*Mrityunjay (mrityunjay9@gmail.com) Tuesday, 24 January 2023*

Q)1 What is git?

➤ Git is a distributed version control system: tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development.

Q)2 What do you understand by the term version control system?

➤ Version control, also known as source control, is the practice of tracking and managing changes to software code. Version control systems are software tools that help software teams manage changes to source code over time.

Q)3 What is GitHub?

➤ GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

Q)4 Mention some popular git hosting services.

➤ Bitbucket, GitLab, Perforce, Beanstalk, Codebase.

Q)5 Different types of version control systems .

➤ Centralized version control system : CBS , SubVersion , Perforce
➤ Decentralized version control system : Git, Mercurial, Bazaar.

Q)6 What benefits come with using git?

• Performance. Git performs very strongly and reliably when compared to other version control systems
• Security. Git is designed specially to maintain the integrity of source code
• Flexibility
• Wide acceptance
• Quality open source project.

Q)7 What is a git Repository?

➢ A Git repository tracks and saves the history of all changes made to the files in a Git project. It saves this data in a directory called . git , also known as the repository folder. Git uses a version control system to track all changes made to the project and save them in the repository.

Q)8 How can you initialize a repository in git?

➢ By using git init command in the gitbash.

```
Mrityunjay@DESKTOP-G5RKSP8 MINGW64 /d/pw skills course/java with dsa and system
design assignment
$ git init
Initialized empty Git repository in D:/pw skills course/java with dsa and system
 design assignment/.git/
```