

K.S INSTITUTE OF TECHNOLOGY, BENGALURU-560109
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

18CS56–UNIX PROGRAMMING

EXHAUSTIVE QUESTION BANK

MODULE-2

1. Briefly explain the significance of the seven fields of 'ls -l' command.
2. Explain absolute and relative methods of assigning permissions to file using examples.(or) Explain different ways of setting file permissions.
3. Current file permission of a regular file "Attendance .txt" are **rw- -w-r-x** write the chmod expression required to change it to following:
 - a) **rw-rw-r-x** b) **-xrw-rwx** c) **rw-rwxrwx**Using both relative and absolute methods of assigning permissions
4. Explain shell features of while, if and for with syntax
5. What is the purpose of grep command ? explain all options
6. What are wildcard characters? Explain each with example.
7. Explain test command for handling string
8. Write a shell script using case to perform all arithmetic operations.
9. Explain for loop with all possible sources for argument list.
10. Explain with example set and shift commands in unix to manipulate positional arguments
11. With examples explain logical operators in shell programming
12. Write Shell programs:
 - a) List of files b) processes of user c) Today's date d) Users of the system
13. Differentiate between hard link and soft link
14. Explain hard link and soft link with examples.
15. Write a menu driven shell script to do the following:
 1. List of files b) Date c) Users of the system d) Process of user
 14. Explain here document (<<) with example.

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15. Briefly explain Basic Regular Expression(BRE) and Extended Regular Expression(ERE) metacharacters

16. Write regular expression to match the following:

- a. A decimal number which is non-negative and floating point number
- b. A valid C variable.

17. What would be the effect of the following commands:

- (a) `grep "[A - Z]" file1`
- (b) `egrep "UNIX|Unix|unix" file1`
- (c) `grep "UNIX$" file1`
- (d) `grep "UNIX. UNIX" file1`
- (e) `grep "." file1 > file2`

18. Refer to the following employee database and

```
2233 |a.|jaisharma |Director |Production| |12/03/50 | 7000
5678 |Ramesh Babu |D.G.M |Marketing |19/04/43 | 7800
2365 |barunsengupta|Director |Personnel |11/04/47 | 5400
1265 |S.N. Dasgupta |Manager |Sales |12/09/63 | 5600
2467 |anilagarwal |Manager |Sales |01/10/78 |3000
3245|Sudhir Agarwal |Executive |Personnel |12/6/89 |7500
3245|Sudhir Agrawal|Manage |Personnel|12/6/89|7500
```

- a) Frame the regular expression using grep command to search the details
- b) Search the employees in Sales department
- c) Search the employees who are Directors.
- d) Search the employees having name as agarwal/aggarwal/agrawal ignore case
- e) Search the employees who are manger and show the line numbers.
- f) Count the number of employee in production department
- g) List the employee in sales, marketing and perconnel department
- h) List the employee who's employee id starts with 3
- i) List the employee who's salary is above 7000

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