1. An attribute is a specification of an object that defines its property.  
a) True  
b) False

Answer: a  
Explanation: An attribute defines the property of an object. In UNIX, every file has a set of attributes which defines the specification of the file.

2. Which command is used to list the attributes of a file?  
a) cp  
b) list  
c) ls  
d) attr

Answer: c  
Explanation: ls command is used for listing the attributes of a file or directory. ls command when used with -l displays all the seven attributes of a file.

3. Which one of the following is not an attribute displayed by ls command?  
a) file permissions  
b) file ownership  
c) links  
d) word count of file

Answer: d  
Explanation: When -l option is used with ls command it simply displays seven attributes of a file which are file type and permissions, links, ownership, group ownership, file size, last modification time, filename.

4. Hard linked files are provided with the same inode number as the original one.  
a) True  
b) False

Answer: a  
Explanation: Hard linked files are provided with the same inode number as the original file so they refer to the same physical location of the file.

5. Soft linked files are provided with different inode number as the original one.  
a) True  
b) False

Answer: a  
Explanation: Soft linked files are provided with a separate inode number each of which points to the original file location.

6. Which option is used with ls command to list the directory attributes rather than its contents?  
a) -b  
b) -a  
c) -l  
d) -d

Answer: d  
Explanation: ls command when combined with -d option displays the attributes of a directory rather than its contents.

$ ls -ld dir01

7. A file can be recognized as an ordinary file or directory by \_\_\_\_ symbol.  
a) $  
b) –  
c) \*  
d) /

Answer: b  
Explanation: When ls command is used with -l option its displays attributes of a file in the multi-columnar form. The first column defines the file types and permissions associated with a file. If the permissions are preceded by a (-), then it is an ordinary file otherwise it is a directory.

8. Permissions of a file are represented by which of the following characters?  
a) r,w,x  
b) e,w,x  
c) x,w,e  
d) e,x,w

Answer: a  
Explanation: A file can have three types of permissions; read, write and execute which is represented by characters r, w and x respectively.

9. A file named abd.txt has the following set of permissions

-rwxrwxrwx

All the three operations i.e read, write and execute can be performed on the file by file owner, group owner and others.  
a) True  
b) False

Answer: a  
Explanation: UNIX provides a three tired file protection system that determines the file access rights i.e. the permissions are dived into three groups as

r w x r w x r w x

The first group has all the three permissions i.e. file is readable, writable and executable by the file owner.  
The second group also has all the three permissions i.e. file is readable, writable and executable by the group owner.  
The third group also has all the three permissions i.e. file is readable, writable and executable by others who are neither a part of the group nor they are an owner of the file.  
Normally this set of permissions is too dangerous!

10. Which of the following symbol is used to indicate the absence of a permission of a file?  
a) $  
b) &  
c) +  
d) –

Answer: d  
Explanation: ( – ) is used to indicate the absence of a single or set of permissions of a file. For example, if a file has all the three permissions for owner but is only readable by group members and others, then the set of permissions would be,

rwx r-- r--

11. When we create a file, we are the owner of a file.  
a) True  
b) False

Answer: a  
Explanation: In most cases, the user which creates the file is regarded as owner of the file. The owner of the file can create, delete or edit the file or he can change the permissions associated with it.

12. What is group ownership?  
a) group of users who can access the file  
b) group of users who can create the file  
c) group of users who can edit the file  
d) group of users who can delete the file

Answer: a  
Explanation: When the system administrator creates a user account, he assigns the user two parameters; UID (user ID) and GID (group ID). Group id denotes the group to which the user belongs.  
In simple words, group ownership defines the group to which the file is accessible.

13. Which command is used to change the permissions of a file?  
a) chmod  
b) ch  
c) chown  
d) chgrp

Answer: a  
Explanation: The chmod (change mode) command is used to change the permissions of files. This command can only be run by the owner of the file or by the super user.

14. chmod command can take multiple filenames as arguments.  
a) True  
b) False

Answer: a  
Explanation: We can change permissions of multiple files by using chmod command once. To change permissions of multiple files simultaneously just use the chmod command with multiple filenames as arguments.

15. Which of the following symbol is used with chmod to assign permission to a file?  
a) –  
b) /  
c) +  
d) \*

Answer: c  
Explanation: To assign and remove permissions from a file, (+) and (-) symbols are used respectively.  
‘+’ symbol will assign a permission  
‘-‘ symbol will remove a permission

16. To assign execute permission to the user (owner) for a file named file01.txt, which of the following command will be used?  
a) chmod u+r file01.txt  
b) chmod u+w file01.txt  
c) chmod u-x file01.txt  
d) chmod u+x file01.txt

Answer: d  
Explanation: To assign execute permission to the user, above command is stated as follows:

u - for specifying the category of user.

+ - for assigning permission.

x - to specify execute permission.

17. What are the permission of file01 after executing this command?

chmod 777 file01

a) rwxrwxrwx  
b) rw-rw-rw  
c) r–r–r–  
d) r–r—-

Answer: a  
Explanation: Since the octal number for the above command is 777 and we know that 7(111) represents all the three sets of permissions (read, write and execute) for a category of user. As we have 777, the file is readable, writable and executable by anyone.