**Linux Quiz-2**

1. What command would list all files (except . and ..) in the current working directory?

**grep**

2. What is the simplest command for adding execute permission to file ~/foo, for all users

(without changing any other permission)

**chmod**

3. Explain what execute permission means/allows when it is associated with a directory.

**It allows users to write, modify any changes in the directory.**

4. Suppose that you wanted all users on the machine to be able to see the contents

of the file ~/public/software/instructions. text. Explain the minimum set of

permissions for files and directories needed to allow this, and any security issues that

arise.

**chmod -v a+r instruction.text**

5. Suppose that you want to allow (only) other users bob and chuck to be able to access

the above file. Explain what you would have to do differently from what you described

above. (You are not allowed to consider the use of ACLs.)

6. How would your answer to the previous problem change if you were to use ACLs (access

control lists)?

7. What are set UID (SUID) files, and when are they typically used?

answer: When set-user identification (set uid) permission is set on an executable file, a process that runs this file is granted access based on the

owner of the file (usually root), rather than the user who is running the executable file.

This special permission allows a user to access files and directories that are normally only available to the owner.

For example, the set uid permission on the password command makes it possible for a user to change passwords,

8. Find one SUID file on a Linux system, and show its “long listing” (permissions, owner,

etc.).

9. Why are SUID root files considered a security issue?

**The programs in this files have security risk because these programs grant special privilages to users who executing them.This may cause a security risk.**

10. What command would be used to set a file foo to be SUID, and how exactly would it

be done?

11. What command could determine the process ID (PID) of a running SSH server (sshd)?

**ps aux | grep pid**

12. What command would best identify which process is using excessive CPU resources?

**top command is used to know cpu usage**

13. What command that should definitely terminate the process identified above?

**kill, sigterm commands can be used to terminate a process**

14. What file contains the list of valid user ID’s (UID’s) and their associated usernames?

**/etc/passwd**

15. What file contains passwords on a Linux system (if that system is using local authentication rather than NIS, etc.)?

**/etc/shadow**

16. What is difference between telnet and ssh. When will you use each command? give examples.

**ssh has information in encrypted form which provides security for the information. where as telnet is not in encrypted format which is a major concern.**