

**Quiz 1****Your score: 75% 35.4 / 47**

Duration: 0:30:16

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1. A company plans to use an Amazon Snowball Edge device to transfer files to the AWS Cloud. 1 / 1 point

Which activities related to a Snowball Edge device are available to the company at no cost?

**Your Answer:** ✓ Correct

- Use of the Snowball Edge appliance for a 10-day period
- The transfer of data out of Amazon S3 and to the Snowball Edge appliance
- The transfer of data from the Snowball Edge appliance into Amazon S3
- Daily use of the Snowball Edge appliance after 10 days

**Explanation:**

When using an Amazon Snowball Edge device to transfer files to the AWS Cloud, there are several activities that are available to the company at no additional cost.

These include:

1. Data Transfer into Amazon S3: Transferring data from the Snowball Edge device into Amazon S3 does not incur any charges. AWS does not charge for data ingestion into S3.
2. Device Shipping (Standard Shipping): The cost of standard shipping to and from AWS is included in the service cost. This means that AWS covers the shipping charges for delivering the Snowball Edge device to your location and returning it to AWS, provided you use the standard shipping option.
3. Data Transfer within Snowball Edge Device: Moving data within the Snowball Edge device, such as transferring data to the device's local storage, is free of charge.

2. A company has deployed applications on Amazon EC2 instances. The company needs to assess application vulnerabilities and must identify infrastructure deployments that do not meet best practices. 0 / 1 point

Which AWS service can the company use to meet these requirements?

**Your Answer:** ✗ Incorrect

- AWS Trusted Advisor

- Amazon Inspector
- AWS Config
- Amazon GuardDuty

**Explanation:**

Amazon Inspector is specifically designed to assess the security of applications deployed on Amazon EC2 instances. It identifies vulnerabilities and deviations from best practices, providing detailed findings that help improve the security posture of your applications. This makes it the most suitable service for the company's need to assess application vulnerabilities and identify infrastructure deployments that do not meet best practices.

3. A company has a centralized group of users with large file storage requirements that have exceeded the space available on premises. The company wants to extend its file storage capabilities for this group while retaining the performance benefit of sharing content locally. 0 / 1 point

What is the MOST operationally efficient AWS solution for this scenario?

Your Answer: **✗ Incorrect**

- Create an Amazon S3 bucket for each user. Mount each bucket by using an S3 file system mounting utility.
- Configure and deploy an AWS Storage Gateway file gateway. Connect each user's workstation to the file gateway.
- Move each user's working environment to Amazon WorkSpaces. Set up an Amazon WorkDocs account for each user.
- Deploy an Amazon EC2 instance and attach an Amazon Elastic Block Store (Amazon EBS) Provisioned IOPS volume. Share the EBS volume directly with the users.

**Explanation:**

Using an AWS Storage Gateway file gateway allows you to extend your on-premises file storage into the AWS Cloud seamlessly. It provides low-latency access to your data stored in Amazon S3 while maintaining the performance benefits of local access. This solution enables centralized management of storage while still allowing users to access files as if they were stored locally. Additionally, it eliminates the need for managing individual S3 buckets for each user, simplifying administration and scalability.

4. According to security best practices, how should an Amazon EC2 instance be given access to an Amazon S3 bucket? 1 / 1 point

Your Answer: ✓ Correct

- Hard code an IAM user's secret key and access key directly in the application, and upload the file.
- Store the IAM user's secret key and access key in a text file on the EC2 instance, read the keys, then upload the file.
- Have the EC2 instance assume a role to obtain the privileges to upload the file.
- Modify the S3 bucket policy so that any service can upload to it at any time.

Explanation:

The recommended security best practice for giving an Amazon EC2 instance access to an Amazon S3 bucket is option C: Have the EC2 instance assume a role to obtain the privileges to upload the file. This involves using AWS Identity and Access Management (IAM) roles to grant temporary permissions to the EC2 instance, rather than hard-coding or storing access keys directly in the application or on the instance.

This approach enhances security by minimizing the exposure of long-term credentials and following the principle of least privilege. The EC2 instance assumes a role with specific permissions to interact with the S3 bucket, and AWS automatically rotates temporary credentials for the instance.

Options A and B involve storing IAM user's secret keys on the EC2 instance, which is not recommended due to security risks. Option D, modifying the S3 bucket policy to allow any service to upload to it at any time, is also not recommended as it may lead to security vulnerabilities and compromises the principle of least privilege.

5. Which option is a customer responsibility when using Amazon DynamoDB under the AWS Shared Responsibility Model? 1 / 1 point

Your Answer: ✓ Correct

- Physical security of DynamoDB
- Patching of DynamoDB
- Access to DynamoDB tables
- Encryption of data at rest in DynamoDB

**Explanation:**

C. Access to DynamoDB tables The customer is responsible for managing and controlling access to their DynamoDB tables. This includes defining appropriate permissions, user access control, and authentication mechanisms to ensure that only authorized users or services can access the tables. The other options are not customer responsibilities:

D. Encryption of data at rest in DynamoDB: AWS provides encryption of data at rest as a built-in feature for DynamoDB. The customer can enable encryption for their tables, but AWS handles the actual implementation and management of the encryption process. Therefore, the correct customer responsibility is C. Access to DynamoDB tables.

- 6. Which option is a perspective that includes foundational capabilities of the AWS Cloud Adoption Framework (AWS CAF)?**

1 / 1 point

**Your Answer:**  **Correct**

- Sustainability
- Performance efficiency
-   Governance
- Reliability

**Explanation:**

AWS CAF perspectives and foundational capabilities

1.Business perspective helps ensure that your cloud investments accelerate your digital transformation ambitions and business outcomes. Common stakeholders include chief executive officer (CEO), chief financial officer (CFO), chief operations officer (COO), chief information officer (CIO), and chief technology officer (CTO).

2.People perspective serves as a bridge between technology and business, accelerating the cloud journey to help organizations more rapidly evolve to a culture of continuous growth, learning, and where change becomes business-as-normal, with focus on culture, organizational structure, leadership, and workforce. Common stakeholders include CIO, COO, CTO, cloud director, and cross-functional and enterprise-wide leaders.

3.Governance perspective helps you orchestrate your cloud initiatives while maximizing organizational benefits and minimizing transformation-related risks. Common stakeholders include chief transformation officer, CIO, CTO, CFO, chief data officer (CDO), and chief risk officer (CRO).

4. Platform perspective helps you build an enterprise-grade, scalable, hybrid cloud platform, modernize existing workloads, and implement new cloud-native solutions. Common stakeholders include CTO, technology leaders, architects, and engineers.

5. Security perspective helps you achieve the confidentiality, integrity, and availability of your data and cloud workloads. Common stakeholders include chief information security officer (CISO), chief compliance officer (CCO), internal audit leaders, and security architects and engineers.

6. Operations perspective helps ensure that your cloud services are delivered at a level that meets the needs of your business. Common stakeholders include infrastructure and operations leaders, site reliability engineers, and information technology service managers.

7. **A company is running and managing its own Docker environment on Amazon EC2 instances. The company wants an alternative to help manage cluster size, scheduling, and environment maintenance.** 1 / 1 point

**Which AWS service meets these requirements?**

**Your Answer:** ✓ Correct

- AWS Lambda
- Amazon RDS
- AWS Fargate
- Amazon Athena

**Explanation:**

AWS Fargate: A technology that you can use with Amazon ECS to run containers without having to manage servers or clusters of Amazon EC2 instances.

AWS Lambda: A serverless service to enable developers to run code without provisioning.

AWS RDS: Fully managed relational database service.

AWS Athena: An interactive query service that makes it simple to analyze data directly in Amazon S3 using standard SQL.

8. **A company wants to run a NoSQL database on Amazon EC2 instances.** 0 / 1 point

**Which task is the responsibility of AWS in this scenario?**

**Your Answer:** ✗ Incorrect

- Update the guest operating system of the EC2 instances.
- Maintain high availability at the database layer
- Patch the physical infrastructure that hosts the EC2 instances.
- Configure the security group firewall

**Explanation:**

A is incorrect because when we set up an instance of ec2 we choose the operating system.

B is incorrect because we are configuring and running the database on the ec2 instances so that would be our responsibility.

D is incorrect because the firewall rules are our job.

C is correct because the physical infrastructure where the ec2 instances run is amazon's responsibility

**9. Which AWS services or tools can identify rightsizing opportunities for Amazon EC2 instances? (Choose two.)**

1 / 1 point

Your Answer: ✓ Correct

- AWS Cost Explorer
- AWS Billing Conductor
- Amazon CodeGuru
- Amazon SageMaker
- AWS Compute Optimizer

**Explanation:**

A. AWS Cost Explorer provides cost and usage reports, allowing you to analyze your historical costs and usage patterns. While it doesn't directly identify rightsizing opportunities, it can help you understand your current spending and identify areas where rightsizing might be beneficial.

E. AWS Compute Optimizer is a service that recommends optimal AWS resources for your workloads. It analyzes the historical utilization of your Amazon EC2 instances and provides recommendations for rightsizing, which involves changing the instance type to a better fit based on the workload's requirements.

B. AWS Billing Conductor Simplify billing and reporting with customizable pricing and cost visibility

C. Amazon CodeGuru is a service for automated code reviews and application performance recommendations. It is not specifically designed for identifying rightsizing opportunities.

D. Amazon SageMaker is a service for building, training, and deploying machine learning models.

**10. Which of the following are benefits of using AWS Trusted Advisor? (Choose two.)** 0.6 / 1 point

**Your Answer:** ✅ Partially correct

- ✗  Providing high-performance container orchestration
- ✗  Creating and rotating encryption keys
- ✓  Detecting underutilized resources to save costs
- ✓  Improving security by proactively monitoring the AWS environment
- ✗  Implementing enforced tagging across AWS resources

**Explanation:**

Benefits of Trusted Advisor:

- Cost optimization - Trusted Advisor can help you save cost with actionable recommendations by analyzing usage, configuration and spend.
- Performance - Trusted Advisor can help improve the performance of your services with actionable recommendations by analyzing usage and configuration.
- Security - Trusted Advisor can help improve the security of your AWS environment by suggesting foundational security best practices curated by security experts.
- Fault tolerance - Trusted Advisor can help improve the reliability of your services.
- Service quotas - Service quotas are the maximum number of resources that you can create in an AWS account.

**11. Which of the following is an advantage that users experience when they move on-premises workloads to the AWS Cloud?**

1 / 1 point

**Your Answer: ✓ Correct**

- ✓  Elimination of expenses for running and maintaining data centers
- Price discounts that are identical to discounts from hardware providers
- Distribution of all operational controls to AWS
- Elimination of operational expenses

**12. A company wants to manage deployed IT services and govern its infrastructure as code (IaC) templates.**

0 / 1 point

**Which AWS service will meet this requirement**

**Your Answer: ✗ Incorrect**

- AWS Resource Explorer
- ✓  AWS Service Catalog
- AWS Organizations
- ✗  AWS Systems Manager

**Explanation:**

B. AWS Service Catalog enables organizations to create and manage catalogs of IT services that are approved for use on AWS. It allows you to centrally manage and govern the deployment of AWS resources, including IaC templates. With AWS Service Catalog, you can control access, ensure compliance, and manage the lifecycle of deployed services.

Options A, C, and D are not specifically designed for managing deployed IT services and governing infrastructure as code:

A. AWS Resource Explorer is a tool for exploring, understanding, and querying your AWS resources.

C. AWS Organizations helps you consolidate multiple AWS accounts into an organization.

D. AWS Systems Manager provides a suite of tools for managing AWS infrastructure at scale. While it is useful for managing operational tasks, it is not specifically designed for governing infrastructure as code or managing IT services.

13. Which AWS service or tool helps users visualize, understand, and manage spending and usage over time?

Your Answer: ✓ Correct

- AWS Organizations
- AWS Pricing Calculator
- AWS Cost Explorer
- AWS Service Catalog

**Explanation:**

- A. AWS Organizations: Manages multiple AWS accounts in an organization, aiding in billing and cost allocation. Not focused on detailed spending visualization.
- B. AWS Pricing Calculator: Estimates AWS service costs based on configurations. Lacks detailed historical spending and usage insights.
- C. AWS Cost Explorer: Visualizes, understands, and manages AWS spending and usage over time. Provides detailed insights, historical data, and forecasting.
- D. AWS Service Catalog: Manages approved IT service catalogs but doesn't focus on detailed cost visualization.

14. A company is using a central data platform to manage multiple types of data for its customers. The company wants to use AWS services to discover, transform, and visualize the data.

0.6 / 1 point

Which combination of AWS services should the company use to meet these requirements? (Choose two.)

Your Answer: ✓ Partially correct

- AWS Glue
- Amazon Elastic File System (Amazon EFS)
- Amazon Redshift
- Amazon QuickSight
- Amazon Quantum Ledger Database (Amazon QLDB)

**Explanation:**

- A. AWS Glue: AWS Glue is a fully managed extract, transform, and load (ETL) service that makes it easy to discover, prepare, and load data for analysis. It automates the time-consuming tasks of data discovery, transformation, and job scheduling, allowing users to focus on analyzing the data.
- B. Amazon Elastic File System (Amazon EFS): Fully managed file system for shared access to file-based data. Not primarily used for data discovery, transformation, or visualization.
- C. Amazon Redshift: Fully managed data warehouse service for running complex queries on large datasets. Not used for data discovery, transformation, or visualization.
- D. Amazon QuickSight: Amazon QuickSight is a fully managed business intelligence (BI) service that enables users to create and visualize interactive dashboards and reports. It connects to various data sources, making it suitable for visualizing data prepared by services like AWS Glue.
- E. Amazon Quantum Ledger Database (Amazon QLDB): Fully managed ledger database service for ensuring data integrity. Not designed for data discovery, transformation, or visualization.

- 15. A global company wants to migrate its third-party applications to the AWS Cloud. The company wants help from a global team of experts to complete the migration faster and more reliably in accordance with AWS internal best practices. Which AWS service or resource will meet these requirements?** 1 / 1 point

**Your Answer:** ✓ Correct

- AWS Support
- AWS Professional Services
- AWS Launch Wizard
- AWS Managed Services (AMS)

**Explanation:**

- A. AWS Support: Provides technical support plans, but not focused on hands-on migration assistance.
- B. AWS Professional Services: Global team of experts for hands-on assistance with planning, executing, and optimizing AWS migrations.

C. AWS Launch Wizard: Simplifies application deployment, but not specifically designed for third-party application migrations.

D. AWS Managed Services (AMS): Fully managed service for ongoing operational support, not designed for the initial migration phase.

**16. An e-learning platform needs to run an application for 2 months each year.** 0 / 1 point

**The application will be deployed on Amazon EC2 instances. Any application downtime during those 2 months must be avoided.**

**Which EC2 purchasing option will meet these requirements MOST cost-effectively?**

**Your Answer:** ✗ Incorrect

- Reserved Instances
- Dedicated Hosts
- ✗  Spot Instances
- ✓  On-Demand Instances

**Explanation:**

A. Reserved Instances (RIs): Reserved Instances provide capacity reservation for a specified term (usually one or three years), offering cost savings compared to On-Demand Instances. However, RIs may not be the most suitable for a short duration like 2 months, as they typically involve longer-term commitments.

B. Dedicated Hosts: Dedicated Hosts may not be cost-effective for short-term workloads and lack the flexibility needed.

C. Spot Instances: Spot Instances offer cost savings but can be terminated with short notice, potentially causing interruptions.

D. On-Demand Instances: On-Demand Instances provide capacity on a pay-as-you-go basis with no upfront commitment. They are suitable for short-term, variable workloads, offering flexibility without the need for long-term commitments. In this scenario, On-Demand Instances would be a cost-effective option for the 2-month duration while avoiding downtime.

17. A developer wants to deploy an application quickly on AWS without manually creating the required resources.

Which AWS service will meet these requirements?

Your Answer: ✓ Correct

- Amazon EC2
- AWS Elastic Beanstalk
- AWS CodeBuild
- Amazon Personalize

Explanation:

A. Amazon EC2: Amazon EC2 (Elastic Compute Cloud) provides resizable compute capacity in the cloud. While it allows you to manually create and configure virtual servers (EC2 instances), it involves more manual setup and is not as streamlined for quick application deployment as other services.

B. AWS Elastic Beanstalk: a fully managed service that simplifies the deployment of applications on AWS. It abstracts the underlying infrastructure, allowing developers to quickly deploy applications without manual resource creation. It is suitable for rapid application deployment.

C. AWS CodeBuild: a fully managed continuous integration service that compiles source code, runs tests, and produces software packages. While it is part of the CI/CD process, it is not focused on quick application deployment and resource provisioning.

D. Amazon Personalize: Amazon Personalize is a machine learning service for building personalized recommendation models. It is not designed for general application deployment and does not provide the infrastructure for quick deployment.

18. A company is storing sensitive customer data in an Amazon S3 bucket. The company wants to protect the data from accidental deletion or overwriting. Which S3 feature should the company use to meet these requirements?

Your Answer: ✓ Correct

- S3 Lifecycle rules
- S3 Versioning
- S3 bucket policies

- S3 server-side encryption

**Explanation:**

- A. S3 Lifecycle rules: Manages object lifecycle for storage optimization, not specifically designed for accidental deletion protection.
- B. S3 Versioning: S3 Versioning is a feature that allows you to preserve, retrieve, and restore every version of every object stored in a bucket. Enabling versioning helps protect against accidental deletion or overwriting of data. When versioning is enabled, each new version of an object is assigned a unique version ID, and you can easily restore previous versions if needed.
- C. S3 bucket policies: Defines access permissions, but does not inherently protect against accidental deletion or overwriting.
- D. S3 server-side encryption: Encrypts data at rest for security but does not directly address accidental deletion or overwriting.

**19. Which AWS service provides the ability to manage infrastructure as code?**

1 / 1 point

**Your Answer: ✓ Correct**

- AWS CodePipeline
- AWS CodeDeploy
- AWS Direct Connect
- AWS CloudFormation

**Explanation:**

- A. AWS CodePipeline: Focuses on continuous integration and delivery.
- B. AWS CodeDeploy: Automates application deployments.
- C. AWS Direct Connect: Provides dedicated network connections.
- D. AWS CloudFormation: AWS CloudFormation is a service that allows you to define and provision AWS infrastructure as code. It enables you to use a template to describe and provision AWS resources in a repeatable and automated manner. With CloudFormation, you can manage your infrastructure as code, making it easier to version, replicate, and share infrastructure configurations.

20. An online gaming company needs to choose a purchasing option to run its Amazon EC2 instances for 1 year. The web traffic is consistent, and any increases in traffic are predictable. The EC2 instances must be online and available without any disruption.

Which EC2 instance purchasing option will meet these requirements MOST cost-effectively?

Your Answer: ✓ Correct

- On-Demand Instances
- Reserved Instances
- Spot Instances
- Spot Fleet

Explanation:

A. On-Demand Instances: Pay-as-you-go without upfront commitment; less cost-effective for consistent workloads.

B. Reserved Instances: Reserved Instances (RIs) provide a significant discount (compared to On-Demand Instances) in exchange for a commitment of one or three years. They are suitable for consistent, predictable workloads. RIs offer cost-effectiveness while ensuring the EC2 instances are online and available without disruptions.

C. Spot Instances: Bid for unused capacity; cost savings but may not provide consistent availability.

D. Spot Fleet: Collection of Spot Instances; offers flexibility but inherits characteristics of Spot Instances.

21. Which AWS service or feature allows a user to establish a dedicated network connection between a company's on-premises data center and the AWS Cloud? 1 / 1 point

Your Answer: ✓ Correct

- AWS Direct Connect
- VPC peering
- AWS VPN
- Amazon Route 53

Explanation:

- A. AWS Direct Connect: AWS Direct Connect allows a user to establish a dedicated network connection between a company's on-premises data center and the AWS Cloud. It provides a private, dedicated network connection to enhance network performance and reliability.
- B. VPC Peering: Connects two Virtual Private Clouds (VPCs) within AWS, allowing them to communicate with each other.
- C. AWS VPN: Provides a secure, encrypted connection between on-premises networks and AWS VPCs over the internet.
- D. Amazon Route 53: A scalable and highly available domain name system (DNS) web service.

**22. Which option is a physical location of the AWS global infrastructure?**

0 / 1 point

**Your Answer:** ✗ Incorrect

- AWS DataSync
- AWS Region
- Amazon Connect
- AWS Organizations

**Explanation:**

- A. AWS DataSync: AWS DataSync is a service for transferring large amounts of data between on-premises storage and Amazon S3. It is not related to the physical location of the AWS global infrastructure.
- B. AWS Region: An AWS Region is a physical location in the world where AWS has multiple data centers. It represents a geographic area with multiple Availability Zones to provide fault tolerance and stability.
- C. Amazon Connect: Amazon Connect is a cloud-based contact center service. It is not related to the physical infrastructure but rather provides customer service solutions.
- D. AWS Organizations: AWS Organizations is a service for consolidating multiple AWS accounts into an organization. It is not related to the physical location of the AWS global infrastructure.

23. A company wants to protect its AWS Cloud information, systems, and assets while performing risk assessment and mitigation tasks. Which pillar of the AWS Well-Architected Framework is supported by these goals? 1 / 1 point

Your Answer: ✓ Correct

- Reliability
- Security
- Operational excellence
- Performance efficiency

**Explanation:**

Pillars of the AWS Well-Architected Framework:

Operational Excellence: Focuses on operational practices that enable efficient management and operation of systems. It involves continuous improvement, monitoring, incident response, and evolving procedures over time.

Security: Focuses on protecting information, systems, and assets. It involves implementing best practices for identity and access management, data protection, and risk assessment and mitigation.

Reliability: Focuses on the ability of a system to recover from failures and meet customer expectations. It involves implementing best practices for resiliency, fault tolerance, and disaster recovery.

Performance Efficiency: Focuses on using resources efficiently to maintain good performance. It involves optimizing workloads, selecting the right resources, and monitoring performance.

Cost Optimization: Focuses on avoiding unnecessary costs and ensuring that resources are used efficiently. It involves optimizing costs, understanding pricing models, and using resources effectively.

24. What is the purpose of having an internet gateway within a VPC? 1 / 1 point

Your Answer: ✓ Correct

- To create a VPN connection to the VPC
- To allow communication between the VPC and the internet

- To impose bandwidth constraints on internet traffic
- To load balance traffic from the internet across Amazon EC2 instances

**Explanation:**

- A. To create a VPN connection to the VPC: VPN connections are typically established using Virtual Private Gateways rather than internet gateways. Internet gateways are not directly involved in VPN connections.
- B. To allow communication between the VPC and the internet: The primary purpose of an internet gateway (IGW) within a Virtual Private Cloud (VPC) is to enable communication between resources in the VPC and the internet. It serves as a horizontally scaled, redundant component that allows outbound traffic from resources in the VPC to the internet and vice versa.
- C. To impose bandwidth constraints on internet traffic: Internet gateways do not impose bandwidth constraints on internet traffic.
- D. To load balance traffic from the internet across Amazon EC2 instances: Load balancing of internet traffic is typically handled by services like Elastic Load Balancing (ELB) rather than the internet gateway.

25. A company is running a monolithic on-premises application that does not scale and is difficult to maintain. The company has a plan to migrate the application to AWS and divide the application into microservices.  
Which best practice of the AWS Well-Architected Framework is the company following with this plan?

1 / 1 point

**Your Answer:** ✓ Correct

- Integrate functional testing as part of AWS deployment.
- Use automation to deploy changes
- Deploy the application to multiple locations.
- Implement loosely coupled dependencies

**Explanation:**

Integrate functional testing as part of AWS deployment (A): While this is a good practice for ensuring application quality, it's not the specific focus of dividing the application into microservices.

Use automation to deploy changes (B): This is also a good practice, but it's applicable to various scenarios and not directly tied to microservices architecture.

Deploy the application to multiple locations (C): While microservices can be deployed across multiple locations, this isn't the defining characteristic of decomposing a monolithic application into microservices.

Implement loosely coupled dependencies (D): This is a core principle of microservices architecture. By breaking down the monolithic application into smaller, independent services with well-defined APIs, the company is aiming to reduce dependencies between services, making them easier to develop, deploy, and scale independently. This aligns perfectly with the goal of improving scalability and maintainability, which are key challenges with the current monolithic application.

**26. A company has an AWS account. The company wants to audit its password and access key rotation details for compliance purposes.**

1 / 1 point

Which AWS service or tool will meet this requirement?

Your Answer:  Correct

- IAM Access Analyzer
- AWS Artifact
-  IAM credential report
- AWS Audit Manager

**Explanation:**

IAM Access Analyzer: Analyzes IAM policies to identify potential issues and excessive permissions, but doesn't specifically focus on password and access key rotation details.

AWS Artifact: Primarily used for managing and tracking infrastructure as code (IaC) configurations, not directly related to credential auditing.

IAM credential report: This built-in IAM feature provides detailed information about the rotation history of user passwords and access keys within the account. It shows dates of last password and access key rotation, along with usernames and key IDs. This aligns perfectly with the requirement of auditing password and access key rotation details for compliance purposes.

AWS Audit Manager: Offers a comprehensive platform for managing and automating audits across various AWS services, but it requires additional setup and configuration compared to the readily available IAM credential report

27. A company wants to receive a notification when a specific AWS cost threshold is reached.

1 / 1 point

Which AWS services or tools can the company use to meet this requirement? (Choose two.)

Your Answer: ✓ Correct

- ✗  Amazon Simple Queue Service (Amazon SQS)
- ✓  AWS Budgets
- ✗  Cost Explorer
- ✓  Amazon CloudWatch
- ✗  AWS Cost and Usage Report

**Explanation:**

B. AWS Budgets: Allows the company to set custom cost and usage budgets that alert them when thresholds are exceeded. They can receive notifications via email or Amazon Simple Notification Service (Amazon SNS) when the budget thresholds are reached.

D. Amazon CloudWatch: Can be used to create custom alarms based on cost metrics. The company can set up alarms to trigger notifications when specific cost thresholds are met or exceeded. CloudWatch Alarms can notify through various channels, including Amazon SNS. The other options are described as follows:

A. Amazon Simple Queue Service (Amazon SQS): SQS is a fully managed message queuing service.

C. Cost Explorer: Cost Explorer is a tool for exploring and analysing AWS costs but does not provide direct notifications for cost thresholds.

E. AWS Cost and Usage Report: The Cost and Usage Report provides detailed information about AWS costs but does not offer real-time notifications for cost thresholds.

28. Which AWS service or resource provides answers to the most frequently asked security-related questions that AWS receives from its users?

0 / 1 point

**Your Answer: ✗ Incorrect**

- AWS Artifact
- Amazon Connect
- AWS Chatbot
- AWS Knowledge Centre

**Explanation:**

A. AWS Artifact: AWS Artifact provides on-demand access to AWS compliance reports and documents. It includes various compliance-related documents, such as SOC reports, PCI DSS reports, and more. While it offers valuable compliance information, it may not directly address the most frequently asked security-related questions.

B. Amazon Connect: Amazon Connect is a cloud-based contact center service. It is focused on providing customer service solutions and does not specifically provide answers to security-related questions.

C. AWS Chatbot: AWS Chatbot is a service that allows users to receive notifications and interact with AWS resources using chat platforms like Slack and Amazon Chime. While it facilitates communication and notifications, it is not designed to provide answers to frequently asked security-related questions.

D. AWS Knowledge Centre: AWS Knowledge Centre is a resource that provides answers to the most frequently asked security-related questions that AWS receives from its users. It offers a collection of articles, videos, and other resources to help users address common security queries and challenges.

29. Which tasks are customer responsibilities, according to the AWS shared responsibility model? (Choose two.)

1 / 1 point

**Your Answer: ✓ Correct**

- Configure the AWS provided security group firewall.
- Classify company assets in the AWS Cloud
- Determine which Availability Zones to use for Amazon S3 buckets
- Patch or upgrade Amazon DynamoDB
- Select Amazon EC2 instances to run AWS Lambda on

**Explanation:**

- A. Configure the AWS provided security group firewall: Customers are responsible for configuring and managing security group firewalls to control inbound and outbound traffic to their AWS resources.
- B. Classify company assets in the AWS Cloud: Asset classification is typically a customer responsibility as part of their data governance and security practices. The other options are not accurate in the context of customer responsibilities:
- C. Determine which Availability Zones to use for Amazon S3 buckets: This is more of a design decision and falls under the AWS management responsibilities.
- D. Patch or upgrade Amazon DynamoDB: Patching or upgrading services like Amazon DynamoDB is managed by AWS. Customers are not responsible for patching or upgrading the underlying infrastructure or services provided by AWS.
- E. Select Amazon EC2 instances to run AWS Lambda on: The selection of underlying infrastructure for serverless services like AWS Lambda is managed by AWS. Customers focus on writing and deploying functions without managing the underlying instances.

**30. Which of the following are pillars of the AWS Well-Architected Framework?** 1 / 1 point  
**(Choose two.)**

**Your Answer:** ✓ Correct

- ✗  Availability
- ✓  Reliability
- ✗  Scalability
- ✗  Responsive design
- ✓  Operational excellence

**Explanation:**

There are 6 pillars - 1. Operational excellence 2. Security 3. Reliability 4. Performance efficiency 5. Cost optimization 6. Sustainability

**31. Which AWS service or feature is used to send both text and email messages from distributed applications?** 1 / 1 point

**Your Answer:** ✓ Correct

- ✓  Amazon Simple Notification Service (Amazon SNS)

- Amazon Simple Email Service (Amazon SES)
- Amazon CloudWatch alerts
- Amazon Simple Queue Service (Amazon SQS)

**Explanation:**

- A. Amazon Simple Notification Service (Amazon SNS): A fully managed messaging service that enables the sending of both text (SMS) and email messages from distributed applications. It allows applications to send messages to a variety of endpoints, including email, SMS, HTTP/HTTPS, and more.
- B. Amazon Simple Email Service (Amazon SES): Amazon SES is focused on sending email messages, not text (SMS) messages.
- C. Amazon CloudWatch alerts: CloudWatch is primarily for monitoring and managing resources, not for sending text or email messages.
- D. Amazon Simple Queue Service (Amazon SQS): SQS is used for reliably transmitting messages between components but is not designed for sending text or email messages.

**32. A user needs programmatic access to AWS resources through the AWS CLI or the AWS API.**

1 / 1 point

**Which option will provide the user with the appropriate access?**

**Your Answer:**  **Correct**

- Amazon Inspector
- Access keys
- SSH public keys
- AWS Key Management Service (AWS KMS) keys

**Explanation:**

A- Amazon Inspector automatically discovers workloads, such as Amazon EC2 instances, containers, and Lambda functions, and scans them for software vulnerabilities and unintended network exposure.

B- Access keys are long-term credentials for an IAM user or the AWS account root user. You can use access keys to sign programmatic requests to the AWS CLI or AWS API (directly or using the AWS SDK)

C- The SSH public keys are used for establishing secure shell (SSH) connections to EC2 instances, not for general API access.

D- AWS Key Management Service (AWS KMS) is a managed service that makes it easy for you to create and control the cryptographic keys that are used to protect your data.

33. A company runs thousands of simultaneous simulations using AWS Batch. 0 / 1 point

Each simulation is stateless, is fault tolerant, and runs for up to 3 hours.

Which pricing model enables the company to optimize costs and meet these requirements?

Your Answer: ✗ Incorrect

- Reserved Instances
- Spot Instances
- On-Demand Instances
- Dedicated Instances

**Explanation:**

Reserved Instances: While offering a significant discount compared to On-Demand Instances, they require a one-year or three-year commitment and upfront payment. This might not be ideal for workloads with variable demand or short durations like the given simulations.

Spot Instances: These offer the potential for significant cost savings compared to On-Demand Instances, with prices fluctuating based on supply and demand. They are well-suited for stateless, fault-tolerant workloads like the company's simulations, as they can be automatically terminated and restarted on price spikes without impacting the overall execution.

On-Demand Instances: These provide predictable pricing but are the most expensive option. Given the cost optimization goal and stateless nature of the simulations, Spot Instances offer a better cost-performance trade-off.

Dedicated Instances: Similar to Reserved Instances, these come with an upfront commitment and fixed payments, making them less flexible for workloads with variable demand like the simulations.

34. What does the concept of agility mean in AWS Cloud computing? (Choose two.) 0.6 / 1 point

Your Answer: ✓ Partially correct

- The speed at which AWS resources are implemented
- The ability to experiment quickly
- The elimination of wasted capacity
- The low cost of entry into cloud computing

**Explanation:**

A. The speed at which AWS resources are implemented: Agility in AWS refers to the ability to quickly provision and implement resources, allowing users to adapt to changing requirements and scale resources as needed.

C. The ability to experiment quickly: Agility involves the capability to experiment rapidly, enabling users to innovate, test ideas, and iterate quickly in the cloud environment. The other options are described as follows:

B. The speed at which AWS creates new AWS Regions: The creation of new AWS Regions is not typically within the control of individual AWS customers. AWS decides when and where to create new regions based on business considerations.

D. The elimination of wasted capacity: While efficiency and cost optimization are important aspects of cloud computing, the elimination of wasted capacity is not a direct aspect of the concept of agility.

E. The low cost of entry into cloud computing: While cost considerations are important, the low cost of entry is not a defining aspect of agility. Agility focuses more on speed, flexibility, and the ability to respond quickly to changing demands.

35. A company needs to block SQL injection attacks. Which AWS service or feature can meet this requirement? 1 / 1 point

Your Answer: ✓ Correct

- AWS WAF
- AWS Shield

- Network ACLs
- Security groups

**Explanation:**

- A. AWS WAF (Web Application Firewall): A web application firewall that allows users to create custom rules to filter and monitor HTTP or HTTPS requests to a web application. It helps protect against common web exploits, including SQL injection attacks, by allowing the blocking or rate-limiting of malicious requests.
- B. AWS Shield: A managed Distributed Denial of Service (DDoS) protection service. While it helps protect against DDoS attacks, it is not specifically designed for blocking SQL injection attacks.
- C. Network ACLs (Access Control Lists): Are used to control traffic at the subnet level. While they provide some control over inbound and outbound traffic, they operate at the network layer (Layer 3) and are not designed for deep inspection of application layer attacks like SQL injection.
- D. Security groups: Operate at the instance level and are stateful firewalls that control inbound and outbound traffic. While they provide network-level security, they are not designed to specifically block SQL injection attacks.

36. Which AWS service or feature identifies whether an Amazon S3 bucket or an IAM role has been shared with an external entity? 1 / 1 point

Your Answer: ✓ Correct

- AWS Service Catalog
- AWS Systems Manager
- ✓  AWS IAM Access Analyzer
- AWS Organizations

**Explanation:**

- A. AWS Service Catalog: A service that allows organizations to create and manage catalogs of IT services that are approved for use on AWS.
- B. AWS Systems Manager: A set of services that enables visibility and control of your infrastructure on AWS.

C. AWS IAM Access Analyzer: A service that helps identify unintended resource access and resource sharing. It specifically identifies whether an Amazon S3 bucket or an IAM role has been shared with an external entity. It provides insights into resource access policies.

D. AWS Organizations: A service for consolidating multiple AWS accounts into an organization that you create and centrally manage.

- 37. A cloud practitioner needs to obtain AWS compliance reports before migrating an environment to the AWS Cloud.**

1 / 1 point

**How can these reports be generated?**

**Your Answer:** ✓ Correct

- Contact the AWS Compliance team
- Download the reports from AWS Artifact.
- Open a case with AWS Support
- Generate the reports with Amazon Macie

**Explanation:**

A. Contact the AWS Compliance team: While it is possible to contact the AWS Compliance team for specific compliance-related inquiries, obtaining standard compliance reports is typically done through self-service options like AWS Artifact. Direct contact may be needed for specific or customized compliance needs.

B. Download the reports from AWS Artifact: A self-service portal that provides on-demand access to AWS compliance reports. Users can download documentation on various compliance programs and certifications, making it a convenient way to obtain compliance reports.

C. Open a case with AWS Support: While AWS Support can assist with various inquiries, opening a case may not be the most efficient way to obtain standard compliance reports.

D. Generate the reports with Amazon Macie: A service focused on discovering, classifying, and protecting sensitive data.

- 38. An ecommerce company has migrated its IT infrastructure from an on-premises data centre to the AWS Cloud.**

1 / 1 point

**Which cost is the company's direct responsibility?**

**Your Answer: ✓ Correct**

- Cost of application software licenses
- Cost of the hardware infrastructure on AWS
- Cost of power for the AWS servers
- Cost of physical security for the AWS data centre

**Explanation:**

- A. Cost of application software licenses: In the AWS Cloud, customers are responsible for the cost of application software licenses. This includes any software licenses required to run applications on AWS services. AWS provides the underlying infrastructure, and customers are responsible for licensing their application software.
- B. Cost of the hardware infrastructure on AWS: AWS manages and covers the cost of the underlying hardware infrastructure.
- C. Cost of power for the AWS servers: AWS handles power costs for its data centres; customers pay for compute resources.
- D. Cost of physical security for the AWS data centre: AWS is responsible for physical security; customers manage security within their accounts.

39. A company is setting up AWS Identity and Access Management (IAM) on an 1 / 1 point  
AWS account.

Which recommendation complies with IAM security best practices?

**Your Answer: ✓ Correct**

- Use the account root user access keys for administrative tasks.
- Grant broad permissions so that all company employees can access the resources they need.
- Turn on multi-factor authentication (MFA) for added security during the login process.
- Avoid rotating credentials to prevent issues in production applications

**Explanation:**

- A. Use the account root user access keys for administrative tasks: It is not recommended to use the root user's access keys for day-to-day administrative tasks. The root user has unrestricted access, and using its access keys poses security risks.

B. Grant broad permissions so that all company employees can access the resources they need: It's advisable to follow the principle of least privilege, granting users only the permissions they need to perform their tasks.

C. Turn on multi-factor authentication (MFA) for added security during the login process: Enabling multi-factor authentication (MFA) is a security best practice. It adds an extra layer of protection by requiring users to provide a second form of authentication in addition to their password. This helps prevent unauthorized access even if credentials are compromised.

D. Avoid rotating credentials to prevent issues in production applications: Regularly rotating credentials, such as access keys and passwords, enhances security by reducing the window of opportunity for attackers.

**40. Elasticity in the AWS Cloud refers to which of the following? (Choose two.)** 0.6 / 1 point

**Your Answer:**  **Partially correct**

-   How quickly an Amazon EC2 instance can be restarted
-   The ability to rightscale resources as demand shifts
-   The maximum amount of RAM an Amazon EC2 instance can use
-   The pay-as-you-go billing model
-   How easily resources can be procured when they are needed

**Explanation:**

A. How quickly an Amazon EC2 instance can be restarted: Not directly related to elasticity. Elasticity is more about adjusting resources based on demand rather than the speed of restarting instances.

B. The ability to rightscale resources as demand shifts: Elasticity involves the ability to dynamically adjust the size of resources (e.g., adding or removing instances) based on changing demand.

C. The maximum amount of RAM an Amazon EC2 instance can use: Not directly related to elasticity. Elasticity is more about the ability to scale resources horizontally or vertically, not the specific resource limits.

D. The pay-as-you-go billing model: Pay-as-you-go is related to the pricing model rather than elasticity.

E. How easily resources can be procured when they are needed: Elasticity involves the ease with which resources can be provisioned or de-provisioned based on changing demand, providing flexibility and scalability.

**41. Which service enables customers to audit API calls in their AWS accounts?** 1 / 1 point

**Your Answer:** ✓ Correct

- ✓  AWS CloudTrail
- AWS Trusted Advisor
- Amazon Inspector
- AWS X-Ray

**Explanation:**

A. AWS CloudTrail: Enables customers to audit API calls in their AWS accounts by capturing and logging those calls. It provides visibility into user and resource activity and can be used for security analysis, compliance checking, and troubleshooting.

B. AWS Trusted Advisor: Provides best practices and recommendations for optimizing AWS resources. While it can offer guidance on security-related matters, it doesn't specifically focus on auditing API calls.

C. Amazon Inspector: Assesses the security vulnerabilities of applications deployed on AWS. It is more focused on security assessments and vulnerability detection rather than auditing API calls.

D. AWS X-Ray: Helps trace requests as they travel through applications, providing insights into application performance. It is not primarily designed for auditing API calls but for understanding and debugging distributed applications.

**42. What is a customer responsibility when using AWS Lambda according to the AWS shared responsibility model?** 1 / 1 point

**Your Answer:** ✓ Correct

- ✓  Managing the code within the Lambda function
- Confirming that the hardware is working in the data centre
- Patching the operating system
- Shutting down Lambda functions when they are no longer in use

**Explanation:**

- A. Managing the code within the Lambda function: Customers are responsible for developing, deploying, and managing the code and dependencies within the Lambda function.
- B. Confirming that the hardware is working in the data centre: AWS manages the hardware infrastructure, and customers do not need to confirm or manage the underlying hardware.
- C. Patching the operating system: AWS Lambda abstracts the underlying infrastructure, and customers are not responsible for patching the operating system. AWS takes care of the maintenance.
- D. Shutting down Lambda functions when they are no longer in use: While it's good practice to manage resources efficiently, AWS Lambda is designed to automatically scale based on demand, and customers don't need to manually shut down functions

**43. A company has 5 TB of data stored in Amazon S3. The company plans to occasionally run queries on the data for analysis.**

1 / 1 point

**Which AWS service should the company use to run these queries in the MOST cost-effective manner?**

**Your Answer: ✓ Correct**

- Amazon Redshift
- Amazon Athena
- Amazon Kinesis
- Amazon RDS

**Explanation:**

- A. Amazon Redshift: Suited for running complex queries on large datasets in a data warehouse. It involves provisioning and managing a cluster, and it may be more suitable for regular or ongoing analytics workloads.
- B. Amazon Athena: A serverless query service that allows you to analyze data in Amazon S3 using standard SQL without the need to manage infrastructure. It is cost-effective for occasional or ad-hoc queries, as you only pay for the queries you run.
- C. Amazon Kinesis: Primarily used for real-time data streaming and analytics. It is not designed for running ad-hoc queries on stored data.

D. Amazon RDS: A managed relational database service. While it supports querying data, it is not typically used for ad-hoc analysis on large datasets stored in Amazon S3

**44. Which AWS service can be used at no additional cost?**

1 / 1 point

**Your Answer:** ✓ Correct

- Amazon SageMaker
- AWS Config
- AWS Organizations
- Amazon CloudWatch

**Explanation:**

A. Amazon SageMaker: While Amazon SageMaker has a free tier that includes certain usage limits, it's important to note that certain features and usage beyond the free tier may incur additional costs

B. AWS Config: AWS Config has associated costs based on the number of configuration items recorded and API activity. It is not a service that is provided at no additional cost.

C. AWS Organizations: This service allows you to consolidate multiple AWS accounts into an organization, and it is indeed available at no additional cost. However, costs associated with the resources used in the accounts within the organization are separate.

D. Amazon CloudWatch: While CloudWatch itself is not entirely free, there is a free tier with limited usage. Beyond the free tier, there are associated costs based on the quantity of metrics, dashboards, alarms, and logs stored.

**45. Which AWS Cloud Adoption Framework (AWS CAF) capability belongs to the people perspective?**

0 / 1 point

**Your Answer:** ✗ Incorrect

- Data architecture
- Event management
- Cloud fluency
- Strategic partnership

**Explanation:**

- A. Data architecture: This capability is more related to the data perspective within the AWS Cloud Adoption Framework (CAF). It involves designing and implementing effective data architectures.
- B. Event management: This capability is related to the operations perspective within the AWS CAF. It involves managing events, incidents, and responses in the cloud environment.
- C. Cloud fluency: This capability belongs to the people perspective within the AWS CAF. It emphasizes the importance of having a workforce that is knowledgeable and skilled in cloud technologies.
- D. Strategic partnership: While collaboration and partnerships are important across perspectives, this capability is often associated with the business perspective. It involves forming strategic partnerships to support cloud adoption and business goals.

**46. A company wants to make an upfront commitment for continued use of its production Amazon EC2 instances in exchange for a reduced overall cost.**

1 / 1 point

**Which pricing options meet these requirements with the LOWEST cost? (Choose two.)**

**Your Answer:** ✓ Correct

- ✗  Spot Instances
- ✗  On-Demand Instances
- ✓  Reserved Instances
- ✓  Savings Plans
- ✗  Dedicated Hosts

**Explanation:**

A. Spot Instances: These are spare EC2 instances available at lower prices, but they are not suitable for making upfront commitments as they are subject to termination if the capacity is needed by the system.

B. On-Demand Instances: On-Demand Instances are pay-as-you-go without upfront commitments, making them flexible but not the most cost-effective for long-term commitments.

- C. Reserved Instances: Reserved Instances allow upfront commitments for a specific instance type in a particular region, offering significant cost savings compared to On-Demand Instances. They provide a lower overall cost in exchange for the commitment.
- D. Savings Plans: Savings Plans provide significant cost savings in exchange for a commitment to a consistent amount of compute usage (measured in \$/hr) for a 1 or 3-year period. They offer flexibility and cost savings similar to Reserved Instances.

E. Dedicated Hosts: Dedicated Hosts provide physical servers dedicated to your use. While they offer visibility and control over the placement of instances, they do not necessarily result in the lowest cost and are not based on the concept of upfront commitments for cost reduction.

47. A company wants to migrate its on-premises relational databases to the AWS Cloud. The company wants to use infrastructure as close to its current geographical location as possible.  
Which AWS service or resource should the company use to select its Amazon RDS deployment area?

0 / 1 point

Your Answer: ✗ Incorrect

- Amazon Connect
- AWS Wavelength
- AWS Regions
- AWS Direct Connect