Introduction to VCS and GIT Workbook

Answer the Following

1. What is GIT?

2. What is a repository in GIT?

3. What is the command you can use to write a commit message?

4. What are the advantages of using GIT?

5. What language is used in GIT?

6. What is the function of GIT PUSH in GIT?

7. What is “Staging Area” or “Index” in GIT?

8. What is the function of ‘git clone’?

9. What is the function of ‘git config’?

10. How can you create a repository in Git?

11. What is the difference between ‘git remote’ and ‘git clone’?

12. What is the function of ‘git rm’?

13. What is the use of ‘git log’?

14. What ‘git add’ is used for?

State whether the following are True/False

1. Version Control System keeps track of all old versions of files. [ ]
2. CVCS is independent on access to the server. [ ]

3. CVCS can be slower because every command connects to the server. [ ]
4. A git repository contains set of references to commit objects, called heads. [ ]
5. A head is simply a reference to a commit object. [ ]
6. The 'git init' creates an empty git repository on the desktop. [ ]
7. Git internally holds a thing called the index, which is a snapshot of your project files. [ ]
8. The 'git clone' command makes a Git repository copy from a remote source. [ ]

Multiple Choice Questions

1. When using the git version control system, the concepts of working directory, index, and commit(s) are ubiquitous. Which of the following statements is correct?
   (a) A commit is a snapshot of any number of files. Thus, to save the current version of your working directory with git, all you need to do is to create a new commit.
   (b) As its name indicates, the index is simply a list of all previous snapshots. Thus, to save the current version of your working directory with git, all you need to do is to add it to the index.
   (c) Saving the current version of your working directory with git requires two steps: add the files to the index, then create a snapshot based on the files listed in the index.
   (d) Saving the current version of your working directory with git requires two steps: create a snapshot of the files in the working directory, then add this snapshot to the index.
2. Your working directory contains three files, named file1, file2, and file3. Which of the following commands will save the current version of your working directory with git.
   (a) git init file1 file2 file3; git commit
   (b) git init; git add file1 file2 file3
   (c) git add file1 file2 file3; git commit
   (d) git commit file1 file2 file3; git add
3. If you need to remove a file permanentaly from Git repository what command will you use?

(a) Simply delete the file

(b) git rm <file-name>

(c) rm <file-name>

(d) remove <file-name>

4. I want to experiment with branching, compare, and merge, and I want this to be private. How do I create the repository?

   (a) Clone a remote repository

   (b) Create a repository on Github

   (c) Create a local repository

5. When creating a local repository what location on disk should never be used ?

   (a) A shared folder

   (b) A folder with no group access

   (c) A folder under the Eclipse workspace

6. When should you commit changes from a branch to a product's master branch?

   (a) Whenever an error is found and a fix is made

   (b) After review and testing

   (c) Never, all work is done in task-based branches

7. When do you use the option to clone a repository?

   (a) When you need to create a new local repository from a shared repository

   (b) When you want to use xtUML editor to view a model in a shared repository

   (c) Before creating a branch to perform a task in

   (d) All of the above