**Exercise -1**

1. **Difference between daemon and service with example.**
2. **How to create a hierarchy of directories ( /opt/rock/break) using mkdir command?**
3. **Different types of shells ?**
4. **What is the use of tar command ? List out the uses.**
5. **What is the use of SSH command.**
6. **How to create a user with password ?**
7. **How to view the content of How a file in reverse order ?**
8. **How many types of files are available in linux and what are they?**
9. **How to search for a particular string in a text file on Linux?**
10. **How to search for a particular file in the Linux file system?**

**Exercise -2**

1. **What is the difference between hardlink and soft link?**
2. **What are the important bootable files in linux?**
3. **Explain the use of aspell & tr commands with an example?**
4. **touch command is used to create an empty file. Is it only the use of touch commands?**
5. **How to list all the available partitions in linux?**
6. **How to view disk space in linux?**
7. **What is GRUB and what are the features of GRUB?**
8. **What is the use of the uniq command?**
9. **What are the standard I/O redirectors?**
10. **What should be the minimum password length of a non root user and root user?**
11. **Create a file with only one character and Count no of characters using the "wc -c" command. What is it showing and why?**
12. **How can we change the ownership of a file?**
13. **Write the command to search for a particular string say "user" in all files in / directory recursively?**
14. **What is the use of lsof command?**
15. **Assign the following permissions to a file called "test". Write the command in both symbolic and numeric notations.**
    1. **user       read**
    2. **group    read,execute,write**
    3. **other     execute,read,write**

**Exercise -3**

1. **What is the difference between ext2 and ext3 file systems and also list advantages and disadvantages?**
2. **How to view kernel version and Operating system name in linux?**
3. **How to create swap space in linux?**
4. **What are the different modes available in the vi editor?**
5. **How to view free memory in linux?**
6. **What is the use of cpio and restore commands?**
7. **What is the use of the pidof command?**
8. **What are the differences between cron and at ?**
9. **What is the use of gzip and bzip2 commands?**
10. **How to get only info related information in centralized logging?**
11. **What is the difference between yum and rpm?**
12. **What is the use of the id command?**
13. **How to change the default runlevel?**
14. **What is the difference between adduser and useradd ?**
15. **What is MBR?**
16. **How to find files of a particular user in / file system?**
17. **How to find files which have the user as test and group as root?**
18. **What are the different types of files available to install applications on Linux?**
19. **Where does the process information is stored?**
20. **How to view the background running process of a terminal?**
21. **What are nice and renice commands?**
22. **What is the signal related to the keystroke ctrl+z ?**
23. **How to find the processes running on a particular port?**
24. **What is the use of signal 1 ?**
25. **Write a crontab to backup my system (Using gzip) for every month, on Mondays whose dates are between 15-21 at 4 a.m.?**
26. **Write a crontab which executes the "ping" and the "ls" commands every 12am and 12pm on the 1st day of every 2nd month.**

**It also has to put the output of the commands into a file /var/log/test.**

1. **Where the user, password and group information is stored?**

**Exercise -4**

1. **How to find files which have a user as test or group as root?**
2. **How to find files which have 644 permissions?**
3. **What is the use of the mount command?**
4. **What is the maximum length of a filename? Prove it**
5. **What is su and sudo?**
6. **What is the difference between "su" and "su -" commands?**
7. **How to mount a pen drive on linux?**
8. **How to list the currently logged in users in your system in Linux?**
9. **How to know the uptime of your linux system?**
10. **How to list only directories?**
11. **List all the shortcuts related  to vi?**
12. **What is the use of diff command?**
13. **In which file all the shell information is available?**
14. **What does ~ represent?**
15. **What does? and .. represents?**
16. **What is the use of | operator?**
17. **How can I store the output of a command to a file?**
18. **What is the use of the tee command?**
19. **What is the difference between locate, find and slocate?**

**Exercise -5**

1. **What does scp command do?**
2. **How to lock a user?**
3. **Explain the entries in /etc/passwd and /etc/shadow files?**
4. **How to check the dependencies of a particular package?**
5. **How to check the version of files installed by a package?**
6. **How to view the exit status of the previous command executed?**
7. **What is the use of NFS service?**
8. **What is NFS and on Which port does NFS run? What are the configuration files related to NFS?**
9. **What is the use of chmod and chown commands?**

**Exercise -6**

1. **What is the use of the netstat command?**
2. **What is the use of profiles?**
3. **What is the use of environment variables?**
4. **What are the types of environment variables available and give some examples?**
5. **What are the configuration files related to profils?**
6. **What is the use of /etc/profile file?**
7. **What is the use of /etc/bashrc file?**
8. **What is the use of .bash\_profile file?**
9. **What is the use of .bashrc file?**
10. **What is the use of DISPLAY variable?**
11. **What are the differences between system defined and user defined variables?**
12. **Which environment variable stores CPU architecture?**
13. **What is the use of LD\_LIBRARY\_PATH env variable?**
14. **What are the different types of manual pages available?**
15. **What How to match empty lines using sed?**
16. **What is the use of wild cards?**
17. **Define awk?**
18. **How to delete the last line using sed?**
19. **Write a sed command to transform one set of characters in mass to another set which we do using tr?**
20. **What is the operator used to print line numbers in sed?**
21. **How can we refer to fields in awk script?**
22. **How can we concatenate strings in awk?**
23. **Which Awk variable is used to access environment variables?**
24. **What is the awk function to read lines from standard input?**
25. **How to change  field separators that awk uses?**