

Test Your Knowledge – Pipeline as a Code

1. Which block is used to define the individual steps within a stage in a Declarative Pipeline?
 - **steps**
 - stage
 - post
 - agent
2. How can you handle sensitive information, such as passwords or API keys, in a Jenkins pipeline?
 - Store them directly in the Jenkinsfile
 - **Use Jenkins credentials and the withCredentials step**
 - Print them in the console output for easy access
 - Commit them to the source code repository
3. What is the purpose of defining pipelines as code in Jenkins?
 - To manually configure pipelines through the Jenkins UI
 - **To version control pipeline definitions and enable collaboration**
 - To eliminate the need for testing and deploying code
 - To replace the use of Jenkinsfiles
4. What is the purpose of the `post` section in a Declarative Pipeline?
 - To define the stages of the pipeline
 - To specify the agent on which the pipeline should run
 - **To run additional steps based on the pipeline's outcome**
 - To declare environment variables for the pipeline
5. Which of the following is the recommended file name for storing the pipeline definition?
 - pipeline.groovy
 - **Jenkinsfile**
 - Dockerfile
 - build.xml
6. What is the purpose of the agent directive in a Declarative Pipeline?
 - To define the steps to be executed in the pipeline
 - To specify the triggers for the pipeline
 - To declare the environment variables for the pipeline

- **To specify where the pipeline should be executed Which of the following is a best practice for**
7. What is the benefit of using the `stash` and `unstash` steps in a Jenkins pipeline?
- To encrypt sensitive data in the pipeline
 - To deploy the application to production
 - **To cache and reuse files between stages or pipelines**
 - To send email notifications about the pipeline status
8. What is the main difference between Declarative and Scripted Pipeline syntax in Jenkins?
- Declarative pipelines are used for continuous integration, while Scripted pipelines are used for continuous deployment
 - Declarative pipelines are written in YAML, while Scripted pipelines are written in Groovy
 - **Declarative pipelines provide a more structured and opinionated syntax, while Scripted pipelines offer more flexibility and control**
 - Declarative pipelines are used for simple projects, while Scripted pipelines are used for complex projects
9. Which of the following is NOT a valid section in a Declarative Pipeline?
- stages
 - steps
 - post
 - **pre**
10. Which of the following is a best practice for writing efficient and maintainable pipelines?
- Use long and descriptive names for stages and steps
 - **Keep the Jenkinsfile concise and focused on the essential pipeline logic**
 - Hardcode all configuration values directly in the Jenkinsfile
 - Avoid using comments and documentation in the pipeline code