv) Move a file;

(10 Marks)

6. Write and explain sed scripts to do the following

- A. Print all the lines which start with lower case.
- B. Delete first 10 lines in the file
- C. Delete all the capital "D" in the file.
- D. Replace all upper case characters in to lower case in the file
- E. Delete all the blank lines in the file.

(5x2=10 Marks)

7. Explain the importance of Getopts command with an example

(10 Marks)

8. Explain any five math built-in functions in awk with an example

(5x2=10 Marks)

9. Write a Perl program

- A. To get person name and corresponding phone from the user and store in a hash.
- B. Get the name from the user and check whether the name is already exist or not.
- C. Display the name sort by name.
- D. Count total numbers of contacts are there in the hash.

(4x2.5=10 Marks)

10. Write short notes on make file. Elaborate on the necessity of make file with an example.

(10 Marks)
