**CS232 : Free and Open Source Software Lab**

Test 1

Roll No: Name :

1. Which is the core of the operating system?  
   a) Shell b) Kernel c) Commands d) Script
2. Which among the following interacts directly with system hardware?  
   a) Shell b) Commands c) Kernel d) Applications
3. Which among the following is used to write small programs to control Unix functionalities?  
   a) Shell Commands b) Shell Script c) Filters d) C Language
4. Which command is used to record a user login session in a file

a) macro b) read c) script d) none of the mentioned

1. Which command is used to display the operating system name  
   a) os b) unix c) kernel d) uname
2. Find / -name ‘\*’ will  
   a) List all files and directories recursively starting from /  
   b) List a file named \* in /  
   c) List all files in / directory  
   d) List all files and directories in / directory
3. Which command changes a file’s group owner  
   a) cgrp b) chgrp c) change d) group
4. Which option of rm command is used to remove a directory with all its subdirectories  
   a) –b b) –o c) –p d) –r
5. Which command is used to identify file type?  
   a) Type b) File c) Finfo d) Info
6. Write the command to display the current date in the form dd/mm/yyyy.  
   a) date +%d/%m/%Y b) date +”%d/%m/%Y”  
   c) date +/%d/%m/20%y d) date +”/%d/%m/20%y”
7. The command syntax to display the file ‘sample.txt’ one page at a time is  
   a) man sample.txt>more b) cat sample.txt<more  
   c) cat sample.txt|more d) none of the mentioned
8. sed is a command typically used for  
   a) Perform complex calculations b) Perform FIFO based non-blocking I/O  
   c) Modify/print selective contents of a file d) None of the mentioned
9. If a file is removed in Unix using ‘rm’ then  
   a) The file can be recovered by a normal user   
   b) The file cannot be recovered by a user  
   c) The file can be fully recovered provided the sytem is not rebooted  
   d) The file will be moved to /lost+found directory and can be recovered only by administrator’s intervention
10. How do you rename file “new” to file “old”?  
    a) mv new old b) move new old c) cp new old d) rn new old
11. What command is used to copy files and directories?  
    a) copy b) cp c) rn d) cpy
12. Any file’s attribute information is stored in which structure on the disk  
    a) Inode b) Data blocks c) File blocks d) Directory file
13. There are two hard links to the “file1” say hl and h2 and a softlink sl. What happens if we deleted the “file1”?  
    a) We will still be able to access the file with hl and h2 but not with sl  
    b) We will not be able to access the file with hl and h2 but with sl  
    c) We will be able to access the file with any of hl, h2 and sl  
    d) We will not be able to access the file with any of hl, h2 and sl
14. Which directory contain device special files?  
    a) /etc b) /etc/dev c) /root/bin d) /dev
15. The permission -rwxr–r– represented in octal expression will be  
    a) 777 b) 666 c) 744 d) 711
16. How do you print the lines between 5 and 10, both inclusive  
    a) cat filename | head | tail -6 b) cat filename | head | tail -5  
    c) cat filename | tail +5 | head d) cat filename | tail -5 | head -10
17. The statement z = ‘expr 5 / 2’ would store which of the following values in z?  
    a) 0 b) 1 c) 2 d) 2.5
18. Which variable contains current shell process id  
    a) $\* b) $? c) $$ d) $!
19. BASH shell stands for?  
    a) Bourne-again Shell b) Basic Access Shell c) Basic to Advanced Shell  
    d) Big & Advanced Shell
20. Which variable is used to display number of arguments specified in command line  
    a) $0 b) $# c) $\* d) $?
21. Which represents the user home directory  
    a) / b) .; c) .d) ~
22. Which variable will display the list of the positional parameters?  
    a) $# b) $\* c) $? d) $$
23. Which option of grep displays the line number as well?  
    a) -v b) -l c) -n d) -E
24. How can you search for blank line in a file?  
    a) $ grep “ “ file b) $ grep “^$” file c) $ grep [“ “] file d) $ grep [^$] file
25. Indicate the right option to search for BOB, Bob, BOb or BoB?  
    a) grep –i Bob files b) grep ‘B[oO][bB]’ files  
    c) grep ‘[BOB]’ files d) grep -v ‘Bob’ files
26. Indicate the right option to search for anything not a letter or number  
    a) grep ‘^[a-zA-Z0-9]’ b) grep ‘[^a-zA-Z0-9]’  
    c) grep ‘[a-zA-Z0-9]’ d) None of the mentioned
27. Write shell scripts for
    1. generate a pattern

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1 2 1

1 2 3 2 1

1 2 3 4 3 2 1

* 1. Write a command line program that accepts three arguments( option pattern filename) to

a) Check whether the given file exists

b) use switch case to

i) count the number of lines that matches the pattern (switch option : ‘-i) ii) count the number of words that matches with the pattern (switch option : ‘-c’)iii) print all the matched lines (switch option: ‘-l’)