1. **What is the output of \\\$SHELL?**
   a. \\$SHELL
   b. /bin/bash
   c. \\\$SHELL
   d. \/bin/bash (Correct answer)

2. **How to extract a particular file from the .tar file? Explain with example (This is a text question)**

Answer:
tar -xvf <file_name.tar> <filename>, e.g., tar -xvf c_files.tar a.c
In the above command,
c_files.tar contain c files in that we have to extract only the a.c file.
-x is an option to extract the files from the tar file.
-v for display the output of tar command
-f for specify the filename.tar

3. **Is read a system call?**
   a. Yes (Correct answer)
   b. No

4. **How to display the details about current directory?**
   a. ls –ls
   b. ls –ld (Correct Answer)
   c. ls –lrt
   d. ls –d

5. **Choose the right option to create softlink for file a?**
   a. ln -s a asoft (Correct answer)
   b. ln -s -a -asoft
   c. ln -s a soft
   d. ln -s soft
   e. Both a & b
   f. None of the above

6. **State if true or false - "The file permission of the softlink is never changed if we change the permission of the soft link"**
   a. True (Correct answer)
   b. False

7. **We can change the owner name and group name of a symbolic link file by using -h option in chmod command**
   a. True
   b. False (Correct answer)

8. **In Unix, root is a special ___ and is re-presented by /**
   a. File
   b. Directory (Correct answer)
   c. List of files
   d. Process

9. **Give command to compress (bzip2) and archive only the "C files" available in a directory??**
   a. tar -jcvf <filename> *.c (Correct answer)
   b. tar -jxf <filename> *.c
   c. tar -jvf <filename> *.c
   d. tar -cvf <filename> *.c

10.   **Given 1 block = 1024 bytes, what is the maximum size of a single file we can store**
   a. 17179869184 (Correct answers)
   b. 17179769184
   c. 17179868184
   d. 17279869184

11.   **Show the octal representation of these permissions rwxr-xrw-**
    a. 756 (Correct answer)
    b. 766
    c. 522
    d. None of the above

12.   **Given umask as 0222, what will the permission for the directories created**
    a. 555 (Correct answer)
    b. 666
    c. 444
    d. 222

13.   **Choose when the size of directory increases**
    a. On adding new files within directory
    b. When the content of directory information content is more than 4096 bytes (Correct answer)
    c. Both a & b
    d. None of the above

14.   **What does command grep "^..*$" do?**
    a. It matches the line which contain one or more characters except empty lines (a line which contain only \n). (Correct answer)
    b. It matches the line which contain two or more characters except empty lines (a line which contain only \n).
    c. It matches the line which contain one or more characters
    d. None of the above

15.   **"When I execute history command, by default it prints as follows**
      **499  evince 2014_EN_HBK_CHPT_2.pdf**
      **500  exit**
      **501  history"**
      **Question: How to print all the commands along with date and time of when it is executed?**
      **(Text question)**
Answer:
For that we have to set value to the HISTTIMEFORMAT in .bashrc
HISTTIMEFORMAT="%F %T"

16.   **Choose the commands that will be required to kill a process gracefully with name "vanguard"**
    a. Ps (Correct)
    b. Kill (Correct)
    c. Cut (Correct)
    d. Grep (Correct)

17.   **Which of the following command kill all the process including shell?**
    a. kill kill 0
    b. kill -9 kill 0
    c. kill -s kill 0
    d. Both B and C (Correct)

18.   **Suppose I am in /etc directory, after executing cd .(single dot), where am I now?**
    a. /etc (Correct)
    b. /(root)
    c. /home
    d. None of these

19.   **Which directory in Linux contains all the config file of the system?**
    a. /etc (Correct)
    b. /var
    c. /lib
    d. /bin

20.   **Which of the following command can be used as an alternative to echo command?**

a. print
b. printr
c. Printf (Correct)
d. none of these

21. **Display lines longer than 100 characters and smaller than 150 characters in a file using grep?**
    a. grep "^.\{100,150\}$" (Correct)
    b. grep "^.\{100-150\}$"
    c. grep "^.\{101,149\}$"
    d. None of the above

22. **This is a text question. Explain what will following command do**
    **history | tr -s ' ' | cut -d ' ' -f3 | sort | uniq -c | sort -nr | head | tr -s ' ' | cut -d' ' -f3**
Answer:
It will list down top 10 commands used frequently

23. **Copy the c files in the /tmp directory which has the group read permission, to your directory for every 1 hour, only in working time, and working days?**
    a. 00 9-18 * * 2-7 find /tmp -type f -perm /g+r -name "*.c" -exec cp {} /home/ \; (Correct)
    b. 00 9-17 * * 2-7 find /tmp -type f -perm /g+r -name "*.c" -exec cp {} /home/ \;
    c. 00 10-18 * * 2-7 find /tmp -type f -perm /g+r -name "*.c" -exec cp {} /home/ \;
    d. Both b & c

24. **What will the following command in crontab do?**
    **00-60 22-24 30 2 * man ls**
Answer:
This will execute the ls command in each minute and in each hour in each day of month in each month in every day.