7 Days DevOps Deloitte Day 1 Test 1

Date 02-01-2025

1. What is the primary requirement to run an application or program?

a) Database

b) Container

c) Virtual Machine

d) Operating System

Answer: d) Operating System

Explanation: An operating system provides the necessary environment for running applications.

2. What does 'deploying an app' mean?

a) Writing code for the app

b) Installing a database

c) Testing the app

d) Hosting the app on an operating system

Answer: d) Hosting the app on an operating system

Explanation: Deploying means making the app available on a platform for users.

3. What is referred to as 'concurrent users'?

a) Users who share the same internet connection

b) Users who perform transactions together

c) Users accessing an app simultaneously

d) Users who log in with different accounts

Answer: c) Users accessing an app simultaneously

Explanation: Concurrent users are multiple users using the app at the same time.

4. What is the 'tsunami effect' in the context of server traffic?

a) Sudden surges and drops in user traffic

b) A steady increase in traffic

c) Server crashes due to lack of resources

d) Slow server response time

r: a) Sudden surges and drops in user traffic

Explanation: The tsunami effect refers to unpredictable spikes in user traffic.

5. Which deployment method provides the highest performance?

a) Cloud

b) Containerization

c) Bare Metal

d) Virtualization

Answer: c) Bare Metal

Explanation: Bare metal deployment maximizes performance by avoiding virtualization overhead.

6. What is a key advantage of cloud computing?

a) Fixed hardware cost

b) Scalability and pay-as-you-go pricing

c) No hardware dependencies

d) Offline availability

Answer: b) Scalability and pay-as-you-go pricing

Explanation: Cloud computing allows flexibility with scalable resources and cost efficiency.

7. What does AWS refer to its operating systems as?

a) Nodes

b) Pods

c) Instances

d) Virtual Machines

Answer: c) Instances

Explanation: AWS instances are virtual servers running on their cloud platform.

8. Which city in India has AWS Availability Zones?

a) Chennai and Jaipur

b) Delhi and Bangalore

c) Pune and Kolkata

d) Mumbai and Hyderabad

Answer: d) Mumbai and Hyderabad

Explanation: AWS has established availability zones in Mumbai and Hyderabad.

t tool is used to automate cloud management?

a) Kubernetes

b) Jenkins

c) Terraform

d) Docker

Answer: c) Terraform

Explanation: Terraform automates cloud infrastructure provisioning and management.

10. Which AWS service is used to launch virtual servers?

a) Lambda

b) EC2

c) RDS

d) S3

Answer: b) EC2

Explanation: EC2 is AWS's service for launching and managing virtual servers.

11. What is an AMI in AWS?

a) Automated Machine Interface

b) Advanced Memory Integration

c) Active Machine Instance

d) Amazon Machine Image

Answer: d) Amazon Machine Image

Explanation: AMI is a pre-configured image used to create virtual servers in AWS.

12. What does t2.micro represent in AWS?

a) An AZ identifier

b) A specific storage configuration

c) A type of instance

d) A network ID

Answer: c) A type of instance

Explanation: t2.micro is a small instance type provided by AWS for lightweight tasks.

13. What is the term for increasing the number of servers to handle more traffic?

ng in
b) Scaling out
c) Scaling up
d) Scaling down

Answer: b) Scaling out
Explanation: Scaling out adds more servers horizontally to manage increased traffic.

14. What is the significance of storing sensitive data in a private cloud?
a) Compliance with security regulations
b) Performance optimization
c) Disaster recovery
d) Cost efficiency
Answer: a) Compliance with security regulations
Explanation: Private clouds ensure sensitive data is stored securely and meets regulatory standards.

15. What is horizontal scaling?
a) Adding more servers to handle traffic
b) Switching to a higher-performance server type
c) Decreasing the number of servers
d) Adding more RAM to existing servers
Answer: a) Adding more servers to handle traffic
Explanation: Horizontal scaling involves adding servers to spread the traffic load.

16. What is 'time to market' in DevOps?
a) Time taken to deploy an application
b) Time taken to scale infrastructure
c) Time taken to launch an idea in the market
d) Time taken to develop an idea
Answer: c) Time taken to launch an idea in the market
Explanation: Time to market measures how quickly an idea can be turned into a deliverable product.

17. Which command is used to install the boto3 library?
a) pip install boto3

install boto3
c) boto3 install
d) python install boto3
Answer: a) pip install boto3

Explanation: The `pip install boto3` command installs the Python library for AWS services.

18. How can you retrieve the ID of a newly created instance in Python?
a) Accessing the return value of the function
b) Using the print function
c) Using the ID attribute directly
d) Calling an API endpoint
Answer: a) Accessing the return value of the function
Explanation: The function's return value typically contains the ID of the newly created instance.

19. What does EC2 stand for?
a) Enhanced Computing Capability
b) Elastic Cloud Compute
c) Elastic Code Cluster
d) Enterprise Cloud Core
Answer: b) Elastic Cloud Compute
Explanation: EC2 stands for Elastic Cloud Compute, providing scalable virtual servers.

20. What type of programming is described as specifying 'what to do' rather than 'how to do it'?
a) Imperative
b) Object-oriented
c) Declarative
d) Functional
Answer: c) Declarative
Explanation: Declarative programming focuses on specifying the desired outcome, not the implementation.