In some questions I am encouraging to search online because it will help you practice for searching more complicated questions in the future
(Good Luck)

1. When you login you get "$" prompt, what is the prompt for root?
    #

2. Explain the difference between grep and egrep?
    Search online

3. What is the port # for DNS, NTP and NFS?
    53,123 and 111/2049

4. What is the configuration file name of DNS and where is it located?
    /etc/named.conf

5. How many new directories will be created after running the following command
    mkdir {a..c}{1..3}
    9

6. Your PC is configured with a DNS server address but not the default gateway. Can the PC access internet?
    No

7. What is the difference between IP and Gateway?
    Search online

8. Can you assign one static IP to 2 computers, if not then why?
    No because it will create IP conflict

9. How to change IPs address to static?
    ifconfig x.x.x.x

10. You are trying to ping a server by hostname and you get an error message, "ping: unknown host …". What could be the reason and how to solve the problem so you can ping it by hostname?
    Check for /etc/hosts or DNS to see if it has hostname to IP entry

11. Explain the difference between relative and absolute path?
    Absolute path starts from / where relative path is your current directory

12. List 3 different methods of adding user?
    Search online

13. What is the command to change file/directory ownership and group?
    chown and chgrp

14. List any 3 type of filesystem?
    ext4,NTFS and FAT

15. When you login you get a message on the screen. What is the name
    of that file and where is it located?
    /etc/motd

16. What is /bin directory used for?
    Search online

17. What are the different types of DNS Server
    Master and secondary

18. How to change a user password?
    passwd username

19. What is the version of Redhat Linux you have experience with?
    7.4

20. List any 4 linux distributions?
    Redhat, CentOS, Ubuntu and SUSE

21. How to logoff from the system?
    exit

22. Give any 3 examples of operating systems?
    Windows, Linux and MAC

23. How to create a directory?
    mkdir

24. Where are the zone files located for DNS service?
    /var/named/zonefiles

25. How to check kernel version?
    uname –a

26. Which directory has all the configuration files?
    /etc

27. How to become root user from a regular user?
    su –

28. How many mega bytes in 1 giga bytes?
    Search online

29. What is the purpose of having different network ports?
    **So the communication of each application goes through a dedicated
    port**

30. How to display first column of a file?
    cat filename | awk '{print $1}'

31. What is the name of DNS rpm package?
    bind

32. What is the difference between nslookup and dig commands?
    Search online

33. How to check your user id and group id?

    id

34.   How to check a file's permission?
    ls -l

35.   What is the difference between "kill" and "kill -9" command?
    Search online

36.   What is subnet?
    Search online

37.   You are troubleshooting an issue with Redhat support and they
    have asked you to send the contents of /etc directory. How and
    which method you will use to transfer the contents?
    tar (compress) the entire /etc directory and ftp

38.   What is root home directory?
    /root

39.   What is rsyslogd deamon and its purpose?
    Search online

40.   Your company has terminated a server administrator. What is first
    thing as an administrator you should do to enhance the security?
    Change root password

41.   How to check the computer name or host name in Linux?
    hostname

42.   Which permission allows a user to run an executable with the
    permissions of the owner of that file?
    First 3 bits should have x

43.   What is the command to untar a tarred file?
    untar

44.   What is /proc directory used for?
    Search online

45.   What is the purpose of nsswitch.conf file
    It tells the system where to go to resolve hostnames

46.   List 3 basic commands to navigate the filesystem?
    cd, pwd and ls

47.   Which service/daemon should be running on the server that allows
    you to connect remotely?
    sshd

48.   What is the purpose of firewall?
    Search online

49.   List any 3 IT components?
    Hardware, OS and Applications

50.   Which directory has all the commands we use, e.g. ls, cd etc.?
    /usr/bin or /bin

51. What is the difference between memory, virtual memory and cache?
    Search online

52. Which of the following is correct?
    a. Hardware → Operating System → Users
    b. Operating System → Users → Hardware
    c. Database → Hardware → Users

53. Which of the following is a communication command?
    o grep
    o **mail**
    o touch
    o cd

54. How to rename a file or directory?
    mv

55. How to change a hostname in Linux?
    Search online

56. How to check network interfaces in Linux?
    ifconfig

57. Why is "tail –f logfilename" command used most often and what does it do?
    It will output all incoming logs in real time

58. What type of hardware have you worked on?
    You should get yourself familiar with Dell, HP and UCS hardware by going online and check the vendor websites

59. How to sort a file in reverse order?
    cat filename | sort –r

60. What is the name of operating system that runs Unix?
    Solaris, HP-UX etc.

61. List all byte sizes from smallest to largest?
    Search online

62. How to check the total number of partition in Linux?
    fdisk -l

63. How to access a linux system from a linux system?
    ssh

64. Explain the procedure of bonding 2 NICs or interfaces together?
    Search online

65. What is the exact command syntax to list the 5th column of a file and cut the first 3 letters?
    cat filename | awk '{print $5}' | cut –c1-3

66. What is /etc/hosts file used for?
    To resolve hostnames with IP address

67. List any 3 options of 'df' command and what they are used for?
Search online

68. What is the command to change file/directory permissions?
chmod

69. What is the purpose of pipe (|)?
To combine multiple commands

70. What is /etc directory used for?
For configuration files

71. Which command is used to list files in a directory?
ls -l

72. There is a command which gives you information about other
commands, please explain that command and what is it used for?
man

73. How to delete a file and a directory?
rm filename and rmdir dirname

74. What is the difference between "tail" and "tail -10"?
None

75. List 4 commands to display or read a file contents?
cat, more, less, vi

76. Which command is used to read the top 5 lines of a file?
head -5 filename

77. What are the different commands or methods to write to a file?
echo > filename and vi filename

78. What is swap space and how to check swap space?
Search online

79. What is inode and how to find an inode of a file?
Search online

80. Which file to edit for kernel tuning?
Search online

81. What is the latest version of Redhat?
Search online

82. Name the command to find specific word from a file?
grep word filename

83. You have scheduled a job using crontab but it does not run at the
time you specified, what could be the reason and how would you
troubleshoot?
Check your system time
Check your crontab entry
Check /var/log/messages

84. How to check system hardware information?

dmidecode

85. How to check network interface MAC address?
    ifconfig

86. If I don't want others to read my file1, how to do that?
    Remove r from the last 3 bits of file permission

87. What is the purpose of "uniq" and "sed" command?
    Search online

88. Which command is used to list the contents of a directory in the
    most recent time and in reverse order, meaning the most updated
    file should be listed on the bottom?
    ls –ltr

89. What is the difference between tar, gzip and gunzip?
    Search online

90. What are the different ways to install and OS?
    DVD, DVD iso and network boot

91. How to view difference between two files?
    diff file1 and file2

92. You noticed that one of the Linux servers has no disk space left,
    how would you troubleshoot that issue?
    If running LVM then add more disk and extend LVM
    If not running LVM then add more disk, create a new partition and
    link the new partition to an existing filesystem

93. How to check Redhat version release?
    uname –a or /etc/redhat-release

94. What is the difference between TCP and UDP?
    Search online

95. What is a zombie process?
    Search online

96. How do you search for a pattern/word in a file and then replace
    it in an entire file?
    sed command

97. Explain the purpose of "touch" command?
    To create an empty file

98. If a command hangs, how to stop it and get the prompt back?
    Ctrl C

99. Which command is used to count words or lines?
    wc

100. How to check the number of users logged in?
     who

101. What is the command to view the calendar of 2011?

cal 2011

102. Which command is used to view disk space?
df -h

103. How to create a new group in Linux?
groupadd

104. What is the command to send a message to everyone who is logged into the system?
wall

105. Which command is used to check total number of disks?
fdisk -l

106. What is an mail server record in DNS?
MX

107. What does the following command line do?
ps -ef | awk '{print $1}' | sort | uniq
List the first column of all running processes, sort them and remove duplicates

108. You get a call that when a user goes to www.yourwebsite.com it fails and gets an error, how do you troubleshoot?
Check for user internet
Check to see if user computer has DNS for hostname lookup
Check to see if the server is up that is running that website
Check to see if the server's web service is running
Check for DNS availability which is resolving that website

109. List 4 different directories in /?
/etc, /bin, /tmp, /home

110. What is the output of the following command:
$tail -10 filename | head -1
It will show the first line from the last 10 lines of a file

111. What are the different fields in /etc/passwd file?
Search online

112. Which command is used to list the processes?
ps -ef

113. What is the difference between "hostname" and "uname" commands?
Hostname will give you system name and uname will give you OS information

114. How to check system load?
top and uptime command

115. How to schedule jobs?
crontab and at

116. What is the 3rd field when setting up crontab?
Day of the month

117. What is the command to create a new user?
useradd

118. What is the "init #" for system reboot?
6

119. How to restart a service?
systemctl restart servicename

120. How to shutdown a system?
shutdown or init 0

121. What is "ftp" command used for?
To transfer files from one computer to another

122. Explain cron job syntax? First is minute, second is..?
Min, house, day of the month, month, day of the week and command

123. How to delete a package in Linux?
rpm –e packagename

124. What is the file name where user password information is saved?
/etc/shadow

125. Which command you would use to find the location of chmod command?
which chmod

126. Which command is used to check if the other computer is online?
ping othercomputer

127. Please explain about LAN, MAN and WAN?
Search online

128. How to list hidden files in a directory?
ls –la

129. What is the difference between telnet and ssh?
ssh is secure where telnet is not

130. How to run a calculator on Linux and exit out of it?
bc and quit

131. List any 4 commands to monitor system?
top, df –h, iostat, dmesg

132. You are notified that your server is down, list the steps you will take to troubleshoot?
Check the system physically
Login through system console
Ping the system
Reboot or boot if possible

133. What is difference between static and DHCP IP?
Search online

134. How to write in vi editor mode?
i = insert, a = insert in next space, o = insert in new line

135. What is the difference between "crontab" and "at" jobs?
   crontab is for repetitive jobs where at is for one time job

136. What is vCenter server in VMWare?
   Search online

137. What is "dmidecode" command used for?
   To get system information

138. What is the difference between SAN and NAS?
   Search online

139. What is the location of system logs? E.g. messages
   /var/log directory

140. How to setup an alias and what is it used for?
   alias aliasname="command"
   It is used to created short-cuts for long commands

141. What is the purpose of "netstat" command?
   Search online

142. What are terminal control keys, list any 3?
   Crtl C, D and Z

143. Which command(s) you would run if you need to find out how many processes are running on your system?
   ps –ef | wc –l

144. What are the different types of shells?
   sh, bash, ksh, csh etc.

145. How to delete a line when in vi editor mode?
   dd

146. Which is the core of the operating system?
   a) Shell
   b) Kernel
   c) Commands
   d) Script

147. Which among the following interacts directly with system hardware?
   a) Shell
   b) Commands
   c) Kernel
   d) Applications

148. How to save and quit from vi editor?
   Shift ZZ or :wq!

149. What is the difference between a process and daemon?
   Search online

150. What is the process or daemon name for NTP?
   ntpd

151. What are a few commands you would run if your system is running slow?
top, iostat, df –h, netstat etc.

152. How to install a package in Redhat Linux?
yum install packagename

153. What is the difference between "ifconfig" and "ipconfig" commands?
ifconfig for Linux and ipconfig for Windows

154. What is the first line written in a shell script?
Define shell
e.g. #!/bin/bash

155. Where is the network (Ethernet) file located, please provide exact directory location and file name?
/etc/sysconfig/network-scripts/ifcfg-nic

156. Why do we use "last" command?
To see who has logged in the system whether active or logged off

157. What is RHEL Linux stands for?
Search online

158. To view your command history, which command is used and how to run a specific command?
history and history #

159. What is NTP and briefly explain how does it work and where is the config files and related commands of NTP?
Search online

160. How to disable firewall in Linux?
Search online

161. How to configure mail server relay for sendmail service?
Edit /etc/mail/sendmail.mc file and add SMART_HOST entry

162. Where is samba log file located?
/var/log/samba

163. What is mkfs command used for?
To create a new filesystem

164. If you create a new group, which file does it get created in?
/etc/group

165. Which file has DNS server information (e.g. DNS resolution)?
/etc/resolv.conf

166. What are the commands you would run if you need to find out the version and build date of a package (e.g. http)?
rpm –qi http

167. On the file permissions? What are the first 3 bits for and who is it for?
Read, write and execute. They are used for the owner of the file

168. How to create a soft link?
ln –s

169. How to write a script to delete messages in a log file older than 30 days automatically?
Search online

170. How to quit out of "man" command?
q

171. Which command is used to partition disk in Linux?
fdisk

172. What is the difference between "shutdown" and "halt" command?
Search online

173. What is the exact syntax of mounting NFS share on a client and also how to un-mount?
Search online

174. What experience do you have with scripting, explain?
if-the, do-while, case, for loop scripts

175. How to get information on all the packages installed on the system?
rpm –qa

176. Explain VMWare?
Search online

177. You are tasked to examine a log file in order to find out why a particular application keep crashing. Log file is very lengthy, which command can you use to simplify the log search using a search string?
grep for error, warning, failure etc. in /var/log/messages file

178. What is /etc/fstab file and explain each column of this file?
Search online

179. What the latest version of Windows server?
Search online

180. What is the exact command to list only the first 2 lines of history output?
history | head -2

181. How to upgrade Linux from 7.3 to 7.4?
yum install update

182. How to tell which shell you are in or running?
$0

183. You have tried to "cd" into a directory but you have been denied. You are not the owner of that directory, what permissions do you need and where?

- - - - - - - r - x

184. What is CNAME record in DNS?
Entry for hostname to hostname

185. What is the name of VMWare operating system?
ESXi

186. What is the client name used to connect to ESXi or vCenter server?
vSphere client

187. You get a call from a user saying that I cannot write to a file because it says, permission denied. The file is owned by that user, how do you troubleshoot?
Give write permission on the first 3 bits

188. What is the latest version of VMWare?
Search online

189. What is the name of firewall daemon in Linux?
firewalld

190. Which command syntax you can use to list only the 20th line of a file?
Search online

191. What is the difference between run level 3 and 5?
3 = Boot system with networking, 5 = boot system with networking and GUI

192. List a few commands that are used in troubleshooting network related issue?
netstat, tcpdump etc.

193. What is the difference between domain and nameserver?
Search online

194. You open up a file and it has 3000 lines and it scrolled up really fast, which command you will use to view it one page at a time?
more or less

195. How to start a new shell. E.g. start a new ksh shell?
Simply type ksh, or bash

196. How to kill a process?
kill processID

197. How to check scheduled jobs?
crontab –l

198. How to check system memory and CPU usage?
      free and top

199. Which utility could you use to repair the corrupted file system?
      fsck

200. What is the command to make a service start at boot?
      systemctl enable servicename

201. How to combine 2 files into 1? E.g. you 3 lines in file "A" and 5
      lines in file "B", which command syntax to use that will combine
      into one file of 3+5 = 8 lines
      cat fileA >> fileB

202. What is echo command used for?
      To output to a screen

203. What does the following command do?
      echo This year the summer will be great > file1
      **It will create a new file "file1" with the content as "This year
      the summer will be great"**

204. Which file to modify to allow users to run root commands
      /etc/sudoers

205. You need to modify httpd.conf file but you cannot find it, Which
      command line tool you can use to find file?
      find / -name "httpd.conf"

206. Your system crashed and being restarted, but a message appears,
      indicating that the operating system cannot be found. What is the
      most likely cause of the problem?
      The /boot file is most likely corrupted