Module-2 MCQs

1. **Which of the following statements is correct about the .git directory content?**
    a. It contains all the staged files
    b. It contains all the staged and tracked files
    c. It contains metadata that needs to function
    d. It contains the configurations specific to that repository

Ans: c

Explanation:

The hidden .git directory contains all the information that is required for Git to function.

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2. **What is the purpose of the "git clone" command?**
    a. To get local copy of the existing GitHub repository to contribute
    b. To fork other GitHub repositories
    c. To create a new branch
    d. To create a pull request

Ans: a

Explanation:

'git clone' is used to get a local copy of an existing GitHub repository so that the developer can add his/her changes and contribute to it.

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3. **What happens when you fork the existing git repository?**
    a. You get your copy of the existing repository
    b. The existing repository gets downloaded
    c. The existing repository is deleted
    d. The existing repository is cloned on a local machine

Ans: a

Explanation:

Forking means generating your copy of another repository to add your changes on top of the existing work.

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4. Git would reject pushing changes to the remote repository under which of the following circumstances?

a. When the remote repository is in sync with the local repository
b. When the same file has been modified both at the local and remote repositories
c. When you use HTTPS protocol instead of SSH protocol
d. When certain files in the remote repository are not in sync with the local repository

Ans: B

Explanation:

Git would reject pushing changes to the remote repository when the same file has been modified at both local and remote repositories. Because local git history and remote GitHub history are not compatible, they are diverged, leading to merge conflict and reject the push.

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5. Which of the following statements is TRUE about GitHub?

a. GitHub works only with servers hosted in the public cloud
b. GitHub works only with servers hosted on your on-premise servers
c. GitHub works with both servers hosted on public and private servers
d. GitHub has only a command-line interface deployed on your workstation

Ans: C

Explanation:

GitHub works with both servers hosted on public and private servers.

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6. Which of the following statements is true when you push several changes from the local repository to the remote repository?

a. Git consolidates all commits from the local repository and creates one commit on the remote repository
b. Git would consolidate all changes at each file-level and only add one commit per modified file in the remote repository
c. Git would only copy the latest commit of each modified files into the remote repository
d. Git would copy each commit from the local repository to the remote repository so that the entire commit history is available at the remote repository.

Ans : d

Explanation:

When you push several changes from the local repository to the remote repository, Git will copy each commit from the local repository to the remote repository so that the entire commit history is available at the remote repository. We can use 'git log' to track all the commits history.

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7. Which of the following commands is used to check commit history?

a. git commit
b. git log
c. git status
d. git checkout

Ans: b

Explanation:

'git log' command is used to see the history of all commits with commit message and unique commit id.

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8. What command is used for adding remote origin to push your changes to the remote repository?

a. git push origin master
b. git remote add origin
c. git remote set origin
d. git remote assign origin

Ans: b

Explanation:

"git remote add origin" is used for adding remote origin to push our changes to the remote repository using the "git push" command.

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9. What command is used to update existing remote origin?

a. git remote add origin <url>
b. git remote set-url origin <url>
c. git remote allocate origin <url>
d. git remote assign origin <url>

Ans: b

Explanation:

"git remote set-URL origin" is used to update the existing remote origin. "git remote add" command is only used to add remote origin for the first time.

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10. Which of the following statements is TRUE in case of pushing changes to ssh URL of the GitHub repository?

a. ssh key-value pair should be generated, and the public ssh key "id_rsa.pub" needs to be added in GitHub ssh keys
b. It should directly work with git push command without any authentication
c. ssh key-value pair should be generated, and the private ssh key "id_rsa" needs to be added in GitHub ssh keys
d. ssh key-value pair should be generated, and both ssh keys "id_rsa" and "id_rsa.pub" needs to be added in GitHub ssh keys

Ans: a

Explanation:

To set up a ssh connection and use git repo ssh URL, a ssh key-value pair should be generated, and the public ssh key "id_rsa.pub" needs to be added in GitHub ssh keys. A ssh key is an alternate way to authenticate the GitHub repo without entering your username and password every time. SSH also offers encryption for data transfer that restricts hackers and attackers from hacking your server password and user information.
