**SET-1 *LINUX PROGRAMMING*-UNIT TEST-1 Date: 14-8-2013 – IV CSE**

**Descreptive : Answer any two questions 2 X 15 =30 marks**

1. a) Write a sed script to print all the lines of a file that is passed as command line argument by changing the string madras with Chennai.

b) Write an awk program to print the fields 1 and 4 of a file that is passed as command line argument. The file contains lines of information that is separated by “,” as delimeter. The awk program must print at the end the average of all 4th field data.

c) Write briefly on sed,chmod,df,comm.,fgrep and sort commands with examples [4 + 5 +6]

2. a) What is UNIX and explain its features b)Explain architecture of UNIX like systems [7+8]

3. a) Explain various meta characters in shell with an example script.

b) Write a shell script to find out number of lines and number of words in the given file without using wc command [8+7]

4 a) write in detail on the file name expansion feature provided in bash with examples.

b)write in detail features of test command

c)Write brieflyon case control structure in bash with examples. Write briefly on “||” operator in bash.[5+5+5]

**Objective 20 X 1 =20**

1. What command is used to count the total number of lines, words, and characters contained in a file?
2. In shell script $# tells\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which character is used to match exactly one character? a) | b) \* c) ^ d) ? [ ]
4. What command is used to remove the directory? a) rdir b) remove c) rd d) rmdir [ ]
5. \_\_\_\_\_\_\_\_\_\_ command is used to search files for specified words or patterns.
6. File descriptors for standard output is \_\_\_\_\_\_\_\_\_\_\_\_\_.
7. In the if statement value for success is\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. Which of the following is not a shell command? a) get b) exit c) set d) test [ ]
9. The system identifies a file by its \_\_ a) name b) absolute path c) file owner d) i-node number [ ]
10. The command that is used to display the name of the operating system running on your machine is \_\_\_\_\_\_\_
11. The process that runs when a user logs in and terminates when logs out is a \_\_\_\_\_\_\_\_\_\_\_ process.
12. A type of file that points to another file is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ file.
13. The symbol \_\_\_\_\_\_\_\_ is usually reffered as a here document a) << b) >> c) || d) ?? [ ]
14. \_\_\_\_\_\_\_ metacharacter gives a shell choice of any one character except those enclosed in the list. [ ]

a) [..] b) [!..] c) [?..] d)[\*..]

1. Syntax of awk\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The \_\_\_\_\_command is used for interrupting a program.
3. The Bourne shell developed \_\_\_\_\_\_\_\_\_\_\_at the AT&T labs.
4. The Octal number to be given along with chmod command to make a file readable, writable and executable to the owner, readable and executable to group and others is\_\_\_
5. [ -n string ] checks for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. $ tar- cvf is used to\_\_\_\_\_\_\_\_\_

**SET-2 *LINUX PROGRAMMING*-UNIT TEST-1 Date: 14-8-2013 – IV CSE**

**Descreptive : Answer any two questions 2 X 15 =30 marks**

1 a) write in detail on the file name expansion feature provided in bash with examples.

b) Write in detail on the here documents feature provided in bash with examples.

c) Write briefly on sed,chmod,df,comm.,fgrep and sort commands with examples [5+5+5]

2 Briey explain the purpose of the following utilities: (a) grep(b) comm.(c) tee(d) awk. [15]

3. (a) Explain how debugging can be done in a shell script.

(b) Write a shell script that determines the period for which a specified user is working on the system? [7+8]

4.a) Define Shell and its Responsibilities.

b) Explain with example the Process of Creation and Execution of a Shell Script.

c) Explain Shell variables

**Objective 20 X 1 =20**

1. The basic function of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is to search files for lines (or other units of text) that contain a pattern.
2. File descriptors for standard input is \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. $mount displays \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Which of the following command is used to count number of lines in a file? a) ln b) nl c) wc d) all [ ]
5. Which option of cut command is used to specify fields separator ? a) – c b) – f c) – F d) – d [ ]
6. The PID of the login shell is stored in \_\_\_\_\_\_\_\_\_\_\_\_\_ variable. a) $\* b) $# c) $@ d) $$ [ ]
7. The default permission bits of a file when it is created for the first time, is controlled by \_\_\_\_value. [ ]
8. chmod b) fmask c) umask d) perm
9. The grep command is used to a) sorts the content of a file b) search a file for presence of a string [ ]
10. Symbolic link is also called as \_\_\_\_\_\_\_\_\_\_\_ link.
11. The \_\_\_\_\_\_\_\_\_\_\_\_ document is used to create menus in shell script.
12. BASH stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. The mkdir and rmdir commands work only in directories owned by the \_a)user b)group c)others d)both a&b [ ]
14. \_\_\_\_\_\_\_\_\_variables are inherited by any program including another shell a) local b) global c) static d)environment [ ]
15. Linux was developed at\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. The \_\_\_\_\_\_\_\_\_command can remove a non-empty directory.
17. The \_\_\_\_\_\_\_\_\_contains all attributes of a file except the file name.
18. In shell script $? tells \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
19. Which command is used to extract specific columns from the file?
20. \_\_\_\_\_\_\_\_\_ act as interface between user and kernel.
21. Syntax of chmod\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.