## **CJE Certified Jenkins Engineer**

#### - Question 1:

## Which answer best describes continuous delivery?

### Choose the correct answer:

- A. A software development discipline where software is built so that it can be released to production at any time.
- B. A software development practice where contributors are integrating their work very frequently.
- C. Building in 60 minutes or less.
- D. A software development discipline where software is released continuously as part of an automated pipeline.

#### - Question 2:

You've just become the administrator for the Jenkins server, and the feedback you've received from the users is they're having trouble locating their jobs to run them. You've determined that folders are the most logical solution and wish to move the jobs into the new folders you've created. How would you accomplish this?

## Choose the correct answer:

- A. Click existing item; in the item view page, select "move" on the left panel; select target folder.
- B. Hover and click the arrow on existing item, choose "move", select target folder.
- C. For new items, click folder; in the folder view, select new item; it will automatically be added to that folder.
- D. All of these

#### - Question 3:

#### What's not true about a build executor?

## Choose the correct answer:

- A. You can run many of them in parallel.
- B. They can run on the master.
- C. The default number of executors on a node is 4.
- D. It runs projects dictated by Jenkins.

## - Question 4:

You have taken over a build environment where Jenkins is responsible for scanning for changes made in a Git repository every hour and then applying that

build to a few dozen web servers. As part of that job, Jenkins also is responsible for completing some scripted performance-based tests and, depending on the defined results, marking the build as complete and notifying the team OR rolling back the build, notifying the team, and marking it as failed. You notice that the build itself is now taking longer than an hour to complete, which is affecting the push of new changes on occasion. What changes could you make to your Jenkins environment to alleviate the amount of time it takes to complete and test a build so that the hourly schedule is more likely to be kept?

Choose the correct answer:

- **A.** Create additional Jenkins Masters and deploy the job to each one. Schedule the job staggered by 30 minutes on each one so that the additional master servers won't be busy if the first job runs long.
- **B.** Add one or more slave nodes to the environment, this will allow us to deploy code to multiple endpoints at one time. Break up the single job into multiple jobs so that each one can be triggered by the successful completion of the previous job to eliminate scheduling problems on beginning a new build in the event subsequent steps run longer than the intended time period.
- **C.** Remove the performance testing from the build. Schedule performance testing as a separate job 30 minutes after the build runs and trigger a rollback if the performance testing fails at this point.
- **D.** None of these

#### - Question 5:

You need to grant permissions, via matrix-based security, to run a specific command in a Jenkins pipeline. The project parameters will not allow you to create a specific user to run this task, and you have no relevant groups. Which of the following is an option?

## Choose the correct answer:

- **A.** Create a group, add an existing user to the task, and grant permissions to that group
- **B.** Set permissions in Jenkins to allow anonymous users to run the command
- **C.** Change the workflow to require an existing user to run the task, and assign permissions to that user.
- **D.** Either creating a group or reassigning the user will work.

#### - Question 6:

You are working on a project that will build a Docker image. When the job completes it needs to trigger a build to deploy a container to your development

## environment for integration testing. How would you go about triggering the second build?

## Choose the correct answer:

- A. Both "Triggered by another project" and the "Parameterized Trigger Plugin"
- **B.** In the downstream build, you can select "Triggered by another project"
- C. You could use the Parameterized Trigger Plugin to trigger from an upstream project.
- **D.** Use the run() function passing the downstream projects name from within an upstream project build step.
  - Question 7:

What interval syntax could I use to trigger a build every day? Choose the correct answer:

- A. @daily
- **B.** 30 12 \* \* \*
- C. HH\*\*\*
- **D**. All of these
  - Question 8:

Where is the initialAdminPassword stored on the system? Choose the correct answer:

- **A.** /var/lib/jenkins/secrets/
- **B.** /usr/lib/jenkins/password/
- C. /opt/jenkins/
- **D.** /tmp/Jenkins/
  - Question 9:

What type of agent nodes are there?

Choose the correct answer:

- **A.** JNLP
- B. SSH
- C. Docker
- **D**. All of the others
  - Question 10:

What directive do you use for a declarative pipeline?

- **A.** config {..}
- **B.** pipeline {..}
- **C.** project {..}

## **D.** test {..}

## - Question 11:

Which is an example of a Jenkins plugin?

- Choose the correct answer:
- **A.** Pipeline
- **B.** Parameterized Trigger
- C. Credentials
- **D**. All of the others
  - Question 12:

## What is an SCM?

## Choose the correct answer:

- A. Source Code (or Control) Management
- **B.** Structural Code Machine
- C. Super Core Management
- **D.** None of the above

## - Question 13:

You have now been given charge over an existing Jenkins system install that was previously started by a colleague who is gone on a business trip. He left it in the install wizard phase. Unfortunately, your colleague did not note the initialAdminPassword. Where on the system would this be located?

## Choose the correct answer:

- **A.** /var/lib/jenkins/secrets/InitialAdminPassword
- **B.** /home/jenkins/secrets/InitialAdminPassword
- C. /var/lib/jenkins/workspace/secrets/InitialAdminPassword
- **D.** /var/lib/jenkins/adminPassword

#### - Question 14:

You're a DevOps engineer in charge of your team's Jenkins server. You have a particular stage in your pipeline that you want to run on a particular build node. You have to have Apache installed on this node. Assuming the node has been appropriately labeled, "apache", how would you ensure this stage ran on that node?

- A. apache agent
- **B.** agent { label 'apache' }
- **C.** 'apache' { agent }

## **D.** agent( 'apache' )

### - Question 15:

## What is Jenkins auditing?

## Choose the correct answer:

- **A.** Ensuring licenses have been paid for and allocated appropriately
- **B.** Tracking system resources
- C. Reviewing Build Failure rate
- **D.** Tracking who did what on your Jenkins server

#### - Question 16:

# You need to execute a shell script (/usr/bin/prepare-env) just before a Linux agent is started. How do you achieve this?

- **A.** Use the "Suffix Start Agent Command" configuration option on the agent configuration.
- **B.** Use the "Prefix Start Agent Command" configuration option on the agent configuration.
- **C.** Configure a .profile file containing a call to /usr/bin/prepare-env in the home directory of the OS user which runs the agent process.
- **D.** Add a shell step to each Job tied to this agent to execute the shell script.

#### - Question 17:

How can you organize Jenkins projects (or jobs)?

#### Choose the correct answer:

- A. Folders and views
- **B.** Relational databases
- C. Folders
- **D**. Views

#### - Question 18:

Over the last six months, a large number of projects have been added to Jenkins. You have been asked by your manager to do some cleanup by creating some list views. How would you go about creating these list views?

- **A.** Explicitly set projects to view
- **B.** Using a regular expression pattern
- **C.** Explicitly set recursively in sub-folders
- **D.** All of these

## - Question 19:

Suppose you are asked to obtain the config.xml of a folder (myFolder) from a script or HTTP client using the Jenkins Remote API. The folder exists at the root of a Jenkins master. Which URL pattern is correct for obtaining this configuration file?

- A. root/job/myFolder/config.xml
- **B.** root/folder/myFolder/config.xml
- **C.** root/myFolder/config.xml
- **D.** root/myFolder?param=config.xml
- **E.** root/api/getConfig?source=myFolder

## - Question 20:

## What is Ant?

## Choose the correct answer:

- A. An acceptance testing platform
- **B.** A Java build tool
- **C.** A unit testing tool
- **D.** None of these

#### - Question 21:

## How can you trigger a downstream build?

#### Choose the correct answer:

- A. In the downstream build, you can select "Triggered by another project."
- **B.** You could use the Parameterized Trigger Plugin to trigger from an upstream project.
- **C.** Use the run() function passing the downstream projects name from within an upstream project build step.
- **D.** Both "Triggered by another project" and the "Parameterized Trigger Plugin".

## - Question 22:

## Which answer best describes continuous deployment?

- **A.** A software development practice where contributors are integrating their work very frequently.
- **B.** A software development discipline where software is built so that it can be released to production at any time.
- **C.** Building in 60 minutes or less.
- **D.** A software development discipline where software is released continuously as part of an automated pipeline.

## - Question 23:

## What's the SDLC?

## **Choose the correct answer:**

- A. Super Digital Life Chain
- **B.** Sloan Digital Legal Conference
- **C.** Software Development Life Cycle
- **D.** None of these
  - Question 24:

Which menu option do you select to add a pipeline or other project? Choose the correct answer:

- A. Manage Jenkins
- **B.** My Views
- C. New Item
- **D.** Credentials