

1. What does DevOps stand for?

- a) Development and Optimization
- b) Development and Operations
- c) Deployment and Services
- d) Development and Strategy

Answer: b) Development and Operations

2. What is a key benefit of DevOps?

- a) Slower delivery
- b) Improved collaboration
- c) High maintenance costs
- d) Limited scalability

Answer: b) Improved collaboration

3. Which is a cultural benefit of DevOps?

- a) Continuous testing
- b) Higher employee engagement
- c) Automated deployment
- d) Virtualization

Answer: b) Higher employee engagement

4. Which phase is considered the heart of the DevOps lifecycle?

- a) Continuous Testing
- b) Continuous Integration
- c) Continuous Deployment
- d) Continuous Monitoring

Answer: b) Continuous Integration

5. Which tool is NOT used for Continuous Deployment?

- a) Chef
- b) Puppet
- c) Selenium
- d) Ansible

Answer: c) Selenium

2. Introduction to AWS

6. What type of cloud computing does AWS NOT provide?

- a) SaaS
- b) IaaS
- c) PaaS
- d) CaaS

Answer: d) CaaS

7. What is the purpose of Amazon S3?

- a) To provide scalable storage
- b) To deliver content
- c) To monitor applications
- d) To manage DNS services

Answer: a) To provide scalable storage

8. Which AWS service offers relational database support?

- a) EC2
- b) S3

- c) RDS
- d) VPC

Answer: c) RDS

9. **Which of the following is a CDN service by AWS?**

- a) S3
- b) CloudFront
- c) VPC
- d) DynamoDB

Answer: b) CloudFront

10. **What is an availability zone in AWS?**

- a) A caching mechanism
- b) A logical data center
- c) A virtual machine
- d) A cloud database

Answer: b) A logical data center

3. Introduction to GCP

11. **What does GCP stand for?**

- a) Google Cloud Product
- b) Google Compute Platform
- c) Google Cloud Platform
- d) General Cloud Platform

Answer: c) Google Cloud Platform

12. **Which GCP service handles virtual machines?**

- a) Cloud Storage
- b) Compute Engine
- c) BigQuery
- d) Cloud DNS

Answer: b) Compute Engine

13. **Which service in GCP is used for DNS management?**

- a) Cloud DNS
- b) Cloud AI
- c) BigQuery
- d) VPC

Answer: a) Cloud DNS

14. **Which GCP feature is used for large-scale data analytics?**

- a) Cloud AI
- b) BigQuery
- c) Cloud Functions

- d) Kubernetes
- Answer:** b) BigQuery

15. What type of environment does GCP offer for serverless computing?

- a) VMs
 - b) SaaS
 - c) IaaS
 - d) PaaS
- Answer:** d) PaaS

4. Introduction to Azure

16. What was the former name of Microsoft Azure?

- a) Azure Cloud
 - b) Windows Azure
 - c) Microsoft Cloud
 - d) CloudNet
- Answer:** b) Windows Azure

17. Which Azure service is used for file storage?

- a) Blob Storage
 - b) Queue Storage
 - c) File Storage
 - d) Table Storage
- Answer:** c) File Storage

18. Which domain in Azure handles scalability?

- a) Networking
 - b) Database
 - c) Storage
 - d) Compute
- Answer:** a) Networking

19. Which database service is NOT offered by Azure?

- a) MySQL
 - b) PostgreSQL
 - c) DynamoDB
 - d) Cosmos DB
- Answer:** c) DynamoDB

20. Which feature of Azure ensures cost-effectiveness?

- a) Auto Scaling

- b) Blob Storage
 - c) Flexibility
 - d) Strong Analytics Support
- Answer:** c) Flexibility
-

5. Git and GitHub

21. What type of version control system is Git?

- a) Centralized
 - b) Distributed
 - c) Local
 - d) Hosted
- Answer:** b) Distributed

22. What is the function of the `git init` command?

- a) Start a new branch
 - b) Clone a repository
 - c) Initialize a Git repository
 - d) Commit changes
- Answer:** c) Initialize a Git repository

23. Which of these is a feature of GitHub?

- a) Hosting Git repositories
 - b) Managing cloud databases
 - c) Tracking real-time analytics
 - d) CI/CD automation
- Answer:** a) Hosting Git repositories

24. What does the `git add` command do?

- a) Stages files for commit
 - b) Commits changes
 - c) Deletes a file
 - d) Tracks branch changes
- Answer:** a) Stages files for commit

25. Which is NOT a part of Git workflow?

- a) Untracked files
 - b) Working directory
 - c) Testing environment
 - d) Staging area
- Answer:** c) Testing environment
-

6. General DevOps Tools

26. Which tool is used for Continuous Integration?

- a) Jenkins
- b) Docker
- c) Kubernetes
- d) Chef

Answer: a) Jenkins

27. What is the main focus of Continuous Monitoring in DevOps?

- a) Automating deployment
 - b) Gathering operational data
 - c) Building artifacts
 - d) Code integration
- Answer:** b) Gathering operational data

28. Which tool is used for container orchestration?

- a) Ansible
 - b) Kubernetes
 - c) Puppet
 - d) Nagios
- Answer:** b) Kubernetes

29. Which phase of the DevOps lifecycle uses Selenium?

- a) Continuous Testing
 - b) Continuous Deployment
 - c) Continuous Integration
 - d) Continuous Operations
- Answer:** a) Continuous Testing

30. What is the main goal of Continuous Feedback in DevOps?

- a) To deploy code faster
 - b) To gather customer behavior insights
 - c) To automate testing
 - d) To configure servers
- Answer:** b) To gather customer behavior insights

1. What does Maven primarily manage?

- a) Servers
- b) Dependencies
- c) User Interfaces
- d) Network Protocols

Answer: b) Dependencies

2. Which file does Maven use for project configuration?

- a) build.xml

- b) pom.xml
 - c) config.json
 - d) settings.xml
- Answer:** b) pom.xml

3. What is Maven based on?

- a) XML-RPC
- b) REST APIs
- c) Project Object Model (POM)
- d) YAML configuration

Answer: c) Project Object Model (POM)

4. What is the default location for Maven's local repository?

- a) C:/maven/repo
- b) ~/.m2/repository
- c) /usr/local/maven
- d) /opt/repo/maven

Answer: b) ~/.m2/repository

Maven Build Lifecycle

5. Which Maven build lifecycle phase compiles the source code?

- a) validate
- b) compile
- c) package
- d) install

Answer: b) compile

6. What happens during the 'package' phase in Maven?

- a) Source code is compiled
- b) A JAR or WAR file is created
- c) Dependencies are resolved
- d) Code is validated

Answer: b) A JAR or WAR file is created

7. What is the primary function of the `deploy` phase in Maven?

- a) Deploy to the local repository
- b) Deploy to a remote repository
- c) Deploy to central repository
- d) Deploy to a Maven plugin

Answer: b) Deploy to a remote repository

POM File

8. What is the root element in a Maven POM file?

- a) <dependencies>
- b) <project>
- c) <build>

- d) <plugin>

Answer: b) <project>

9. Which element in POM specifies the unique identifier for the project group?

- a) artifactId
- b) groupId
- c) name
- d) version

Answer: b) groupId

10. Which tag in POM defines external libraries required for the project?

- a) <plugin>
- b) <dependency>
- c) <repository>
- d) <resource>

Answer: b) <dependency>

Maven Repositories

11. Where does Maven first look for dependencies?

- a) Central Repository
- b) Local Repository
- c) Remote Repository
- d) Source Repository

Answer: b) Local Repository

12. What is the URL of Maven's central repository?

- a) <https://maven.repo.com>
- b) <https://repo.maven.apache.org/maven2>
- c) <https://maven.apache.com/repo>
- d) <https://central.maven.com>

Answer: b) <https://repo.maven.apache.org/maven2>

Maven Plugins

13. Which Maven plugin compiles Java source code?

- a) Surefire Plugin
- b) Jar Plugin
- c) Compiler Plugin
- d) Assembly Plugin

Answer: c) Compiler Plugin

14. Which plugin is used to run unit tests in Maven?

- a) Javadoc Plugin
 - b) PMD Plugin
 - c) Surefire Plugin
 - d) War Plugin
- Answer:** c) Surefire Plugin
-

Maven Goals

15. Which goal validates the availability of necessary data for the build?

- a) validate
 - b) compile
 - c) package
 - d) test
- Answer:** a) validate

16. Which command cleans up the build directory in Maven?

- a) mvn build
 - b) mvn validate
 - c) mvn clean
 - d) mvn compile
- Answer:** c) mvn clean
-

Gradle Basics

17. What language is primarily used for Gradle build scripts?

- a) XML
 - b) Groovy
 - c) YAML
 - d) JSON
- Answer:** b) Groovy

18. Which command builds a project using Gradle?

- a) gradle package
 - b) gradle build
 - c) gradle run
 - d) gradle compile
- Answer:** b) gradle build

19. What is the equivalent of POM in Gradle?

- a) settings.gradle
- b) pom.gradle

- c) build.gradle
 - d) gradle.xml
- Answer:** c) build.gradle
-

Dependency Management

20. What is the main advantage of Maven dependency management?

- a) Faster IDE
 - b) Manual updates
 - c) Automatic version updates
 - d) Reduced build size
- Answer:** c) Automatic version updates

21. What does Maven do when a dependency is not in the local repository?

- a) Searches the internet
 - b) Downloads it from the central repository
 - c) Ignores the dependency
 - d) Logs an error
- Answer:** b) Downloads it from the central repository
-

Miscellaneous

22. What does the term ‘artifact’ in Maven refer to?

- a) A dependency
 - b) A build configuration
 - c) The output of the project build
 - d) An XML configuration
- Answer:** c) The output of the project build

23. Which Maven command creates a new project?

- a) mvn create
 - b) mvn init
 - c) mvn archetype:generate
 - d) mvn build
- Answer:** c) mvn archetype:generate

24. In Maven, what does the ‘install’ goal do?

- a) Deploys the project to central repository
- b) Deploys the project to a remote repository
- c) Installs the project to the local repository

- d) Installs plugins
Answer: c) Installs the project to the local repository

25. Which lifecycle phase is responsible for running integration tests?

- a) verify
 - b) test
 - c) package
 - d) deploy
- Answer:** a) verify
-

True/False Questions

26. Maven supports only Java projects.

Answer: False

27. Gradle is faster than Maven due to incremental builds.

Answer: True

28. The groupId is unique for every Maven project.

Answer: True

29. Remote repositories store dependencies locally on your system.

Answer: False

The mvn deploy com 1. Jenkins is primarily written in which programming language?

- a) Python
 - b) Ruby
 - c) Java
 - d) C++
- Answer:** c) Java

2. What is the main purpose of Jenkins in the DevOps workflow?

- a) Source code version control
 - b) Continuous Integration
 - c) Cloud deployment
 - d) Monitoring server health
- Answer:** b) Continuous Integration

3. Which of the following is NOT a feature of Jenkins?

- a) Easy installation
 - b) Available plugins
 - c) Manual code testing
 - d) Platform independence
- Answer:** c) Manual code testing

4. Jenkins architecture is based on which model?

- a) Peer-to-peer
 - b) Client-server
 - c) Master-slave
 - d) Monolithic
- Answer:** c) Master-slave

5. Which protocol is used for communication between Jenkins Master and Slave?

- a) HTTP
 - b) TCP/IP
 - c) FTP
 - d) UDP
- Answer:** b) TCP/IP

6. What type of job is ideal for automating simple tasks like running tests or packaging applications?

- a) Maven Project
 - b) Pipeline
 - c) Freestyle Project
 - d) Multi-configuration Project
- Answer:** c) Freestyle Project

7. Where can you find the option to install plugins in Jenkins?

- a) Manage Plugins
 - b) Manage Jobs
 - c) Job Dashboard
 - d) Source Code Management
- Answer:** a) Manage Plugins

8. Which plugin allows Jenkins to integrate with Git repositories?

- a) HTML Publisher Plugin
 - b) Git Plugin
 - c) Extended Choice Parameter Plugin
 - d) Copy Artifact Plugin
- Answer:** b) Git Plugin

9. What is a cron expression used for in Jenkins?

- a) Defining a plugin update schedule
 - b) Specifying build frequency
 - c) Triggering webhooks
 - d) Creating backup jobs
- Answer:** b) Specifying build frequency

10. In Jenkins, what does the 'Build Now' button do?

- a) Configures the job
 - b) Schedules a build
 - c) Starts the job immediately
 - d) Restarts Jenkins
- Answer:** c) Starts the job immediately

11. Jenkins workspace is used for:

- a) Storing configuration files
 - b) Hosting web applications
 - c) Performing build operations
 - d) Running scheduled backups
- Answer:** c) Performing build operations

12. Which Jenkins build trigger listens for changes in a Git repository?

- a) Scheduled Trigger
 - b) GitHub hook trigger
 - c) Poll SCM
 - d) Manual Trigger
- Answer:** b) GitHub hook trigger

13. What command is used to install a plugin using Jenkins CLI?

- a) install-cli-plugin
 - b) install-plugin
 - c) add-plugin
 - d) jenkins-plugin-install
- Answer:** b) install-plugin

14. Which of the following is a disadvantage of Jenkins?

- a) Free to use
 - b) Maintenance overhead
 - c) Rich plugin ecosystem
 - d) Platform independence
- Answer:** b) Maintenance overhead

15. How can sensitive data be handled in Jenkins builds?

- a) Using secret text(s) or file(s)
 - b) Encrypting the Jenkins workspace
 - c) Restricting user roles
 - d) Using pipeline scripts
- Answer:** a) Using secret text(s) or file(s)

16. Which field in a cron expression represents months?

- a) 1st field
- b) 2nd field
- c) 4th field
- d) 5th field

Answer: c) 4th field

17. What is Jenkins' default port?

- a) 80
- b) 443
- c) 8080
- d) 8888

Answer: c) 8080

18. Jenkins supports integration with which source code management system by default?

- a) Git
- b) SVN
- c) Mercurial
- d) All of the above

Answer: d) All of the above

19. Which option in Jenkins allows the execution of post-build actions?

- a) Source Code Management
- b) Build Environment
- c) Post-build Actions
- d) Build Steps

Answer: c) Post-build Actions

20. What does the 'Quiet Period' setting in Jenkins do?

- a) Delays build execution
- b) Reduces console output
- c) Suspends user logins
- d) Silences notifications

Answer: a) Delays build execution

21. Which plugin is used to publish HTML reports in Jenkins?

- a) HTML Publisher Plugin
- b) Git Plugin
- c) Parameter Plugin
- d) Extended Choice Parameter Plugin

Answer: a) HTML Publisher Plugin

22. What is the primary function of a Jenkins Slave?

- a) Managing plugins
- b) Scheduling jobs
- c) Executing builds
- d) Archiving artifacts

Answer: c) Executing builds

23. The process of checking a repository for changes at regular intervals in Jenkins is called:

- a) Poll SCM
- b) Git push
- c) Repository polling
- d) Webhook polling

Answer: a) Poll SCM

24. Which field in the Jenkins job configuration allows you to define dependencies on other jobs?

- a) Source Code Management
- b) Build Triggers
- c) Build Steps
- d) Post-build Actions

Answer: b) Build Triggers

25. How can Jenkins administrators restrict where a project can run?

- a) Using Master-only mode
- b) Restrict where this project can be run
- c) Setting up firewall rules
- d) Disabling certain jobs

Answer: b) Restrict where this project can be run

26. Jenkins is widely used because it:

- a) Reduces manual testing
- b) Supports only Java applications
- c) Requires no plugins
- d) Runs exclusively on Linux

Answer: a) Reduces manual testing

27. How can you specify credentials for a private Git repository in Jenkins?

- a) In Source Code Management settings
- b) In the Jenkins workspace
- c) Using an API key
- d) Adding a webhook

Answer: a) In Source Code Management settings

28. Which plugin allows Jenkins to deploy applications to Amazon EC2?

- a) Git Plugin
- b) EC2 Plugin
- c) HTML Publisher Plugin
- d) AWS Tools Plugin

Answer: b) EC2 Plugin

29. What type of job is used for complex build configurations with multiple environments?

- a) Pipeline
- b) Multi-configuration project
- c) Freestyle project
- d) Maven project

Answer: b) Multi-configuration project

30. Which feature of Jenkins allows scheduling a build to run at a specific time?

- a) GitHub hook trigger
- b) Poll SCM
- c) Build periodically
- d) Parameterized builds

Answer: c) Build periodically

- Here are 30 multiple-choice questions (MCQs) based on **Unit 4 – Configuration Management Using Ansible** with answers provided:

- ---
- **1. What is Ansible primarily used for?**

- a) Web development
 - b) IT automation
 - c) Data analysis
 - d) Software testing
- Answer:** b) IT automation

- ---
- **2. What is the default communication protocol used by Ansible to connect to nodes?**

- a) FTP
- b) HTTP
- c) SSH
- d) TCP

Answer: c) SSH

- ---
- **3. Which file format does Ansible use for playbooks?**

- a) JSON
- b) XML
- c) YAML
- d) INI

Answer: c) YAML

- ---
- **4. What does YAML stand for?**

- a) Yet Another Markup Language
- b) YAML Ain't Markup Language
- c) Both a and b
- d) None of the above

Answer: c) Both a and b

- **5. Which of the following is a key characteristic of Ansible?**

- a) Agentless architecture
- b) Requires a dedicated database
- c) Uses JSON playbooks
- d) Only works on Linux

Answer: a) Agentless architecture

- **6. How does Ansible manage nodes?**

- a) By installing permanent agents on them
- b) By pushing small programs called modules to them
- c) By running SQL commands on them
- d) Through FTP communication

Answer: b) By pushing small programs called modules to them

- **7. What is the purpose of an inventory file in Ansible?**

- a) To store playbook logs
- b) To list managed nodes
- c) To track Ansible versions
- d) To define Ansible modules

Answer: b) To list managed nodes

- **8. Which of the following is not a common module in Ansible?**

- a) Command
- b) Copy
- c) Package
- d) Connect

Answer: d) Connect

- **9. What symbol is used for comments in YAML?**

- a) //
- b) #
- c) <!-- -->
- d) ;

Answer: b) #

- **10. In YAML, how do you define a list?**

- a) Using curly braces { }
- b) Using square brackets []
- c) Using dashes -
- d) Using colons :

Answer: c) Using dashes -

- **11. Which of these is a valid YAML key-value pair?**

- a) key:value
- b) key = value
- c) key -> value
- d) key::value

Answer: a) key:value

• **12. Which Ansible command is used to check connectivity to nodes?**

- a) ansible all -m ping
- b) ansible --check
- c) ansible all --connect
- d) ansible-playbook -check

Answer: a) ansible all -m ping

• **13. What is the file extension for YAML files?**

- a) .yaml
- b) .yml
- c) Both a and b
- d) .ansible

Answer: c) Both a and b

• **14. Which Ansible module is used to install a package?**

- a) Shell
- b) Service
- c) Package
- d) Copy

Answer: c) Package

• **15. What does `state=present` indicate in a playbook?**

- a) The module should be skipped
- b) The resource should be created or installed
- c) The resource should be removed
- d) The task is complete

Answer: b) The resource should be created or installed

• **16. How does Ansible handle multi-line values in YAML?**

- a) Using |
- b) Using >
- c) Using both a and b
- d) Using #

Answer: c) Using both a and b

• **17. Which component in Ansible defines the target hosts?**

- a) Variables
- b) Modules
- c) Inventory
- d) Handlers

Answer: c) Inventory

• **18. What is the command to execute an Ansible playbook?**

- a) `ansible --playbook`
 - b) `ansible-playbook`
 - c) `run-playbook`
 - d) `execute-ansible`
- Answer:** b) `ansible-playbook`

• **19. In Ansible, what are roles primarily used for?**

- a) Debugging playbooks
 - b) Organizing and reusing tasks
 - c) Connecting to hosts
 - d) Storing logs
- Answer:** b) Organizing and reusing tasks

• **20. Where does Ansible look for the default inventory file?**

- a) `/etc/ansible/hosts`
 - b) `/usr/ansible/hosts`
 - c) `/var/ansible/inventory`
 - d) `/home/ansible/hosts`
- Answer:** a) `/etc/ansible/hosts`

• **21. Which YAML data type is supported?**

- a) Strings
 - b) Numbers
 - c) Booleans
 - d) All of the above
- Answer:** d) All of the above

• **22. What is the primary advantage of YAML in Ansible?**

- a) Complex syntax
 - b) Machine-readable only
 - c) Human-readable and simple
 - d) Requires strict indentation rules
- Answer:** c) Human-readable and simple

• **23. What does the `gather_facts` option in a playbook do?**

- a) Runs all tasks
 - b) Collects information about remote hosts
 - c) Installs Ansible on remote hosts
 - d) Deletes temporary modules
- Answer:** b) Collects information about remote hosts

• **24. Which option is used to specify a module in an ad-hoc Ansible command?**

- a) `-a`
 - b) `-m`
 - c) `-t`
 - d) `-c`
- Answer:** b) `-m`
-

- **25. What does the `ansible-galaxy` command manage?**

- a) Roles
- b) Playbooks
- c) Modules
- d) Inventory

Answer: a) Roles

- **26. What is the main feature of Ansible's agentless design?**

- a) Faster execution
- b) No dependency on agents installed on nodes
- c) Improved security
- d) Built-in databases

Answer: b) No dependency on agents installed on nodes

- **27. What is an Ansible module?**

- a) A type of inventory
- b) A reusable script for a specific task
- c) A playbook file
- d) A type of role

Answer: b) A reusable script for a specific task

- **28. Which directive is used in playbooks to execute tasks with elevated privileges?**

- a) `elevate: yes`
- b) `privilege: true`
- c) `become: yes`
- d) `sudo: enable`

Answer: c) `become: yes`

- **29. What is the key advantage of Ansible roles?**

- a) High performance
- b) Simplified task organization and reuse
- c) Automatic error resolution
- d) Agent-based architecture

Answer: b) Simplified task organization and reuse

- **30. What is the significance of `vars` in a playbook?**

- a) Defines inventory files
- b) Stores reusable values for tasks
- c) Connects to remote hosts
- d) Specifies playbook execution order

Answer: b) Stores reusable values for tasks

1. What is Docker?

- A) A virtual machine
- B) A cloud storage service
- C) An open-source containerization platform

- D) A programming language
- Answer:** C) An open-source containerization platform
-

2. What is a key benefit of Docker containers?

- A) They are heavyweight like virtual machines
 - B) They depend on specific OS versions
 - C) They provide application portability across environments
 - D) They do not support scalability
- Answer:** C) They provide application portability across environments
-

3. What does the Docker daemon (`dockerd`) do?

- A) Acts as the Docker CLI
 - B) Manages containers and images in the background
 - C) Hosts the Docker registry
 - D) Builds applications from scratch
- Answer:** B) Manages containers and images in the background
-

4. What is the purpose of a Dockerfile?

- A) To configure Docker networks
 - B) To manage Docker images
 - C) To define instructions for building a Docker image
 - D) To monitor container performance
- Answer:** C) To define instructions for building a Docker image
-

5. What is Docker Hub?

- A) A command-line tool for managing containers
 - B) A cloud-based registry for Docker images
 - C) A component of the Docker daemon
 - D) A tool for creating Dockerfiles
- Answer:** B) A cloud-based registry for Docker images
-

6. Which Docker network driver is the default?

- A) Host
- B) Bridge

- C) Overlay
 - D) Macvlan
- Answer:** B) Bridge
-

7. Which command lists all Docker networks?

- A) `docker network create`
 - B) `docker network inspect`
 - C) `docker network ls`
 - D) `docker network rm`
- Answer:** C) `docker network ls`
-

8. What is a Docker image?

- A) A running instance of a container
 - B) A read-only template for creating containers
 - C) A network configuration file
 - D) A persistent storage unit
- Answer:** B) A read-only template for creating containers
-

9. What does the `docker-compose.yml` file do?

- A) Provides persistent storage for containers
 - B) Defines multi-container applications
 - C) Manages Docker registries
 - D) Lists available networks
- Answer:** B) Defines multi-container applications
-

10. What is the main feature of the Docker Host network driver?

- A) Low latency by sharing the host's network stack
 - B) Complete isolation from external systems
 - C) Compatibility with multiple hosts
 - D) Provides persistent storage
- Answer:** A) Low latency by sharing the host's network stack
-

11. Which command builds a Docker image?

- A) `docker pull`

- B) `docker push`
 - C) `docker build`
 - D) `docker run`
- Answer:** C) `docker build`
-

12. What is the command to push a Docker image to Docker Hub?

- A) `docker pull`
 - B) `docker push`
 - C) `docker build`
 - D) `docker login`
- Answer:** B) `docker push`
-

13. Which component stores Docker images?

- A) Docker CLI
 - B) Docker Daemon
 - C) Docker Registry
 - D) Docker Volume
- Answer:** C) Docker Registry
-

14. Which is NOT a type of Docker network driver?

- A) Host
 - B) Overlay
 - C) Standalone
 - D) None
- Answer:** C) Standalone
-

15. Which Docker command stops a running container?

- A) `docker stop`
 - B) `docker rm`
 - C) `docker exec`
 - D) `docker pause`
- Answer:** A) `docker stop`
-

16. What is the use of Docker Volumes?

- A) To manage container memory
 - B) To provide persistent storage for containers
 - C) To scale container instances
 - D) To bridge network connections
- Answer:** B) To provide persistent storage for containers
-

17. What is a Docker container?

- A) A Docker image template
 - B) A running instance of a Docker image
 - C) A storage unit for Docker images
 - D) A networking driver
- Answer:** B) A running instance of a Docker image
-

18. Which command is used to inspect a Docker network?

- A) `docker network create`
 - B) `docker network ls`
 - C) `docker network inspect`
 - D) `docker network disconnect`
- Answer:** C) `docker network inspect`
-

19. What is a key feature of the Macvlan network driver?

- A) Isolates containers from external systems
 - B) Allows containers to appear as physical devices
 - C) Provides persistent storage
 - D) Enables communication across multiple hosts
- Answer:** B) Allows containers to appear as physical devices
-

20. How do you log in to Docker Hub using the CLI?

- A) `docker login <username>`
 - B) `docker login`
 - C) `docker connect`
 - D) `docker init`
- Answer:** B) `docker login`
-

21. What does `docker run` do?

- A) Builds a Docker image
 - B) Starts a new container from an image
 - C) Pushes an image to Docker Hub
 - D) Removes a Docker container
- Answer:** B) Starts a new container from an image
-

22. What does the `overlay` network driver enable?

- A) Low-latency communication
 - B) Multi-host networking
 - C) Disabling all container networking
 - D) Sharing the host's IP
- Answer:** B) Multi-host networking
-

23. How do you delete a Docker network?

- A) `docker network ls`
 - B) `docker network delete`
 - C) `docker network rm`
 - D) `docker network drop`
- Answer:** C) `docker network rm`
-

24. Which component is the CLI interface for Docker?

- A) Docker Client
 - B) Docker Registry
 - C) Docker Daemon
 - D) Docker Container
- Answer:** A) Docker Client
-

25. Which network type disables all container networking?

- A) None
 - B) Host
 - C) Bridge
 - D) Overlay
- Answer:** A) None
-

26. What does the `docker network connect` command do?

- A) Creates a new network
 - B) Removes a network
 - C) Connects a container to a network
 - D) Inspects a network
- Answer:** C) Connects a container to a network
-

27. What is required to sign up for AWS?

- A) A credit or debit card for billing verification
 - B) A registered GitHub account
 - C) A valid Docker ID
 - D) Administrator permissions
- Answer:** A) A credit or debit card for billing verification
-

28. What does the `docker-compose up --build` command do?

- A) Lists all networks
 - B) Runs and builds services in the Docker Compose file
 - C) Stops a running container
 - D) Pulls an image from Docker Hub
- Answer:** B) Runs and builds services in the Docker Compose file
-

29. What is the primary purpose of Docker Hub's webhooks?

- A) To manage containers
 - B) To trigger actions after an image push
 - C) To build images from Dockerfiles
 - D) To store Docker volumes
- Answer:** B) To trigger actions after an image push
-

30. Which command creates a new Docker network?

- A) `docker network init`
 - B) `docker network create`
 - C) `docker network config`
 - D) `docker network add`
- Answer:** B) `docker network create`