**Assignment**

* 1. Explain DevOps Life cycle?
  2. What is a distributed VCS?
  3. What are the fundamental differences between DevOps & Agile.
  4. What is the difference between git pull and git fetch?
  5. Explain chef components.
  6. What does a Node represent in chef?
  7. Explain the use of knife in chef.
  8. List types of handlers in chef and explain it.
  9. What are some technical and business benefits of DevOps work culture
  10. What is data bag in chef?
  11. Explain how to create and manage data bags?
  12. How do you configure a Git respository to run code sanity checking tool right before making commits and preventing them if test fails?(10M)
  13. Write and explain different phases of maven build life cycle.(10M)
  14. Explain the use of the following GIT commands:

Git add, git branch, git pull, git push, git clean

* 1. Explain docker architecture in detail with diagram.
  2. How to setup chef workstations,
  3. Why Linux OS is more important to use in DevOps?
  4. What are the fundamental differences between DevOps and Agile?
  5. What are maven dependencies?
  6. How does Maven works?
  7. Explain Maven build life cycle.
  8. What are different types of Maven repositories?
  9. What is Maven - release plugin and how does it work?
  10. What is branching? Explain the various steps in creating for the Branches.
  11. Explain the various steps that are needed to create Environment also mention how to add servers to the environment.
  12. What is the need for Creating Roles also mention the steps for adding roles to an organization
  13. Write a short note on:
      1. Group ID
      2. AWS ECS
      3. Container Routing
      4. Cookbooks
      5. Creating Repository
      6. RPM and YUM

**Submission Date : 23/6/2023**