CJE

Exam A

QUESTION 1
Which of the following practices are recommended for a Declarative Pipeline? choose 3

A. Encapsulate common Jenkins logic within shared libraries when leveraging Declarative Pipelines.
B. Use the pipeline DSL to implement intricate networking and computational tasks that your Pipeline needs to do.
C. Call scripts written in Shell, Batch, Groovy, or Python to implement any complex logic required for your pipeline; call these scripts as steps in your pipeline.
D. Simplify the test/debug process and improve performance of your pipeline by defining separate steps for each important task performed by the pipeline.
E. Use tools such as Maven, Gradle, NPM, Ant, and Make to define most of the build work; call these executables as steps in your pipeline.

Correct Answer: CDE

QUESTION 2
What is the purpose of the Script Console?

A. Provides a secure environment to run python scripts to administer Jenkins.
B. Provides a secure environment used to execute sh and bat scripts for all Pipelines and Freestyle jobs.
C. Provides a largely unrestricted environment where sophisticated and trusted users can run sh and bat scripts to streamline management tasks.
D. Provides the secure environment used to run CLI commands.
E. Provides a largely unrestricted environment where sophisticated and trusted users can run Apache Groovy scripts to streamline management tasks

Correct Answer: E

QUESTION 3
How does Jenkins integrate with Source Code Management Systems (SCM)? choose three

A. Jenkins retrieves source code from SCM repositories.
B. Jenkins notifies the SCM system of the status of each source code change.
C. The SCM system starts a change review thread in Jenkins for each source code change that is made.
D. Any job definition change in Jenkins automatically launches SCM actions.
E. The SCM system notifies Jenkins of each source code change; Jenkins then triggers the appropriate jobs.

Correct Answer: BCE

QUESTION 4
In a "standalone" configuration, when masters manage the build environment and also execute builds with their own resources, which of the following is true?

A. Masters are more highly available.
B. Build times decrease.
C. The builds share SCM checkouts.
D. User interface becomes slower as resources on the master run out.

Correct Answer: D

QUESTION 5
Which of the following is a type of artifact that CANNOT be published using the "Archive the artifacts" publisher?

A. multi-file directory structures
B. empty folders/directories

C. text files
D. binary executable files
E. binary files

Correct Answer: B

QUESTION 6
What security concerns are associated with a non-distributed builds architecture?

A. Developer certificates are duplicated by builds.
B. Encryption of credentials is not possible.
C. Malicious users can get direct access to private information on the master.
D. Agent node communications can be intercepted.

Correct Answer: C

QUESTION 7
Which of the following are true about Declarative Pipelines:

A. Declarative syntax can express complex flows and conditionals.
B. Execution can be resumed after most failures.
C. The Jenkinsfile can incorporate any valid Apache Groovy code.
D. A Jenkinsfile can express the entire CI/CD process as code that is stored in a Source Code Management system.
E. Delclarative Pipeline uses the Pipeline domain specific language (DSL) to manipulate Jenki/ '

Correct Answer: CDE

QUESTION 8
Which is the expected workflow for "Test-Driven Development"?

A. Write a new failing unit test, write the new functional code to fix the test, verify that the test passes, and then refactor the code.
B. Validate with the CI system, write the new functional code, and then verify that the test passes..
C. Write a new test, validate with the CI system, and then write the new functional code.
D. Write a new failing unit test, write the new functional code to fix the test, and then verify that the test passes

Correct Answer: C

QUESTION 9
You need to automate the deployment of 20 base Jenkins masters. For this, you set the system property `jenkins . install. runSetupWizard` to the value "false".

A. No default administrator account is created; you have to configure security manually.
B. A default administrator account is created and you cannot re-enable security.
C. A default administrator account is created with username "admin" and password "admin".
D. A default administrator account is created with username "admin" and password from the file
E. `JENKINS HOME/secrets/initialAdminPassword.`

Correct Answer: A

QUESTION 10
Which of the following are advantages of a Pipeline job when compared to a Freestyle job?

A. Job definition can be loaded from the Source Code Management system at build time.
B. Builds can be triggered with millisecond granularity.

C. Builds can be parameterized.

D. Jenkins can be restarted while a build is in progress without impacting the build.

E. No extra plugins must be installed.

Correct Answer: ACD

QUESTION 11
Your teams share one Jenkins master. How can you prevent one team from changing the jobs of another team?

A. Define team-specific views and set the initial view to the team-specific view.

B. You do not need to do anything. Job editing is restricted to team members by default. You cannot. Each team must
C. use a separate master.

D. Define team-specific folders and restrict edit access to team members.

Correct Answer:

QUESTION 12
Which of the following are advantages of a Pipeline job when compared to a Freestyle job? choose 2 answer

A. No extra plugins must be installed.

B. Builds can be triggered with millisecond granularity.

C. Job definition can be loaded from the Source Code Management system at build time. Jenkins can be restarted while a
D. build is in progress without impacting the build.
E. Builds can be parameterized.

Correct Answer: CE

QUESTION 13
Which can you use to discover conflicts and bugs when upgrading Jenkins or a plugin?

A. Base Jenkins' validation framework
B. Tool installers
C. Controlled slaves
D. Cloud build nodes
E. Test Instances

Correct Answer: E

QUESTION 14
In Jenkins, a trigger commonly refers to a mechanism that automatically

A. updates plugins
B. detects code changes in the repository
C. sends notification once the build is completed
D. starts the build of a job

Correct Answer: D

QUESTION 15

What does a flashing build icon in the Build History indicate? choose 3

A. A build is waiting for input.
B. A groovy script needs to be approved.
C. The build is waiting for an executor to be available.
D. An agent Is being spawned.

Correct Answer: ACD

QUESTION 16
When you want to validate that your software produces the desired behavior for end-users, you need to use

A. acceptance tests
B. functional tests
C. smoke tests
D. non-regression tests

Correct Answer: A

QUESTION 17
What are the main advantages of using webhooks/post-commit hooks from your Source Code Management system to trigger your Jenkins project rather han using SCM polling?

A. Builds are started on a defined cron schedule.
B. The entire repository Is scanned so no commits are missed.
C. Avoid unnecessary overhead from polling.
D. 'Builds arc started Immediately after changes are committed.

Correct Answer: CD

QUESTION 18
how can you see which plugins installed in the jenkins

A. View the section of the $JENKINS_HOME/config.xml file.
B. Look on the System Information page.
C. In the "Configure" page of each agent
D. In the Blue Ocean pipeline creation page
E. Goto the'Manage Plugins" page and click on the "Installed"tab.

Correct Answer: BE

QUESTION 19
To minimize the delay between a developer committing source code to the SCM and Jenkins starting a build, which of the following routes should you

A. Start a build as soon as the previous build finishes.
B. Ask the developer to manually trigger a build after each check-In.
C. Configure a hook on the SCM server to notify Jenkins to start a build.
D. Poll the repository once per second, checking for changes.
E. use an external service to periodically poll the SCM for changes.

Correct Answer: C

QUESTION 20
In which situations can the REST API be used?

A. Modifying the authorization strategy configuration.
B. Administering Jenkins' global configuration.

C. Retrieving information from Jenkins for programmatic consumption.
D. Triggering a new build.
E. Creating/copying jobs.

Correct Answer: CDE

QUESTION 21
To configure an HTTP Proxy, go to:

A. Manage Jenkins -> Configure System
B. Manage Jenkins -> Configure Credentials
C. Manage Jenkins -> Configure Global Security
D. Manage Jenkins -> Manage Plugins -> Advanced tab
E. Manage Jenkins -> Configure Network Settings

Correct Answer: D

QUESTION 22
What actions must you configure in a Jenkins Freestyle job with git so that, when Jenkins builds this job. no files are present in the workspace before the build is started?

A. Add an "Execute Shell" build step with the following content: rm -rf *
B. Use "*Tefs/he3ds/master:refs/remotes/origln/master" as refspec In the Git SCM configuration.
C. Nothing special is required. Jenkins always uses clean checkouts when using Git.
D. Add "Clean before checkout" as an "Additional Behavior" in the Git SCM configuration.

Correct Answer: D

QUESTION 23
Which are commonly referenced as key points of CI?

A. Automated deployment to the production environment.
B. Automated builds after each commit.
C. Automated tests after each commit.
D. Collaboration among Dev. QA and Ops.
E. Frequent commits to source code repository.

Correct Answer: CDE

QUESTION 24
Your Pipeline has three stages: build, test, and deploy. You want the build and test stages to run automatically (without requiring human interaction), but you want the deploy stage to require approval by a human being. How do you achieve that goal?

A. Use an input step just before the deploy stage.
B. Create a separate Pipeline to run the deploy stage.
C. This is not possible using Pipeline, because a Pipeline must run from start to finish without human interaction.
D. Use a stage step just before the deploy stage.

Correct Answer: A

QUESTION 25
Which of the following statements are TRUE about Jenkins Pipeline? choose 2

A. It Is not possible to call a Freestyle job from within a Pipeline job.
B. The Pipeline syntax supports running steps in parallel on different agents.
C. When using a Multibranch Pipeline. Jenkins can automatically create jobs for each branch in the source

code repository
D. A Pipeline job must contain at least three stages.
E. Pipeline jobs survive master restarts only if the Pipeline definition script is checked into an SCM.

Correct Answer: BC

QUESTION 26
Jenkins utilizes the fingerprints feature to:

A. Biometric authentication during the login process.
B. Estimate the amount of memory required to successfully complete a build.
C. Track a specific instance of a file and determine which particular version of that file was used for a specific build.
D. Audit changes in the system configuration.

Correct Answer: C

QUESTION 27
Jenkins unit test results can be displayed by which plugins?

A. XUn'it
B. ClearCase
C. Git
D. Mercurial
E. JUnit

Correct Answer: AE

QUESTION 28
You are building a software project targeting multiple operating systems and architectures (Windows. Linux-32, and Linux-64). You have a dedicated Freestyle job for each architecture. In order to build each job on the right agent, which of the following does Jenkins provide by default on the job's configuration page?

A. an agent dropdown menu to choose the right agent
B. an architecture dropdown box to choose agent characteristics
C. a label field to restrict builds to specific agents
D. an expression field to describe target architecture

Correct Answer: C

QUESTION 29
Which is the expected workflow for "Test-Driven Development"?

A. Write a new test, validate with the CI system, and then write the new functional code.
B. Write a new failing unit test, write the new functional code to fix the test, and then verify that the test passes.
C. Validate with the CI system, write the new functional code, and then verify that the test passes.
D. Write a new failing unit test, write the new functional code to fix the test, verify that the test passes, and then refactor the code.

Correct Answer: D

QUESTION 30
A unit test

A. verifies that the complete software matches the specifications it was written to fulfill
B. tests an individual unit or component
C. verities cross-functionalities

D. is written when an integration or multi-environment bug is fixed

Correct Answer: B

QUESTION 31
Which TWO of the following are ways to inform users about build results in Jenkins? choose 2

A. SNMP
B. RSS
C. sound alarms in the browser
D. email
E. SMS

Correct Answer: BD

QUESTION 32
What are ways to create a new Freestyle job in Jenkins?

A. Upload a Job `config`. xml file via the UI.
B. Download a job template from the Update Center.
C. Post the job's `conf ig`. xml file to the remote access API.
D. Use the `CL` I with the command `get- j ob.`
E. Select "New Item- in the Jenkins UI.

Correct Answer: CE

QUESTION 33
Which is a valid reason for using public cloud build resources?

A. Jenkins masters cannot run in a one-shot configuration.
B. Jenkins masters require a standalone configuration.
C. Cloud nodes are not fungible (replaceable).
D. You need to limit on premise build resources while still providing new resources on-demand.

Correct Answer: D

QUESTION 34
An email account is stored in the environment variable NOTIFY_EMAIL, located on the Jenkins master. You want to notify this email account when Freestyle builds are marked "failed'* or "unstable". What do you need to do?

A. **Use a Shell step to call** `mail -s "3uild $ {3UILD_NUM3ER} failed"` **"S {N0TIFY_ZMAIL}**
B. Use a Shell Step to call nail -s "Build $ {BUILD NUMBER} failed" NOTIFY EMAIL.
C. Use an email notification post-build action, check "Send e-mail for every unstable build", and add SNOTIFY EMAILto the recipients list.
D. Use an email notification post-build action, check "Send e-mail for every unstable build", and add NOTIFY EKAIL to the recipients list.

Correct Answer: D

QUESTION 35
Which data formats docs the Jenkins REST API support out of the box? choose 3

A. Protocol Buffer
B. Python
C. JSON
D. XML

E. YAML

Correct Answer: BCD

QUESTION 36
Which is the best choice for keeping a JENKINS_HOME folder from becoming too large?

A. Purge the secrets.key and secrets-not-so-secret.key regularly.
B. Start new versions of Jenkins on fresh machines.
C. Remove all non-bundled plugins.
D. Discard build records.

Correct Answer: D

QUESTION 37
When you upgrade a plugin and find an issue in the new version, how can you move back to the previously installed version? choose 2

A. Use the button on the Plugin Manager that allows a downgrade to the previously installed version..
B. Select the version you want to use in the global configuration section for this plugin.
C. Use the `PluginManager. downgrade` method in the script console.
D. Use the "downgrade-plugin* command in the Jenkins CLI.
E. Manually download and install the previously installed version
F. Select one of the previous versions in the Plugin Manager.

Correct Answer: AE

QUESTION 38
what happens to all associated configuration metadata (on jobs, builds, etc.) after a plugin is uninstalled?

A. It is deleted immediately.
B. It is deleted on the next restart of Jenkins.
C. The data is backed up and then deleted from the live configuration.
D. Nothing happens. The data remains on the persisted form of the configuration until the next save of that item (Job. etc.).
E. It is deleted on the next configuration reload.

Correct Answer: D

QUESTION 39
Which of the following can be specified as arguments to the archiveArtifactsQ step in a Pipeline?

A. Whether to fingerprint the artifact.
B. Days for artifact retention period.
C. Location where the artifact will be written.
D. Pattern that identifies the artifacts to archive.

Correct Answer: AD

QUESTION 40
In a Pipeline, the stage step

A. prepares a test environment in Jenkins
B. transfers artifacts to a staging server for testing
C. collects a set of artifacts that can be referenced in a later Pipeline step
D. can be used to group a number of other steps into a logical unit for display

Correct Answer: D

QUESTION 41

You need to automate the deployment of `20` base Jenkins masters. For this, you set the system property `jenkins. install. runSetupWi` zardtothe value •false*'.
Which is TRUE about your Jenkins masters?

A. A default administrator account is created with username "admin" and password from the file `JENKlNS HOME/secrecs/initialAdrainPassword`.
B. A default administrator account Is created with username "admin" and password "admin".
C. A default administrator account is created and you cannot re-enable security.
D. No default administrator account Is created: you have to configure security manually.

Correct Answer: A

QUESTION 42

Which of the following would correctly complete the sentence. "Continuous Integration is a
of Continuous Delivery"?

A. subset
B. process definition
C. superset
D. consolidation
E. requirement

Correct Answer: AE

QUESTION 43

You want to execute a job passing one parameter via the Jenkins REST API. The correct syntax for this is
http://server/job/myjob

A. /build WithParameters
B. /build?Parameter=Value
C. /buildWithParameters?Parameter=Value
D. /build?Parameters=Value

Correct Answer: C

QUESTION 44

Which of the following is true about resuming a Declarative Pipeline?

A. Declarative Pipelines can be resumed only after a transient outage (such as a network failure or disk space exhaustion).
B. Declarative Pipelines cab be restarted after a Jenkins failure but not after a transient outage (such as a networ k failure or disk space exhaustion).
C. A Declarative Pipeline can be restarted only if the preserveStashesO option is set in the pipeline.
D. All Declarative Pipelines are restartable by default, with the same inputs (commit to build, parameters, etc) as the original run. Any data that was built in the original run is available only if the preserveStashes ( ) option is specified in the Jenkinsfile.
E. Declarative Pipelines that use Docker containers can not be resumed because the docker APIs that Jenkins calls to create the container are not serialized.

Correct Answer: C

QUESTION 45

Which of the following is NOT a valid way to access build artifacts?

A. View on the main Build page for the associated build on the main dashboard.
B. View in your browser at: httpV/$IJENKINS_URL}/job/$IYOURJOBJ/$iBUILD_NUMBERl/artifact

C. Copy to another project using the Copy Artifact plugin.
D. On the "My Views -> Workspace -> Artifacts" screen.
E. View on the Blue Ocean "Artifact" screen for the associated build.

Correct Answer: D

QUESTION 46
What happens it you specify build parameters but do not specify default values for each parameter?

A. The build will always fail.
B. The user will be required to enter values before starting a build.
C. You cannot save the configuration.
D. A standard default for that type will be used.

Correct Answer: D

QUESTION 47
Which THREE of the following are considered best practices when setting up rules for notifications?

A. Periodically change the recipient of emails, to make sure they are not classified as spam.
B. Do not send developers too many email notifications.
C. Make sure the notification's target is the right person.
D. Send notifications by multiple channels (email, chat room, PagerDuty, etc.) to make sure they are received.
E. Send notifications only when direct intervention is needed.

Correct Answer: BCE

QUESTION 48
Which would the Credentials plugin help you do?

A. Log in without entering a password.
B. Generate random passwords to use with third-party integrations.
C. Défine what jobs a user can see.
D. Share a user/password pair between jobs.

Correct Answer: A

QUESTION 49
In Jenkins, the stability of a job or pipeline Is normally Indicated using a set of weather icons (sunny, cloudy, etc). Which builds from a job's or pipeline's history are used to calculate its stability?

A. All builds from today.
B. The five most recent builds.
C. All builds
D. The most recent build only.

Correct Answer: C

QUESTION 50
When using SSH to launch an agent, which are required? chooee 2

A. SSHD must be Installed on the agenL OpenSSL must be installed on the agent.
B. The agent's SSH Public Key must be in the master's authorized keys.
C. The public key of the credential that is used for the agent must be installed on the agent.
D. You must log into the agent with SSH and start the agent

Correct Answer: BC

QUESTION 51
One quality of an ideal build node is that it is

A. tailored to specific builds
B. on-master
C. ephemeral and replaceable
D. static

Correct Answer: C

QUESTION 52
minimum requirements to run the jenkins LTS or CLoudbees jenkins Distribution master are

A. Current Linux/Unix/BSD. macOS. or Windows Oper ating system with a Java 7 or later runtime environment.
B. An installed and configured Docker environment if you are using the Docker image.
C. Current Linux/Unix/BSD. macOS, or Windows operating system with a Java 8 or 11 runtime environment
D. Low latency SSD disk.
E. Logical Volume Manager (LVM) on Linux/Unix systems or a "Spanned volume" on Windows systems.

Correct Answer: CE

QUESTION 53
Where do you find alerts about Jenkins security issues? choose 3

A. An email message sent to all users who are listed in the "Send security notifications" field of the "Extended E-mail Notification" configuration.
B. Beekeeper Upgrade Assistant if you are running CloudBees Jenkins Distribution or CloudBees Core.
C. An email message that is automatically sent to all users who have registered with the mailing list at jenkinssci-advlsories@googlegroups.com.
D. Jenkins logs.
E. A banner displayed in the upper right section of the master's home page.

Correct Answer: ADE

QUESTION 54
With the Jenkins Install Wizard, you CANNOT

A. select from a set of community-chosen plugins to be included on the instance being installed
B. skip the creation of an admin user and use a default user instead
C. define an admin user for Jenkins
D. define the avatar for the admin user
E. explicitly define the username and password for the admin user

Correct Answer: D

QUESTION 55
 A Source Code Management system records and tracks all changes of a source code repository. What is the feature that enables an SCM system to notify other systems when such changes happen?

A. Tagging
B. Version Control
C. Web hooks
D. Merge
E. Review Polling

Correct Answer: C

QUESTION 56

Declarative Pipelines and Scripted Pipelines are both defined in a Jenkinsfile and use the same underlying subsystem. Which of the following is NOT true when discussing Declarative versus Scripted Pipelines?

A. Scripted Pipelines usually execute significantly faster than the comparable Declarative Pipeline.

B. Scripted Pipelines require extensive knowledge of the Apache Groovy syntax wherease Declarative Pipelines can be implemented with minimal understanding of Groovy and so have a lower risk of syntax errors than Scripted Pipelines.

C. You can use the Declarative Directive Generator to help structure statements for Declarative Pipelines and use the Snippet Generator to help structure statements for Scripted Pipelines.

D. Scripted Pipelines can implement some functionality that Declarative Pipeline syntax does not support, although small bits of scripted syntax can be included in a Declarative Pipeline by using the "script" step..

E. Declarative Pipelines usually use the "agent" section to define the node where the code should execute but the "node" parameter can be used instead and allows for additional options such as "customWorkspace"

Correct Answer: B

QUESTION 57

Which can be defined in and limited to a specific folder and its subfolders?

A. View definitions
B. Credentials
C. Pipeline shared libraries
D. Permissions to run jobs and Pipelines
E. Plugins

Correct Answer: ABCD

QUESTION 58

You are using a base Jenkins master with the recommended set of plugins. Your team has a dedicated folder named "TeamA", located on the root of the Jenkins master. This folder is configured to use Global Pipeline Libraries hosted in an external git repository named "team-a-jenkins-libs". On the master branch of this repository, the file "vars/sayHello.groovy" contains the following code:

```
def call(name) {
Â  node() {
Â Â Â  echo String.format("Hello ${name}")
Â  }
}
```

The "TeamA" folder also contains a job ("Project1") running this Pipeline script: `@Library('common-libs'`
`sayHello 'Butler'` Which ONE of the following statements correctly describes the result of running a sin

A. The build will be in "ABORTED" state, because the method `String. format` is not approved by the administrators.

B. The build will be in "ABORTED" state, because the Global Pipeline Library is not configured by the administrators of the Jenkins instance

C. The build will be in "SUCCESS" state, because the Global Pipeline Libraries are trusted.

D. The build will be in "SUCCESS" state only if the Global Pipeline Library is configured in the Jenkins Global Configuration.

E. The build will be in "SUCCESS" state only if the administrator has allowed the method `string`.

format.

Correct Answer: D

QUESTION 59
How can you configure a Declarative Pipeline to record the fingerprint of an artifact?

A. No action is required; Declarative Pipelines automatically record a fingerprint for each artifact.
B. Enable the Declarative Pipeline enableFingerprints* option'.
C. Set the Fingerprint Artifacts global configuration option.
D. Set the "fingerprint: true" argument for the archiveArtifactsO step.
E. Call the ñngerprintArtifact() step immediately after the archiveArtifacts() step.

Correct Answer: D

QUESTION 60
You are using GitHub repository scanning (in a project of type "GitHub Organization") with the Pipeline Jenkinsfile Project Recognizer. In this case, which repositories under the organization will have Multibranch projects automatically created for them?

A. only repositories that contain a Jenkinsfile in at least one branch
B. all repositories that contain a Jenkinsfile in at least one branch or pull request
C. all repositories
D. only repositories that contain a Jenkinsfile in all their branches

Correct Answer:

QUESTION 61

You are using a base Jenkins master in production with the recommended set of plugins.
The administrators have configured a Global Pipeline Library named "common-libs", stored in a git repository, with the configuration shown in the exhibit above.
You have a Pipeline job at the root of the Jenkins dashboard, whose script starts with the annotation @Library('common-libs') _
You want to test this Pipeline job with a beta version of the Global Pipeline Library "common-libs", stored on the branch named "edge" of the git repositl^y. Which of the following statements are TRUE?

A. You cannot do this on this Jenkins instance.
B. Replace the @Library (' ccitmon-libs •) _annotation with QLibrary (• conmon-libs@edge ') _ and run the job again.
C. Duplicate the pipeline job in a folder with a local Global Pipeline I ibrary referencing the git repository on the "edge" branch, and change its
@Library ('common-libs') annotation to §Library(' common-libsgedge ')
D. Duplicate the Pipeline job in a folder with a local Global Pipeline Library referencing the git repository on the "edge" branch, and change its ^Library (' common-libs1) _ annotation to ^Library (' common-libs : edge ')
E. A Jenkins test instance with the same configuration as the production Jenkins master can be used to achieve this, giving yourself administrator rights to configure the "edge" branch on the Global Configuration..
F. Replace the ^Library (' common-libs ')   annotation with QLibrary (' common-libs :edge ') and run the job again

Correct Answer: BE

QUESTION 62
What is the recommended plugin to use for building Pipelines on Jenkins?

A. Job DSL plugin
B. Join plugin
C. Promoted Builds plugin
D. Build Pipeline plugin
E. Pipeline plugin (previously named "Workflow")

Correct Answer: E

QUESTION 63
You are checking out source code for a Multibranch Pipeline project from the repository, and you want to ensure that the sources are of the same version as the Jenkinsfile. How can you do that?

A. Use a `git` step specifying explicit url and branch.
B. The Jenkinsfile performs a checkout automatically without explicit instruction.
C. Use a `checkout` step specifying explicit url and branch.
D. Use a `checkout` step with the predefined object `scm` as a parameter.

Correct Answer: B

QUESTION 64
. In a series of Freestyle jobs, you have configured an upstream build job to be triggered after a user commits code to the SCM. After the upstream build completes, it then triggers a downstream build job. You want to notify the committers of the upstream build job if the triggered downstream job fails. Which of the following is a supported mechanism for sending these notifications?

A. It is not possible to notify upstream committers of downstream build failures..
B. Add an email notification post-build action and check "Send email to committers of upstream build".
C. Add an Editable Email Notification post-build action (Email-ext plugin) on the downstream job and select "Upstream Committers" as recipients for the "Failure - Any" trigger.
D. Add a "Record fingerprints of files to track usage" post build action on the upstream job and select the "Listen for downstream build failures" option.)
E. Select the "Notify upstream committers" option in the "Build failure notifications" section of the system configuration (Manage Jenkins -> Configure System

Correct Answer: B

QUESTION 65
In a GitHub Organization project, what type of credentials can you use to scan the GitHub organization for

repositories and branches?

A. Username with personal access token as password.
B. SSH username with private key.
C. PKCS #12 certificate.
D. All of the above are valid scan credentials

Correct Answer: A

QUESTION 66
The Jenkins Install Wizard allows you to

A. deñne non-admin users for Jenkins
B. define executor agents
C. define an admin user for Jenkins
D. completely define the security and notification settings of the Jenkins instance you are installing
E. define the security settings of the Jenkins instance you are installing

Correct Answer: C

QUESTION 67
Vou want to allow regular users to configure limited aspects of a job but not allow them to change everything. What Jenkins mechanism do you use?

A. System environment variables
B. Job Configuration Restriction
C. plugin Build parameters
D. Declarative Pipeline
E. Matrix-based security

Correct Answer: E

QUESTION 68
Which job type is always available in Jenkins without additional plugins?

A. Make project
B. Grad le project
C. Pipeline project
D. Freestyle project
E. Ant project

Correct Answer: D

QUESTION 69
Which are commonly tuned items to run Jenkins or CloudBees Jenkins Distribution?

A. Database query performance parameters.
B. Operating system limits on open files and forked processes.
C. Operating system buffer cache size and limits on open files.
D. Operating system limits on network packet size and interrupt latency.
E. Java memory heap size and garbage collector for heap.

Correct Answer: BE

QUESTION 70
Which of the following statements are TRUE about Jenkins Pipeline?

A. It is not possible to call a Freestyle job from within a Pipeline job.
B. Pipeline jobs survive master restarts only if the Pipeline definition script is checked into an SCM.
C. A Pipeline job must contain at least three stages.
D. When using a Multibranch Pipeline, Jenkins can automatically create jobs for each branch in the source code repository.
E. The Pipeline syntax supports running steps in parallel on different agents.

Correct Answer: AC

QUESTION 71
What is true for plugins listed under the "Available" tab on the "Manage Plugins" screen?

A. Click the âCœNameâC column header to determine whether plugins are listed alphabetically or sorted by category.
B. All plugins available for your software release are listed here with links to documentation about each.
C. The list is updated frequently with new plugins that have been released.
D. Only plugins that have been tested by the Jenkins community in the last year are listed.
E. Plugins with known security issues are listed with a "red flag" to warn users not to install them.

Correct Answer: C

QUESTION 72
Choose the destinations where Jenkins and its plugins can send job notifications?

A. email
B. Slack
C. Jira
D. SMS messaging
E. All of the above

Correct Answer: AB

QUESTION 73
You need to support versioning of Jenkins Freestyle job configurations. Which files or folders must you add to your version control system in order to support this?

A. lhe config.xml file in lhe /jobs/job-name directory
B. lhe iobackup.xml file in lhe /jobs/job-name/backup directory
C. lhe /workspace folder in the /jobs/job-name directory
D. the enure /jobs/your-job directory

Correct Answer: A

QUESTION 74
What Pipeline step captures XML test results to provide a graphical visualization of the historical test results?

A. maven
B. testReport
C. antReport
D. junit
E. kibana

Correct Answer: D

QUESTION 75
Which are Source Code Management tools? choose 3

A. Subversion
B. Java
C. Git
D. Maven
E. Perforce

Correct Answer: ACE

QUESTION 76
Which practices optimize performance on large systems?

A. Avoid modifying Java parameters that control heap size and garbage collection.
B. Use plugins as much as possible.
C. Use the maximum number of executors at all times and avoid using labels.
D. Allocate specific masters for different build types and teams.
E. Run all builds on agents and never on the master itself.

Correct Answer: AD

QUESTION 77
Which is the best choice for keeping a JENKINSJHOME folder from becoming too large?

A. Purge the secrets.key and secrets-not-so-secret.key regularly.
B. Remove all non-bundled plugins.
C. Discard build records.
D. Start new versions of Jenkins on fresh machines.

Correct Answer: C

QUESTION 78
Which of the following are advantages of a Pipeline job when compared to a Freestyle job?

A. Builds can be parameterized.
B. Jenkins can be restarted while a build is in progress without impacting the build.
C. No extra plugins must be installed.
D. Builds can be triggered with millisecond granularity.
E. Job definition can be loaded from the Source Code Management system at build time.

Correct Answer: AE

QUESTION 79
Which of the following "input" steps are not valid'

A. input "
B. input 'deploy?'
C. input message: 'deploy?', oki'deploy'
D. input message: 'deploy?', submitter: 'admin'
E. input message: 'deploy?', propagate: true

Correct Answer: B

QUESTION 80
In a "standalone" configuration, when masters manage the build environment and also execute builds with their own resources, which of the following is true?

A. Build times decrease.
B. The builds share SCM checkouts.

C. Masters are more highly available.

D. User interface becomes slower as resources on the master run out.

Correct Answer: B

QUESTION 81
You are building a software project targeting multiple operating systems and architectures (Windows, Linux-32, and Linux-64). You have a dedicated Freestyle job for each architecture. In order to build each job on the right agent, which of the following does Jenkins provide by default on the job's configuration page?

A. an agent dropdown menu to choose the right agent

B. a label field to restrict builds to specific agents

C. an expression field to describe target architecture an architecture

D. dropdown box to choose agent characteristics

Correct Answer: B

QUESTION 82
In Jenkins, which section in a Freestyle job configuration is used to execute a Linux (shell) or Windows (batch) command?

A. Post-build Actions

B. Build Triggers

C. Build Environment

D. Source Code Management

E. Build

Correct Answer:

QUESTION 83
One quality of an ideal build node is that it is

A. tailored to specific builds

B. static

C. on-master

D. ephemeral and replaceable

Correct Answer: C

QUESTION 84
Which are ways to influence the number of build artifacts that can be archived?

A. Limit build data using the job setting "Discard old builds".

B. Make sure you regularly delete unused views.

C. Increase the size of the JENKINS_HOME partition/logical volume.

D. Clear the Jenkins cache.

E. Change the order of jobs in the pipeline.

Correct Answer: AC

QUESTION 85
You are an administrator of a Jenkins instance that has security enabled and is using the "Project-based Matrix Authorization Strategy". Another user creates a job named Projectl in a Folder named Folderl with project-based security enabled using the option "Do not inherit permissions grants from other ACLs" and without any additional permissions configured. The user saves the job configuration, but now cannot access the configuration to change it. As administrator, which can you do to enable the user to configure the job again?

A. Disable the "Project-based Matrix Authorization Strategy" in Projectl.
B. Grant "Job/Configure" and "Job/Read" permission to the user from Configure Global Security.
C. Grant "Job/Configure" and "Job/Read" permission to the user in Projectl.
D. Grant "Job/Configure" and "Job/Read" permission to the user in Folderl.

Correct Answer: A

QUESTION 86
. In a Multibranch Pipeline project, you removed a branch in the repository. When is the corresponding "orphaned" job removed?

A. All orphaned jobs that match the "Orphaned Item Strategy" configuration are cleaned up on every branch re-index process.
B. All "orphaned" jobs are cleaned up on every branch re-index process.
C. All orphaned jobs are cleaned up every time the Multibranch project is saved.
D. All orphaned jobs that match the "Orphaned Item Strategy" are cleaned up automatically every 24 hours.

Correct Answer: A

QUESTION 87
. A job has a "Build Periodically" trigger with the following configuration: H H(0-7) * * * What does this specification mean? Select the most exact interval in which the job is guaranteed to run.

A. run once between 12:00 AM (midnight) and 6:59 AM
B. run every hour between 12:00 AM (midnight) and 7:00 AM
C. run once between 12:00 AM (midnight) and 7:59 AM
D. run once between 12:00 AM (midnight) and 7:00 AM
E. run every hour between 12:00 AM (midnight) and 6:59 AM

Correct Answer: A

QUESTION 88
Fingerprinting artifacts is the process of:

A. Recording the MD5 checksum of the selected artifacts.
B. Enabling access passwords for the selected artifacts.
C. Creating an archive file of the selected artifacts.
D. Building, testing, and deploying the selected files to production environment.

Correct Answer: A

QUESTION 89
What is the purpose of the "Manage Old Data" screen under "Manage Jenkins"?

A. Delete outdated configurations left by uninstalled, deleted, or upgraded plugins.
B. Clean up workspaces left by deleted Jenkins users.
C. Prepare for migration from Jenkins 1 to Jenkins 2.
D. Delete or restore old credentials details.
E. Delete artifacts, logs, and backups that are no longer required.

Correct Answer: A

QUESTION 90
what is the preferred method for a Jenkins administrator to notify all Jenkins users about upcoming system maintenance?

A. Add text to the "System Message" field on the "System Configuration" page to populate a banner displayed across the top of the master's home page,

B. On the master's dashboard, click "add description" or "edit description" to populate a banner displayed across the top of the master's home page.

C. On the "System Configuration" page, choose the "Maintenance Alerts" option from the "Alerts" drop-down menu and populate the box with a message to be added to all build logs.

D. Populate the "Email Notifications" section of the "System Configuration" page with a message to be sent as email to all registered Jenkins users.

Correct Answer: C

QUESTION 91
You are an administrator of a base Jenkins master with the recommended plugin set and you want to connect a new agent using SSH. Authentication on the remote node that will host the agent is done with an SSH key-pair which your users must NOT be able to see or access. Which of the following is TRUE assuming your users do not have admin rights?

A. You cannot use an SSH key-pair. Configure a password for the agent's SSH user, and create a credential of type "Username with password" for the node's SSH authentication.

B. Use a credential "SSH Username with private key", restricted to the Scope "System", for the node's SSH authentication.

C. Use a credential "SSH Username with private key", restricted to the Scope "Agents", for the node's SSH authentication.

D. The SSH key will be stored in the JENKINS_HOME/.ssh folder. Configure the agent to use a key from the "standard" SSH folder.

Correct Answer: C

QUESTION 92
What does Jenkins do after activating "Prepare for Shutdown" from "Manage Jenkins"?

A. Wait for existing builds to complete and then shut down Jenkins.

B. Wait for existing builds to complete and then restart Jenkins.

C. Cancel the effect of the "quiet-down" command if Jenkins is already in Quiet Down mode

D. None of the above.

Correct Answer: A

QUESTION 93
You are checking out source code for a Multibranch Pipeline project from the repository, and you want to ensure that the sources are of the same version as the Jenkinsfile. How can you do that?

A. Use a git step specifying explicit url and branch.

B. Use a checkout step specifying explicit url and branch.

C. The Jenkinsfile performs a checkout automatically without explicit instruction

D. Use a checkout step with the predefined object scm as a parameter.

Correct Answer:

QUESTION 94
What happens if a job with build parameters is triggered automatically?

A. the job builds with default values for each parameter,

B. the build waits for a user to enter parameter value,

C. fhe job will leverage null values for each parameter.

D. you cannot configure a build with parameters to automatically trigger,

E. the build fails.

Correct Answer: A

QUESTION 95

Which are commonly referenced as key points of CI?

A. Automated tests after each commit.
B. Automated builds after each commit.
C. Frequent commits to source code repository.
D. Collaboration among Dev, QA and Ops.
E. Automated deployment to the production environment.

Correct Answer:

QUESTION 96
Which statements about a Distributed Version Control System are correct?

A. It requires one server in each location.
B. It requires fast network access for daily work.
C. It makes it easy to fork and merge code..
D. It operates without a central server.
E. It requires a central server and a standby server

Correct Answer: AD

QUESTION 97
Which of the following statements are TRUE about Global Pipeline Libraries Groovy scripts?

A. They can be stored on a git repository hosted by the Jenkins master.
B. They can be stored on an NFS shared folder of your infrastructure.
C. They can be stored by the Jenkins administrators, using a custom job manager.
D. They can be stored on the Jenkins master, inside the JENKINSJHOME/.global-library folder.
E. They can be stored on an external SVN repository.

Correct Answer:

QUESTION 98
Which are correct ways to install a custom plugin (a plugin that is NOT available in the Jenkins Update Center)?

A. Copy the plugin (.hpi file) to the JENKINS_HOME/pluginManager/ location.
B. Copy the plugin (.hpi file) to the JENKINS_HOME/plugins/ location in your Jenkins instance.
C. From the UI, select Manage Jenkins -> Manage Plugins, "Advanced" tab. Then select the option to upload a plugin.
D. Copy the plugin to the JENKINS_HOME/config/ location.
E. From the UI, select Manage Jenkins •> Manage Plugins and use the "Install" button; then find and upload a plugin (.hpi file).

Correct Answer: BC

QUESTION 99
Which of the following build steps is most appropriate to use to publish the artifact files of a build?

A. Stash artifact files.
B. Upload the artifact files to a central artifact repository.
C. Commit the artifact files to git.
D. Copy artifact files to the agent file system

Correct Answer: B

QUESTION 100
In Jenkins, which THREE of the following actions can be done by using notifications

A. Inform upstream developers when a downstream build fail
B. Start a build job once another build job has completed
C. Inform recipients when build status changes
D. Record build failures
E. Alert developers who break a build

Correct Answer: ACD

QUESTION 101
Which are valid command-line options for the java command that runs Jenkins as a stand-alone application?

A. —httpPort - Specify the port on which Jenkins listens.
B. —installPlugin -- Install a new plugin.
C. -prefix - Specify a string to be added at the end of the URL for this instance.
D. -ldap - Specify an LDAP server location to use for user authentication,
E. -logfile - Specify the path for the Jenkins log file.

Correct Answer: ACE

QUESTION 102
Which of the following "when" conditionals are not valid in Declarative Pipeline?

A. when {changeset "**/*.js"}
B. when { not { branch 'master'}}
C. when {expression {return params.DEBUG_BUILD}}
D. when {branch 'master'}
E. when {gitTagName '**-release'}

Correct Answer: B

QUESTION 103
What happens to all associated configuration metadata (on jobs, builds, etc.) after a plugin is uninstalled?

A. The data is backed up and then deleted from the live configuration.
B. Nothing happens. The data remains on the persisted form of the configuration until the next save of that item (job. etc.)
C. It is deleted on the next restart of Jenkins.
D. It is deleted on the next configuration reload.
E. It is deleted immediately.

Correct Answer: B

QUESTION 104
Your base Jenkins instance has one master, 2 agents, and a total of 5 executors. How many builds can you run concurrently?

A. 10
B. 2
C. 1
D. 5
E. 15

Correct Answer: D

QUESTION 105

Which of the following is an effect of posting to the remote URL JENKINS URL/job/name/polling?

A. It forces Jenkins to build the job.
B. It forces Jenkins to check out the source code from SCM.
C. It forces Jenkins to poll the SCM for changes.
D. It lets you define a polling interval.

Correct Answer:

QUESTION 106
Why is the performance of a Jenkins master improved by using a distributed builds architecture?

A. Because it prevents builds from overloading a master's CPU/memory.
B. Because executors cannot be allocated on the master.
C. Because builds cannot be run in parallel on a master.
D. Because it prevents the CPU being overloaded during parallel polls.
E. Because executors offloaded onto build nodes are not performant.

Correct Answer: C

QUESTION 107
Which of the following conditions can be used as the basis of a valid promotion criterion using the Promoted Builds plugin?

A. successful execution of a specified script
B. successful run of a specified unit test
C. execution of the build by a specified user
D. successful build of specified downstream projects

Correct Answer: D

QUESTION 108
Which are benefits of binary reuse (compiling once and reusing the built artifact across the rest of the pipeline)?

A. ensures a single version is used throughout the pipeline
B. allows the inclusion of environment configurations into the artifact
C. guarantees the same source is tested in each environment
D. allows a shorter cycle time
E. enables selectively linking stubs and real classes representing an external interface

Correct Answer: ACD

QUESTION 109
What happens it you specify build parameters but do not specify default values for each parameter?

A. The build will always fail..
B. The user will be required to enter values before starting a build.
C. You cannot save the configuration.
D. A standard default for that type will be used

Correct Answer: B

QUESTION 110
Which of these tasks arc ONI Y available from the "Manage Jenkins" page?

A. Manage plugins
B. Define views

C. Configure credentials
D. Open Blue Ocean
E. Configuie Global Security

Correct Answer: ACE

QUESTION 111
A I reestyle job is set lip to "I nable concurrent builds if necessary" and configured to run on a single node. How can you ensure that multiple concurrent runs share the same workspace?

A. Pass the argument -Dhuoson.model.Run.ioc*woricspaces=faise in the Jenkins master invocation.
B. Check "Do not lock workspace" in the Advanced Project Options of the project.
C. Multiple concurrent runs can never share the same workspace.
D. Define a "Custom workspace" path for the Job.

Correct Answer: C

QUESTION 112
Which of the following are true about credentials that are implemented in a Declarative Pipeline using the "credentials" or "withCredentials() method?

A. All credential bindings support the "Secret Text" and "Standard username and password" credential types.
B. Oedential IDs are case Insensitive.
C. The credential types supported are defined by the binding plugin for the resource being accessed.
D. Most credentials called from a pipeline have Global scope, not System scope.

Correct Answer: A

QUESTION 113
What does the M# of executors" field on the Jenkins master control?

A. Maximum number of jobs which can be run concurrently on attached agents.
B. Number of Java threads that can run Jenkins jobs.
C. Number of external build agents that can be used for jobs run on this Jenkins master.
D. Number of CPU cores configured for this master.
E. Number of jobs that can execute simultaneously on the Jenkins master

Correct Answer: E

QUESTION 114
A multi-configuration job contains the combination filter indox*4—1. What does this filter achieve?

A. It removes 3 combinations in every 4.
B. It removes one combination in every 4.
C. It removes the fourth combination.
D. Nothing. The syntax Is Invalid.
E. It removes the first combination.

Correct Answer:

QUESTION 115
Which of lhe following are **true** when using build parameters?

A. If your Jenkinsfile specifies parameters with the "parameters* directive, those are the only parameters recognized when the Pipeline executes; any parameters that were specified In the "Project is parameterized" section of the Job configuration are cleared.
B. Use the 'params" object to reference parameters that are defined on "The project is parameterized"

section of the job configuration..

C. Use the "parameters" directive to define parameters for your Pipeline Inside your Pipeline code.

D. If you configure a build parameter of type File, then users can specify a file on the server as build input

Correct Answer:

QUESTION 116
Which enables you to use artifacts from a completed build in the workspace of the currently running build/

A. Jenkins core.
B. Copy Artifact plugin.
C. Rebuild plugin.
D. ArtifactDeployer plugin

Correct Answer:

QUESTION 117
What is the* purpose of the "Manage Users" section of the Manage lenkins dashboard?

A. Contains entries used for the security matrix or project security matrix.
B. Defines aliases for credentials that have been created In the external security realm..
C. Each user who is allowed access to Jenkins must have an entry in this Jenkins user database.
D. Defines user groups used for role-based strategy authorization.
E. Populates the Jenkins user database that can be used if you are not using an external senility realm such as LDAP, Active Directory, or Unix user/groups

Correct Answer: E

QUESTION 118
.on a single Jenkins master you have a folder named "Projectl". Ihis folder contains three jobs: "job master", 'job develop", and "Job edge". The Job "job master" Is the latest built project and Is In a success state while the two other Jobs are in failing state. Which statement is true about the folder "Projectl"?

A. It reports its health as "failed" ("Raining Cloud" weather icon), because tliat is the "worst health of the sub-items".
B. It reports its health as "success" ("Sunny" weather icon), because that is the health of the "latest built Item."
C. It must be configured with a dedicated ' Health Metric" setting before it can report its health with weather icons.
D. It does not report Its health on the folder level; only Jobs report health.

Correct Answer: A