Cloud Computing  
Weekly Test 4

Time:

22:48

Points:

14/30

1.Write your Name.



2.Choose your location:

A. NSTI Calicut

B. NSTI Howrah

C. NSTI Kolkata

D. NSTI Vidyanagar

**Incorrect**

0/1 Points

3.Fill in the blank. When developers use APIs, they can benefit from \_\_\_\_\_\_\_\_\_\_\_, meaning each microservice can handle errors and failures gracefully, without causing the whole system to crash.

scalability

availability

reusability

reliability

**Correct**

1/1 Points

4.Nimisha wants to improve the performance and availability of her company’s network services. She decides to distribute the workload across multiple servers. What technology can she use to do this?

Containers

Virtual machines

Virtual storage

Virtual networks

**Incorrect**

0/1 Points

5.Huan is on an IT team that monitors his company’s private cloud performance. He pulled a report from the monitoring tool and determined there’s a bottleneck in the cloud performance. What’s the best next step for Huan to perform to optimize the cloud performance?

Change the business requirements and performance metrics the IT team monitors to optimize performance.

Re-deploy the cloud on premises.

Adjust the cloud infrastructure based on the report and implement performance optimizations.

Set performance goals to adjust the response time, throughput, and availability.

**Correct**

1/1 Points

6.A large hospital is considering migrating their infrastructure to a cloud provider. Healthcare workers and patients must be able to always access the hospital’s applications and data. Which of the following factors should the hospital consider first when choosing a cloud provider?

Size of the cloud provider

Cost of their cloud solutions

Culture and values of the cloud provider

High availability of services

**Incorrect**

0/1 Points

7.A new financial services company is choosing a cloud deployment model to implement. They have strict compliance guidelines they must follow for their customer data. They would like the ability to scale up and down based on customer demand during the financial year and are considering implementing AI systems for their data analysis. What cloud deployment model best suits this scenario?

On premises

Hybrid cloud

Public cloud

Private cloud

**Incorrect**

0/1 Points

8.You are part of an IT team tasked with using a container to create and deploy your company’s new microservice. What is the correct order of steps you should take to complete the deployment?

Write the code, create the container, publish the container, deploy the container, test the image

Write the code, test the image, create the container, publish the container, deploy the container

Write the code, create the container image, test the container image, publish the container, deploy the container

Write the code, create the container, test the image, deploy the container, publish the container

**Incorrect**

0/1 Points

9.Which of the following is a benefit of microservices? Select all that apply.

They include an operating system alongside the code that the service provides.

Developers can group microservices in clusters to work together to provide the service or function.

Each microservice can handle errors and failures gracefully, without causing the whole system to crash.

Developers can scale each microservice up or down according to the demand and load, without impacting other microservices.

**Correct**

1/1 Points

10.Which task in a cloud migration plan involves deciding timelines, resources, and potentials risks?

Develop a migration strategy

Choose the right cloud services

Plan for budget

Assess current infrastructure

**Correct**

1/1 Points

11.When a business deploys to the cloud, the first step in the process is to design the architecture. What does this involve?

Designing the infrastructure and applications to ensure it is optimized for performance, cost, and scalability.

Configuring security for the cloud architecture, including the firewall, to ensure the infrastructure is secure and protected.

Creating a virtualized environment of VMs and containers to host applications, services, and databases in the cloud architecture.

Designing the cloud infrastructure based on business requirements, such as its size and configuration, including the virtual network, security groups, and storage accounts.

**Incorrect**

0/1 Points

12.What feature of containers makes them more lightweight than virtual machines?

They do not need an operating system.

They use a sandboxed operating system.

All containers running on the same physical computer share the same app resources.

They share the host computer’s operating system.

**Correct**

1/1 Points

13.Fill in the blank. \_\_\_\_\_\_\_\_\_\_ is a tool for orchestrating multiple containers across different machines or clouds.

Podman

Virtual machine

Docker

Kubernetes

**Incorrect**

0/1 Points

14.Vaishali is migrating a legacy application to the cloud using containers and microservices. She is currently moving each container image to a cloud platform that has all the scaling, networking, security, and monitoring capabilities her team needs. What migration step is she performing?

Step 4: Deploy

Step 3: Package

Step 5: Test

Step 6: Monitor

**Correct**

1/1 Points

15.Why are containers fast to deploy and easy to update?

They run on any cloud platform that supports them.

They use the operating system of the host computer so they don’t need to start an independent operating system.

They use daemons.

There are tools available to orchestrate them.

**Incorrect**

0/1 Points

16.Your small business is growing rapidly so you need to scale your infrastructure quickly to meet the demands of your growing customer base. You don’t have the finances to upgrade your infrastructure. And you don’t have the IT knowledge or time to maintain a bigger IT system. Which cloud model would be the best option for you?

Public cloud

Community cloud

Hybrid cloud

Private cloud

**Incorrect**

0/1 Points

17.Which cloud deployment model offers businesses the advantages of more control over their data and applications as well as access to a wide range of features from different cloud providers?

Hybrid cloud

Public cloud

Private cloud

Community cloud

**Incorrect**

0/1 Points

18.An online graphic design site allows users to create designs online that they can download and share. They need to deploy a cloud model to create and host their content. They want to deliver the content consistently and scale up during peak demand, but they don’t have the resources to set up their own infrastructure. What cloud deployment model best suits this scenario?

Public cloud

Hybrid cloud

Community cloud

Private cloud

**Correct**

1/1 Points

19.Which of the following is a correct description of the functionality that an API provides?

A collection of algorithms and mathematical formulas that developers can use to solve complex computational problems in software applications.

A set of rules and instructions that allow different software applications to communicate and exchange data with each other.

A set of guidelines and best practices for designing visually appealing and user-friendly software applications.

A framework for managing and organizing the development process of software applications to ensure timely delivery and high-quality results.

**Incorrect**

0/1 Points

20.A large organization in the government sector has a lot of sensitive data with strict security and privacy requirements. It also must maintain control over the performance and availability of its systems to meet its customer’s requirements. Which cloud model should the company choose?

Public cloud

Community cloud

Hybrid cloud

Private cloud

**Correct**

1/1 Points

21.Dara is considering a career as a cloud engineer and decides to learn a containerization service. Which of the following is a common containerization service she could learn?

Python

JavaScript

Docker

Google Cloud Platform

**Correct**

1/1 Points

22.You are the IT security manager of a large government department. You want to ensure that only authorized officials can physically access the computers hosting your data. What type of data centre should you use?

Off-shore data centre

Cloud provider data centre

On-premises data centre

Community cloud

**Incorrect**

0/1 Points

23.Which of the following statements about virtual machines (VMs) is correct?

Only one VM per physical computer can run at a time.

VMs are software-based emulations of a physical computer.

A VM uses the physical computer’s virtual hardware.

VMs must use the same operating system as the host computer.

**Incorrect**

0/1 Points

24.Ding works for a small retailer who use three different cloud providers for storing its online catalog data, hosting its online catalog, and storing its customer data. What technology can Ding use to integrate the three services together and to automatically place orders with their shipping partner when a customer places an order?

Microservices

Containers

APIs

Virtual networks

**Correct**

1/1 Points

25.Why is it a best practice for cloud engineers to design microservices to be loosely coupled and highly cohesive?

To develop, test, deploy, and update each microservice independently, without affecting the rest of the system.

To ensure interoperability, reliability, and security of the system.

To gain useful insights into the behavior of the system.

To simplify the complexity of managing many containers across different environments.

**Incorrect**

0/1 Points

26.Deepak works closely with the development team at a social media company. He’s responsible for ensuring a smooth and continuous delivery of their cloud-based apps. He manages the cloud infrastructure using configuration management tools and containerization tools like Kubernetes. What is Deepak’s role on the team?

Cloud architect

DevOps engineer

Cloud support engineer

Security engineer

**Correct**

1/1 Points

27.Sonia is working on a cloud computing team for a software development company. She’s responsible for designing, implementing, and maintaining the company’s cloud infrastructure and cloud-based applications. She writes code to automate their cloud infrastructure deployments. What is Sonia’s role on the team?

Cloud support engineer

Cloud engineer

Security engineer

Cloud architect

**Correct**

1/1 Points

28.A long-standing construction company has systems and processes that they’ve used for a long time without updating to modern technology. They need to continue using some of their legacy software and hardware, but would like to start migrating some of their applications to the cloud. What cloud deployment model best suits this scenario?

Private cloud

Public cloud

Hybrid cloud

Community cloud

**Incorrect**

0/1 Points

29.Which of the following are key factors a business must consider when deciding to move to cloud services? Select all that apply.

The size and reputation of the cloud provider

The security of the cloud services

The speed of the on-premises infrastructure

The scalability of the cloud services

**Incorrect**

0/1 Points

30.Which cloud deployment model offers businesses the advantages of scalability, flexibility, cost-efficiency, and reliability of the cloud without having to invest in or manage their own infrastructure?

Community cloud

Hybrid cloud

Public cloud

Private cloud

**Correct**

1/1 Points

31.A small business owner wants to install a new software application that will help them manage their finances. They decide to host the application on premises using their own servers. Which of the following is the most likely reason for this decision?

The business owner wants to have complete control over the application and its data.

The business owner does not have an internet connection that is fast enough to support a cloud-based application.

The business owner does not have the technical expertise to manage a cloud-based application.

The business owner wants to avoid paying monthly fees for a cloud-based application.

**Correct**

1/1 Points

32.You are part of an IT team tasked with migrating your company’s on- premises data centre to the cloud. What is the correct order of steps you should take to complete the migration?

Assess the current infrastructure, choose a cloud provider, plan the migration, migrate the data, configure cloud services, and test and validate the cloud environment

Assess the current infrastructure, configure cloud services, migrate the data, choose a cloud provider, plan the migration, and test and validate the cloud environment

Plan the migration, assess the current infrastructure, choose a cloud provider, migrate the data, configure cloud services, and test and validate the cloud environment

Test and validate the cloud environment, assess the current infrastructure, configure cloud services, choose a cloud provider, plan the migration, and migrate the data

Keep the information with you by saving your response.