

Your grade: 100%

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Next item →

1. What are the four main factors that a solutions architect should consider when they must choose a Region?

1 / 1 point

- ☒ Latency, price, service availability, and compliance
- ☐ Latency, high availability, taxes, and compliance.
- ☐ Latency, taxes, speed, and compliance
- ☐ Latency, security, high availability, and resiliency

✓ **Correct**

A solutions architect should consider the following four aspects when deciding which AWS Region to use for hosting applications and workloads: latency, price, service availability, and compliance. For more information, see the AWS Global Infrastructure video in week 1.

2. Which statement BEST describes the relationship between Regions, Availability Zones and data centers?

1 / 1 point

- ☐ Availability Zones are clusters of Regions. Regions are clusters of data centers.
- ☐ Data centers are cluster of Availability Zones. Regions are clusters of Availability Zones.
- ☒ Regions are clusters of Availability Zones. Availability Zones are clusters of data centers.
- ☐ Data centers are clusters of Regions. Regions are clusters of Availability Zones.

✓ **Correct**

The AWS Cloud infrastructure is built around AWS Regions and Availability Zones. An AWS Region is a physical location in the world that has multiple Availability Zones. Availability Zones consist of one or more discrete data centers, each with redundant power, networking, and connectivity, housed in separate facilities. For more information, see the AWS Global Infrastructure video in week 1.

3. Which of the following can be found in an AWS Identity and Access Management (IAM) policy?

1 / 1 point

- ☐ Effect
- ☐ Action
- ☐ Object
- ☒ A and B
- ☐ B and C

✓ **Correct**

An IAM policy contains a series of elements, including a Version, Statement, Sid, Effect, Principal, Action, Resource, and Condition. For more information, see Introduction to Amazon Identity and Access Management.

4. A solutions architect is consulting for a company. When users in the company authenticate to a corporate network, they want to be able to use AWS without needing to sign in again. Which AWS identity should the solutions architect recommend for this use case?

1 / 1 point

- ☐ AWS account root user
- ☐ AWS Identity and Access Management (IAM) user
- ☒ IAM Role
- ☐ IAM Group

✓ **Correct**

An IAM role does not have any credentials (password or access keys) that are associated with it. Instead of being uniquely associated with one person, a role can be assumed by anyone who needs it. An IAM user can assume a role to temporarily take on different permissions for a specific task. A role can be also assigned to a federated user who signs in by using an external identity provider (IdP) instead of IAM. For more information, see the Role Based Access in AWS video.

5. A company wants to allow resources in a public subnet to communicate with the internet. Which of the following must the company do to meet this requirement?

1 / 1 point

- ☐ Create a route to a private subnet

- ☐ Attach an internet gateway to their VPC
- ☐ Create a route in a route table to the internet gateway
- ☐ A and B
- ☒ B and C

✓ **Correct**

Unlike a modem at home, which can go down or go offline, an internet gateway is highly available and scalable. After the company creates an internet gateway, they then need to attach it to a virtual private cloud (VPC) and create a route table to route network traffic through the internet gateway. For more information, see the Introduction to Amazon VPC reading.

6. What does an Amazon Elastic Compute Cloud (Amazon EC2) instance type indicate?

1 / 1 point

- ☒ Instance family and instance size
- ☐ Instance placement and instance size
- ☐ Instance tenancy and instance billing
- ☐ Instance Amazon Machine Image (AMI) and networking speed

✓ **Correct**

Instance types are named based on instance generation, family, additional capabilities, and size. For more information, see the Introduction to Amazon EC2 video.

7. What is a typical use case for Amazon Simple Storage Service (Amazon S3)?

1 / 1 point

- ☒ Object storage for media hosting
- ☐ Object storage for a boot drive
- ☐ Block storage for an EC2 instance
- ☐ File storage for multiple EC2 instances

✓ **Correct**

Amazon S3 is an object storage service that is designed for large objects, such as media files. Because users can store unlimited objects, and the size of each individual object can be up to 5 TB, Amazon S3 is a good location to host video, photo, or music uploads. For more information, see the Object Storage with Amazon S3 video.

8. A solutions architect is working for a healthcare facility, and they are tasked with storing 7 years of patient information that is rarely accessed. The facility's IT manager asks the solutions architect to consider one of the Amazon Simple Storage Service (Amazon S3) storage tiers to store the patient information. Which storage tier should the solutions architect suggest?

1 / 1 point

- ☐ Amazon S3 Standard
- ☒ Amazon S3 Glacier Deep Archive
- ☐ Amazon S3 Standard-Infrequent Access
- ☐ Amazon S3 Intelligent-Tiering

✓ **Correct**

Amazon S3 Glacier Deep Archive is the lowest-cost storage class in Amazon S3. This storage class supports long-term retention and digital preservation for data that might be accessed once or twice in a year. It is designed for customers—particularly those in highly regulated industries, such as financial services, healthcare, and the public sector—that retain data sets for 7 to 10 years (or longer) to meet regulatory compliance requirements. For more information, see the Object storage with Amazon S3 reading.

9. Which task of running and operating the database are users responsible for when they use Amazon Relational Database Service (Amazon RDS)?

1 / 1 point

- ☒ Optimizing the database
- ☐ Provisioning and managing the underlying infrastructure
- ☐ Installing the relational database management system on the database instance
- ☐ Installing patches to the operating system for the database instance

✓ **Correct**

With Amazon RDS, users are no longer responsible for the underlying environment that the database runs on. Instead, users can focus on optimizing the database because Amazon RDS has components that AWS manages. For more information, see Explore Databases on AWS.

10. True or false: A Multi-AZ deployment is beneficial when users want to increase the availability of their database.

1 / 1 point

- ☒ True
- ☐ False

✔ **Correct**

Placing a workload across multiple Availability Zones increases the availability of resources. For example, say that an environmental hazard in an Availability Zone causes an Amazon Aurora database to stop working. In this case, a read-replica of the Aurora database instance that is in an unaffected Availability Zone will automatically be promoted to a primary database instance. For more information, see Amazon Relational Database Service.

11. What are the three components of Amazon EC2 Auto Scaling?

1 / 1 point

- ☐ Scaling policies, security group, EC2 Auto Scaling group
- ☒ Launch template, scaling policies, EC2 Auto Scaling group
- ☐ Security group, instance type, key pair
- ☐ Amazon Machine Image (AMI) ID, instance type, storage

✔ **Correct**

Amazon EC2 Auto Scaling requires users to specify three main components: a configuration template for the Amazon Elastic Compute Cloud (Amazon EC2) instances (either a launch template or a launch configuration); an EC2 Auto Scaling group to list minimum, maximum, and desired capacity of instances; and scaling policies that scale an instance based on the occurrence of specified conditions or on a schedule. For more information, see Amazon EC2 Auto Scaling.

12. An application must choose target groups by using a rule that is based on the path of a URL. Which Elastic Load Balancing (ELB) type should be used for this use case?

1 / 1 point

- ☐ Classic Load Balancer
- ☒ Application Load Balancer
- ☐ Network Load Balancer
- ☐ Gateway Load Balancer

✔ **Correct**

Application Load Balancer is a layer 7 load balancer that routes HTTP and HTTPS traffic, with support for rules. For more information, see Route Traffic with Amazon Elastic Load Balancing.