**Time : 1:30 Hrs Marks : 100**

1. **Install RHEL 6.6 with following Specifications**

RAM- 1GB

HDD- 32GB

Partitioning

/ -- 10240MB

/boot -- 2048MB

/home -- 10240MB

/var -- 4096MB

/swap – 2048MB

and other required filesystem

Mode – Minimal

1. **Configure your Host Name, IP Address, Gateway and DNS**

Host name: crxxxxxx.di.com

IP Address: 192.168.1.x (where x is your provided IP digit)

Gateway: 192.168.1.1

DNS: 192.168.1.1

1. Add 3 users: harry, natasha and tom. The requirements: The Additional group of the two users: harry, Natasha is the admin group. The user: tom’s login shell should be non-interactive
2. Create a directory under /home named admins. Its respective group is requested to be the admin group. The group users could read and write, while other users are not allowed to access it. The files created by users from the same group should also be the admin group.
3. Create a user named alex, and the user id should be 1234, and the password should be alex111.
4. You work as a Network Administrator for Net Perfect Inc. The company has a Linux-based network.  
   By using the VI utility, you have created a document that has 100 lines. You want to replace all the occurrences of "net" with "Net" in the first 50 lines of the document. Which of the commands will you use?
5. You work as the Network Administrator for McNeil Inc. The company has a Linux-based network.  
   You are working as a root user on the Linux operating system. Some employees have been recently appointed in your company. You have to add these users in your network.  
   Which of the tools should you use to accomplish this task?
6. You are a newly appointed System Administrator at Net Perfect Inc. The company has a Linux-based network. You want to install a package named “net-tools on your Linux system. Which of the commands will you use to accomplish the task?
7. **Which of the commands can be used to change default permissions for files and directories at the time of creation?And what is the default value of it? Explain with example?**
8. How to change the default SSH port of your Linux Server ?
9. **Which of the option of ls command can be used to view file inode number?**
10. **What is the command to change the group ownership of a file?**
11. **Which of the command display the disk consumption of any directory?**
12. **Which command creates an empty file if it does not exist?**
13. **Which option of rm command is used to remove a directory including all its subdirectories?**
14. **Which of the commands will display all the files in your current directory and its subdirectories including the hidden files?**
15. Which of the SHELL commands displays currently logged-in users and their tasks?
16. How to check whether you are working on Physical or Virtual Server ?
17. How to check when was the particular rpm package installed ?
18. How to check which Kernel Modules are installed on your Linux box ?
19. Which command is used to check IO Stat in Linux ?
20. List the services that are enabled at a particular run level in linux server ?
21. Create a read-only file in your home directory?
22. How do you find whether your system is 32 bit or 64 bit ?
23. Your application home directory is full? How will you find which directory is taking how much space?
24. What are the basic components of the Linux operating system?
25. Which of the redirection operator is used to append the content in a file?
26. Can we provide permissions to the directory at the time of creation using the "mkdir" command?
27. Which of the directory contains the scripts related to service used in the Linux operating system?
28. How can we shut down the system by notifying all users?
29. Which of the first process executed by the kernel during the booting time of the system?
30. Which of the directories contains binary files?
31. How can we differentiate between file and directory from the output of ls command?
32. Which of the character is used to comment lines in a shell script file?
33. Which exact command is used to set subnet mask in the Linux operating

system?

1. **What is the UID and GID of root user? Can a normal user change the ownership of a file? What is the command to change ownership of a file?**

**True or False and provide explanation:**

1. The file can be a text, image, audio, and video file?
2. A device is also represented as a file in the Linux operating system?
3. A directory is also a file?
4. Disk partitions are also represented as a file?