Number: CLF-C02
Passing Score: 800
Time Limit: 120
File Version: 14.0

Exam Code: CLF-C02

Exam Name: AWS Certified Cloud Practitioner

Exam A

QUESTION 1
What is an AWS responsibility under the AWS shared responsibility model?

A. Configure the security group rules that determine which ports are open on an Amazon EC2 Linux instance.
B. Ensure the security of the internal network in the AWS data centers.
C. Patch the guest operating system with the latest security patches on Amazon EC2.
D. Turn on server-side encryption for Amazon S3 buckets.
A company wants to deploy its critical application on AWS and maintain high availability.

Correct Answer: B
Section:
Explanation:
Under the AWS shared responsibility model, AWS is responsible for ensuring the security of the internal network in the AWS data centers, as well as the physical security of the hardware and facilities that run AWS services. AWS customers are responsible for configuring the security group rules that determine which ports are open on an EC2 Linux instance, patching the guest operating system with the latest security patches on EC2, and turning on server-side encryption for S3 buckets.
Source: AWS Shared Responsibility Model

QUESTION 2
How should the company deploy the application to meet these requirements?

A. Ina single Availability Zone
B. On AWS Direct Connect
C. On Reserved Instances
D. In multiple Availability Zones

Correct Answer: D
Section:
Explanation:
Deploying the application in multiple Availability Zones is the best way to ensure high availability for the application. Availability Zones are isolated locations within an AWS Region that are engineered to be fault-tolerant from failures in other Availability Zones. By deploying the application in multiple Availability Zones, the company can reduce the impact of outages and increase the resilience of the application. Deploying the application in a single Availability Zone, on AWS Direct Connect, or on Reserved Instances does not provide the same level of high availability as deploying the application in multiple Availability Zones. Source: Availability Zones

QUESTION 3
An ecommerce company wants to provide relevant product recommendations to its customers. The recommendations will include products that are frequently purchased with other products that the customer already purchased. The recommendations also will include products of a specific color and products from the customer's favorite brand.
Which AWS service or feature should the company use to meet these requirements with the LEAST development effort?

A. Amazon Comprehend
B. Amazon Forecast
C. Amazon Personalize
D. Amazon SageMaker Studio

Correct Answer: C

Section:
Explanation:
Amazon Personalize is a service that provides real-time personalized recommendations based on the user's behavior, preferences, and context. It can also incorporate metadata such as product color and brand to generate more relevant recommendations. Amazon Comprehend is a natural language processing (NLP) service that can analyze text for entities, sentiments, topics, and more. Amazon Forecast is a service that provides accurate time-series forecasting based on machine learning.
Amazon SageMaker Studio is a web-based integrated development environment (IDE) for machine learning.

QUESTION 4
Which AWS service or storage class provides low-cost, long-term data storage?

A. Amazon S3 Glacier Deep Archive
B. AWS Snowball
C. Amazon MQ
D. AWS Storage Gateway

Correct Answer: A
Section:
Explanation:
Amazon S3 Glacier Deep Archive is a storage class within Amazon S3 that provides the lowest-cost, long-term data storage for data that is rarely accessed. AWS Snowball is a service that provides a physical device for transferring large amounts of data into and out of AWS. Amazon MQ is a service that provides managed message broker service for Apache ActiveMQ. AWS Storage Gateway is a service that provides hybrid cloud storage for on-premises applications.

QUESTION 5
Which AWS service or feature offers security for a VPC by acting as a firewall to control traffic in and out of subnets?

A. AWS Security Hub
B. Security groups
C. Network ACL
D. AWSWAF

Correct Answer: C
Section:
Explanation:
A network access control list (network ACL) is a feature that acts as a firewall for controlling traffic in and out of one or more subnets in a virtual private cloud (VPC). Network ACLs can be configured with rules that allow or deny traffic based on the source and destination IP addresses, ports, and protocols1. AWS Security Hub is a service that provides a comprehensive view of the security posture of AWS accounts and resources2. Security groups are features that act as firewalls for controlling traffic at the instance level3. AWS WAF is a web application firewall that helps protect web applications from common web exploits4.

QUESTION 6
A company wants to create a set of custom dashboards to collect metrics to monitor its applications.
Which AWS service will meet these requirements?

A. Amazon CloudWatch
B. AWS X-Ray
C. AWS Systems Manager
D. AWS CloudTrail

Correct Answer: A
Section:

Explanation:
Amazon CloudWatch is a service that provides monitoring and observability for AWS resources and applications. Users can create custom dashboards to collect and visualize metrics, logs, alarms, and events from different sources5. AWS X-Ray is a service that provides distributed tracing and analysis for applications. AWS Systems Manager is a service that provides operational management for AWS resources and applications. AWS CloudTrail is a service that provides governance, compliance, and auditing for AWS account activity.

QUESTION 7
A company wants to migrate its workloads to AWS, but it lacks expertise in AWS Cloud computing.
Which AWS service or feature will help the company with its migration?

A. AWS Trusted Advisor
B. AWS Consulting Partners
C. AWS Artifacts
D. AWS Managed Services

Correct Answer: D
Section:
Explanation:
AWS Managed Services is a service that provides operational management for AWS infrastructure and applications. It helps users migrate their workloads to AWS and provides ongoing support, security, compliance, and automation. AWS Trusted Advisor is a service that provides best practices and recommendations for cost optimization, performance, security, and fault tolerance. AWS Consulting Partners are professional services firms that help customers design, architect, build, migrate, and manage their workloads and applications on AWS. AWS Artifacts is a service that provides on-demand access to AWS compliance reports and select online agreements.

QUESTION 8
A company must store call recordings for 6 years. The storage system should be highly durable and cost-effective.
Which AWS service meets these requirements?

A. AWS Snowball
B. Amazon S3
C. AWS Storage Gateway
D. Amazon Kinesis

Correct Answer: B
Section:
Explanation:
Amazon S3 is a service that provides highly durable and cost-effective object storage for a variety of use cases, including backup and archive, big data analytics, disaster recovery, and cloud applications.
Amazon S3 offers 99.999999999% (11 9's) of durability, meaning that data is designed to withstand the loss of two facilities concurrently. Amazon S3 also offers several storage classes with different price and performance characteristics, such as S3 Glacier and S3 Glacier Deep Archive, which are ideal for long-term archival of data that is rarely accessed. AWS Snowball, AWS Storage Gateway, and Amazon Kinesis are not designed to provide the same level of durability and cost-effectiveness as Amazon S3 for storing call recordings for 6 years. Source: Amazon S3

QUESTION 9
In which categories does AWS Trusted Advisor provide recommended actions? (Select TWO.)

A. Operating system patches
B. Cost optimization
C. Repetitive tasks
D. Service quotas
E. Account activity records

Correct Answer: B, D

Section:
Explanation:
AWS Trusted Advisor is a service that provides real-time guidance to help you provision your resources following AWS best practices. AWS Trusted Advisor provides recommended actions in five categories: cost optimization, performance, security, fault tolerance, and service quotas. Cost optimization helps you reduce your overall AWS costs by identifying idle and underutilized resources.
Service quotas helps you monitor and manage your usage of AWS service quotas and request quota increases. Operating system patches, repetitive tasks, and account activity records are not categories that AWS Trusted Advisor provides recommended actions for. Source: [AWS Trusted Advisor]

QUESTION 10
Which actions are examples of a company's effort to right size its AWS resources to control cloud costs? (Select TWO.)

A. Switch from Amazon RDS to Amazon DynamoDB to accommodate NoSQL datasets.
B. Base the selection of Amazon EC2 instance types on past utilization patterns.
C. Use Amazon S3 Lifecycle policies to move objects that users access infrequently to lower-cost storage tiers.
D. Use Multi-AZ deployments for Amazon RDS.
E. Replace existing Amazon EC2 instances with AWS Elastic Beanstalk.

Correct Answer: B, C
Section:
Explanation:
Basing the selection of Amazon EC2 instance types on past utilization patterns is a way to right size the AWS resources and optimize the performance and cost. Using Amazon S3 Lifecycle policies to move objects that users access infrequently to lower-cost storage tiers is another way to reduce the storage costs and align them with the business value of the data. These two actions are recommended by the AWS Cost Optimization Pillar1.
Switching from Amazon RDS to Amazon DynamoDB is not necessarily a cost-saving action, as it depends on the use case and the data model.
Using Multi-AZ deployments for Amazon RDS is a way to improve the availability and durability of the database, but it also increases the cost. Replacing existing Amazon EC2 instances with AWS Elastic Beanstalk is a way to simplify the deployment and management of the application, but it does not affect the cost of the underlying EC2 instances.

QUESTION 11
A company is designing a web application that will run on Amazon EC2 instances.
Which AWS services and features will improve availability and reduce the impact of failures for this application?
(Select TWO.)

A. Amazon EC2 Auto Scaling for the EC2 instances
B. VPC subnet ACLs to check the health of a service
C. Resources that are distributed across multiple Availability Zones
D. Configuration of AWS Server Migration Service (AWS SMS) to move the EC2 instances to a different AWS Region
E. Resources that are distributed across multiple AWS points of presence

Correct Answer: A, C
Section:
Explanation:
The correct answers are A and C because Amazon EC2 Auto Scaling and resources that are distributed across multiple Availability Zones are AWS services and features that will improve availability and reduce the impact of failures for the web application. Amazon EC2 Auto Scaling is a service that enables users to automatically adjust the number of Amazon EC2 instances in response to changes in demand or performance. Amazon EC2 Auto Scaling helps users to maintain optimal availability and performance of their applications by adding or removing instances as needed.
Resources that are distributed across multiple Availability Zones are AWS features that enable users to increase the fault tolerance and resilience of their applications. Availability Zones are isolated locations within an AWS Region that have independent power, cooling, and networking. Users can launch their resources, such as Amazon EC2 instances, in multiple Availability Zones to protect their applications from the failure of a single location.
The other options are incorrect because they are not AWS services and features that will improve availability and reduce the impact of failures for the web application. VPC subnet ACLs are AWS features that enable users to control the inbound and outbound traffic to and from their subnets within a VPC. VPC subnet ACLs do not check the health of a service, but rather filter the network traffic based on rules. Configuration of AWS Server Migration Service (AWS SMS) is an AWS service that enables users to migrate their on-premises servers to AWS.
Configuration of AWS SMS does not help to move the Amazon EC2 instances to a different AWS Region, but rather to migrate the servers from the source environment to AWS. Resources that are distributed across multiple

AWS points of presence are AWS features that enable users to deliver content to their end users with low latency and high performance. AWS points of presence are edge locations that are part of the AWS Global Infrastructure. Users can use services such as Amazon CloudFront and AWS Global Accelerator to distribute their content across multiple AWS points of presence. Reference: Amazon EC2 Auto Scaling, [Regions, Availability Zones, and Local Zones]

QUESTION 12
An Availability Zone consists of:

A. one or more data centers in a single location.
B. two or more data centers in multiple locations.
C. one or more physical hosts in a single data center.
D. two or more physical hosts in multiple data centers.

Correct Answer: A
Section:
Explanation:
The correct answer is A because an Availability Zone consists of one or more data centers in a single location. An Availability Zone is an isolated location within an AWS Region that has independent power, cooling, and networking. Each Availability Zone has one or more data centers that host the physical servers and storage devices that run the AWS services. The other options are incorrect because they are not accurate descriptions of an Availability Zone. Two or more data centers in multiple locations are not an Availability Zone, but rather multiple Availability Zones within an AWS Region. One or more physical hosts in a single data center are not an Availability Zone, but rather the components of a data center within an Availability Zone. Two or more physical hosts in multiple data centers are not an Availability Zone, but rather the components of multiple data centers within one or more Availability Zones. Reference: [Regions, Availability Zones, and Local Zones]

QUESTION 13
A company wants to ensure that two Amazon EC2 instances are in separate data centers with minimal communication latency between the data centers.
How can the company meet this requirement?

A. Place the EC2 instances in two separate AWS Regions connected with a VPC peering connection.
B. Place the EC2 instances in two separate Availability Zones within the same AWS Region.
C. Place one EC2 instance on premises and the other in an AWS Region. Then connect them by using an AWS VPN connection.
D. Place both EC2 instances in a placement group for dedicated bandwidth.

Correct Answer: B
Section:
Explanation:
The correct answer is B because placing the EC2 instances in two separate Availability Zones within the same AWS Region is the best way to meet the requirement. Availability Zones are isolated locations within an AWS Region that have independent power, cooling, and networking. Users can launch their resources, such as Amazon EC2 instances, in multiple Availability Zones to increase the fault tolerance and resilience of their applications. Availability Zones within the same AWS Region are connected with low-latency, high-throughput, and highly redundant networking. The other options are incorrect because they are not the best ways to meet the requirement. Placing the EC2 instances in two separate AWS Regions connected with a VPC peering connection is not the best way to meet the requirement because AWS Regions are geographically dispersed and may have higher communication latency between them than Availability Zones within the same AWS Region. VPC peering connection is a networking connection between two VPCs that enables users to route traffic between them using private IP addresses. Placing one EC2 instance on premises and the other in an AWS Region, and then connecting them by using an AWS VPN connection is not the best way to meet the requirement because on-premises and AWS Region are geographically dispersed and may have higher communication latency between them than Availability Zones within the same AWS Region.
AWS VPN connection is a secure and encrypted connection between a user's network and their VPC.
Placing both EC2 instances in a placement group for dedicated bandwidth is not the best way to meet the requirement because a placement group is a logical grouping of instances within a single Availability Zone that enables users to launch instances with specific performance characteristics. A placement group does not ensure that the instances are in separate data centers, and it does not provide low-latency communication between instances in different Availability Zones. Reference:
[Regions, Availability Zones, and Local Zones], [VPC Peering], [AWS VPN], [Placement Groups]

QUESTION 14
A company wants to host its relational databases on AWS. The databases have predefined schemas that the company needs to replicate on AWS.
Which AWS services could the company use for the databases? (Select TWO.)

A. Amazon Aurora
B. Amazon RDS
C. Amazon DocumentDB (with MongoDB compatibility)
D. Amazon Neptune
E. Amazon DynamoDB

Correct Answer: A, B
Section:
Explanation:
: The correct answers are A and B because Amazon Aurora and Amazon RDS are AWS services that the company could use for the relational databases. Amazon Aurora is a relational database that is compatible with MySQL and PostgreSQL. Amazon Aurora is a fully managed, scalable, and highperformance service that offers up to five times the throughput of standard MySQL and up to three times the throughput of standard PostgreSQL. Amazon RDS is a service that enables users to set up, operate, and scale relational databases in the cloud. Amazon RDS supports six popular database engines: MySQL, PostgreSQL, Oracle, SQL Server, MariaDB, and Amazon Aurora. The other options are incorrect because they are not AWS services that the company could use for the relational databases. Amazon DocumentDB (with MongoDB compatibility) is a document database that is compatible with MongoDB. Amazon Neptune is a graph database that supports property graph and RDF models. Amazon DynamoDB is a key-value and document database. Reference: Amazon Aurora, Amazon RDS

QUESTION 15
Which of the following are benefits that a company receives when it moves an on-premises production workload to AWS? (Select TWO.)

A. AWS trains the company's staff on the use of all the AWS services.
B. AWS manages all security in the cloud.
C. AWS offers free support from technical account managers (TAMs).
D. AWS offers high availability.
E. AWS provides economies of scale.

Correct Answer: D, E
Section:
Explanation:
The correct answers are D and E because AWS offers high availability and AWS provides economies of scale are benefits that a company receives when it moves an on-premises production workload to AWS. High availability means that AWS has a global infrastructure that allows customers to deploy their applications and data across multiple regions and availability zones. This increases the fault tolerance and resilience of their applications and reduces the impact of failures. Economies of scale means that AWS can achieve lower variable costs than customers can get on their own. This allows customers to pay only for the resources they use and scale up or down as needed. The other options are incorrect because they are not benefits that a company receives when it moves an on-premises production workload to AWS. AWS trains the company's staff on the use of all the AWS services is not a benefit that a company receives when it moves an on-premises production workload to AWS. AWS does provide various learning resources and training courses for customers, but it does not train the company's staff on the use of all the AWS services. AWS manages all security in the cloud is not a benefit that a company receives when it moves an on-premises production workload to AWS. AWS is responsible for the security of the cloud, but the customer is responsible for the security in the cloud. AWS offers free support from technical account managers (TAMs) is not a benefit that a company receives when it moves an on-premises production workload to AWS. AWS does offer support from TAMs, but only for customers who have the AWS Enterprise Support plan, which is not free.
Reference: What is Cloud Computing?, [AWS Shared Responsibility Model], [AWS Support Plans]

QUESTION 16
A company needs a content delivery network that provides secure delivery of data, videos, applications, and APIs to users globally with low latency and high transfer speeds.
Which AWS service meets these requirements?

A. Amazon CloudFront
B. Elastic Load Balancing
C. Amazon S3
D. Amazon Elastic Transcoder

Correct Answer: A
Section:
Explanation:
The correct answer is A because Amazon CloudFront is an AWS service that provides secure delivery of data, videos, applications, and APIs to users globally with low latency and high transfer speeds.
Amazon CloudFront is a fast content delivery network (CDN) that integrates with other AWS services, such as Amazon S3, Amazon EC2, AWS Lambda, and AWS Shield. Amazon CloudFront delivers content through a worldwide network of edge locations that are located close to the end users. The other options are incorrect because they are not AWS services that provide secure delivery of data, videos, applications, and APIs to users globally with low latency and high transfer speeds. Elastic Load Balancing is an AWS service that distributes incoming traffic across multiple targets, such as Amazon EC2 instances, containers, and IP addresses. Amazon S3 is an AWS service that provides object storage for data of any size and type. Amazon Elastic Transcoder is an AWS service that converts media files from their original source format into different formats that will play on various devices.
Reference: Amazon CloudFront FAQs

QUESTION 17
An application is running on multiple Amazon EC2 instances. The company wants to make the application highly available by configuring a load balancer with requests forwarded to the EC2 instances based on URL paths.
Which AWS load balancer will meet these requirements and take the LEAST amount of effort to deploy?

A. Network Load Balancer
B. Application Load Balancer
C. AWS OpsWorks Load Balancer
D. Custom Load Balancer on Amazon EC2

Correct Answer: B
Section:
Explanation:
The correct answer is B because Application Load Balancer is an AWS load balancer that will meet the requirements and take the least amount of effort to deploy. Application Load Balancer is a type of Elastic Load Balancing that operates at the application layer (layer 7) of the OSI model and routes requests to targets based on the content of the request. Application Load Balancer supports advanced features, such as path-based routing, host-based routing, and HTTP header-based routing.
The other options are incorrect because they are not AWS load balancers that will meet the requirements and take the least amount of effort to deploy. Network Load Balancer is a type of Elastic Load Balancing that operates at the transport layer (layer 4) of the OSI model and routes requests to targets based on the destination IP address and port. Network Load Balancer does not support path-based routing. AWS OpsWorks Load Balancer is not an AWS load balancer, but rather a feature of AWS OpsWorks that enables users to attach an Elastic Load Balancing load balancer to a layer of their stack. Custom Load Balancer on Amazon EC2 is not an AWS load balancer, but rather a user-defined load balancer that runs on an Amazon EC2 instance. Custom Load Balancer on Amazon EC2 requires more effort to deploy and maintain than an AWS load balancer. Reference: Elastic Load Balancing

QUESTION 18
A large company has a workload that requires hardware to remain on premises. The company wants to use the same management and control plane services that it currently uses on AWS.
Which AWS service should the company use to meet these requirements?

A. AWS Device Farm
B. AWS Fargate
C. AWS Outposts
D. AWS Ground Station

Correct Answer: C
Section:
Explanation:
The correct answer is C because AWS Outposts is an AWS service that enables the company to meet the requirements. AWS Outposts is a fully managed service that extends AWS infrastructure, services, APIs, and tools to virtually any datacenter, co-location space, or on-premises facility. AWS Outposts allows customers to run their workloads on the same hardware and software that AWS uses in its cloud, while maintaining local access and control. The other options are incorrect because they are not AWS services that enable the company to meet the requirements. AWS Device Farm is an AWS service that enables customers to test their mobile and web applications on real devices in the AWS Cloud. AWS Fargate is an AWS service that enables customers to run containers without having to manage servers or clusters. AWS Ground Station is an AWS service that enables customers to communicate with satellites and downlink data from orbit. Reference: AWS Outposts FAQs

QUESTION 19

A company needs to use dashboards and charts to analyze insights from business data.
Which AWS service will provide the dashboards and charts for these insights?

A. Amazon Macie
B. Amazon Aurora
C. Amazon QuickSight
D. AWS CloudTrail

Correct Answer: C
Section:
Explanation:
The correct answer is C because Amazon QuickSight is an AWS service that will provide the dashboards and charts for the insights from business data. Amazon QuickSight is a fully managed, scalable, and serverless business intelligence service that enables users to create and share interactive dashboards and charts. Amazon QuickSight can connect to various data sources, such as Amazon S3, Amazon RDS, Amazon Redshift, and more. Amazon QuickSight also provides users with machine learning insights, such as anomaly detection, forecasting, and natural language narratives.
The other options are incorrect because they are not AWS services that will provide the dashboards and charts for the insights from business data. Amazon Macie is an AWS service that helps users discover, classify, and protect sensitive data stored in Amazon S3. Amazon Aurora is an AWS service that provides a relational database that is compatible with MySQL and PostgreSQL. AWS CloudTrail is an AWS service that enables users to track user activity and API usage across their AWS account.
Reference: Amazon QuickSight FAQs

QUESTION 20
When a user wants to utilize their existing per-socket, per-core, or per-virtual machine software licenses for a Microsoft Windows server running on AWS, which Amazon EC2 instance type is required?

A. Spot Instances
B. Dedicated Instances
C. Dedicated Hosts
D. Reserved Instances

Correct Answer: C
Section:
Explanation:
The correct answer is C because Dedicated Hosts are Amazon EC2 instances that are required when a user wants to utilize their existing per-socket, per-core, or per-virtual machine software licenses for a Microsoft Windows server running on AWS. Dedicated Hosts are physical servers that are dedicated to a single customer. Dedicated Hosts allow customers to use their existing server-bound software licenses, such as Windows Server, SQL Server, and SUSE Linux Enterprise Server, subject to their license terms. The other options are incorrect because they are not Amazon EC2 instances that are required when a user wants to utilize their existing per-socket, per-core, or per-virtual machine software licenses for a Microsoft Windows server running on AWS. Spot Instances are spare Amazon EC2 instances that are available at up to 90% discount compared to On-Demand prices. Spot Instances are suitable for stateless, fault-tolerant, and flexible workloads that can recover from interruptions easily. Dedicated Instances are Amazon EC2 instances that run on hardware that is dedicated to a single customer, but not to a specific physical server. Dedicated Instances do not allow customers to use their existing server-bound software licenses. Reserved Instances are Amazon EC2 instances that are reserved for a specific period of time (one or three years) in exchange for a lower hourly rate. Reserved Instances are suitable for steady-state or predictable workloads that run for a long duration. Reserved Instances do not allow customers to use their existing server-bound software licenses. Reference: Dedicated Hosts, Amazon EC2 Instance Purchasing Options

QUESTION 21
Which AWS service should a cloud engineer use to view API calls to AWS services?

A. Amazon CloudWatch
B. AWS CloudTrail
C. AWS Config
D. AWS Artifact

Correct Answer: B

Section:
Explanation:
The correct answer is B because AWS CloudTrail is an AWS service that a cloud engineer can use to view API calls to AWS services. AWS CloudTrail is a service that enables customers to track user activity and API usage across their AWS account. AWS CloudTrail records the details of every API call made to AWS services, such as the identity of the caller, the time of the call, the source IP address of the caller, the parameters and responses of the call, and more. Customers can use AWS CloudTrail to audit, monitor, and troubleshoot their AWS resources and actions. The other options are incorrect because they are not AWS services that a cloud engineer can use to view API calls to AWS services.
Amazon CloudWatch is an AWS service that enables customers to collect, analyze, and visualize metrics, logs, and events from their AWS resources and applications. AWS Config is an AWS service that enables customers to assess, audit, and evaluate the configurations of their AWS resources. AWS Artifact is an AWS service that provides customers with on-demand access to AWS compliance reports and select online agreements. Reference: AWS CloudTrail FAQs

QUESTION 22
A company uses Amazon Workspaces. What can a user accomplish using AWS CloudTrail?

A. Generate an 1AM user credentials report.
B. Record API calls made to AWS services.
C. Assess the compliance of AWS resource configurations with policies and guidelines.
D. Ensure that Amazon EC2 instances are patched with the latest security updates.

Correct Answer: B
Section:
Explanation:
AWS CloudTrail is an AWS service that enables users to accomplish the task of recording API calls made to AWS services. AWS CloudTrail is a service that tracks user activity and API usage across the AWS account. AWS CloudTrail records the details of every API call made to AWS services, such as the identity of the caller, the time of the call, the source IP address of the caller, the parameters and responses of the call, and more. Users can use AWS CloudTrail to audit, monitor, and troubleshoot their AWS resources and actions. The other options are incorrect because they are not tasks that users can accomplish using AWS CloudTrail. Generating an IAM user credentials report is a task that users can accomplish using IAM, which is an AWS service that enables users to manage access and permissions to AWS resources and services. Assessing the compliance of AWS resource configurations with policies and guidelines is a task that users can accomplish using AWS Config, which is an AWS service that enables users to assess, audit, and evaluate the configurations of their AWS resources. Ensuring that Amazon EC2 instances are patched with the latest security updates is a task that users can accomplish using AWS Systems Manager, which is an AWS service that enables users to automate operational tasks, manage configuration and compliance, and monitor system health and performance. Reference: AWS CloudTrail FAQs

QUESTION 23
A company stores data in an Amazon S3 bucket. The company must control who has permission to read, write, or delete objects that the company stores in the S3 bucket. Which task is the responsibility of AWS, according to the AWS shared responsibility model?

A. Set up multi-factor authentication (MFA) for each Workspaces user account.
B. Ensure the environmental safety and security of the AWS infrastructure that hosts Workspaces.
C. Provide security for Workspaces user accounts through AWS Identity and Access Management (1AM).
D. Configure AWS CloudTrail to log API calls and user activity.

Correct Answer: B
Section:
Explanation:
The correct answer is B because ensuring the environmental safety and security of the AWS infrastructure that hosts Workspaces is the responsibility of AWS, according to the AWS shared responsibility model. The AWS shared responsibility model is a framework that defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the global infrastructure, such as the regions, availability zones, and edge locations; the hardware, software, networking, and facilities that run the AWS services; and the virtualization layer that separates the customer instances and storage. The customer is responsible for the security in the cloud, which includes the customer data, the guest operating systems, the applications, the identity and access management, the firewall configuration, and the encryption. The other options are incorrect because they are the responsibility of the customer, according to the AWS shared responsibility model. Setting up multi-factor authentication (MFA) for each Workspaces user account, providing security for Workspaces user accounts through AWS Identity and Access Management (IAM), configuring AWS CloudTrail to log API calls and user activity, and encrypting data at rest and in transit are all tasks that the customer has to perform to secure their Workspaces environment. Reference: AWS Shared Responsibility Model, Amazon WorkSpaces Security

QUESTION 24
Which database engine is compatible with Amazon RDS?

A. Apache Cassandra
B. MongoDB
C. Neo4j
D. PostgreSQL

Correct Answer: D
Section:
Explanation:
Amazon RDS supports six database engines: Amazon Aurora, MySQL, MariaDB, PostgreSQL, Oracle, and SQL Server. Apache Cassandra, MongoDB, and Neo4j are not compatible with Amazon RDS. Therefore, the correct answer is D. You can learn more about Amazon RDS and its supported database engines from this page.

QUESTION 25
A company needs to run code in response to an event notification that occurs when objects are uploaded to an Amazon S3 bucket.
Which AWS service will integrate directly with the event notification?

A. AWS Lambda
B. Amazon EC2
C. Amazon Elastic Container Registry (Amazon ECR)
D. AWS Elastic Beanstalk

Correct Answer: A
Section:
Explanation:
AWS Lambda is a service that lets you run code without provisioning or managing servers. You can use Lambda to process event notifications from Amazon S3 when objects are uploaded or deleted.
Lambda integrates directly with the event notification and invokes your code automatically.
Therefore, the correct answer is A.

QUESTION 26
A company wants to centrally manage security policies and billing services within a multi-account AWS environment. Which AWS service should the company use to meet these requirements?

A. AWS Identity and Access Management (1AM)
B. AWS Organizations
C. AWS Resource Access Manager (AWS RAM)
D. AWS Config

Correct Answer: B
Section:
Explanation:
AWS Organizations is a service that helps you centrally manage and govern your environment as you grow and scale your AWS resources. You can use AWS Organizations to create groups of accounts and apply policies to them. You can also use AWS Organizations to consolidate billing for multiple accounts. Therefore, the correct answer is B. You can learn more about AWS Organizations and its features from this page.

QUESTION 27
What are the characteristics of Availability Zones? (Select TWO.)

A. All Availability Zones in an AWS Region are interconnected with high-bandwidth, low-latency networking

B. Availability Zones are physically separated by a minimum of distance of 150 km (100 miles).
C. All traffic between Availability Zones is encrypted.
D. Availability Zones within an AWS Region share redundant power, networking, and connectivity.
E. Every Availability Zone contains a single data center.

Correct Answer: A, D
Section:
Explanation:
Availability Zones are physically separate locations within an AWS Region that are engineered to be isolated from failures. Each Availability Zone has independent power, cooling, and physical security, and is connected to other Availability Zones in the same Region by a low-latency network. Therefore, the correct answers are A and D. You can learn more about Availability Zones and their characteristics from this page.

QUESTION 28
Which AWS Well-Architected Framework concept represents a system's ability to remain functional when the system encounters operational problems?

A. Consistency
B. Elasticity
C. Durability
D. Latency

Correct Answer: B
Section:
Explanation:
The AWS Well-Architected Framework is a set of best practices and guidelines for designing and operating systems in the cloud. The framework consists of five pillars: operational excellence, security, reliability, performance efficiency, and cost optimization. The concept of elasticity represents a system's ability to adapt to changes in demand by scaling resources up or down automatically. Therefore, the correct answer is B. You can learn more about the AWS Well-Architected Framework and its pillars from this page.

QUESTION 29
Which AWS service or tool does AWS Control Tower use to create resources?

A. AWS CloudFormation
B. AWS Trusted Advisor
C. AWS Directory Service
D. AWS Cost Explorer

Correct Answer: A
Section:
Explanation:
AWS Control Tower uses AWS CloudFormation to create resources in your landing zone. AWS CloudFormation is a service that helps you model and set up your AWS resources using templates.
AWS Control Tower supports creating AWS::ControlTower::EnabledControl resources in AWS CloudFormation. Therefore, the correct answer is A. You can learn more about AWS Control Tower and AWS CloudFormation from this page.

QUESTION 30
What are some advantages of using Amazon EC2 instances lo host applications in the AWS Cloud instead of on premises? (Select TWO.)

A. EC2 includes operating system patch management
B. EC2 integrates with Amazon VPC. AWS CloudTrail, and AWS Identity and Access Management (1AM)
C. EC2 has a 100% service level agreement (SLA).

D. EC2 has a flexible, pay-as-you-go pricing model.
E. EC2 has automatic storage cost optimization.

Correct Answer: B, D
Section:
Explanation:
Some of the advantages of using Amazon EC2 instances to host applications in the AWS Cloud instead of on premises are:
EC2 integrates with Amazon VPC, AWS CloudTrail, and AWS Identity and Access Management (IAM).
Amazon VPC lets you provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you define. AWS CloudTrail enables governance, compliance, operational auditing, and risk auditing of your AWS account. AWS IAM enables you to manage access to AWS services and resources securely. Therefore, the correct answer is B. You can learn more about Amazon EC2 and its integration with other AWS services from this page.
EC2 has a flexible, pay-as-you-go pricing model. You only pay for the compute capacity you use, and you can scale up and down as needed. You can also choose from different pricing options, such as On-Demand, Savings Plans, Reserved Instances, and Spot Instances, to optimize your costs.
Therefore, the correct answer is D. You can learn more about Amazon EC2 pricing from this page.
The other options are incorrect because:
EC2 does not include operating system patch management. You are responsible for managing and maintaining your own operating systems on EC2 instances. You can use AWS Systems Manager to automate common maintenance tasks, such as applying patches, or use Amazon EC2 Image Builder to create and maintain secure images. Therefore, the incorrect answer is A.
EC2 does not have a 100% service level agreement (SLA). The EC2 SLA guarantees 99.99% availability for each EC2 Region, not for each individual instance. Therefore, the incorrect answer is C.
EC2 does not have automatic storage cost optimization. You are responsible for choosing the right storage option for your EC2 instances, such as Amazon Elastic Block Store (EBS) or Amazon Elastic File System (EFS), and monitoring and optimizing your storage costs. You can use AWS Cost Explorer or
AWS Trusted Advisor to analyze and reduce your storage spending. Therefore, the incorrect answer is E.

QUESTION 31
Which option is an advantage of AWS Cloud computing that minimizes variable costs?

A. High availability
B. Economies of scale
C. Global reach
D. Agility

Correct Answer: B
Section:
Explanation:
One of the advantages of AWS Cloud computing is that it minimizes variable costs by leveraging economies of scale. This means that AWS can achieve lower costs per unit of computing resources by spreading the fixed costs of building and maintaining data centers over a large number of customers.
As a result, AWS can offer lower and more predictable prices to its customers, who only pay for the resources they consume. Therefore, the correct answer is B. You can learn more about AWS pricing and economies of scale from this page.

QUESTION 32
Which pillar of the AWS Well-Architected Framework focuses on the ability to run workloads effectively, gain insight into operations, and continuously improve supporting processes and procedures?

A. Cost optimization
B. Reliability
C. Operational excellence
D. Performance efficiency

Correct Answer: C
Section:

Explanation:
The AWS Well-Architected Framework is a set of best practices and guidelines for designing and operating systems in the cloud. The framework consists of five pillars: operational excellence, security, reliability, performance efficiency, and cost optimization. The operational excellence pillar focuses on the ability to run workloads effectively, gain insight into operations, and continuously improve supporting processes and procedures. Therefore, the correct answer is C. You can learn more about the AWS Well-Architected Framework and its pillars from this page.

QUESTION 33
Which benefit is included with an AWS Enterprise Support plan?

A. AWS Partner Network (APN) support at no cost
B. Designated support from an AWS technical account manager (TAM)
C. On-site support from AWS engineers
D. AWS managed compliance as code with AWS Config

Correct Answer: B
Section:
Explanation:
AWS offers different support plans to meet the needs of different customers. The AWS Enterprise Support plan is the highest level of support that provides customers with concierge-like service, where the main focus is helping them achieve their outcomes and find success in the cloud. One of the benefits of the AWS Enterprise Support plan is that customers get designated support from an AWS technical account manager (TAM), who provides consultative architectural and operational guidance based on their applications and use cases. Therefore, the correct answer is B. You can learn more about AWS support plans and their benefits from this page.

QUESTION 34
A company plans to migrate to AWS and wants to create cost estimates for its AWS use cases.
Which AWS service or tool can the company use to meet these requirements?

A. AWS Pricing Calculator
B. Amazon CloudWatch
C. AWS Cost Explorer
D. AWS Budgets

Correct Answer: A
Section:
Explanation:
AWS Pricing Calculator is a web-based planning tool that customers can use to create estimates for their AWS use cases. They can use it to model their solutions before building them, explore the AWS service price points, and review the calculations behind their estimates. Therefore, the correct answer is A. You can learn more about AWS Pricing Calculator and how it works from this page.

QUESTION 35
A developer needs to build an application for a retail company. The application must provide realtime product recommendations that are based on machine learning.
Which AWS service should the developer use to meet this requirement?

A. AWS Health Dashboard
B. Amazon Personalize
C. Amazon Forecast
D. Amazon Transcribe

Correct Answer: B
Section:
Explanation:
Amazon Personalize is a fully managed machine learning service that customers can use to generate personalized recommendations for their users. It can also generate user segments based on the users' affinity for certain

items or item metadata. Amazon Personalize uses the customers' data to train and deploy custom recommendation models that can be integrated into their applications.
Therefore, the correct answer is B. You can learn more about Amazon Personalize and its use cases from this page.

QUESTION 36
A company deploys its application on Amazon EC2 instances. The application occasionally experiences sudden increases in demand. The company wants to ensure that its application can respond to changes in demand at the lowest possible cost.
Which AWS service or tool will meet these requirements?

A. AWS Auto Scaling
B. AWS Compute Optimizer
C. AWS Cost Explorer
D. AWS Well-Architected Framework

Correct Answer: A
Section:
Explanation:
AWS Auto Scaling is the AWS service or tool that will meet the requirements of ensuring that the application can respond to changes in demand at the lowest possible cost. AWS Auto Scaling allows users to automatically adjust the number of Amazon EC2 instances based on the application's performance and availability needs. AWS Auto Scaling can also optimize costs by helping users select the most cost-effective EC2 instances for their application1

QUESTION 37
Which AWS service or tool provides recommendations to help users get rightsized Amazon EC2 instances based on historical workload usage data?

A. AWS Pricing Calculator
B. AWS Compute Optimizer
C. AWS App Runner
D. AWS Systems Manager

Correct Answer: B
Section:
Explanation:
AWS Compute Optimizer is the AWS service or tool that provides recommendations to help users get rightsized Amazon EC2 instances based on historical workload usage data. AWS Compute Optimizer analyzes the configuration and performance characteristics of the EC2 instances and delivers recommendations for optimal instance types, sizes, and configurations. AWS Compute Optimizer helps users improve performance, reduce costs, and eliminate underutilized resources

QUESTION 38
A company wants to use a managed service to simplify the setup, operation, and scaling of its MySQL database in the AWS Cloud.
Which AWS service will meet these requirements?

A. Amazon EMR
B. Amazon RDS
C. Amazon Redshift
D. Amazon DynamoDB

Correct Answer: B
Section:
Explanation:
Amazon RDS is the AWS service that will meet the requirements of using a managed service to simplify the setup, operation, and scaling of a MySQL database in the AWS Cloud. Amazon RDS is a relational database service

that supports MySQL and other popular database engines. Amazon RDS handles routine database tasks such as provisioning, patching, backup, recovery, and scaling. Amazon RDS also offers high availability, security, and compatibility features3

QUESTION 39
A company deploys its application to multiple AWS Regions and configures automatic failover between those Regions.
Which cloud concept does this architecture represent?

A. Security
B. Reliability
C. Scalability
D. Cost optimization

Correct Answer: B
Section:
Explanation:
Reliability is the cloud concept that this architecture represents. Reliability is the ability of a system to recover from infrastructure or service disruptions, dynamically acquire computing resources to meet demand, and mitigate disruptions such as misconfigurations or transient network issues. Deploying an application to multiple AWS Regions and configuring automatic failover between those Regions enhances the reliability of the application by reducing the impact of regional failures and increasing the availability of the application4

QUESTION 40
A company's IT team is managing MySQL database server clusters. The IT team has to patch the database and take backup snapshots of the data in the clusters. The company wants to move this workload to AWS so that these tasks will be completed automatically.
What should the company do to meet these requirements?

A. Deploy MySQL database server clusters on Amazon EC2 instances.
B. Use Amazon RDS with a MySQL database.
C. Use an AWS Cloud Form at ion template to deploy MySQL database servers on Amazon EC2 instances.
D. Migrate all the MySQL database data to Amazon S3.

Correct Answer: B
Section:
Explanation:
The company should use Amazon RDS with a MySQL database to meet the requirements of moving its workload to AWS so that the tasks of patching the database and taking backup snapshots of the data in the clusters will be completed automatically. Amazon RDS is a managed service that simplifies the setup, operation, and scaling of relational databases in the AWS Cloud. Amazon RDS automates common database administration tasks such as patching, backup, and recovery. Amazon RDS also supports MySQL and other popular database engines5

QUESTION 41
A company recently migrated to the AWS Cloud. The company needs to determine whether its newly imported Amazon EC2 instances are the appropriate size and type.
Which AWS services can provide this information to the company? {Select TWO.)

A. AWS Auto Scaling
B. AWS Control Tower
C. AWS Trusted Advisor
D. AWS Compute Optimizer
E. Amazon Forecast

Correct Answer: C, D
Section:

Explanation:
AWS Trusted Advisor and AWS Compute Optimizer are the AWS services that can provide information to the company about whether its newly imported Amazon EC2 instances are the appropriate size and type. AWS Trusted Advisor is an online tool that provides best practices recommendations in five categories: cost optimization, performance, security, fault tolerance, and service limits. AWS Trusted Advisor can help users identify underutilized or idle EC2 instances, and suggest ways to reduce costs and improve performance. AWS Compute Optimizer is a service that analyzes the configuration and utilization metrics of EC2 instances and delivers recommendations for optimal instance types, sizes, and configurations. AWS Compute Optimizer helps users improve performance, reduce costs, and eliminate underutilized resources

QUESTION 42
A company has a social media platform in which users upload and share photos with other users. The company wants to identify and remove inappropriate photos. The company has no machine learning (ML) scientists and must build this detection capability with no ML expertise.
Which AWS service should the company use to build this capability?

A. Amazon SageMaker
B. Amazon Textract
C. Amazon Rekognition
D. Amazon Comprehend

Correct Answer: C
Section:
Explanation:
Amazon Rekognition is the AWS service that the company should use to build the capability of identifying and removing inappropriate photos. Amazon Rekognition is a service that uses deep learning technology to analyze images and videos for various purposes, such as face detection, object recognition, text extraction, and content moderation. Amazon Rekognition can help users detect unsafe or inappropriate content in images and videos, such as nudity, violence, or drugs, and provide confidence scores for each label. Amazon Rekognition does not require any machine learning expertise, and users can easily integrate it with other AWS services

QUESTION 43
A company's user base needs to remotely access virtual desktop computers from the internet Which AWS service provides this functionality?

A. Amazon Connect
B. Amazon Cognito
C. Amazon Workspaces
D. Amazon Upstream 2.0

Correct Answer: C
Section:
Explanation:
Amazon Workspaces is the AWS service that provides the functionality of remotely accessing virtual desktop computers from the internet. Amazon Workspaces is a fully managed, secure desktop-as-aservice (DaaS) solution that allows users to provision cloud-based virtual desktops and access them from anywhere, using any supported device. Amazon Workspaces helps users reduce the complexity and cost of managing and maintaining physical desktops, and provides a consistent and secure user experience

QUESTION 44
Amazon Elastic File System (Amazon EFS) and Amazon FSx offer which type of storage?

A. File storage
B. Object storage
C. Block storage
D. Instance store

Correct Answer: A
Section:

Explanation:
Amazon Elastic File System (Amazon EFS) and Amazon FSx offer file storage. File storage is a type of storage that organizes data into files and folders, and allows multiple users or applications to access and share the same files over a network. Amazon EFS is a fully managed, scalable, and elastic file system that supports the Network File System (NFS) protocol and can be used with Amazon EC2 instances and AWS Lambda functions. Amazon FSx is a fully managed service that provides two file system options: Amazon FSx for Windows File Server, which supports the Server Message Block (SMB) protocol and is compatible with Microsoft Windows applications; and Amazon FSx for Lustre, which is a high-performance file system that is optimized for compute-intensive workloads

QUESTION 45
Which AWS service or feature is used to Troubleshoot network connectivity issues between Amazon EC2 instances?

A. AWS Certificate Manager (ACM)
B. Internet gateway
C. VPC Flow Logs
D. AWS CloudHSM

Correct Answer: C
Section:
Explanation:
VPC Flow Logs is the AWS service or feature that is used to troubleshoot network connectivity issues between Amazon EC2 instances. VPC Flow Logs is a feature that enables users to capture information about the IP traffic going to and from network interfaces in their VPC. VPC Flow Logs can help users monitor and diagnose network-related issues, such as traffic not reaching an instance, or an instance not responding to requests. VPC Flow Logs can be published to Amazon CloudWatch Logs, Amazon S3, or Amazon Kinesis Data Firehose for analysis and storage.

QUESTION 46
Which factors affect costs in the AWS Cloud? (Select TWO.)

A. The number of unused AWS Lambda functions
B. The number of configured Amazon S3 buckets
C. Inbound data transfers without acceleration
D. Outbound data transfers without acceleration
E. Compute resources that are currently in use

Correct Answer: D, E
Section:
Explanation:
Outbound data transfers without acceleration and compute resources that are currently in use are the factors that affect costs in the AWS Cloud. Outbound data transfers without acceleration refer to the amount of data that is transferred from AWS to the internet, without using any service that can optimize the speed and cost of the data transfer, such as AWS Global Accelerator or Amazon CloudFront. Outbound data transfers are charged at different rates depending on the source and destination AWS Regions, and the volume of data transferred. Compute resources that are currently in use refer to the AWS services and resources that provide computing capacity, such as Amazon EC2 instances, AWS Lambda functions, or Amazon ECS tasks. Compute resources are charged based on the type, size, and configuration of the resources, and the duration and frequency of their usage.

QUESTION 47
Which design principles support the reliability pillar of the AWS Well-Architected Framework? (Select TWO.)

A. Perform operations as code.
B. Enable traceability.
C. Automatically scale to meet demand.
D. Deploy resources globally to improve response time.
E. Automatically recover from failure.

Correct Answer: C, E
Section:
Explanation:
The design principles that support the reliability pillar of the AWS Well-Architected Framework are:
automatically scale to meet demand, and automatically recover from failure. These principles help users design systems that can handle changes in load, avoid disruptions, and resume normal operations quickly. Automatically scaling to meet demand means adjusting the capacity of the system based on the current and anticipated workload, using services such as AWS Auto Scaling, Amazon EC2, and AWS Lambda. Automatically recovering from failure means detecting and resolving issues, using services such as Amazon CloudWatch, AWS CloudFormation, and AWS CloudTrail

QUESTION 48
Which of the following are user authentication services managed by AWS? (Select TWO.)

A. Amazon Cognito
B. AWS Lambda
C. AWS License Manager
D. AWS Identity and Access Management (1AM)
E. AWS CodeStar

Correct Answer: A, D
Section:
Explanation:
The user authentication services managed by AWS are: Amazon Cognito and AWS Identity and Access Management (IAM). These services help users securely manage and control access to their
AWS resources and applications. Amazon Cognito is a service that provides user sign-up, sign-in, and access control for web and mobile applications. Amazon Cognito supports various identity providers, such as Facebook, Google, and Amazon, as well as custom user pools. AWS IAM is a service that enables users to create and manage users, groups, roles, and permissions for AWS services and resources. AWS IAM supports various authentication methods, such as passwords, access keys, and multi-factor authentication (MFA)

QUESTION 49
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?

A. Reliability
B. Security
C. Operational excellence
D. Performance efficiency

Correct Answer: B
Section:
Explanation:
The pillar of the AWS Well-Architected Framework that is supported by the goals of protecting AWS Cloud information, systems, and assets while performing risk assessment and mitigation tasks is security. Security is the ability to protect information, systems, and assets while delivering business value through risk assessments and mitigation strategies. The security pillar covers topics such as identity and access management, data protection, infrastructure protection, detective controls, incident response, and compliance

QUESTION 50
Which of the following is an advantage of AWS Cloud computing?

A. Trade security for elasticity.
B. Trade operational excellence for agility.
C. Trade fixed expenses for variable expenses.
D. Trade elasticity for performance.

Correct Answer: C
Section:
Explanation:
The correct answer is C because AWS Cloud computing allows customers to trade fixed expenses for variable expenses. This means that customers only pay for the resources they use, and can scale up or down as needed. The other options are incorrect because they are not advantages of AWS Cloud computing. Trade security for elasticity means that customers have to compromise on the protection of their data and applications in order to adjust their capacity quickly. Trade operational excellence for agility means that customers have to sacrifice the quality and reliability of their operations in order to respond to changing needs faster. Trade elasticity for performance means that customers have to limit their ability to scale up or down in order to achieve higher speed and efficiency.
Reference: What is Cloud Computing?

QUESTION 51
A company is running applications on Amazon EC2 instances in the same AWS account for several different projects. The company wants to track the infrastructure costs for each of the projects separately. The company must conduct this tracking with the least possible impact to the existing infrastructure and with no additional cost.
What should the company do to meet these requirements?

A. Use a different EC2 instance type for each project.
B. Publish project-specific custom Amazon CloudWatch metrics for each application.
C. Deploy EC2 instances for each project in a separate AWS account.
D. Use cost allocation tags with values that are specific to each project.

Correct Answer: D
Section:
Explanation:
The correct answer is D because cost allocation tags are a way to track the infrastructure costs for each of the projects separately. Cost allocation tags are key-value pairs that can be attached to AWS resources, such as EC2 instances, and used to categorize and group them for billing purposes. The other options are incorrect because they do not meet the requirements of the question. Use a different EC2 instance type for each project does not help to track the costs for each project, and may impact the performance and compatibility of the applications. Publish project-specific custom Amazon CloudWatch metrics for each application does not help to track the costs for each project, and may incur additional charges for using CloudWatch. Deploy EC2 instances for each project in a separate AWS account does help to track the costs for each project, but it impacts the existing infrastructure and incurs additional charges for using multiple accounts. Reference: Using Cost Allocation Tags

QUESTION 52
A company has an online shopping website and wants to store customers' credit card dat a. The company must meet Payment Card Industry (PCI) standards.
Which service can the company use to access AWS compliance documentation?

A. Amazon Cloud Directory
B. AWS Artifact
C. AWS Trusted Advisor
D. Amazon Inspector

Correct Answer: B
Section:
Explanation:
The correct answer is B because AWS Artifact is a service that provides access to AWS compliance documentation, such as audit reports, security certifications, and agreements. AWS Artifact allows customers to download, review, and accept the documents that are relevant to their use of AWS services. The other options are incorrect because they are not services that provide access to AWS compliance documentation. Amazon Cloud Directory is a service that enables customers to create flexible cloud-native directories for organizing hierarchies of data. AWS Trusted Advisor is a service that provides real-time guidance to help customers follow AWS best practices for security, performance, cost optimization, and fault tolerance. Amazon Inspector is a service that helps customers find security vulnerabilities and deviations from best practices in their Amazon EC2 instances. Reference: [AWS Artifact FAQs]

QUESTION 53
Which of the following are components of an AWS Site-to-Site VPN connection? (Select TWO.)

A. AWS Storage Gateway
B. Virtual private gateway
C. NAT gateway
D. Customer gateway
E. Internet gateway

Correct Answer: B, D
Section:
Explanation:
The correct answers are B and D because a virtual private gateway and a customer gateway are components of an AWS Site-to-Site VPN connection. A virtual private gateway is the AWS side of the VPN connection that attaches to the customer's VPC. A customer gateway is the customer side of the VPN connection that resides in the customer's network. The other options are incorrect because they are not components of an AWS Site-to-Site VPN connection. AWS Storage Gateway is a service that connects on-premises software applications with cloud-based storage. NAT gateway is a service that enables instances in a private subnet to connect to the internet or other AWS services, but prevents the internet from initiating a connection with those instances. Internet gateway is a service that enables communication between instances in a VPC and the internet. Reference: [What is AWS Siteto-Site VPN?]

QUESTION 54
A company runs thousands of simultaneous simulations using AWS Batch. 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?

A. Reserved Instances
B. Spot Instances
C. On-Demand Instances
D. Dedicated Instances

Correct Answer: B
Section:
Explanation:
The correct answer is B because Spot Instances enable the company to optimize costs and meet the requirements. Spot Instances are spare EC2 instances that are available at up to 90% discount compared to On-Demand prices. Spot Instances are suitable for stateless, fault-tolerant, and flexible applications that can run for any duration. The other options are incorrect because they do not enable the company to optimize costs and meet the requirements. Reserved Instances are EC2 instances that are reserved for a specific period of time (one or three years) in exchange for a lower hourly rate. Reserved Instances are suitable for steady-state or predictable workloads that run for a long duration. On-Demand Instances are EC2 instances that are launched and billed at a fixed hourly rate. On-Demand Instances are suitable for short-term, irregular, or unpredictable workloads that cannot be interrupted. Dedicated Instances are EC2 instances that run on hardware that is dedicated to a single customer. Dedicated Instances are suitable for workloads that require regulatory compliance or data isolation. Reference: [Amazon EC2 Instance Purchasing Options]

QUESTION 55
A company has an application with robust hardware requirements. The application must be accessed by students who are using lightweight, low-cost laptops.
Which AWS service will help the company deploy the application without investing in backend infrastructure or high end client hardware?

A. Amazon AppStream 2.0
B. AWS AppSync
C. Amazon WorkLink
D. AWS Elastic Beanstalk

Correct Answer: A
Section:
Explanation:
The correct answer is A because Amazon AppStream 2.0 is a service that will help the company deploy the application without investing in backend infrastructure or high end client hardware.
Amazon AppStream 2.0 is a fully managed, secure application streaming service that allows customers to stream desktop applications from AWS to any device running a web browser. Amazon AppStream 2.0 handles the

provisioning, scaling, patching, and maintenance of the backend infrastructure, and delivers high performance and responsive user experience. The other options are incorrect because they are not services that will help the company deploy the application without investing in backend infrastructure or high end client hardware. AWS AppSync is a service that enables customers to create flexible APIs for synchronizing data across multiple data sources.
Amazon WorkLink is a service that enables customers to provide secure, one-click access to internal websites and web apps from mobile devices. AWS Elastic Beanstalk is a service that enables customers to deploy and manage web applications using popular platforms such as Java, .NET, PHP, and Node.js. Reference: [Amazon AppStream 2.0 FAQs]

QUESTION 56
Which AWS service will help a company identify the user who deleted an Amazon EC2 instance yesterday?

A. Amazon CloudWatch
B. AWS Trusted Advisor
C. AWS CloudTrail
D. Amazon Inspector

Correct Answer: C
Section:
Explanation:
The correct answer is C because AWS CloudTrail is a service that will help a company identify the user who deleted an Amazon EC2 instance yesterday. AWS CloudTrail is a service that enables users to track user activity and API usage across their AWS account. AWS CloudTrail records the details of every API call made to AWS services, such as the identity of the caller, the time of the call, the source IP address of the caller, the parameters and responses of the call, and more. Users can use AWS CloudTrail to audit, monitor, and troubleshoot their AWS resources and actions. The other options are incorrect because they are not services that will help a company identify the user who deleted an Amazon EC2 instance yesterday. Amazon CloudWatch is a service that enables users to collect, analyze, and visualize metrics, logs, and events from their AWS resources and applications. AWS Trusted Advisor is a service that provides real-time guidance to help users follow AWS best practices for security, performance, cost optimization, and fault tolerance. Amazon Inspector is a service that helps users find security vulnerabilities and deviations from best practices in their Amazon EC2 instances. Reference: AWS CloudTrail FAQs

QUESTION 57
Which AWS database service provides in-memory data storage?

A. Amazon DynamoDB
B. Amazon ElastiCache
C. Amazon RDS
D. Amazon Timestream

Correct Answer: B
Section:
Explanation:
The correct answer is B because Amazon ElastiCache is a service that provides in-memory data storage. Amazon ElastiCache is a fully managed, scalable, and high-performance service that supports two popular open-source in-memory engines: Redis and Memcached. Amazon ElastiCache allows users to store and retrieve data from fast, low-latency, and high-throughput in-memory systems. Users can use Amazon ElastiCache to improve the performance of their applications by caching frequently accessed data, reducing database load, and enabling real-time data processing.
The other options are incorrect because they are not services that provide in-memory data storage.
Amazon DynamoDB is a service that provides key-value and document data storage. Amazon RDS is a service that provides relational data storage. Amazon Timestream is a service that provides time series data storage.
Reference: Amazon ElastiCache FAQs

QUESTION 58
Which of the following acts as an instance-level firewall to control inbound and outbound access?

A. Network access control list
B. Security groups
C. AWS Trusted Advisor

D. Virtual private gateways

Correct Answer: B
Section:
Explanation:
The correct answer is B because security groups are AWS features that act as instance-level firewalls to control inbound and outbound access. Security groups are virtual firewalls that can be attached to one or more Amazon EC2 instances. Users can configure rules for security groups to allow or deny traffic based on protocols, ports, and source or destination IP addresses. The other options are incorrect because they are not AWS features that act as instance-level firewalls to control inbound and outbound access. Network access control list is an AWS feature that acts as a subnet-level firewall to control inbound and outbound access. AWS Trusted Advisor is an AWS service that provides real-time guidance to help users follow AWS best practices for security, performance, cost optimization, and fault tolerance. Virtual private gateways are AWS features that enable users to create a secure and encrypted connection between their VPC and their on-premises network.
Reference: Security Groups for Your VPC

QUESTION 59
A company has an application that uses AWS services. During scaling events, the company wants to keep application usage within AWS service quotas.
Which AWS services or tools can report on the quotas so that the company can improve the reliability of the application? (Select TWO.)

A. Service Quotas console
B. AWS Trusted Advisor
C. AWS Systems Manager
D. AWS Shield
E. AWS Cost Explorer

Correct Answer: A, B
Section:
Explanation:
The correct answers are A and B because Service Quotas console and AWS Trusted Advisor are AWS services or tools that can report on the quotas so that the company can improve the reliability of the application. Service Quotas console is an AWS tool that enables users to view and manage their quotas for AWS services from a central location. Users can use Service Quotas console to request quota increases, track quota usage, and set up alarms for approaching quota limits. AWS Trusted Advisor is an AWS service that provides real-time guidance to help users follow AWS best practices for security, performance, cost optimization, and fault tolerance. One of the categories of checks that AWS Trusted Advisor performs is service limits, which monitors the usage of each AWS service and alerts users when they are close to reaching the default limit. The other options are incorrect because they are not AWS services or tools that can report on the quotas so that the company can improve the reliability of the application. AWS Systems Manager is an AWS service that enables users to automate operational tasks, manage configuration and compliance, and monitor system health and performance. AWS Shield is an AWS service that protects users from distributed denial of service (DDoS) attacks. AWS Cost Explorer is an AWS tool that enables users to visualize, understand, and manage their AWS costs and usage. Reference: Service Quotas, AWS Trusted Advisor FAQs

QUESTION 60
Which of the following are AWS Cloud design principles? (Select TWO.)

A. Pay for compute resources in advance.
B. Make data-driven decisions to determine cloud architectural design.
C. Emphasize manual processes to allow for changes.
D. Test systems at production scale.
E. Refine operational procedures infrequently.

Correct Answer: B, D
Section:
Explanation:
The correct answers are B and D because making data-driven decisions to determine cloud architectural design and testing systems at production scale are AWS Cloud design principles. Making data-driven decisions to determine cloud architectural design means that users should collect and analyze data from their AWS resources and applications to optimize their performance, availability, security, and cost. Testing systems at production scale means that users should simulate real-world scenarios and load conditions to validate the functionality, reliability, and scalability of their systems.

The other options are incorrect because they are not AWS Cloud design principles. Paying for compute resources in advance means that users have to invest heavily in data centers and servers before they know how they will use them. This is not a cloud design principle, but rather a traditional IT model. Emphasizing manual processes to allow for changes means that users have to rely on human intervention and coordination to perform operational tasks and updates. This is not a cloud design principle, but rather a source of inefficiency and error. Refining operational procedures infrequently means that users have to stick to the same methods and practices without adapting to the changing needs and feedback. This is not a cloud design principle, but rather a hindrance to innovation and improvement. Reference: AWS Well-Architected Framework

QUESTION 61
A company needs to migrate all of its development teams to a cloud-based integrated development environment (IDE).
Which AWS service should the company use?

A. AWS CodeBuild
B. AWS Cloud9
C. AWS OpsWorks
D. AWS Cloud Development Kit (AWS CDK)

Correct Answer: B
Section:
Explanation:
The correct answer is B because AWS Cloud9 is an AWS service that enables users to run their existing custom, nonproduction workloads in the AWS Cloud quickly and cost-effectively. AWS Cloud9 is a cloud-based integrated development environment (IDE) that allows users to write, run, and debug code from a web browser. AWS Cloud9 supports multiple programming languages, such as Python, Java, Node.js, and more. AWS Cloud9 also provides users with a terminal that can access AWS services and resources, such as Amazon EC2 instances, AWS Lambda functions, and AWS CloudFormation stacks. The other options are incorrect because they are not AWS services that enable users to run their existing custom, nonproduction workloads in the AWS Cloud quickly and cost-effectively. AWS CodeBuild is an AWS service that enables users to compile, test, and package their code for deployment. AWS OpsWorks is an AWS service that enables users to configure and manage their applications using Chef or Puppet. AWS Cloud Development Kit (AWS CDK) is an AWS service that enables users to define and provision their cloud infrastructure using familiar programming languages, such as TypeScript, Python, Java, and C#. Reference: AWS Cloud9 FAQs

QUESTION 62
A company needs to run its existing custom, nonproduction workloads in the AWS Cloud quickly and cost-effectively.
The workloads can recover from interruptions easily.
Which pricing model should the company use?

A. Reserved Instances
B. On-Demand Instances
C. Spot Instances
D. Dedicated Hosts

Correct Answer: C
Section:
Explanation:
The correct answer is C because Spot Instances are the pricing model that enables the company to run its existing custom, nonproduction workloads in the AWS Cloud quickly and cost-effectively. Spot Instances are spare Amazon EC2 instances that are available at up to 90% discount compared to On-Demand prices. Spot Instances are suitable for stateless, fault-tolerant, and flexible workloads that can recover from interruptions easily. The other options are incorrect because they are not the pricing model that enables the company to run its existing custom, nonproduction workloads in the AWS Cloud quickly and cost-effectively. Reserved Instances are Amazon EC2 instances that are reserved for a specific period of time (one or three years) in exchange for a lower hourly rate.
Reserved Instances are suitable for steady-state or predictable workloads that run for a long duration. On-Demand Instances are Amazon EC2 instances that are launched and billed at a fixed hourly rate. On-Demand Instances are suitable for short-term, irregular, or unpredictable workloads that cannot be interrupted. Dedicated Hosts are physical servers that are dedicated to a single customer. Dedicated Hosts are suitable for workloads that require regulatory compliance or data isolation. Reference: Amazon EC2 Instance Purchasing Options

QUESTION 63
Which AWS features will meet these requirements? (Select TWO.)

A. Security groups
B. Network ACLs
C. S3 bucket policies
D. 1AM user policies
E. S3 bucket versioning

Correct Answer: C, D
Section:
Explanation:
The correct answers are C and D because S3 bucket policies and IAM user policies are AWS features that will meet the requirements. S3 bucket policies are access policies that can be attached to Amazon S3 buckets to grant or deny permissions to the bucket and the objects it contains. S3 bucket policies can be used to control who has permission to read, write, or delete objects that the company stores in the S3 bucket. IAM user policies are access policies that can be attached to IAM users to grant or deny permissions to AWS resources and actions. IAM user policies can be used to control who has permission to read, write, or delete objects that the company stores in the S3 bucket. The other options are incorrect because they are not AWS features that will meet the requirements.
Security groups and network ACLs are AWS features that act as firewalls to control inbound and outbound traffic to and from Amazon EC2 instances and subnets. Security groups and network ACLs do not control who has permission to read, write, or delete objects that the company stores in the S3 bucket. S3 bucket versioning is an AWS feature that enables users to keep multiple versions of the same object in the same bucket. S3 bucket versioning can be used to recover from accidental overwrites or deletions of objects, but it does not control who has permission to read, write, or delete objects that the company stores in the S3 bucket. Reference: Using Bucket Policies and User Policies, Security Groups for Your VPC, Network ACLs, [Using Versioning]

QUESTION 64
Which of the following is a recommended design principle of the AWS Well-Architected Framework?

A. Reduce downtime by making infrastructure changes infrequently and in large increments.
B. Invest the time to configure infrastructure manually.
C. Learn to improve from operational failures.
D. Use monolithic application design for centralization.

Correct Answer: C
Section:
Explanation:
The correct answer is C because learning to improve from operational failures is a recommended design principle of the AWS Well-Architected Framework. The AWS Well-Architected Framework is a set of best practices and guidelines for designing and operating reliable, secure, efficient, and costeffective systems in the cloud. The AWS Well-Architected Framework consists of five pillars:
operational excellence, security, reliability, performance efficiency, and cost optimization. Each pillar has a set of design principles that describe the characteristics of a well-architected system. Learning to improve from operational failures is a design principle of the operational excellence pillar, which focuses on running and monitoring systems to deliver business value and continually improve supporting processes and procedures. The other options are incorrect because they are not recommended design principles of the AWS Well-Architected Framework. Reducing downtime by making infrastructure changes infrequently and in large increments is not a design principle of the AWS Well-Architected Framework, but rather a source of risk and inefficiency. A well-architected system should implement changes frequently and in small increments to minimize the impact and scope of failures. Investing the time to configure infrastructure manually is not a design principle of the AWS Well-Architected Framework, but rather a source of human error and inconsistency. A wellarchitected system should automate manual tasks to improve the speed and accuracy of operations.
Using monolithic application design for centralization is not a design principle of the AWS Well-Architected Framework, but rather a source of complexity and rigidity. A well-architected system should use loosely coupled and distributed components to enable scalability and resilience.
Reference: [AWS Well-Architected Framework]

QUESTION 65
A security engineer wants a single-tenant AWS solution to create, control, and manage their own cryptographic keys to meet regulatory compliance requirements for data security.
Which AWS service should the engineer use?

A. AWS Key Management Service (AWS KMS)
B. AWS Certificate Manager (ACM)
C. AWS CloudHSM

D. AWS Systems Manager

Correct Answer: C
Section:
Explanation:
The correct answer is C because AWS CloudHSM is an AWS service that enables the security engineer to meet the requirements. AWS CloudHSM is a service that provides customers with dedicated hardware security modules (HSMs) to create, control, and manage their own cryptographic keys in the AWS Cloud. AWS CloudHSM allows customers to meet strict regulatory compliance requirements for data security, such as FIPS 140-2 Level 3, PCI-DSS, and HIPAA. The other options are incorrect because they are not AWS services that enable the security engineer to meet the requirements. AWS Key Management Service (AWS KMS) is a service that provides customers with a fully managed, scalable, and integrated key management system to create and control encryption keys for AWS services and applications. AWS KMS does not provide customers with single-tenant or dedicated HSMs. AWS Certificate Manager (ACM) is a service that provides customers with a simple and secure way to provision, manage, and deploy public and private Secure Sockets Layer/Transport Layer Security (SSL/TLS) certificates for use with AWS services and internal connected resources. ACM does not provide customers with HSMs or cryptographic keys. AWS Systems Manager is a service that provides customers with a unified user interface to view operational data from multiple AWS services and automate operational tasks across their AWS resources. AWS Systems Manager does not provide customers with HSMs or cryptographic keys.
Reference: AWS CloudHSM FAQs

QUESTION 66
Which tasks are the responsibility of AWS, according to the AWS shared responsibility model? (Select TWO.)

A. Patch AWS network devices.
B. Set user password rules.
C. Provide physical security for compute resources.
D. Configure security groups.
E. Patch the operating system of an Amazon EC2 instance.

Correct Answer: A, C
Section:
Explanation:
The correct answers are A and C because patching AWS network devices and providing physical security for compute resources are tasks that are the responsibility of AWS, according to the AWS shared responsibility model. The AWS shared responsibility model is a framework that defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the global infrastructure, such as the regions, availability zones, and edge locations; the hardware, software, networking, and facilities that run the AWS services; and the virtualization layer that separates the customer instances and storage.
The customer is responsible for the security in the cloud, which includes the customer data, the guest operating systems, the applications, the identity and access management, the firewall configuration, and the encryption. The other options are incorrect because they are tasks that are the responsibility of the customer, according to the AWS shared responsibility model. Setting user password rules, configuring security groups, and patching the operating system of an Amazon EC2 instance are all tasks that the customer has to perform to secure their AWS environment. Reference: AWS Shared Responsibility Model

QUESTION 67
Which AWS service or feature captures information about the network traffic to and from an Amazon EC2 instance?

A. VPC Reachability Analyzer
B. Amazon Athena
C. VPC Flow Logs
D. AWS X-Ray

Correct Answer: C
Section:
Explanation:
The correct answer is C because VPC Flow Logs is an AWS service or feature that captures information about the network traffic to and from an Amazon EC2 instance. VPC Flow Logs is a feature that enables customers to capture information about the IP traffic going to and from network interfaces in their VPC. VPC Flow Logs can help customers to monitor and troubleshoot connectivity issues, such as traffic not reaching an instance or traffic being rejected by a security group. The other options are incorrect because they are not AWS services or features that capture information about the network traffic to and from an Amazon EC2 instance. VPC Reachability

Analyzer is an AWS service or feature that enables customers to perform connectivity testing between resources in their VPC and identify configuration issues that prevent connectivity. Amazon Athena is an AWS service that enables customers to query data stored in Amazon S3 using standard SQL. AWS X-Ray is an AWS service that enables customers to analyze and debug distributed applications, such as those built using a microservices architecture. Reference: VPC Flow Logs

QUESTION 68
Which of the following are pillars of the AWS Well-Architected Framework? (Select TWO.)

A. Availability
B. Reliability
C. Scalability
D. Responsive design
E. Operational excellence

Correct Answer: B, E
Section:
Explanation:
The correct answers to the questions are B and E because reliability and operational excellence are pillars of the AWS Well-Architected Framework. The AWS Well-Architected Framework is a set of best practices and guidelines for designing and operating reliable, secure, efficient, and cost-effective systems in the cloud. The AWS Well-Architected Framework consists of five pillars: operational excellence, security, reliability, performance efficiency, and cost optimization. Each pillar has a set of design principles that describe the characteristics of a well-architected system. Reliability is the pillar that focuses on the ability of a system to recover from failures and meet business and customer demand. Operational excellence is the pillar that focuses on the ability of a system to run and monitor processes that support business outcomes and continually improve. The other options are incorrect because they are not pillars of the AWS Well-Architected Framework. Availability, scalability, and responsive design are important aspects of cloud architecture, but they are not separate pillars in the framework. Availability and scalability are related to the reliability and performance efficiency pillars, while responsive design is related to the customer experience and user interface. Reference: AWS Well-Architected Framework

QUESTION 69
Which tasks are customer responsibilities according to the AWS shared responsibility model? (Select TWO.)

A. Determine application dependencies with operating systems.
B. Provide user access with AWS Identity and Access Management (1AM).
C. Secure the data center in an Availability Zone.
D. Patch the hypervisor.
E. Provide network availability in Availability Zones.

Correct Answer: B
Section:
Explanation:
The correct answer to the question is B because providing user access with AWS Identity and Access Management (IAM) is a customer responsibility according to the AWS shared responsibility model.
The AWS shared responsibility model is a framework that defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the global infrastructure, such as the regions, availability zones, and edge locations; the hardware, software, networking, and facilities that run the AWS services; and the virtualization layer that separates the customer instances and storage. The customer is responsible for the security in the cloud, which includes the customer data, the guest operating systems, the applications, the identity and access management, the firewall configuration, and the encryption.
IAM is an AWS service that enables customers to manage access and permissions to AWS resources and services. Customers are responsible for creating and managing IAM users, groups, roles, and policies, and ensuring that they follow the principle of least privilege. Reference: AWS Shared Responsibility Model

QUESTION 70
A user wants to identify any security group that is allowing unrestricted incoming SSH traffic.
Which AWS service can be used to accomplish this goal?

A. Amazon Cognito

B. AWS Shield
C. Amazon Macie
D. AWS Trusted Advisor

Correct Answer: D
Section:
Explanation:
The correct answer to the question is D because AWS Trusted Advisor is an AWS service that can be used to accomplish the goal of identifying any security group that is allowing unrestricted incoming SSH traffic. AWS Trusted Advisor is a service that provides customers with recommendations that help them follow AWS best practices. Trusted Advisor evaluates the customer's AWS environment and identifies ways to optimize their AWS infrastructure, improve security and performance, reduce costs, and monitor service quotas. One of the checks that Trusted Advisor performs is the Security Groups - Specific Ports Unrestricted check, which flags security groups that allow unrestricted access to specific ports, such as port 22 for SSH. Customers can use this check to review and modify their security group rules to restrict SSH access to only authorized sources. Reference: Security Groups -Specific Ports Unrestricted

QUESTION 71
Which AWS feature or resource is a deployable Amazon EC2 instance template that is prepackaged with software and security requirements?

A. Amazon Elastic Block Store (Amazon EBS) volume
B. AWS CloudFormation template
C. Amazon Elastic Block Store (Amazon EBS) snapshot
D. Amazon Machine Image (AMI)

Correct Answer: D
Section:
Explanation:
: An Amazon Machine Image (AMI) is a deployable Amazon EC2 instance template that is prepackaged with software and security requirements. It provides the information required to launch an instance, which is a virtual server in the cloud. You can use an AMI to launch as many instances as you need. You can also create your own custom AMIs or use AMIs shared by other AWS users1.

QUESTION 72
Which AWS service is a highly available and scalable DNS web service?

A. Amazon VPC
B. Amazon CloudFront
C. Amazon Route 53
D. Amazon Connect

Correct Answer: C
Section:
Explanation:
Amazon Route 53 is a highly available and scalable DNS web service. It is designed to give developers and businesses an extremely reliable and cost-effective way to route end users to Internet applications by translating domain names into the numeric IP addresses that computers use to connect to each other2. Amazon Route 53 also offers other features such as health checks, traffic management, domain name registration, and DNSSEC3.

QUESTION 73
Which of the following is a characteristic of the AWS account root user?

A. The root user is the only user that can be configured with multi-factor authentication (MFA).
B. The root user is the only user that can access the AWS Management Console.
C. The root user is the first sign-in identity that is available when an AWS account is created.

D. The root user has a password that cannot be changed.

Correct Answer: C
Section:
Explanation:
The AWS account root user is the first sign-in identity that is available when an AWS account is created. It has complete access to all AWS services and resources in the account. The root user email address and password are the same credentials that are used to sign in to the AWS Management Console4. The root user should be used only to perform a few account and service management tasks. For day-to-day tasks, it is recommended to use AWS Identity and Access Management (IAM) users or roles instead.

QUESTION 74
Which AWS service provides the ability to host a NoSQL database in the AWS Cloud?

A. Amazon Aurora
B. Amazon DynamoDB
C. Amazon RDS
D. Amazon Redshift

Correct Answer: B
Section:
Explanation:
Amazon DynamoDB is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability. It supports both key-value and document data models, and allows you to create tables that can store and retrieve any amount of data, and serve any level of request traffic. You can also use DynamoDB Streams to capture data modification events in DynamoDB tables.

QUESTION 75
What is the total amount of storage offered by Amazon S3?

A. WOMB
B. 5 GB
C. 5 TB
D. Unlimited

Correct Answer: D
Section:
Explanation:
Amazon S3 offers unlimited storage for any amount of data. You can store as many objects as you want, and each object can be as large as 5 terabytes. You pay only for the storage space that you actually use, and there are no minimum commitments or upfront fees. Amazon S3 also provides high durability, availability, scalability, and security for your data.

QUESTION 76
Which AWS network services or features allow Cl DR block notation when providing an IP address range?
(Select TWO.)

A. Security groups
B. Amazon Machine Image (AMI)
C. Network access control list (network ACL)
D. AWS Budgets
E. Amazon Elastic Block Store (Amazon EBS)

Correct Answer: A, C

Section:
Explanation:
Security groups and network access control lists (network ACLs) are two AWS network services or features that allow CIDR block notation when providing an IP address range. Security groups act as a firewall for associated Amazon EC2 instances, controlling both inbound and outbound traffic at the instance level. Network ACLs act as a firewall for associated subnets, controlling both inbound and outbound traffic at the subnet level. Both security groups and network ACLs use CIDR block notation to specify the IP address ranges that are allowed or denied

QUESTION 77
A company has a workload that requires data to be collected, analyzed, and stored on premises. The company wants to extend the use of AWS services to run on premises with access to the company network and the company's VPC.
Which AWS service meets this requirement?

A. AWS Outposts
B. AWS Storage Gateway
C. AWS Direct Connect
D. AWS Snowball

Correct Answer: A
Section:
Explanation:
AWS Outposts is an AWS service that meets the requirement of running AWS services on premises with access to the company network and the company's VPC. AWS Outposts is a fully managed service that extends AWS infrastructure, AWS services, APIs, and tools to virtually any datacenter, colocation space, or on-premises facility for a truly consistent hybrid experience. AWS Outposts is ideal for workloads that require low latency access to on-premises systems, local data processing, or local data storage2.

QUESTION 78
A company wants to deploy and manage a Docker-based application on AWS.
Which solution meets these requirements with the LEAST amount of operational overhead?

A. An open-source Docker orchestrator on Amazon EC2 instances
B. AWS AppSync
C. Amazon Elastic Container Registry (Amazon ECR)
D. Amazon Elastic Container Service (Amazon ECS)

Correct Answer: D
Section:
Explanation:
Amazon Elastic Container Service (Amazon ECS) is a solution that meets the requirements of deploying and managing a Docker-based application on AWS with the least amount of operational overhead. Amazon ECS is a fully managed container orchestration service that makes it easy to run, scale, and secure Docker container applications on AWS. Amazon ECS eliminates the need for you to install, operate, and scale your own cluster management infrastructure. With simple API calls, you can launch and stop container-enabled applications, query the complete state of your cluster, and access many familiar features like security groups, Elastic Load Balancing, EBS volumes, and IAM roles3.

QUESTION 79
When designing AWS workloads to be operational even when there are component failures, what is an AWS best practice?

A. Perform quarterly disaster recovery tests.
B. Place the main component on the us-east-1 Region.
C. Design for automatic failover to healthy resources.
D. Design workloads to fit on a single Amazon EC2 instance.

Correct Answer: C
Section:
Explanation:
Designing for automatic failover to healthy resources is an AWS best practice when designing AWS workloads to be operational even when there are component failures. This means that you should architect your system to handle the loss of one or more components without impacting the availability or performance of your application. You can use various AWS services and features to achieve this, such as Auto Scaling, Elastic Load Balancing, Amazon Route 53, Amazon CloudFormation, and AWS CloudFormation4.

QUESTION 80
Which AWS service provides highly durable object storage?

A. Amazon S3
B. Amazon Elastic File System (Amazon EFS)
C. Amazon Elastic Block Store (Amazon EBS)
D. Amazon FSx

Correct Answer: A
Section:
Explanation:
Amazon S3 is the AWS service that provides highly durable object storage. Amazon S3 is designed to provide 99.999999999% durability of objects over a given year. This means that you can store your data with high confidence that it will not be lost. Amazon S3 also provides high availability, scalability, security, and performance for your data. You can use Amazon S3 to store and retrieve any amount of data, at any time, from anywhere on the web5.

QUESTION 81
Which pillar of the AWS Well-Architected Framework includes a design principle about measuring the overall efficiency of workloads in terms of business value?

A. Operational excellence
B. Security
C. Reliability
D. Cost optimization

Correct Answer: A
Section:
Explanation:
The operational excellence pillar of the AWS Well-Architected Framework includes a design principle about measuring the overall efficiency of workloads in terms of business value. This principle states that you should monitor and measure key performance indicators (KPIs) and set targets and thresholds that align with your business goals. You should also use feedback loops to continuously improve your processes and procedures1.

QUESTION 82
Who enables encryption of data at rest for Amazon Elastic Block Store (Amazon EBS)?

A. AWS Support
B. AWS customers
C. AWS Key Management Service (AWS KMS)
D. AWS Trusted Advisor

Correct Answer: B
Section:
Explanation:
AWS customers are responsible for enabling encryption of data at rest for Amazon Elastic Block Store (Amazon EBS). Amazon EBS encryption offers a simple encryption solution for your EBS volumes that does not require you

to build, maintain, and secure your own key management infrastructure. You can encrypt both the boot and data volumes of your EC2 instances. You can use AWS Key Management Service (AWS KMS) customer master keys (CMKs) or your own CMKs to encrypt your volumes2.

QUESTION 83
Who is responsible for decommissioning end-of-life underlying storage devices that are used to host data on AWS?

A. Customer
B. AWS
C. Account creator
D. Auditing team

Correct Answer: B
Section:
Explanation:
AWS is responsible for decommissioning end-of-life underlying storage devices that are used to host data on AWS. AWS follows strict and audited data destruction processes to ensure that customer data is not exposed to unauthorized individuals or devices when an AWS storage device reaches the end of its useful life. AWS uses techniques detailed in DoD 5220.22-M ("National Industrial Security Program Operating Manual") or NIST 800-88 ("Guidelines for Media Sanitization") to destroy data as part of the decommissioning process3.

QUESTION 84
A company wants to manage access and permissions for its third-party software as a service (SaaS) applications. The company wants to use a portal where end users can access assigned AWS accounts and AWS Cloud applications.
Which AWS service should the company use to meet these requirements?

A. Amazon Cognito
B. AWS 1AM Identity Center (AWS Single Sign-On)
C. AWS Identity and Access Management (1AM)
D. AWS Directory Service for Microsoft Active Directory

Correct Answer: B
Section:
Explanation:
AWS IAM Identity Center (AWS Single Sign-On) is the AWS service that the company should use to meet the requirements of managing access and permissions for its third-party SaaS applications.
AWS Single Sign-On is a cloud-based service that makes it easy to centrally manage single sign-on (SSO) access to multiple AWS accounts and business applications. You can use AWS Single Sign-On to enable your users to sign in to a user portal with their existing corporate credentials and access all of their assigned accounts and applications from one place4.

QUESTION 85
A large company wants to track the combined AWS usage costs of all of its linked accounts.
How can this be accomplished?

A. Use AWS Trusted Advisor to generate customized summary reports.
B. Use AWS Organizations to generate consolidated billing reports.
C. Use AWS Budgets to set utilization targets and receive summary reports.
D. Use the AWS Control Tower dashboard to get a summary report of all linked account costs.

Correct Answer: B
Section:
Explanation:
The company can use AWS Organizations to track the combined AWS usage costs of all of its linked accounts. AWS Organizations is a service that enables you to consolidate multiple AWS accounts into an organization that

you can manage centrally. You can use AWS Organizations to create a consolidated billing report that shows the charges incurred by each account in your organization as well as the total charges across all accounts. You can also use AWS Organizations to apply policies and controls to your accounts to help you manage costs and security5.

QUESTION 86
A company wants its Amazon EC2 instances to operate in a highly available environment, even if there is a natural disaster in a particular geographic area.
Which solution achieves this goal?

A. Use EC2 instances in a single Availability Zone.
B. Use EC2 instances in multiple AWS Regions.
C. Use EC2 instances in multiple edge locations.
D. Use Amazon CloudFront with the EC2 instances configured as the source.

Correct Answer: B
Section:
Explanation:
To achieve high availability in the event of a natural disaster, the company should use EC2 instances in multiple AWS Regions. AWS Regions are geographically isolated areas that consist of multiple Availability Zones. Availability Zones are physically separate locations within an AWS Region that are engineered to be isolated from failures. By using EC2 instances in multiple AWS Regions, the company can ensure that its applications can continue to run even if one Region is affected by a disaster. AWS Global InfrastructureAWS Well-Architected Framework

QUESTION 87
Using Amazon Elastic Container Service (Amazon ECS) to break down a monolithic architecture into microservices is an example of:

A. a loosely coupled architecture.
B. a tightly coupled architecture.
C. a stateless architecture.
D. a stateful architecture.

Correct Answer: A
Section:
Explanation:
Using Amazon Elastic Container Service (Amazon ECS) to break down a monolithic architecture into microservices is an example of a loosely coupled architecture. A loosely coupled architecture is one where the components are independent and can communicate with each other through well-defined interfaces. This allows for greater scalability, flexibility, and resilience. A tightly coupled architecture is one where the components are interdependent and rely on each other for functionality. This can lead to increased complexity, fragility, and difficulty in changing or scaling the system. Amazon ECS OverviewAWS Well-Architected Framework

QUESTION 88
Which of the following are design principles for reliability in the AWS Cloud? (Select TWO.)

A. Build architectures with tightly coupled resources.
B. Use AWS Trusted Advisor to meet security best practices.
C. Use automation to recover immediately from failure.
D. Rightsize Amazon EC2 instances to ensure optimal performance.
E. Simulate failures to test recovery processes.

Correct Answer: C, E
Section:
Explanation:
The design principles for reliability in the AWS Cloud are:
Test recovery procedures. The best way to ensure that systems can recover from failures is to regularly test them using simulated scenarios. This can help identify gaps and improve the recovery process.

Automatically recover from failure. By using automation, systems can detect and correct failures without human intervention. This can reduce the impact and duration of failures and improve the availability of the system.
Scale horizontally to increase aggregate system availability. By adding more redundant resources to the system, the impact of individual resource failures can be reduced. This can also improve the performance and scalability of the system.
Stop guessing capacity. By using monitoring and automation, systems can adjust the capacity based on the demand and performance metrics. This can prevent failures due to insufficient or excessive capacity and optimize the cost and efficiency of the system.
Manage change in automation. By using automation, changes to the system can be applied in a consistent and controlled manner. This can reduce the risk of human errors and configuration drifts that can cause failures. AWS Well-Architected Framework

QUESTION 89
Which statements represent the cost-effectiveness of the AWS Cloud? (Select TWO.)

A. Users can trade fixed expenses for variable expenses.
B. Users can deploy all over the world in minutes.
C. AWS offers increased speed and agility.
D. AWS is responsible for patching the infrastructure.
E. Users benefit from economies of scale.

Correct Answer: A, E
Section:
Explanation:
The statements that represent the cost-effectiveness of the AWS Cloud are:
Users can trade fixed expenses for variable expenses. By using the AWS Cloud, users can pay only for the resources they use, instead of investing in fixed and upfront costs for hardware and software. This can lower the total cost of ownership and increase the return on investment.
Users benefit from economies of scale. By using the AWS Cloud, users can leverage the massive scale and efficiency of AWS to access lower prices and higher performance. AWS passes the cost savings to the users through price reductions and innovations. AWS Cloud Value Framework

QUESTION 90
A company wants to migrate its on-premises data warehouse to AWS. The information in the data warehouse is used to populate analytics dashboards.
Which AWS service should the company use for the data warehouse?

A. Amazon ElastiCache
B. Amazon Aurora
C. Amazon RDS
D. Amazon Redshift

Correct Answer: D
Section:
Explanation:
The AWS service that the company should use for the data warehouse is Amazon Redshift. Amazon Redshift is a fully managed, petabyte-scale data warehouse service that is optimized for analytical queries. It can integrate with various data sources and business intelligence tools to provide fast and cost-effective insights. Amazon Redshift also offers high availability, scalability, security, and compliance features. [Amazon Redshift Overview]

QUESTION 91
Which benefit does Amazon Rekognition provide?

A. The ability to place watermarks on images
B. The ability to detect objects that appear in pictures
C. The ability to resize millions of images automatically
D. The ability to bid on object detection jobs

Correct Answer: B
Section:
Explanation:
Amazon Rekognition is a service that provides deep learning-based image and video analysis. One of the benefits of Amazon Rekognition is the ability to detect objects that appear in pictures, such as faces, landmarks, animals, text, and scenes. This can enable applications to perform tasks such as face recognition, face verification, face comparison, face search, celebrity recognition, emotion detection, age range estimation, gender identification, facial analysis, facial expression recognition, and more. Amazon Rekognition OverviewAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 92
Which AWS service uses a combination of publishers and subscribers?

A. AWS Lambda
B. Amazon Simple Notification Service (Amazon SNS)
C. Amazon CloudWatch
D. AWS CloudFormation

Correct Answer: B
Section:
Explanation:
Amazon Simple Notification Service (Amazon SNS) is a service that provides fully managed pub/sub messaging. Pub/sub messaging is a pattern that uses a combination of publishers and subscribers.
Publishers are entities that produce messages and send them to topics. Subscribers are entities that receive messages from topics. Topics are logical access points that act as communication channels between publishers and subscribers. Amazon SNS enables applications to decouple, scale, and coordinate the delivery of messages to multiple endpoints, such as email, SMS, mobile push notifications, Lambda functions, SQS queues, and HTTP/S endpoints. Amazon SNS OverviewAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 93
A company is developing an application that uses multiple AWS services. The application needs to use temporary, limited-privilege credentials for authentication with other AWS APIs.
Which AWS service or feature should the company use to meet these authentication requirements?

A. Amazon API Gateway
B. 1AM users
C. AWS Security Token Service (AWS STS)
D. 1AM instance profiles

Correct Answer: C
Section:
Explanation:
AWS Security Token Service (AWS STS) is a service that enables applications to request temporary, limited-privilege credentials for authentication with other AWS APIs. AWS STS can be used to grant access to AWS resources to users who are federated (using IAM roles), switched (using IAM users), or cross-account (using IAM roles). AWS STS can also be used to assume a role within the same account or a different account. The credentials issued by AWS STS are short-term and have a limited scope, which can enhance the security and compliance of the application. AWS STS OverviewAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 94
A company is migrating an application that includes an Oracle database to AWS. The company cannot rewrite the application.
To which AWS service could the company migrate the database?

A. Amazon Athena
B. Amazon DynamoDB
C. Amazon RDS
D. Amazon DocumentDB (with MongoDB compatibility)

Correct Answer: C
Section:
Explanation:
Amazon Relational Database Service (Amazon RDS) is a service that provides fully managed relational database engines. Amazon RDS supports several database engines, including Oracle, MySQL, PostgreSQL, MariaDB, SQL Server, and Amazon Aurora. Amazon RDS can be used to migrate an application that includes an Oracle database to AWS without rewriting the application, as long as the application is compatible with the Oracle version and edition supported by Amazon RDS. Amazon RDS can also provide benefits such as high availability, scalability, security, backup and restore, and performance optimization. [Amazon RDS Overview] AWS Certified Cloud Practitioner -aws.amazon.com

QUESTION 95
Which of the following is an AWS value proposition that describes a user's ability to scale infrastructure based on demand?

A. Speed of innovation
B. Resource elasticity
C. Decoupled architecture
D. Global deployment

Correct Answer: B
Section:
Explanation:
Resource elasticity is an AWS value proposition that describes a user's ability to scale infrastructure based on demand. Resource elasticity means that the user can provision or deprovision resources quickly and easily, without any upfront commitment or long-term contract. Resource elasticity can help the user optimize the cost and performance of the application, as well as respond to changing business needs and customer expectations. Resource elasticity can be achieved by using services such as Amazon EC2, Amazon S3, Amazon RDS, Amazon DynamoDB, Amazon ECS, and AWS Lambda.
[AWS Cloud Value Framework] AWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 96
A company needs to continuously monitor its environment to analyze network and account activity and identify potential security threats.
Which AWS service should the company use to meet these requirements?

A. AWS Artifact
B. Amazon Macie
C. AWS Identity and Access Management (1AM)
D. Amazon GuardDuty

Correct Answer: D
Section:
Explanation:
Amazon GuardDuty is a service that provides intelligent threat detection and continuous monitoring for the AWS environment. It analyzes network and account activity using machine learning and threat intelligence to identify potential security threats, such as unauthorized access, compromised credentials, malicious hosts, and reconnaissance activities. It also generates detailed and actionable findings that can be viewed on the AWS Management Console or sent to other AWS services, such as Amazon CloudWatch Events and AWS Lambda, for further analysis or remediation. Amazon GuardDuty OverviewAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 97
Which AWS service can report how AWS resource configurations have changed over time?

A. AWS CloudTrail
B. Amazon CloudWatch
C. AWS Config
D. Amazon Inspector

Correct Answer: C
Section:
Explanation:
AWS Config is a service that enables users to assess, audit, and evaluate the configurations of AWS resources. It continuously monitors and records the configuration changes of the resources and evaluates them against desired configurations and best practices. It also provides a detailed view of the resource configuration history and relationships, as well as compliance reports and notifications.
AWS Config can help users maintain consistent and secure configurations, troubleshoot issues, and simplify compliance auditing. AWS Config OverviewAWS Certified Cloud Practitioner -aws.amazon.com

QUESTION 98
Which AWS benefit is demonstrated by on-demand technology services that enable companies to replace upfront fixed expenses with variable expenses?

A. High availability
B. Economies of scale
C. Pay-as-you-go pricing
D. Global reach

Correct Answer: C
Section:
Explanation:
Pay-as-you-go pricing is an AWS benefit that demonstrates the ability of users to replace upfront fixed expenses with variable expenses. With pay-as-you-go pricing, users only pay for the resources they consume, without any long-term contracts or commitments. This can lower the total cost of ownership and increase the return on investment. Pay-as-you-go pricing also provides flexibility and scalability, as users can adjust their resource usage according to their changing needs and demands. AWS Cloud Value FrameworkAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 99
A company is using AWS Lambda functions to build an application.
Which tasks are the company's responsibility, according to the AWS shared responsibility model?
(Select TWO.)

A. Patch the servers where the Lambda functions are deployed.
B. Establish the 1AM permissions that define who can run the Lambda functions.
C. Write the code for the Lambda functions to define the application logic.
D. Deploy Amazon EC2 instances to support the Lambda functions.
E. Scale out the Lambda functions when the load increases.

Correct Answer: B, C
Section:
Explanation:
According to the AWS shared responsibility model, AWS is responsible for the security of the cloud, while the user is responsible for the security in the cloud. This means that AWS manages the security and maintenance of the underlying infrastructure, such as the servers, networks, and operating systems, while the user manages the security and configuration of the resources and applications that run on AWS. For AWS Lambda functions, the tasks that are the user's responsibility are:
Establish the IAM permissions that define who can run the Lambda functions. IAM is a service that enables users to manage access and permissions for AWS resources and users. Users can create IAM policies, roles, and users to grant or deny permissions to run Lambda functions, invoke other AWS services, or access AWS resources from Lambda functions. [AWS Lambda Permissions] AWS Certified Cloud Practitioner - aws.amazon.com
Write the code for the Lambda functions to define the application logic. Lambda functions are units of code that can be written in any supported programming language, such as Python, Node.js, Java, or Go. Users can write the code for the Lambda functions using the AWS Management Console, the AWS Command Line Interface (AWS CLI), the AWS SDKs, or any code editor of their choice. Users can also use AWS Lambda Layers to share and manage common code and dependencies across multiple functions. [AWS Lambda Overview] AWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 100
Which services can be used to deploy applications on AWS? (Select TWO.)

A. AWS Elastic Beanstalk
B. AWS Config
C. AWS OpsWorks
D. AWS Application Discovery Service
E. Amazon Kinesis

Correct Answer: A, C
Section:
Explanation:
The services that can be used to deploy applications on AWS are:
AWS Elastic Beanstalk. This is a service that simplifies the deployment and management of web applications on AWS. Users can upload their application code and Elastic Beanstalk automatically handles the provisioning, scaling, load balancing, monitoring, and health checking of the resources needed to run the application. Users can also retain full control and access to the underlying resources and customize their configuration settings. Elastic Beanstalk supports multiple platforms, such as Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker. [AWS Elastic Beanstalk Overview] AWS Certified Cloud Practitioner - aws.amazon.com
AWS OpsWorks. This is a service that provides configuration management and automation for AWS resources. Users can define the application architecture and the configuration of each resource using Chef or Puppet, which are popular open-source automation platforms. OpsWorks then automatically creates and configures the resources according to the user's specifications. OpsWorks also provides features such as auto scaling, monitoring, and integration with other AWS services. OpsWorks has two offerings: OpsWorks for Chef Automate and OpsWorks for Puppet Enterprise. [AWS OpsWorks Overview] AWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 101
Which statement describes a characteristic of the AWS global infrastructure?

A. Edge locations contain multiple AWS Regions.
B. AWS Regions contain multiple Regional edge caches.
C. Availability Zones contain multiple data centers.
D. Each data center contains multiple edge locations.

Correct Answer: C
Section:
Explanation:
Availability Zones contain multiple data centers. This is a characteristic of the AWS global infrastructure, which consists of AWS Regions, Availability Zones, and edge locations. AWS Regions are geographically isolated areas that contain multiple Availability Zones. Availability Zones are physically separate locations within an AWS Region that are engineered to be isolated from failures and connected by low-latency, high-throughput, and highly redundant networking. Each Availability Zone contains one or more data centers that house the servers and storage devices that run AWS services. Edge locations are sites that are located closer to the end users and provide caching and content delivery services. AWS Global InfrastructureAWS Certified Cloud Practitioner -aws.amazon.com

QUESTION 102
Which of the following is available to a company that has an AWS Business Support plan?

A. AWS Support concierge
B. AWS DDoS Response Team (DRT)
C. AWS technical account manager (TAM)
D. AWS Health API

Correct Answer: D
Section:
Explanation:
AWS Health API is available to a company that has an AWS Business Support plan. The AWS Health API provides programmatic access to the AWS Health information that is presented in the AWS Personal Health Dashboard. The AWS Health API can help users get timely and personalized information about events that can affect the availability and performance of their AWS resources, such as scheduled maintenance, network issues, or service disruptions. The AWS Health API can also integrate with other AWS services, such as Amazon CloudWatch Events and AWS Lambda, to enable automated actions and notifications. AWS Health API OverviewAWS Support Plans

QUESTION 103
Which pillar of the AWS Well-Architected Framework focuses on the return on investment of moving into the AWS Cloud?

A. Sustainability
B. Cost optimization
C. Operational excellence
D. Reliability

Correct Answer: B
Section:
Explanation:
Cost optimization is the pillar of the AWS Well-Architected Framework that focuses on the return on investment of moving into the AWS Cloud. Cost optimization means that users can achieve the desired business outcomes at the lowest possible price point, while maintaining high performance and reliability. Cost optimization can be achieved by using various AWS features and best practices, such as pay-as-you-go pricing, right-sizing, elasticity, reserved instances, spot instances, cost allocation tags, cost and usage reports, and AWS Trusted Advisor. [AWS Well-Architected Framework] AWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 104
Which AWS service or feature offers HTTP attack protection to users running public-facing web applications?

A. Security groups
B. Network ACLs
C. AWS Shield Standard
D. AWS WAF

Correct Answer: D
Section:
Explanation:
AWS WAF is the AWS service or feature that offers HTTP attack protection to users running publicfacing web applications. AWS WAF is a web application firewall that helps users protect their web applications from common web exploits, such as SQL injection, cross-site scripting, and bot attacks.
Users can create custom rules to define the web traffic that they want to allow, block, or count. Users can also use AWS Managed Rules, which are pre-configured rules that are curated and maintained by AWS or AWS Marketplace Sellers. AWS WAF can be integrated with other AWS services, such as Amazon CloudFront, Amazon API Gateway, and Application Load Balancer, to provide comprehensive security for web applications. [AWS WAF Overview] AWS Certified Cloud Practitioner -aws.amazon.com

QUESTION 105
What is an Availability Zone?

A. A location where users can deploy compute, storage, database, and other select AWS services where no AWS Region currently exists
B. One or more discrete data centers with redundant power, networking, and connectivity
C. One or more clusters of servers where new workloads can be deployed
D. A fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to users globally

Correct Answer: B
Section:
Explanation:
An Availability Zone is one or more discrete data centers with redundant power, networking, and connectivity. Availability Zones are part of the AWS global infrastructure, which consists of AWS Regions, Availability Zones, and edge locations. Availability Zones are physically separate locations within an AWS Region that are engineered to be isolated from failures and connected by low-latency, high-throughput, and highly redundant networking. Each Availability Zone contains one or more data centers that house the servers and storage devices that run AWS services. Availability Zones enable users to design and operate fault-tolerant and high-availability applications on AWS. AWS Global InfrastructureAWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 106
Which of the following is a cloud benefit that AWS offers to its users?

A. The ability to configure AWS data center hypervisors
B. The ability to purchase hardware in advance of increased traffic
C. The ability to deploy to AWS on a global scale
D. Compliance audits for user IT environments

Correct Answer: C
Section:
Explanation:
The ability to deploy to AWS on a global scale is a cloud benefit that AWS offers to its users. AWS has a global infrastructure that consists of AWS Regions, Availability Zones, and edge locations. Users can choose from multiple AWS Regions around the world to deploy their applications and data closer to their end users, while also meeting their compliance and regulatory requirements. Users can also leverage AWS services, such as Amazon CloudFront, Amazon Route 53, and AWS Global Accelerator, to improve the performance and availability of their global applications. AWS also provides tools and guidance to help users optimize their global deployments, such as AWS Well-Architected Framework, AWS CloudFormation, and AWS Migration Hub. AWS Global Infrastructure [AWS Cloud Value Framework] AWS Certified Cloud Practitioner - aws.amazon.com

QUESTION 107
Which design principle is achieved by following the reliability pillar of the AWS Well-Architected Framework?

A. Vertical scaling
B. Manual failure recovery
C. Testing recovery procedures
D. Changing infrastructure manually

Correct Answer: C
Section:
Explanation:
: Testing recovery procedures is the design principle that is achieved by following the reliability pillar of the AWS Well-Architected Framework. The reliability pillar focuses on the ability of a system to recover from failures and prevent disruptions. Testing recovery procedures helps to ensure that the system can handle different failure scenarios and restore normal operations as quickly as possible.
Testing recovery procedures also helps to identify and mitigate any risks or gaps in the system design and implementation. For more information, see [Reliability Pillar] and [Testing for Reliability].

QUESTION 108
What is a benefit of moving to the AWS Cloud in terms of improving time to market?

A. Decreased deployment speed
B. Increased application security
C. Increased business agility
D. Increased backup capabilities

Correct Answer: C
Section:
Explanation:
Increased business agility is a benefit of moving to the AWS Cloud in terms of improving time to market. Business agility refers to the ability of a company to adapt to changing customer needs, market conditions, and competitive pressures. Moving to the AWS Cloud enables business agility by providing faster access to resources, lower upfront costs, and greater scalability and flexibility. By using the AWS Cloud, companies can launch new products and services, experiment with new ideas, and respond to customer feedback more quickly and efficiently. For more information, see [Benefits of Cloud Computing] and [Business Agility].

QUESTION 109
In which of the following AWS services should database credentials be stored for maximum security?

A. AWS Identity and Access Management (1AM)
B. AWS Secrets Manager
C. Amazon S3
D. AWS Key Management Service (AWS KMS)

Correct Answer: B
Section:
Explanation:
AWS Secrets Manager is the AWS service where database credentials should be stored for maximum security. AWS Secrets Manager helps to protect the secrets, such as database credentials, passwords, API keys, and tokens, that are used to access applications, services, and resources. AWS Secrets Manager enables secure storage, encryption, rotation, and retrieval of the secrets. AWS Secrets Manager also integrates with other AWS services, such as AWS Identity and Access Management (IAM), AWS Key Management Service (AWS KMS), and AWS Lambda. For more information, see [What is AWS Secrets Manager?] and [Getting Started with AWS Secrets Manager].

QUESTION 110
A company needs to configure rules to identify threats and protect applications from malicious network access.
Which AWS service should the company use to meet these requirements?

A. AWS Identity and Access Management (1AM)
B. Amazon QuickSight
C. AWS WAF
D. Amazon Detective

Correct Answer: C
Section:
Explanation:
AWS WAF is the AWS service that the company should use to configure rules to identify threats and protect applications from malicious network access. AWS WAF is a web application firewall that helps to filter, monitor, and block malicious web requests based on customizable rules. AWS WAF can be integrated with other AWS services, such as Amazon CloudFront, Amazon API Gateway, and Application Load Balancer. For more information, see What is AWS WAF? and How AWS WAF Works.

QUESTION 111
Which option is an advantage of AWS Cloud computing that minimizes variable costs?

A. High availability
B. Economies of scale
C. Global reach
D. Agility

Correct Answer: B
Section:
Explanation:
Economies of scale is the advantage of AWS Cloud computing that minimizes variable costs.
Economies of scale refers to the reduction in the cost per unit as the output increases. AWS Cloud computing leverages economies of scale by providing a large pool of shared resources that can be accessed on demand and paid for as needed. AWS Cloud computing also passes the cost savings to the customers by offering lower prices and discounts. For more information, see Economies of Scale and AWS Pricing.

QUESTION 112
A company moves its infrastructure from on premises to the AWS Cloud. The company can now provision additional Amazon EC2 instances whenever the instances are required. With this ability, the company can launch new marketing campaigns in 3 days instead of 3 weeks.

Which benefit of the AWS Cloud does this scenario demonstrate?

A. Cost savings
B. Improved operational resilience
C. Increased business agility
D. Enhanced security

Correct Answer: C
Section:
Explanation:
Increased business agility is the benefit of the AWS Cloud that this scenario demonstrates. Business agility refers to the ability of a company to adapt to changing customer needs, market conditions, and competitive pressures. Moving to the AWS Cloud enables business agility by providing faster access to resources, lower upfront costs, and greater scalability and flexibility. By using the AWS Cloud, the company can launch new marketing campaigns in 3 days instead of 3 weeks, which shows that it can respond to customer feedback more quickly and efficiently. For more information, see Benefits of Cloud Computing and [Business Agility].

QUESTION 113
A retail company is migrating its IT infrastructure applications from on premises to the AWS Cloud.
Which costs will the company eliminate with this migration? (Select TWO.)

A. Cost of data center operations
B. Cost of application licensing
C. Cost of marketing campaigns
D. Cost of physical server hardware
E. Cost of network management

Correct Answer: A, D
Section:
Explanation:
The costs that the company will eliminate with this migration are the cost of application licensing and the cost of physical server hardware. The cost of application licensing is the fee that the company has to pay to use the software applications on its on-premises servers. The cost of physical server hardware is the expense that the company has to incur to purchase, maintain, and upgrade the servers and related equipment. By migrating to the AWS Cloud, the company can avoid these costs by using the AWS services and resources that are already licensed and managed by AWS. For more information, see [Cloud Economics] and [AWS Total Cost of Ownership (TCO) Calculator].

QUESTION 114
Which AWS Support plan assigns an AWS concierge agent to a company's account?

A. AWS Basic Support
B. AWS Developer Support
C. AWS Business Support
D. AWS Enterprise Support

Correct Answer: D
Section:
Explanation:
AWS Enterprise Support is the AWS Support plan that assigns an AWS concierge agent to a company's account. AWS Enterprise Support is the highest level of support that AWS offers, and it provides the most comprehensive and personalized assistance. An AWS concierge agent is a dedicated technical account manager who acts as a single point of contact for the company and helps to optimize the AWS environment, resolve issues, and access AWS experts. For more information, see [AWS Support Plans] and [AWS Concierge Support].

QUESTION 115

A company hosts an application on an Amazon EC2 instance. The EC2 instance needs to access several AWS resources, including Amazon S3 and Amazon DynamoDB.
What is the MOST operationally efficient solution to delegate permissions?

A. Create an 1AM role with the required permissions. Attach the role to the EC2 instance.
B. Create an IAM user and use its access key and secret access key in the application.
C. Create an 1AM user and use its access key and secret access key to create a CLI profile in the EC2 instance.
D. Create an 1AM role with the required permissions. Attach the role to the administrative1AM user.

Correct Answer: A
Section:
Explanation:
Creating an IAM role with the required permissions and attaching the role to the EC2 instance is the most operationally efficient solution to delegate permissions. An IAM role is an entity that defines a set of permissions for making AWS service requests. An IAM role can be assumed by an EC2 instance to access other AWS resources, such as Amazon S3 and Amazon DynamoDB, without having to store any credentials on the instance. This solution is more secure and scalable than using IAM users and their access keys. For more information, see [IAM Roles for Amazon EC2] and [Using an IAM Role to Grant Permissions to Applications Running on Amazon EC2 Instances].

QUESTION 116
Which encryption types can be used to protect objects at rest in Amazon S3? (Select TWO.)

A. Server-side encryption with AmazonS3 managed encryption keys (SSE-S3)
B. Server-side encryption with AWS KMSmanaged keys (SSE-KMS)
C. TLS
D. SSL
E. Transparent Data Encryption (TDE)

Correct Answer: A, B
Section:
Explanation:
Server-side encryption with Amazon S3 managed encryption keys (SSE-S3) and server-side encryption with AWS KMS managed keys (SSE-KMS) are the encryption types that can be used to protect objects at rest in Amazon S3. Server-side encryption means that Amazon S3 encrypts the objects before saving them on disks and decrypts them when they are downloaded. SSE-S3 uses one master key per bucket that is managed by Amazon S3. SSE-KMS uses a customer master key (CMK) that is stored in AWS Key Management Service (AWS KMS) and provides additional benefits, such as audit trails and key rotation. For more information, see Protecting Data Using Server-Side Encryption and Protecting Data Using Encryption.

QUESTION 117
A company is building an application that will receive millions of database queries each second. The company needs the data store for the application to scale to meet these needs.
Which AWS service will meet this requirement?

A. Amazon DynamoDB
B. AWS Cloud9
C. Amazon ElastiCache for Memcached
D. Amazon Neptune

Correct Answer: A
Section:
Explanation:
Amazon DynamoDB is the AWS service that will meet the requirement of building an application that will receive millions of database queries each second. Amazon DynamoDB is a fully managed NoSQL database service that provides fast and consistent performance, scalability, and durability.
Amazon DynamoDB can handle any level of request traffic and automatically scale up or down the capacity based on the demand. Amazon DynamoDB also supports in-memory caching with Amazon DynamoDB Accelerator

(DAX) to improve the response time and reduce the cost. For more information, see What is Amazon DynamoDB? and Amazon DynamoDB Features.

QUESTION 118
An application runs on multiple Amazon EC2 instances that access a shared file system simultaneously.
Which AWS storage service should be used?

A. Amazon EBS
B. Amazon EFS
C. Amazon S3
D. AWS Artifact

Correct Answer: B
Section:
Explanation:
Amazon Elastic File System (Amazon EFS) is the AWS storage service that should be used for an application that runs on multiple Amazon EC2 instances that access a shared file system simultaneously. Amazon EFS is a fully managed service that provides a scalable, elastic, and highly available file system for Linux-based workloads. Amazon EFS supports the Network File System version 4 (NFSv4) protocol and allows multiple EC2 instances to read and write data to the same file system concurrently. Amazon EFS also integrates with other AWS services, such as AWS Backup, AWS CloudFormation, and AWS CloudTrail. For more information, see What is Amazon Elastic File System? and [Amazon EFS Use Cases].

QUESTION 119
Which of the following is entirely the responsibility of AWS, according to the AWS shared responsibility model?

A. Security awareness and training
B. Development of an 1AM password policy
C. Patching of the guest operating system
D. Physical and environmental controls

Correct Answer: D
Section:
Explanation:
Physical and environmental controls are entirely the responsibility of AWS, according to the AWS shared responsibility model. The AWS shared responsibility model defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the physical and environmental controls of the AWS global infrastructure, such as power, cooling, fire suppression, and physical access. The customer is responsible for the security in the cloud, which includes the configuration and management of the AWS resources and applications. For more information, see [AWS Shared Responsibility Model] and [AWS Cloud Security].

QUESTION 120
A company does not want to rely on elaborate forecasting to determine its usage of compute resources. Instead, the company wants to pay only for the resources that it uses. The company also needs the ability to increase or decrease its resource usage to meet business requirements.
Which pillar of the AWS Well-Architected Framework aligns with these requirements?

A. Operational excellence
B. Security
C. Reliability
D. Cost optimization

Correct Answer: D
Section:
Explanation:

Cost optimization is the pillar of the AWS Well-Architected Framework that aligns with the requirements of not relying on elaborate forecasting and paying only for the resources that are used.
The cost optimization pillar focuses on the ability of a system to deliver business value at the lowest price point. Cost optimization involves using the right AWS services and resources for the workload, measuring and monitoring the cost and usage, and continuously improving the cost efficiency. Cost optimization also leverages the benefits of the AWS Cloud, such as pay-as-you-go pricing, elasticity, and scalability. For more information, see [Cost Optimization Pillar] and [Cost Optimization].

QUESTION 121
A company wants to use Amazon EC2 instances to run a stateless and restartable process after business hours.
Which AWS service provides DNS resolution?

A. Amazon CloudFront
B. Amazon VPC
C. Amazon Route 53
D. AWS Direct Connect

Correct Answer: C
Section:
Explanation:
Amazon Route 53 is the AWS service that provides DNS resolution. DNS (Domain Name System) is a service that translates domain names into IP addresses. Amazon Route 53 is a highly available and scalable cloud DNS service that offers domain name registration, DNS routing, and health checking.
Amazon Route 53 can route the traffic to various AWS services, such as Amazon EC2, Amazon S3, and Amazon CloudFront. Amazon Route 53 can also integrate with other AWS services, such as AWS Certificate Manager, AWS Shield, and AWS WAF. For more information, see [What is Amazon Route 53?] and [Amazon Route 53 Features].

QUESTION 122
Which group shares responsibility with AWS for security and compliance of AWS accounts and resources?

A. Third-party vendors
B. Customers
C. Reseller partners
D. Internet providers

Correct Answer: B
Section:
Explanation:
Customers share responsibility with AWS for security and compliance of AWS accounts and resources. This is part of the AWS shared responsibility model, which defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the physical and environmental controls of the AWS global infrastructure, such as power, cooling, fire suppression, and physical access. The customer is responsible for the security in the cloud, which includes the configuration and management of the AWS resources and applications, such as identity and access management, encryption, firewall, and backup. For more information, see AWS Shared Responsibility Model and AWS Cloud Security.

QUESTION 123
A company wants to migrate its Microsoft SQL Server database management system from on premises to the AWS Cloud.
Which AWS service should the company use to reduce management overhead for this environment?

A. Amazon Elastic Container Service (Amazon ECS)
B. Amazon SageMaker
C. Amazon RDS
D. Amazon Athena

Correct Answer: C

Section:
Explanation:
Amazon Relational Database Service (Amazon RDS) is the AWS service that the company should use to migrate its Microsoft SQL Server database management system from on premises to the AWS Cloud. Amazon RDS is a fully managed service that provides a scalable, secure, and highperformance relational database platform. Amazon RDS supports several database engines, including Microsoft SQL Server. Amazon RDS reduces the management overhead for the database environment by taking care of tasks such as provisioning, patching, backup, recovery, and monitoring. For more information, see What is Amazon Relational Database Service (Amazon RDS)? and Amazon RDS for SQL Server.

QUESTION 124
A company moves a workload to AWS to run on Amazon EC2 instances. The company needs to run the workload in the most cost-effective way.
What can the company do to meet this requirement?

A. Use AWS Key Management Service (AWS KMS).
B. Use multiple AWS accounts and consolidated billing.
C. Use AWS CloudFormation to deploy the infrastructure.
D. Rightsized all the EC2 instances that are used in the deployment.

Correct Answer: D
Section:
Explanation:
Rightsizing all the EC2 instances that are used in the deployment is the best way to run the workload in the most cost-effective way. Rightsizing means choosing the optimal instance type and size for the workload based on the performance and capacity requirements. Rightsizing helps to avoid overprovisioning or under-provisioning of the EC2 instances, which can result in wasted resources or poor performance. Rightsizing also helps to take advantage of the different pricing models and features that AWS offers, such as On-Demand, Reserved, and Spot Instances, and Auto Scaling. For more information, see Rightsizing Your Instances and [Cost Optimization with AWS].

QUESTION 125
A company needs to launch an Amazon EC2 instance.
Which of the following can the company use during the launch process to configure the root volume of the EC2 instance?

A. Amazon EC2 Auto Scaling
B. Amazon Data Lifecycle Manager (Amazon DLM)
C. Amazon Machine Image (AMI)
D. Amazon Elastic Block Store (Amazon EBS) volume

Correct Answer: C
Section:
Explanation:
Amazon Machine Image (AMI) is the option that the company can use during the launch process to configure the root volume of the EC2 instance. An AMI is a template that contains the software configuration, such as the operating system, applications, and settings, required to launch an EC2 instance. An AMI also specifies the volume size and type of the root device for the instance. The company can choose an AMI provided by AWS, the AWS Marketplace, or the AWS community, or create a custom AMI. For more information, see [Amazon Machine Images (AMI)] and [Launching an Instance Using the Launch Instance Wizard].

QUESTION 126
A company plans to migrate its on-premises workload to AWS. Before the migration, the company needs to estimate its future AWS service costs.
Which AWS service or tool should the company use to meet this requirement?

A. AWS Trusted Advisor
B. AWS Budgets
C. AWS Pricing Calculator
D. AWS Cost Explorer

Correct Answer: C
Section:
Explanation:
AWS Pricing Calculator is the AWS service or tool that the company should use to estimate its future AWS service costs before the migration. AWS Pricing Calculator is a web-based tool that allows the company to create cost estimates for various AWS services and scenarios. AWS Pricing Calculator helps the company to compare the costs of running the workload on premises versus on AWS, and to optimize the costs by choosing the best options for the workload. AWS Pricing Calculator also provides a detailed breakdown of the cost components and a downloadable report. For more information, see [AWS Pricing Calculator] and [Getting Started with AWS Pricing Calculator].

QUESTION 127
A company suspects that its AWS resources are being used for illegal activities.
Which AWS group or team should the company notify?

A. AWS Abuse team
B. AWS Support team
C. AWS technical account managers
D. AWS Professional Services team

Correct Answer: A
Section:
Explanation:
AWS Abuse team is the AWS group or team that the company should notify if it suspects that its
AWS resources are being used for illegal activities. AWS Abuse team is a dedicated team that handles reports of abuse, such as spam, phishing, malware, denial-of-service attacks, and unauthorized access, involving AWS resources. The company can contact the AWS Abuse team by filling out the [Report Abuse of AWS Resources form] or sending an email to abuse@amazonaws.com. The company should provide as much information as possible, such as the source and destination IP addresses, timestamps, log files, and screenshots, to help the AWS Abuse team investigate and take appropriate actions. For more information, see [Reporting Abuse] and [AWS Acceptable Use Policy].

QUESTION 128
A company wants an in-memory data store that is compatible with open source in the cloud.
Which AWS service should the company use?

A. Amazon DynamoDB
B. Amazon ElastiCache
C. Amazon Elastic Block Store (Amazon EBS)
D. Amazon Redshift

Correct Answer: B
Section:
Explanation:
Amazon ElastiCache is a fully managed in-memory data store service that is compatible with open source engines such as Redis and Memcached1. It provides fast and scalable performance for applications that require high throughput and low latency1. Amazon DynamoDB is a fully managed NoSQL database service that provides consistent and single-digit millisecond latency at any scale2. Amazon EBS is a block storage service that provides persistent and durable storage volumes for Amazon EC2 instances3. Amazon Redshift is a fully managed data warehouse service that allows users to run complex analytic queries using SQL4.

QUESTION 129
A company wants to improve its security and audit posture by limiting Amazon EC2 inbound access.
According to the AWS shared responsibility model, which task is the responsibility of the customer?

A. Protect the global infrastructure that runs all of the services offered in the AWS Cloud.
B. Configure logical access controls for resources, and protect account credentials.

C. Configure the security used by managed services.
D. Patch and back up Amazon Aurora.

Correct Answer: B
Section:
Explanation:
According to the AWS shared responsibility model, the customer is responsible for configuring logical access controls for resources, and protecting account credentials. This includes managing IAM user permissions, security group rules, network ACLs, encryption keys, and other aspects of access management1. AWS is responsible for protecting the global infrastructure that runs all of the services offered in the AWS Cloud, such as the hardware, software, networking, and facilities. AWS is also responsible for configuring the security used by managed services, such as Amazon RDS, Amazon DynamoDB, and Amazon Aurora2.

QUESTION 130
Which task is the responsibility of AWS when using AWS services?

A. Management of 1AM user permissions
B. Creation of security group rules for outbound access
C. Maintenance of physical and environmental controls
D. Application of Amazon EC2 operating system patches

Correct Answer: C
Section:
Explanation:
AWS is responsible for maintaining the physical and environmental controls of the AWS Cloud, such as power, cooling, fire suppression, and physical security1. The customer is responsible for managing the IAM user permissions, creating security group rules for outbound access, applying Amazon EC2 operating system patches, and other aspects of security in the cloud1.

QUESTION 131
A company wants to push VPC Flow Logs to an Amazon S3 bucket.
A company wants to optimize long-term compute costs of AWS Lambda functions and Amazon EC2 instances.
Which AWS purchasing option should the company choose to meet these requirements?

A. Dedicated Hosts
B. Compute Savings Plans
C. Reserved Instances
D. Spot Instances

Correct Answer: B
Section:
Explanation:
Compute Savings Plans are a flexible and cost-effective way to optimize long-term compute costs of AWS Lambda functions and Amazon EC2 instances. With Compute Savings Plans, customers can commit to a consistent amount of compute usage (measured in $/hour) for a 1-year or 3-year term and receive a discount of up to 66% compared to On-Demand prices3. Dedicated Hosts are physical servers with EC2 instance capacity fully dedicated to the customer's use. They are suitable for customers who have specific server-bound software licenses or compliance requirements4. Reserved Instances are a pricing model that provides a significant discount (up to 75%) compared to On-Demand pricing and a capacity reservation for EC2 instances. They are available in 1-year or 3-year terms and different payment options5. Spot Instances are spare EC2 instances that are available at up to 90% discount compared to On-Demand prices. They are suitable for customers who have flexible start and end times, can withstand interruptions, and can handle excess capacity.

QUESTION 132
Which task can a company perform by using security groups in the AWS Cloud?

A. Allow access to an Amazon EC2 instance through only a specific port.
B. Deny access to malicious IP addresses at a subnet level.

C. Protect data that is cached by Amazon CloudFront.
D. Apply a stateless firewall to an Amazon EC2 instance.

Correct Answer: A
Section:
Explanation:
Security groups are virtual firewalls that control the inbound and outbound traffic for Amazon EC2 instances. They can be used to allow access to an Amazon EC2 instance through only a specific port, such as port 22 for SSH or port 80 for HTTP. Security groups cannot deny access to malicious IP addresses at a subnet level, as they only allow or deny traffic based on the rules defined by the customer. To block malicious IP addresses, customers can use network ACLs, which are stateless firewalls that can be applied to subnets. Security groups cannot protect data that is cached by Amazon CloudFront, as they only apply to EC2 instances. To protect data that is cached by Amazon CloudFront, customers can use encryption, signed URLs, or signed cookies. Security groups are not stateless firewalls, as they track the state of the traffic and automatically allow the response traffic to flow back to the source. Stateless firewalls do not track the state of the traffic and require rules for both inbound and outbound traffic.

QUESTION 133
A company needs to centralize its operational dat a. The company also needs to automate tasks across all of its Amazon EC2 instances.
Which AWS service can the company use to meet these requirements?

A. AWS Trusted Advisor
B. AWS Systems Manager
C. AWS CodeDeploy
D. AWS Elastic Beanstalk

Correct Answer: B
Section:
Explanation:
AWS Systems Manager is a service that enables users to centralize and automate the management of their AWS resources. It provides a unified user interface to view operational data, such as inventory, patch compliance, and performance metrics. It also allows users to automate common and repetitive tasks, such as patching, backup, and configuration management, across all of their Amazon EC2 instances1. AWS Trusted Advisor is a service that provides best practices and recommendations to optimize the performance, security, and cost of AWS resources2. AWS CodeDeploy is a service that automates the deployment of code and applications to Amazon EC2 instances or other compute services3. AWS Elastic Beanstalk is a service that simplifies the deployment and management of web applications using popular platforms, such as Java, PHP, and Node.js4.

QUESTION 134
A company needs Amazon EC2 instances for a workload that can tolerate interruptions.
Which EC2 instance purchasing option meets this requirement with the LARGEST discount compared to On-Demand prices?

A. Spot Instances
B. Convertible Reserved Instances
C. Standard Reserved Instances
D. Dedicated Hosts

Correct Answer: A
Section:
Explanation:
Spot Instances are spare Amazon EC2 instances that are available at up to 90% discount compared to On-Demand prices. They are suitable for workloads that can tolerate interruptions, such as batch processing, data analysis, and testing. Spot Instances are allocated based on the current supply and demand, and can be reclaimed by AWS with a two-minute notice when the demand exceeds the supply5. Convertible Reserved Instances are a type of Reserved Instances that provide a significant discount (up to 54%) compared to On-Demand prices and a capacity reservation for Amazon EC2 instances. They are available in 1-year or 3-year terms and allow users to change the instance family, size, operating system, or tenancy during the term. Standard Reserved Instances are another type of Reserved Instances that provide a larger discount (up to 75%) compared to On-Demand prices and a capacity reservation for Amazon EC2 instances. They are available in 1-year or 3-year terms and do not allow users to change the instance attributes during the term. Dedicated Hosts are physical servers with Amazon EC2 instance capacity fully dedicated to the user's use. They are suitable for users who have specific server-bound software licenses or compliance requirements.

QUESTION 135
Which AWS service can defend against DDoS attacks?

A. AWS Firewall Manager
B. AWS Shield Standard
C. AWS WAF
D. Amazon Inspector

Correct Answer: B
Section:
Explanation:
AWS Shield Standard is a service that provides protection against Distributed Denial of Service (DDoS) attacks for all AWS customers at no additional charge. It automatically detects and mitigates the most common and frequently occurring network and transport layer DDoS attacks that target AWS resources, such as Amazon EC2 instances, Elastic Load Balancers, Amazon CloudFront distributions, and Amazon Route 53 hosted zones. AWS Firewall Manager is a service that allows users to centrally configure and manage firewall rules across their AWS accounts and resources, such as AWS WAF web ACLs, AWS Shield Advanced protections, and Amazon VPC security groups. AWS WAF is a web application firewall that helps protect web applications from common web exploits, such as SQL injection, cross-site scripting, and bot attacks. Amazon Inspector is an automated security assessment service that helps improve the security and compliance of applications deployed on AWS. It analyzes the behavior of the applications and checks for vulnerabilities, exposures, and deviations from best practices.

QUESTION 136
A company wants its Amazon EC2 instances to share the same geographic area but use redundant underlying power sources.
Which solution will meet these requirements?

A. Use EC2 instances across multiple Availability Zones in the same AWS Region.
B. Use Amazon CloudFront as the database for the EC2 instances.
C. Use EC2 instances in the same edge location and the same Availability Zone.
D. Use EC2 instances in AWS OpsWorks stacks in different AWS Regions.

Correct Answer: A
Section:
Explanation:
Using EC2 instances across multiple Availability Zones in the same AWS Region is a solution that meets the requirements of sharing the same geographic area but using redundant underlying power sources. Availability Zones are isolated locations within an AWS Region that have independent power, cooling, and physical security. They are connected through low-latency, high-throughput, and highly redundant networking. By launching EC2 instances in different Availability Zones, users can increase the fault tolerance and availability of their applications. Amazon CloudFront is a content delivery network (CDN) service that speeds up the delivery of web content and media to end users by caching it at the edge locations closer to them. It is not a database service and cannot be used to store operational data for EC2 instances. Edge locations are sites that are part of the Amazon CloudFront network and are located in many cities around the world. They are not the same as Availability Zones and do not provide redundancy for EC2 instances. AWS OpsWorks is a configuration management service that allows users to automate the deployment and management of applications using Chef or Puppet. It can be used to create stacks that span multiple AWS Regions, but this would not meet the requirement of sharing the same geographic area.

QUESTION 137
A company needs to design a solution for the efficient use of compute resources for an enterprise workload. The company needs to make informed decisions as its technology needs evolve.
Which pillar of the AWS Well-Architected Framework do these requirements represent?

A. Operational excellence
B. Performance efficiency
C. Cost optimization
D. Reliability

Correct Answer: B
Section:

Explanation:
Performance efficiency is the pillar of the AWS Well-Architected Framework that represents the requirements of designing a solution for the efficient use of compute resources for an enterprise workload and making informed decisions as the technology needs evolve. It focuses on using the right resources and services for the workload, monitoring performance, and continuously improving the efficiency of the solution. Operational excellence is the pillar of the AWS Well-Architected Framework that represents the ability to run and monitor systems to deliver business value and to continually improve supporting processes and procedures. Cost optimization is the pillar of the AWS Well-Architected Framework that represents the ability to run systems to deliver business value at the lowest price point. Reliability is the pillar of the AWS Well-Architected Framework that represents the ability of a system to recover from infrastructure or service disruptions, dynamically acquire computing resources to meet demand, and mitigate disruptions such as misconfigurations or transient network issues.

QUESTION 138
What does "security of the cloud" refer to in the AWS shared responsibility model?

A. Availability of AWS services such as Amazon EC2
B. Security of the cloud infrastructure that runs all the AWS services
C. Implementation of password policies for 1AM users
D. Security of customer environments by using AWS Network Firewall partners

Correct Answer: B
Section:
Explanation:
Security of the cloud refers to the security of the cloud infrastructure that runs all the AWS services.
This includes the hardware, software, networking, and facilities that AWS operates and manages.
AWS is responsible for protecting the security of the cloud as part of the AWS shared responsibility model. Availability of AWS services such as Amazon EC2 refers to the ability of the services to be up and running and to meet the expected performance. Availability is part of the reliability pillar of the AWS Well-Architected Framework and is a shared responsibility between AWS and the customer .
Implementation of password policies for IAM users refers to the security of the customer data and applications in the cloud. This includes the configuration and management of IAM user permissions, encryption keys, security group rules, network ACLs, and other aspects of access management. The customer is responsible for protecting the security in the cloud as part of the AWS shared responsibility model. Security of customer environments by using AWS Network Firewall partners refers to the security of the customer data and applications in the cloud. AWS Network Firewall is a managed service that provides network protection for Amazon VPCs. It allows customers to use AWS Marketplace partners to implement firewall rules and policies. The customer is responsible for protecting the security in the cloud as part of the AWS shared responsibility model .

QUESTION 139
Which AWS service or tool should a company use to forecast AWS spending?

A. Amazon DevPay
B. AWS Organizations
C. AWS Trusted Advisor
D. Cost Explorer

Correct Answer: D
Section:
Explanation:
Cost Explorer is an AWS service or tool that can be used to forecast AWS spending. It allows users to analyze their AWS costs and usage using interactive graphs and tables. It also provides features such as filtering, grouping, and forecasting to help users plan their future spending. Amazon DevPay is an AWS service that allows developers to sell applications that are built on AWS services. It handles the billing and metering for the customers of the applications and collects payments from them. It is not a tool for forecasting AWS spending. AWS Organizations is an AWS service that allows users to centrally manage and govern their AWS accounts. It provides features such as creating groups of accounts, applying policies, and automating account creation. It is not a tool for forecasting AWS spending. AWS Trusted Advisor is an AWS service that provides best practices and recommendations to optimize the performance, security, and cost of AWS resources. It can help users identify opportunities to reduce their AWS costs, but it is not a tool for forecasting AWS spending

QUESTION 140
Which AWS service is always free of charge for users?

A. Amazon S3

B. Amazon Aurora
C. Amazon EC2
D. AWS Identity and Access Management (1AM)

Correct Answer: D
Section:
Explanation:
AWS Identity and Access Management (IAM) is a service that allows users to manage access to AWS resources and services. It enables users to create and manage users, groups, roles, and policies that control who can do what in AWS. IAM is always free of charge for users, as there is no additional cost for using IAM with any AWS service1. Amazon S3 is a storage service that provides scalable, durable, and secure object storage. Amazon S3 has a free tier that offers 5 GB of storage, 20,000 GET requests, and 2,000 PUT requests per month for one year. However, users are charged for any additional usage beyond the free tier limits2. Amazon Aurora is a relational database service that is compatible with MySQL and PostgreSQL. Amazon Aurora has a free tier that offers 750 hours of Aurora Single-AZ db.t2.small database usage and 20 GB of storage per month for one year. However, users are charged for any additional usage beyond the free tier limits3. Amazon EC2 is a compute service that provides resizable virtual servers. Amazon EC2 has a free tier that offers 750 hours of Linux and Windows t2.micro instances per month for one year. However, users are charged for any additional usage beyond the free tier limits4.

QUESTION 141
A company has multiple AWS accounts that include compute workloads that cannot be interrupted.
The company wants to obtain billing discounts that are based on the company's use of AWS services.
Which AWS feature or purchasing option will meet these requirements?

A. Resource tagging
B. Consolidated billing
C. Pay-as-you-go pricing
D. Spot Instances

Correct Answer: B
Section:
Explanation:
Consolidated billing is an AWS feature that allows users to combine the usage and costs of multiple
AWS accounts into a single bill. This enables users to obtain billing discounts that are based on the company's use of AWS services, such as volume pricing tiers, Reserved Instance discounts, and Savings Plans discounts5. Resource tagging is an AWS feature that allows users to assign metadata to AWS resources, such as EC2 instances, S3 buckets, and Lambda functions. This enables users to organize, track, and manage their AWS resources, such as filtering, grouping, and reporting. Pay-asyou-go pricing is an AWS pricing model that allows users to pay only for the resources and services they use, without any upfront or long-term commitments. This enables users to lower their costs by scaling up or down as needed, and avoiding over-provisioning or under-utilization. Spot Instances are spare EC2 instances that are available at up to 90% discount compared to On-Demand prices. They are suitable for workloads that can tolerate interruptions, such as batch processing, data analysis, and testing. Spot Instances are allocated based on the current supply and demand, and can be reclaimed by AWS with a two-minute notice when the demand exceeds the supply.

QUESTION 142
A company has an environment that includes Amazon EC2 instances, Amazon Lightsail, and onpremises servers. The company wants to automate the security updates for its operating systems and applications.
Which solution will meet these requirements with the LEAST operational effort?

A. Use AWS Shield to identify and manage security events.
B. Connect to each server by using a remote desktop connection. Run an update script.
C. Use the AWS Systems Manager Patch Manager capability.
D. Schedule Amazon GuardDuty to run on a nightly basis.

Correct Answer: C
Section:
Explanation:
AWS Systems Manager Patch Manager is a capability that allows users to automate the security updates for their operating systems and applications. It enables users to scan their instances for missing patches, define patch

baselines, schedule patching windows, and monitor patch compliance.
It supports Amazon EC2 instances, Amazon Lightsail instances, and on-premises servers. AWS Shield is a service that provides protection against Distributed Denial of Service (DDoS) attacks for AWS resources and services. It does not automate the security updates for operating systems and applications. Connecting to each server by using a remote desktop connection and running an update script is a manual and time-consuming solution that requires a lot of operational effort. It is not a recommended best practice for automating the security updates for operating systems and applications. Amazon GuardDuty is a service that provides intelligent threat detection and continuous monitoring for AWS accounts and resources. It does not automate the security updates for operating systems and applications.

QUESTION 143
A company that is planning to migrate to the AWS Cloud is based in an isolated area that has limited internet connectivity. The company needs to perform local data processing on premises. The company needs a solution that can operate without a stable internet connection.
Which AWS service will meet these requirements?

A. Amazon S3
B. AWS Snowball Edge
C. AWS StorageGateway
D. AWS Backup

Correct Answer: B
Section:
Explanation:
AWS Snowball Edge is a service that provides a physical device that can store up to 100 TB of data and perform local data processing on premises. It enables users to transfer data to and from the AWS Cloud in areas with limited or no internet connectivity. It also supports AWS Greengrass, which allows users to run AWS Lambda functions and other AWS services locally without a stable internet connection. Amazon S3 is a storage service that provides scalable, durable, and secure object storage. It requires a stable internet connection to transfer data to and from the AWS Cloud. AWS Storage Gateway is a service that provides a hybrid storage solution that connects on-premises applications to AWS Cloud storage services, such as Amazon S3, Amazon S3 Glacier, and Amazon EBS. It requires a stable internet connection to synchronize data between the on-premises and cloud storage. AWS Backup is a service that provides a centralized and automated solution to back up data across AWS services and on-premises resources. It requires a stable internet connection to transfer data to and from the AWS Cloud.

QUESTION 144
A company wants to migrate its applications to the AWS Cloud. The company plans to identify and prioritize any business transformation opportunities and evaluate its AWS Cloud readiness.
Which AWS service or tool should the company use to meet these requirements?

A. AWS Cloud Adoption Framework (AWS CAF)
B. AWS Managed Services (AMS)
C. AWS Well-Architected Framework
D. AWS Migration Hub

Correct Answer: A
Section:
Explanation:
AWS Cloud Adoption Framework (AWS CAF) is a service or tool that helps users migrate their applications to the AWS Cloud. It provides guidance and best practices to identify and prioritize any business transformation opportunities and evaluate their AWS Cloud readiness. It also helps users align their business and technical perspectives, create an actionable roadmap, and measure their progress. AWS Managed Services (AMS) is a service that provides operational services for AWS infrastructure and applications. It helps users reduce their operational overhead and risk, and focus on their core business. It does not help users identify and prioritize any business transformation opportunities and evaluate their AWS Cloud readiness. AWS Well-Architected Framework is a tool that helps users design and implement secure, high-performing, resilient, and efficient solutions on AWS. It provides a set of questions and best practices across five pillars: operational excellence, security, reliability, performance efficiency, and cost optimization. It does not help users identify and prioritize any business transformation opportunities and evaluate their AWS Cloud readiness. AWS Migration Hub is a service that provides a single location to track and manage the migration of applications to AWS. It helps users discover their on-premises servers, group them into applications, and choose the right migration tools. It does not help users identify and prioritize any business transformation opportunities and evaluate their AWS Cloud readiness.

QUESTION 145
Which controls are the responsibility of both AWS and AWS customers, according to the AWS shared responsibility model? (Select TWO.)

A. Physical and environmental controls
B. Patch management
C. Configuration management
D. Account structures
E. Choice of the AWS Region where data is stored

Correct Answer: B, C
Section:
Explanation:
Patch management and configuration management are controls that are the responsibility of both AWS and AWS customers, according to the AWS shared responsibility model. Patch management is the process of applying updates to software and applications to fix vulnerabilities, bugs, or performance issues. Configuration management is the process of defining and maintaining the settings and parameters of systems and applications to ensure their consistency and reliability. AWS is responsible for patching and configuring the software and services that it manages, such as the AWS global infrastructure, the hypervisor, and the AWS managed services. The customer is responsible for patching and configuring the software and services that they manage, such as the guest operating system, the applications, and the AWS customer-managed services. Physical and environmental controls are the responsibility of AWS, according to the AWS shared responsibility model. Physical and environmental controls are the measures that protect the physical security and availability of the AWS global infrastructure, such as power, cooling, fire suppression, and access control. AWS is responsible for maintaining these controls and ensuring the resilience and reliability of the AWS Cloud. Account structures are the responsibility of the customer, according to the AWS shared responsibility model. Account structures are the ways that customers organize and manage their AWS accounts and resources, such as using AWS Organizations, IAM users and roles, resource tagging, and billing preferences. The customer is responsible for creating and configuring these structures and ensuring the security and governance of their AWS environment. Choice of the AWS Region where data is stored is the responsibility of the customer, according to the AWS shared responsibility model. AWS Regions are geographic areas that consist of multiple isolated Availability Zones. Customers can choose which AWS Region to store their data and run their applications, depending on their latency, compliance, and cost requirements. The customer is responsible for selecting the appropriate AWS Region and ensuring the data sovereignty and regulatory compliance of their data.

QUESTION 146
Which AWS service can a company use to securely store and encrypt passwords for a database?

A. AWS Shield
B. AWS Secrets Manager
C. AWS Identity and Access Management (1AM)
D. Amazon Cognito

Correct Answer: B
Section:
Explanation:
AWS Secrets Manager is an AWS service that can be used to securely store and encrypt passwords for a database. It allows users to manage secrets, such as database credentials, API keys, and tokens, in a centralized and secure way. It also provides features such as automatic rotation, fine-grained access control, and auditing. AWS Shield is an AWS service that provides protection against Distributed Denial of Service (DDoS) attacks for AWS resources and services. It does not store or encrypt passwords for a database. AWS Identity and Access Management (IAM) is an AWS service that allows users to manage access to AWS resources and services. It can be used to create users, groups, roles, and policies that control who can do what in AWS. It does not store or encrypt passwords for a database. Amazon Cognito is an AWS service that provides user identity and data synchronization for web and mobile applications. It can be used to authenticate and authorize users, manage user profiles, and sync user data across devices. It does not store or encrypt passwords for a database.

QUESTION 147
Which of the following is the customer's responsibility, according to the AWS shared responsibility model?

A. Identity and access management
B. Hard drive initialization
C. Protection of data center hardware
D. Security of Availability Zones

Correct Answer: A
Section:

Explanation:
Identity and access management is the customer's responsibility, according to the AWS shared responsibility model. This means that the customer is responsible for managing user access to the AWS resources, using tools such as AWS Identity and Access Management (IAM), AWS Single Sign-On (SSO), and AWS Organizations. The customer is also responsible for securing their data in transit and at rest, using encryption, key management, and other methods. Hard drive initialization, protection of data center hardware, and security of Availability Zones are AWS's responsibility, as they are part of the infrastructure, physical security, and network security that AWS provides to the customer12

QUESTION 148
A company wants to create multiple isolated networks in the same AWS account.
Which AWS service or component will provide this functionality?

A. AWS Transit Gateway
B. Internet gateway
C. Amazon VPC
D. Amazon EC2

Correct Answer: C
Section:
Explanation:
Amazon Virtual Private Cloud (Amazon VPC) is the AWS service that allows customers to create multiple isolated networks in the same AWS account. A VPC is a logically isolated section of the AWS Cloud where customers can launch AWS resources in a virtual network that they define. Customers can create multiple VPCs within an AWS account, each with its own IP address range, subnets, route tables, security groups, network access control lists, gateways, and other components. AWS Transit Gateway, Internet gateway, and Amazon EC2 are not services or components that provide the functionality of creating multiple isolated networks in the same AWS account. AWS Transit Gateway is a service that enables customers to connect their Amazon VPCs and their on-premises networks to a single gateway. An Internet gateway is a component that enables communication between instances in a VPC and the Internet. Amazon EC2 is a service that provides scalable compute capacity in the cloud34

QUESTION 149
Which AWS service offers a global content delivery network (CDN) that helps companies securely deliver websites, videos, applications, and APIs at high speeds with low latency?

A. Amazon EC2
B. Amazon CloudFront
C. Amazon CloudWatch
D. AWS CloudFormation

Correct Answer: B
Section:
Explanation:
Amazon CloudFront is the AWS service that offers a global content delivery network (CDN) that helps companies securely deliver websites, videos, applications, and APIs at high speeds with low latency. Amazon CloudFront is a web service that speeds up distribution of static and dynamic web content, such as HTML, CSS, JavaScript, and image files, to users. Amazon CloudFront uses a global network of edge locations, located near users' geographic locations, to cache and serve content with high availability and performance. Amazon CloudFront also provides features such as AWS Shield for DDoS protection, AWS Certificate Manager for SSL/TLS encryption, AWS WAF for web application firewall, and AWS Lambda@Edge for customizing content delivery with serverless code. Amazon EC2, Amazon CloudWatch, and AWS CloudFormation are not services that offer a global CDN. Amazon EC2 is a service that provides scalable compute capacity in the cloud. Amazon CloudWatch is a service that provides monitoring and observability for AWS resources and applications. AWS CloudFormation is a service that provides a common language to model and provision AWS resources and their dependencies.

QUESTION 150
Which benefit of AWS Cloud computing provides lower latency between users and applications?

A. Agility
B. Economies of scale
C. Global reach

D. Pay-as-you-go pricing

Correct Answer: C
Section:
Explanation:
Global reach is the benefit of AWS Cloud computing that provides lower latency between users and applications. Global reach means that AWS customers can deploy their applications and data in multiple regions around the world, and deliver them to users with high performance and availability.
AWS has the largest global infrastructure of any cloud provider, with 25 geographic regions and 81 Availability Zones, as well as 216 Points of Presence in 84 cities across 42 countries. Customers can choose the optimal locations for their applications and data based on their business requirements, such as compliance, data sovereignty, and customer proximity. Agility, economies of scale, and payas-you-go pricing are other benefits of AWS Cloud computing, but they do not directly provide lower latency between users and applications. Agility means that AWS customers can quickly and easily provision and scale up or down AWS resources as needed, without upfront costs or long-term commitments. Economies of scale means that AWS customers can benefit from the lower costs and higher efficiency that AWS achieves by operating at a massive scale and passing the savings to the customers. Pay-as-you-go pricing means that AWS customers only pay for the AWS resources they use, without any upfront costs or long-term contracts.

QUESTION 151
Which design principles should a company apply to AWS Cloud workloads to maximize sustainability and minimize environmental impact? (Select TWO.)

A. Maximize utilization of Amazon EC2 instances.
B. Minimize utilization of Amazon EC2 instances.
C. Minimize usage of managed services.
D. Force frequent application reinstallations by users.
E. Reduce the need for users to reinstall applications.

Correct Answer: A, E
Section:
Explanation:
To maximize sustainability and minimize environmental impact, a company should apply the following design principles to AWS Cloud workloads: maximize utilization of Amazon EC2 instances and reduce the need for users to reinstall applications. Maximizing utilization of Amazon EC2 instances means that the company can optimize the performance and efficiency of their compute resources, and avoid wasting energy and money on idle or underutilized instances. The company can use features such as Amazon EC2 Auto Scaling, Amazon EC2 Spot Instances, and AWS Compute Optimizer to automatically adjust the number and type of instances based on demand, cost, and performance. Reducing the need for users to reinstall applications means that the company can minimize the amount of data and bandwidth required to deliver their applications to users, and avoid unnecessary downloads and updates that consume energy and resources. The company can use services such as Amazon CloudFront, AWS AppStream 2.0, and AWS Amplify to deliver their applications faster, more securely, and more efficiently to users across the globe. Minimizing utilization of Amazon EC2 instances, minimizing usage of managed services, and forcing frequent application reinstallations by users are not design principles that would maximize sustainability and minimize environmental impact. Minimizing utilization of Amazon EC2 instances would reduce the performance and efficiency of the compute resources, and potentially increase the costs and complexity of the cloud workloads. Minimizing usage of managed services would increase the operational overhead and responsibility of the company, and potentially expose them to more security and reliability risks. Forcing frequent application reinstallations by users would increase the amount of data and bandwidth required to deliver the applications to users, and potentially degrade the user experience and satisfaction.

QUESTION 152
An ecommerce company wants to design a highly available application that will be hosted on multiple Amazon EC2 instances.
How should the company deploy the EC2 instances to meet these requirements?

A. Across multiple edge locations
B. Across multiple VPCs
C. Across multiple Availability Zones
D. Across multiple AWS accounts

Correct Answer: C
Section:
Explanation:
The company should deploy the EC2 instances across multiple Availability Zones to design a highly available application. Availability Zones are isolated locations within an AWS Region that are engineered to be fault-tolerant

and operate independently of each other. By deploying the EC2 instances across multiple Availability Zones, the company can ensure that their application can withstand the failure of an entire Availability Zone and continue to operate with minimal disruption.
Deploying the EC2 instances across multiple edge locations, VPCs, or AWS accounts will not provide the same level of availability and fault tolerance as Availability Zones. Edge locations are part of the Amazon CloudFront service, which is a content delivery network (CDN) that caches and serves web content to users. VPCs are virtual networks that isolate the AWS resources within an AWS Region. AWS accounts are the primary units of ownership and access control for AWS resources12

QUESTION 153
Which AWS Cloud design principle does a company follow by using AWS CloudTrail?

A. Recover automatically.
B. Perform operations as code.
C. Measure efficiency.
D. Ensure traceability.

Correct Answer: D
Section:
Explanation:
The company follows the AWS Cloud design principle of ensuring traceability by using AWS CloudTrail. AWS CloudTrail is a service that records the API calls and events made by or on behalf of the AWS account. The company can use AWS CloudTrail to monitor, audit, and analyze the activity and changes in their AWS resources and applications. AWS CloudTrail helps the company to achieve compliance, security, governance, and operational efficiency. Recovering automatically, performing operations as code, and measuring efficiency are other AWS Cloud design principles, but they are not directly related to using AWS CloudTrail. Recovering automatically means that the company can design their cloud workloads to handle failures gracefully and resume normal operations without manual intervention. Performing operations as code means that the company can automate the creation, configuration, and management of their cloud resources using scripts or templates. Measuring efficiency means that the company can monitor and optimize the performance and utilization of their cloud resources and applications34

QUESTION 154
A company wants to move its data warehouse application to the AWS Cloud. The company wants to run and scale its analytics services without needing to provision and manage data warehouse clusters.
Which AWS service will meet these requirements?

A. Amazon Redshift provisioned data warehouse
B. Amazon Redshift Serverless
C. Amazon Athena
D. Amazon S3

Correct Answer: B
Section:
Explanation:
Amazon Redshift Serverless is the AWS service that will meet the requirements of the company that wants to move its data warehouse application to the AWS Cloud and run and scale its analytics services without needing to provision and manage data warehouse clusters. Amazon Redshift Serverless is a new feature of Amazon Redshift, which is a fully managed data warehouse service that allows customers to run complex queries and analytics on large volumes of structured and semistructured data. Amazon Redshift Serverless automatically scales the compute and storage resources based on the workload demand, and customers only pay for the resources they consume. Amazon Redshift Serverless also simplifies the management and maintenance of the data warehouse, as customers do not need to worry about choosing the right cluster size, resizing the cluster, or distributing the data across the nodes. Amazon Redshift provisioned data warehouse, Amazon Athena, and Amazon S3 are not the best services to meet the requirements of the company. Amazon Redshift provisioned data warehouse requires customers to choose the number and type of nodes for their cluster, and manually resize the cluster if their workload changes. Amazon Athena is a serverless query service that allows customers to analyze data stored in Amazon S3 using standard SQL, but it is not a data warehouse service that can store and organize the data. Amazon S3 is a scalable object storage service that can store any amount and type of data, but it is not a data warehouse service that can run complex queries and analytics on the data.

QUESTION 155
Which tasks are the responsibility of AWS according to the AWS shared responsibility model? (Select TWO.)

A. Configure AWS Identity and Access Management (1AM).
B. Configure security groups on Amazon EC2 instances.
C. Secure the access of physical AWS facilities.
D. Patch applications that run on Amazon EC2 instances.
E. Perform infrastructure patching and maintenance.

Correct Answer: C, E
Section:
Explanation:
The tasks that are the responsibility of AWS according to the AWS shared responsibility model are securing the access of physical AWS facilities and performing infrastructure patching and maintenance. The AWS shared responsibility model defines the division of responsibilities between AWS and the customer for security and compliance. AWS is responsible for the security of the cloud, which includes the physical security of the hardware, software, networking, and facilities that run the AWS services. AWS is also responsible for the maintenance and patching of the infrastructure that supports the AWS services. The customer is responsible for the security in the cloud, which includes the configuration and management of the AWS resources and applications that they use. Configuring AWS Identity and Access Management (IAM), configuring security groups on Amazon EC2 instances, and patching applications that run on Amazon EC2 instances are tasks that are the responsibility of the customer, not AWS.

QUESTION 156
A company is running an order processing system on Amazon EC2 instances. The company wants to migrate microservices-based application.
Which combination of AWS services can the application use to meet these requirements? (Select TWO.)

A. Amazon Simple Queue Service (Amazon SQS)
B. AWS Lambda
C. AWS Migration Hub
D. AWS AppSync
E. AWS Application Migration Service

Correct Answer: A, B
Section:
Explanation:
The combination of AWS services that the application can use to migrate to a microservices-based application are Amazon Simple Queue Service (Amazon SQS) and AWS Lambda. Amazon SQS is a fully managed message queuing service that enables customers to decouple and scale microservices, distributed systems, and serverless applications. The application can use Amazon SQS to send, store, and receive messages between the microservices, ensuring that each message is processed only once and in the right order. AWS Lambda is a serverless compute service that allows customers to run code without provisioning or managing servers. The application can use AWS Lambda to create and deploy microservices as functions that are triggered by events, such as messages from Amazon SQS. AWS Migration Hub, AWS AppSync, and AWS Application Migration Service are not the best services to use for migrating to a microservices-based application. AWS Migration Hub is a service that provides a single location to track the progress of application migrations across multiple AWS and partner solutions. AWS AppSync is a service that simplifies the development of GraphQL APIs for real-time and offline data synchronization. AWS Application Migration Service is a service that enables customers to migrate their on-premises applications to AWS without making any changes to the applications, servers, or databases.

QUESTION 157
A company wants to access a report about the estimated environmental impact of the company's AWS usage.
Which AWS service or feature should the company use to meet this requirement?

A. AWS Organizations
B. 1AM policy
C. AWS Billing console
D. Amazon Simple Notification Service (Amazon SNS)

Correct Answer: C
Section:
Explanation:

The company should use the AWS Billing console to access a report about the estimated environmental impact of the company's AWS usage. The AWS Billing console provides customers with various tools and reports to manage and monitor their AWS costs and usage. One of the reports available in the AWS Billing console is the AWS Sustainability Dashboard, which shows the estimated carbon footprint and energy mix of the customer's AWS usage. The company can use this dashboard to measure and improve the sustainability of their cloud workloads. AWS Organizations, IAM policy, and Amazon Simple Notification Service (Amazon SNS) are not services or features that can provide a report about the estimated environmental impact of the company's AWS usage. AWS Organizations is a service that enables customers to centrally manage and govern their AWS accounts. IAM policy is a document that defines the permissions for an IAM identity (user, group, or role) or an AWS resource. Amazon SNS is a fully managed pub/sub messaging service that enables customers to send messages to subscribers or other AWS services.

QUESTION 158
A company has an AWS-hosted website located behind an Application Load Balancer. The company wants to safeguard the website from SQL injection or cross-site scripting.
Which AWS service should the company use?

A. Amazon GuardDuty
B. AWS WAF
C. AWS Trusted Advisor
D. Amazon Inspector

Correct Answer: B
Section:
Explanation:
The company should use AWS WAF to safeguard the website from SQL injection or cross-site scripting. AWS WAF is a web application firewall that helps protect web applications from common web exploits that could affect availability, compromise security, or consume excessive resources. The company can use AWS WAF to create custom rules that block malicious requests that match certain patterns, such as SQL injection or cross-site scripting. AWS WAF can be applied to web applications that are behind an Application Load Balancer, Amazon CloudFront, or Amazon API Gateway. Amazon GuardDuty, AWS Trusted Advisor, and Amazon Inspector are not the best services to use for this purpose. Amazon GuardDuty is a threat detection service that monitors for malicious activity and unauthorized behavior across the AWS accounts and resources. AWS Trusted Advisor is a service that provides best practice recommendations for cost optimization, performance, security, and fault tolerance. Amazon Inspector is a service that assesses the security and compliance of applications running on Amazon EC2 instances12

QUESTION 159
A company needs to host a web server on Amazon EC2 instances for at least 1 year. The web server cannot tolerate interruption.
Which EC2 instance purchasing option will meet these requirements MOST cost-effectively?

A. On-Demand Instances
B. Partial Upfront Reserved Instances
C. Spot Instances
D. No Upfront Reserved Instances

Correct Answer: B
Section:
Explanation:
The most cost-effective EC2 instance purchasing option for the company that needs to host a web server on Amazon EC2 instances for at least 1 year and cannot tolerate interruption is Partial Upfront Reserved Instances. Reserved Instances are a pricing model that offer significant discounts compared to On-Demand Instances in exchange for a commitment to use a specific amount of compute capacity for a fixed period of time (1 or 3 years). Partial Upfront Reserved Instances require customers to pay a portion of the total cost upfront, and the remaining cost in monthly installments over the term. This option offers a lower effective hourly rate than No Upfront Reserved Instances, which require no upfront payment but have higher monthly payments. On-Demand Instances and Spot Instances are not the best options for the company. On-Demand Instances are a pricing model that offer the most flexibility and no long-term commitment, but have the highest hourly rate. Spot Instances are a pricing model that offer the lowest cost, but are subject to interruption based on supply and demand34

QUESTION 160
A company runs a database on Amazon Aurora in the us-east-1 Region. The company has a disaster recovery requirement that the database be available in another Region.
Which solution meets this requirement with minimal disruption to the database operations?

A. Perform an Aurora Multi-AZ deployment.
B. Deploy Aurora cross-Region read replicas.
C. Create Amazon Elastic Block Store (Amazon EBS) volume snapshots for Aurora and copy them to another Region.
D. Deploy Aurora Replicas.

Correct Answer: B
Section:
Explanation:
The solution that meets the requirement of the company that runs a database on Amazon Aurora in the us-east-1 Region and has a disaster recovery requirement that the database be available in another Region with minimal disruption to the database operations is to deploy Aurora cross-Region read replicas. Aurora cross-Region read replicas are secondary Aurora clusters that are created in a different AWS Region from the primary Aurora cluster, and are kept in sync with the primary cluster using physical replication. The company can use Aurora cross-Region read replicas to improve the availability and durability of the database, as well as to reduce the recovery time objective (RTO) and recovery point objective (RPO) in case of a regional disaster. Performing an Aurora Multi-AZ deployment, creating Amazon EBS volume snapshots for Aurora and copying them to another Region, and deploying Aurora Replicas are not the best solutions for this requirement. An Aurora Multi-AZ deployment is a configuration that creates one or more Aurora Replicas within the same AWS Region as the primary Aurora cluster, and provides automatic failover in case of an Availability Zone outage. However, this does not provide cross-Region disaster recovery. Creating Amazon EBS volume snapshots for Aurora and copying them to another Region is a manual process that requires stopping the database, creating the snapshots, copying them to the target Region, and restoring them to a new Aurora cluster. This process can cause significant downtime and data loss. Deploying Aurora Replicas is a configuration that creates one or more secondary Aurora clusters within the same AWS Region as the primary Aurora cluster, and provides read scaling and high availability. However, this does not provide cross-Region disaster recovery.

QUESTION 161
Which AWS service requires the customer to patch the guest operating system?

A. AWS Lambda
B. Amazon OpenSearch Service
C. Amazon EC2
D. Amazon ElastiCache

Correct Answer: C
Section:
Explanation:
The AWS service that requires the customer to patch the guest operating system is Amazon EC2.
Amazon EC2 is a service that provides scalable compute capacity in the cloud, and allows customers to launch and run virtual servers, called instances, with a variety of operating systems, configurations, and specifications. The customer is responsible for patching and updating the guest operating system and any applications that run on the EC2 instances, as part of the security in the cloud. AWS Lambda, Amazon OpenSearch Service, and Amazon ElastiCache are not services that require the customer to patch the guest operating system. AWS Lambda is a serverless compute service that allows customers to run code without provisioning or managing servers. Amazon OpenSearch Service is a fully managed service that makes it easy to deploy, operate, and scale OpenSearch clusters in the AWS Cloud. Amazon ElastiCache is a fully managed service that provides in-memory data store and cache solutions, such as Redis and Memcached. These services are managed by AWS, and AWS is responsible for patching and updating the underlying infrastructure and software.

QUESTION 162
Which benefit of the AWS Cloud helps companies achieve lower usage costs because of the aggregate usage of all AWS users?

A. No need to guess capacity
B. Ability to go global in minutes
C. Economies of scale
D. Increased speed and agility

Correct Answer: C
Section:
Explanation:
The benefit of the AWS Cloud that helps companies achieve lower usage costs because of the aggregate usage of all AWS users is economies of scale. Economies of scale means that AWS can achieve lower costs and higher

efficiency by operating at a massive scale and passing the savings to the customers. AWS leverages the aggregate usage of all AWS users to negotiate better prices with hardware vendors, optimize power consumption, and improve operational processes. As a result, AWS can offer lower and more flexible pricing options to the customers, such as pay-as-you-go, reserved, and spot pricing models. No need to guess capacity, ability to go global in minutes, and increased speed and agility are other benefits of the AWS Cloud, but they are not directly related to the aggregate usage of all AWS users. No need to guess capacity means that AWS customers can avoid the risk of over-provisioning or under-provisioning resources, and scale up or down as needed.
Ability to go global in minutes means that AWS customers can deploy their applications and data in multiple regions around the world, and deliver them to users with high performance and availability.
Increased speed and agility means that AWS customers can quickly and easily provision and access AWS resources, and accelerate their innovation and time to market.

QUESTION 163
Which AWS services or tools are designed to protect a workload from SQL injections, cross-site scripting, and DDoS attacks? (Select TWO.)

A. VPC endpoint
B. Virtual private gateway
C. AWS Shield Standard
D. AWS Config
E. AWS WAF

Correct Answer: C
Section:
Explanation:
AWS Shield Standard and AWS WAF are the AWS services or tools that are designed to protect a workload from SQL injections, cross-site scripting, and DDoS attacks. According to the AWS Shield Developer Guide, "AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS. AWS Shield provides always-on detection and automatic inline mitigations that minimize application downtime and latency, so there is no need to engage AWS Support to benefit from DDoS protection."5 According to the AWS WAF Developer Guide, "AWS WAF is a web application firewall that helps protect your web applications or APIs against common web exploits that may affect availability, compromise security, or consume excessive resources. AWS WAF gives you control over how traffic reaches your applications by enabling you to create security rules that block common attack patterns, such as SQL injection or cross-site scripting, and rules that filter out specific traffic patterns you define." VPC endpoint, virtual private gateway, and AWS Config are not designed to protect a workload from these types of attacks.

QUESTION 164
A company wants guidance to optimize the cost and performance of its current AWS environment.
Which AWS service or tool should the company use to identify areas for optimization?

A. Amazon QuickSight
B. AWS Trusted Advisor
C. AWS Organizations
D. AWS Budgets

Correct Answer: B
Section:
Explanation:
AWS Trusted Advisor is the AWS service or tool that the company should use to identify areas for optimization. According to the AWS Trusted Advisor User Guide, "AWS Trusted Advisor is an online tool that provides you real time guidance to help you provision your resources following AWS best practices. AWS Trusted Advisor checks help optimize your AWS infrastructure, increase security and performance, reduce your overall costs, and monitor service limits." Amazon QuickSight, AWS Organizations, and AWS Budgets are not designed to provide optimization recommendations for the current AWS environment.

QUESTION 165
A new AWS user who has little cloud experience wants to build an application by using AWS services.
The user wants to learn how to implement specific AWS services from other customer examples. The user also wants to ask questions to AWS experts.
Which AWS service or resource will meet these requirements?

A. AWS Online Tech Talks

B. AWS documentation
C. AWS Marketplace
D. AWS Health Dashboard

Correct Answer: A
Section:
Explanation:
AWS Online Tech Talks are online presentations that cover a broad range of topics at varying technical levels and provide a live Q&A session with AWS experts. They are a great resource for new AWS users who want to learn how to implement specific AWS services from other customer examples and ask questions to AWS experts. AWS documentation, AWS Marketplace, and AWS Health Dashboard do not offer the same level of interactivity and guidance as AWS Online Tech Talks.
Source: AWS Online Tech Talks

QUESTION 166
A user discovered that an Amazon EC2 instance is missing an Amazon Elastic Block Store (Amazon EBS) data volume. The user wants to determine when the EBS volume was removed.
Which AWS service will provide this information?

A. AWS Config
B. AWS Trusted Advisor
C. Amazon Timestream
D. Amazon QuickSight

Correct Answer: A
Section:
Explanation:
AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources. AWS Config continuously monitors and records your AWS resource configurations and allows you to automate the evaluation of recorded configurations against desired configurations.
AWS Config can help you determine when an EBS volume was removed from an EC2 instance by providing a timeline of configuration changes and compliance status. AWS Trusted Advisor, Amazon Timestream, and Amazon QuickSight do not provide the same level of configuration tracking and auditing as AWS Config. Source: AWS Config

QUESTION 167
A company has a single Amazon EC2 instance. The company wants to adopt a highly available architecture.
What can the company do to meet this requirement?

A. Scale vertically to a larger EC2 instance size.
B. Scale horizontally across multiple Availability Zones.
C. Purchase an EC2 Dedicated Instance.
D. Change the EC2 instance family to a compute optimized instance.

Correct Answer: B
Section:
Explanation:
Scaling horizontally across multiple Availability Zones is a way to adopt a highly available architecture, as it increases the fault tolerance and resilience of the application. Scaling vertically to a larger EC2 instance size is a way to improve the performance of the application, but it does not improve the availability. Purchasing an EC2 Dedicated Instance is a way to isolate the instance from other AWS customers, but it does not improve the availability. Changing the EC2 instance family to a compute optimized instance is a way to optimize the instance type for the workload, but it does not improve the availability. These concepts are explained in the AWS Well-Architected Framework2.

QUESTION 168
A company is running an application that is hosted on Amazon EC2 instances. The usage of the EC2 instances is higher during daytime hours than nighttime hours. The company wants to optimize the number of EC2 instances

based on this usage pattern.
Which AWS service or instance purchasing option should the company use to meet these requirements?

A. Spot Instances
B. Reserved Instances
C. AWS CloudFormation
D. AWS Auto Scaling

Correct Answer: D
Section:
Explanation:
AWS Auto Scaling is the AWS service that allows users to optimize the number of EC2 instances based on the usage pattern, as it automatically adjusts the capacity to maintain steady and predictable performance at the lowest possible cost. Spot Instances are a way to reduce the cost of EC2 instances by bidding on unused EC2 capacity, but they are not suitable for applications that require steady and reliable performance. Reserved Instances are a way to reduce the cost of EC2 instances by committing to a certain amount of usage for a period of time, but they are not flexible to adjust to the usage pattern. AWS CloudFormation is a way to automate the creation and management of AWS resources, but it does not optimize the number of EC2 instances based on the usage pattern. These concepts are explained in the AWS Cloud Practitioner Essentials course3.

QUESTION 169
Which AWS services allow users to monitor and retain records of account activities that include governance, compliance, and auditing?
(Select TWO.)

A. Amazon CloudWatch
B. AWS CloudTrail
C. Amazon GuardDuty
D. AWS Shield
E. AWS WAF

Correct Answer: A, B
Section:
Explanation:
Amazon CloudWatch and AWS CloudTrail are the AWS services that allow users to monitor and retain records of account activities that include governance, compliance, and auditing. Amazon CloudWatch is a service that collects and tracks metrics, collects and monitors log files, and sets alarms. AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. Amazon GuardDuty, AWS Shield, and AWS WAF are AWS services that provide security and protection for AWS resources, but they do not monitor and retain records of account activities. These concepts are explained in the AWS Cloud Practitioner Essentials course3.

QUESTION 170
Which AWS service or tool provides on-demand access to AWS security and compliance reports and AWS online agreements?

A. AWS Artifact
B. AWS Trusted Advisor
C. Amazon Inspector
D. AWS Billing console

Correct Answer: A
Section:
Explanation:
AWS Artifact is the AWS service or tool that provides on-demand access to AWS security and compliance reports and AWS online agreements. AWS Trusted Advisor is a tool that provides realtime guidance to help users provision their resources following AWS best practices. Amazon Inspector is a service that helps users improve the security and compliance of their applications. AWS Billing console is a tool that helps users manage their AWS costs and usage. These concepts are explained in the AWS Cloud Practitioner Essentials course3.

QUESTION 171
A company wants to move its iOS application development and build activities to AWS.
Which AWS service or resource should the company use for these activities?

A. AWS CodeCommit
B. Amazon EC2 M1 Mac instances
C. AWS Amplify
D. AWS App Runner

Correct Answer: B
Section:
Explanation:
Amazon EC2 M1 Mac instances are the AWS service or resource that the company should use for its iOS application development and build activities, as they enable users to run macOS on AWS and access a broad and growing set of AWS services. AWS CodeCommit is a service that provides a fully managed source control service that hosts secure Git-based repositories. AWS Amplify is a set of tools and services that enable developers to build full-stack web and mobile applications using AWS.
AWS App Runner is a service that makes it easy for developers to quickly deploy containerized web applications and APIs. These concepts are explained in the AWS Developer Tools page4.

QUESTION 172
Which statements explain the business value of migration to the AWS Cloud? (Select TWO.)

A. The migration of enterprise applications to the AWS Cloud makes these applications automatically available on mobile devices.
B. AWS availability and security provide the ability to improve service level agreements (SLAs) while reducing risk and unplanned downtime.
C. Companies that migrate to the AWS Cloud eliminate the need to plan for high availability and disaster recovery.
D. Companies that migrate to the AWS Cloud reduce IT costs related to infrastructure, freeing budget for reinvestment in other areas.
E. Applications are modernized because migration to the AWS Cloud requires companies to rearchitect and rewrite all enterprise applications.

Correct Answer: B, D
Section:
Explanation:
B and D are correct because AWS availability and security enable customers to improve their SLAs while reducing risk and unplanned downtime1, and AWS reduces IT costs related to infrastructure, allowing customers to reinvest in other areas2. A is incorrect because migrating to the AWS Cloud does not automatically make applications available on mobile devices, as it depends on the application design and compatibility. C is incorrect because companies that migrate to the AWS Cloud still need to plan for high availability and disaster recovery, as AWS is a shared responsibility model3. E is incorrect because migrating to the AWS Cloud does not require companies to rearchitect and rewrite all enterprise applications, as AWS offers different migration strategies depending on the application complexity and business objectives4.

QUESTION 173
Which AWS service is designed to help users build conversational interfaces into applications using voice and text?

A. Amazon Lex
B. Amazon Transcribe
C. Amazon Comprehend
D. Amazon Timestream

Correct Answer: A
Section:
Explanation:
A is correct because Amazon Lex is the AWS service that helps users build conversational interfaces into applications using voice and text. B is incorrect because Amazon Transcribe is the AWS service that helps users convert speech to text. C is incorrect because Amazon Comprehend is the AWS service that helps users analyze text using natural language processing. D is incorrect because Amazon Timestream is the AWS service that helps users collect, store, and process time series data.

QUESTION 174
A company wants to develop a shopping application that records customer orders. The application needs to use an AWS managed database service to store data.
Which AWS service should the company use to meet these requirements?

A. Amazon RDS
B. Amazon Redshift
C. Amazon ElastiCache
D. Amazon Neptune

Correct Answer: A
Section:
Explanation:
A is correct because Amazon RDS is the AWS service that provides a managed relational database service that supports various database engines, such as MySQL, PostgreSQL, Oracle, and SQL Server.
B is incorrect because Amazon Redshift is the AWS service that provides a managed data warehouse service that is optimized for analytical queries. C is incorrect because Amazon ElastiCache is the AWS service that provides a managed in-memory data store service that supports Redis and Memcached.
D is incorrect because Amazon Neptune is the AWS service that provides a managed graph database service that supports property graph and RDF models.

QUESTION 175
A company wants to use Amazon EC2 instances for a stable production workload that will run for 1 year.
Which instance purchasing option meets these requirements MOST cost-effectively?

A. Dedicated Hosts
B. Reserved Instances
C. On-Demand Instances
D. Spot Instances

Correct Answer: B
Section:
Explanation:
B is correct because Reserved Instances are the instance purchasing option that offers the most costeffective way to use Amazon EC2 instances for a stable production workload that will run for 1 year, as they provide significant discounts compared to On-Demand Instances in exchange for a commitment to use a specific amount of computing power for a period of time. A is incorrect because Dedicated Hosts are the instance purchasing option that allows customers to use physical servers that are fully dedicated to their use, which is more expensive and less flexible than Reserved Instances. C is incorrect because On-Demand Instances are the instance purchasing option that allows customers to pay for compute capacity by the hour or second with no long-term commitments, which is more suitable for short-term, variable, and unpredictable workloads. D is incorrect because Spot Instances are the instance purchasing option that allows customers to bid on spare Amazon EC2 computing capacity, which is more suitable for flexible, scalable, and fault-tolerant workloads that can tolerate interruptions.

QUESTION 176
A company needs a repository that stores source code. The company needs a way to update the running software when the code changes.
Which combination of AWS services will meet these requirements? (Select TWO.)

A. AWS CodeCommit
B. AWS CodeDeploy
C. Amazon DynamoDB
D. Amazon S3
E. Amazon Elastic Container Service (Amazon ECS)

Correct Answer: A, B
Section:

Explanation:
A and B are correct because AWS CodeCommit is the AWS service that provides a fully managed source control service that hosts secure Git-based repositories1, and AWS CodeDeploy is the AWS service that automates code deployments to any instance, including Amazon EC2 instances and servers running on-premises2. These two services can be used together to store source code and update the running software when the code changes. C is incorrect because Amazon DynamoDB is the AWS service that provides a fully managed NoSQL database service that supports key-value and document data models3. It is not related to storing source code or updating software. D is incorrect because Amazon S3 is the AWS service that provides object storage through a web service interface4.
It can be used to store source code, but it does not provide source control features or update software. E is incorrect because Amazon Elastic Container Service (Amazon ECS) is the AWS service that allows users to run, scale, and secure Docker container applications. It can be used to deploy containerized software, but it does not store source code or update software.

QUESTION 177
A company is setting up AWS Identity and Access Management (1AM) on an AWS account.
Which recommendation complies with 1AM security best practices?

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

Correct Answer: C
Section:
Explanation:
C is correct because turning on multi-factor authentication (MFA) for added security during the login process is one of the IAM security best practices recommended by AWS. MFA adds an extra layer of protection on top of the user name and password, making it harder for attackers to access the AWS account. A is incorrect because using the account root user access keys for administrative tasks is not a good practice, as the root user has full access to all the resources in the AWS account and can cause irreparable damage if compromised. AWS recommends creating individual IAM users with the least privilege principle and using roles for applications that run on Amazon EC2 instances. B is incorrect because granting broad permissions so that all company employees can access the resources they need is not a good practice, as it increases the risk of unauthorized or accidental actions on the AWS resources. AWS recommends granting only the permissions that are required to perform a task and using groups to assign permissions to IAM users. D is incorrect because avoiding rotating credentials to prevent issues in production applications is not a good practice, as it increases the risk of credential leakage or compromise. AWS recommends rotating credentials regularly and using temporary security credentials from AWS STS when possible.

QUESTION 178
A company wants to run its production workloads on AWS. The company needs concierge service, a designated AWS technical account manager (TAM), and technical support that is available 24 hours a day, 7 days a week.
Which AWS Support plan will meet these requirements?

A. AWS Basic Support
B. AWS Enterprise Support
C. AWS Business Support
D. AWS Developer Support

Correct Answer: B
Section:
Explanation:
B is correct because AWS Enterprise Support is the AWS Support plan that provides concierge service, a designated AWS technical account manager (TAM), and technical support that is available 24 hours a day, 7 days a week. This plan is designed for customers who run mission-critical workloads on AWS and need the highest level of support. A is incorrect because AWS Basic Support is the AWS Support plan that provides customer service and support for billing and account issues, service limit increases, and technical support for a limited set of AWS services. It does not provide concierge service, a designated TAM, or 24/7 technical support. C is incorrect because AWS Business Support is the AWS Support plan that provides customer service and support for billing and account issues, service limit increases, and technical support for all AWS services, as well as access to AWS Trusted Advisor and AWS Support API. It does not provide concierge service or a designated TAM. D is incorrect because AWS Developer Support is the AWS Support plan that provides customer service and support for billing and account issues, service limit increases, and technical support for all AWS services, as well as access to AWS Trusted Advisor. It does not provide concierge service, a designated TAM, or 24/7 technical support.

QUESTION 179
Which AWS service or feature can be used to control inbound and outbound traffic on an Amazon EC2 instance?

A. Internet gateways
B. AWS Identity and Access Management (1AM)
C. Network ACLs
D. Security groups

Correct Answer: D
Section:
Explanation:
D is correct because security groups are the AWS service or feature that can be used to control inbound and outbound traffic on an Amazon EC2 instance. Security groups act as a virtual firewall for the EC2 instance, allowing users to specify which protocols, ports, and source or destination IP addresses are allowed or denied. A is incorrect because internet gateways are the AWS service or feature that enable communication between instances in a VPC and the internet. They do not control the traffic on an EC2 instance. B is incorrect because AWS Identity and Access Management (IAM) is the AWS service or feature that enables users to manage access to AWS services and resources securely. It does not control the traffic on an EC2 instance. C is incorrect because network ACLs are the AWS service or feature that provide an optional layer of security for the VPC that acts as a firewall for controlling traffic in and out of one or more subnets. They do not control the traffic on an EC2 instance.

QUESTION 180
A user is moving a workload from a local data center to an architecture that is distributed between the local data center and the AWS Cloud.
Which type of migration is this?

A. On-premises to cloud native
B. Hybrid to cloud native
C. On-premises to hybrid
D. Cloud native to hybrid

Correct Answer: C
Section:
Explanation:
C is correct because moving a workload from a local data center to an architecture that is distributed between the local data center and the AWS Cloud is an example of an on-premises to hybrid migration. A hybrid cloud is a cloud computing environment that uses a mix of on-premises, private cloud, and public cloud services with orchestration between the platforms. A is incorrect because onpremises to cloud native migration is the process of moving a workload from a local data center to an architecture that is fully hosted and managed on the AWS Cloud. B is incorrect because hybrid to cloud native migration is the process of moving a workload from an architecture that is distributed between the local data center and the AWS Cloud to an architecture that is fully hosted and managed on the AWS Cloud. D is incorrect because cloud native to hybrid migration is the process of moving a workload from an architecture that is fully hosted and managed on the AWS Cloud to an architecture that is distributed between the local data center and the AWS Cloud.

QUESTION 181
Which AWS solution provides the ability for a company to run AWS services in the company's onpremises data center?

A. AWS Direct Connect
B. AWS Outposts
C. AWS Systems Manager hybrid activations
D. AWS Storage Gateway

Correct Answer: B
Section:
Explanation:
AWS Outposts is a fully managed service that extends AWS infrastructure, AWS services, APIs, and tools to virtually any datacenter, co-location space, or on-premises facility for a truly consistent hybrid experience. AWS Outposts enables you to run AWS services in your on-premises data center1.

QUESTION 182

A company provides a web-based ecommerce service that runs in two Availability Zones within a single AWS Region. The web service distributes content that is stored in the Amazon S3 Standard storage class. The company wants to improve the web service's performance globally.
What should the company do to meet this requirement?

A. Change the S3 storage class to S3 Intelligent-Tiering.
B. Deploy an Amazon CloudFront distribution to cache web server content in edge locations.
C. Use Amazon API Gateway for the web service.
D. Migrate the website ecommerce servers to Amazon EC2 with enhanced networking.

Correct Answer: B
Section:
Explanation:
Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment. CloudFront can cache web server content in edge locations, which are located closer to the end users, to improve the web service's performance globally2.

QUESTION 183
What is a characteristic of Convertible Reserved Instances (RIs)?

A. Users can exchange Convertible RIs for other Convertible RIs from a different instance family.
B. Users can exchange Convertible RIs for other Convertible RIs in different AWS Regions.
C. Users can sell and buy Convertible RIs on the AWS Marketplace.
D. Users can shorten the term of their Convertible RIs by merging them with other Convertible RIs.

Correct Answer: A
Section:
Explanation:
Convertible Reserved Instances (RIs) are a type of Reserved Instance that allow you to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value. You can exchange Convertible RIs for other Convertible RIs from a different instance family, size, platform, tenancy, or scope (Region or Availability Zone)3.

QUESTION 184
Which AWS service is always available free of charge to users?

A. Amazon Athena
B. AWS Identity and Access Management (1AM)
C. AWS Secrets Manager
D. Amazon ElastiCache A company has only basic knowledge of AWS technologies.

Correct Answer: B
Section:
Explanation:
AWS Identity and Access Management (IAM) is a web service that helps you securely control access to AWS resources for your users. You use IAM to control who can use your AWS resources (authentication) and what resources they can use and in what ways (authorization). IAM is always available free of charge to users4.

QUESTION 185
Which AWS service provides the SIMPLEST way for the company to establish a website on AWS?

A. Amazon Elastic File System (Amazon EFS)

B. AWS Elastic Beanstalk
C. AWS Lambda
D. Amazon Lightsail

Correct Answer: D
Section:
Explanation:
Amazon Lightsail is an easy-to-use cloud platform that offers you everything needed to build an application or website, plus a cost-effective, monthly plan. Whether you're new to the cloud or looking to get on the cloud quickly with AWS infrastructure you trust, we've got you covered.
Lightsail provides the simplest way for the company to establish a website on AWS.

QUESTION 186
A company wants to migrate its application to AWS. The company wants to replace upfront expenses with variable payment that is based on usage.
What should the company do to meet these requirements?

A. Use pay-as-you-go pricing.
B. Purchase Reserved Instances.
C. Pay less by using more.
D. Rightsize instances.

Correct Answer: A
Section:
Explanation:
Pay-as-you-go pricing is one of the main benefits of AWS. With pay-as-you-go pricing, you pay only for what you use, when you use it. There are no long-term contracts, termination fees, or complex licensing. You replace upfront expenses with lower variable costs and pay only for the resources you consume.

QUESTION 187
A company manages factory machines in real time. The company wants to use AWS technology to deploy its monitoring applications as close to the factory machines as possible.
Which AWS solution will meet these requirements with the LEAST latency?

A. AWS Outposts
B. Amazon EC2
C. AWS App Runner
D. AWS Batch

Correct Answer: A
Section:
Explanation:
AWS Outposts is a fully managed service that extends AWS infrastructure, AWS services, APIs, and tools to virtually any datacenter, co-location space, or on-premises facility for a truly consistent hybrid experience. AWS Outposts enables you to run AWS services in your on-premises data center1.

QUESTION 188
Which option is a pillar of the AWS Well-Architected Framework?

A. Patch management
B. Cost optimization
C. Business technology strategy

D. Physical and environmental controls

Correct Answer: B
Section:
Explanation:
The AWS Well-Architected Framework helps you understand the pros and cons of decisions you make while building systems on AWS. By using the Framework, you will learn architectural best practices for designing and operating reliable, secure, efficient, and cost-effective systems in the cloud. The Framework consists of five pillars: operational excellence, security, reliability, performance efficiency, and cost optimization2.

QUESTION 189
A company is collecting user behavior patterns to identify how to meet goals for sustainability impact.
Which guidelines are best practices for the company to implement to meet these goals? (Select TWO.)

A. Scale infrastructure with user load.
B. Maximize the geographic distance between workloads and user locations.
C. Eliminate creation and maintenance of unused assets.
D. Scale resources with excess capacity and remove auto scaling.
E. Scale infrastructure based on the number of users.

Correct Answer: A, C
Section:
Explanation:
To meet the goals for sustainability impact, the company should follow the best practices of scaling infrastructure with user load and eliminating creation and maintenance of unused assets. Scaling infrastructure with user load means adjusting the capacity of the infrastructure to match the demand of the users, which can reduce the energy consumption and carbon footprint of the system. Eliminating creation and maintenance of unused assets means avoiding the waste of resources and money on assets that are not needed or used, which can also improve the environmental and economic efficiency of the system3.

QUESTION 190
A company is running an application on AWS. The company wants to identify and prevent the accidental
Which AWS service or feature will meet these requirements?

A. Amazon GuardDuty
B. Network ACL
C. AWS WAF
D. AWS Network Firewall

Correct Answer: A
Section:
Explanation:
Amazon GuardDuty is a threat detection service that continuously monitors for malicious activity and unauthorized behavior to protect your AWS accounts, workloads, and data stored in Amazon S3.
With the cloud, the collection and aggregation of account and network activities is simplified, but it can be time consuming for security teams to continuously analyze event log data for potential threats. With GuardDuty, you can automate anomaly detection and get actionable findings to help you protect your AWS resources4.

QUESTION 191
A company has an Amazon S3 bucket containing images of scanned financial invoices. The company is building an artificial intelligence (AI)-based application on AWS. The company wants the application to identify and read total balance amounts on the invoices.
Which AWS service will meet these requirements?

A. Amazon Forecast
B. Amazon Textract

C. Amazon Rekognition
D. Amazon Lex

Correct Answer: B
Section:
Explanation:
Amazon Textract is a service that automatically extracts text and data from scanned documents.
Amazon Textract goes beyond simple optical character recognition (OCR) to also identify the contents of fields in forms and information stored in tables. Amazon Textract can analyze images of scanned financial invoices and extract the total balance amounts, as well as other relevant information, such as invoice number, date, vendor name, etc5.

QUESTION 192
A company migrated its core application onto multiple workloads in the AWS Cloud. The company wants to improve the application's reliability.
Which cloud design principle should the company implement to achieve this goal?

A. Maximize utilization.
B. Decouple the components.
C. Rightsize the resources.
D. Adopt a consumption model.

Correct Answer: B
Section:
Explanation:
Decoupling the components of an application means reducing the dependencies and interactions between them, which can improve the application's reliability, scalability, and performance. Decoupling can be achieved by using services such as Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and AWS Lambda1

QUESTION 193
A company is using AWS Organizations to configure AWS accounts.
A company is planning its migration to the AWS Cloud. The company is identifying its capability gaps by using the AWS Cloud Adoption Framework (AWS CAF) perspectives.
Which phase of the cloud transformation journey includes these identification activities?

A. Envision
B. Align
C. Scale
D. Launch

Correct Answer: A
Section:
Explanation:
The Envision phase of the cloud transformation journey is where the company defines its vision, business drivers, and desired outcomes for the cloud adoption. The company also identifies its capability gaps by using the AWS Cloud Adoption Framework (AWS CAF) perspectives, which are business, people, governance, platform, security, and operations2.

QUESTION 194
Which aspect of security is the customer's responsibility, according to the AWS shared responsibility model?

A. Patch and configuration management
B. Service and communications protection or zone security
C. Physical and environmental controls
D. Awareness and training

Correct Answer: A
Section:
Explanation:
According to the AWS shared responsibility model, AWS is responsible for the security of the cloud, while the customer is responsible for the security in the cloud. This means that AWS provides the physical and environmental controls, the service and communications protection, and the awareness and training for its employees, while the customer provides the patch and configuration management, the identity and access management, the data encryption, and the firewall configuration for its resources3.

QUESTION 195
A developer needs to maintain a development environment infrastructure and a production environment infrastructure in a repeatable fashion.
Which AWS service should the developer use to meet these requirements?

A. AWS Ground Station
B. AWS Shield
C. AWS loT Device Defender
D. AWS CloudFormation

Correct Answer: D
Section:
Explanation:
AWS CloudFormation is a service that allows you to model and provision your AWS and third-party application resources in a repeatable and predictable way. You can use AWS CloudFormation to create, update, and delete a collection of resources as a single unit, called a stack. You can also use AWS CloudFormation to manage your development and production environments in a consistent and efficient manner4.

QUESTION 196
A company wants to use guidelines from the AWS Well-Architected Framework to limit human error and facilitate consistent responses to events.
Which of the following is a Well-Architected design principle that will meet these requirements?

A. Use AWS CodeDeploy.
B. Perform operations as code.
C. Migrate workloads to a Dedicated Host.
D. Use AWS Compute Optimizer.

Correct Answer: B
Section:
Explanation:
This is a design principle of the operational excellence pillar of the AWS Well-Architected Framework. Performing operations as code means using scripts, templates, or automation tools to perform routine tasks, such as provisioning, configuration, deployment, and monitoring. This reduces human error, increases consistency, and enables faster recovery from failures. You can learn more about the operational excellence pillar from this whitepaper or this digital course.

QUESTION 197
Which of the following is a benefit of using an AWS managed service?

A. Reduced operational overhead for a company's IT staff
B. Increased fixed costs that can be predicted by a finance team
C. Removal of the need to have a backup strategy
D. Removal of the need to follow compliance standards

Correct Answer: A
Section:

Explanation:
This is a benefit of using an AWS managed service, such as Amazon S3, Amazon DynamoDB, or AWS Lambda. AWS managed services are fully managed by AWS, which means that AWS handles the provisioning, scaling, patching, backup, and recovery of the underlying infrastructure and software.
This reduces the operational overhead for the company's IT staff, who can focus on their core business logic and innovation. You can learn more about the AWS managed services from this webpage or this digital course.

QUESTION 198
A company encourages its teams to test failure scenarios regularly and to validate their understanding of the impact of potential failures.
Which pillar of the AWS Well-Architected Framework does this philosophy represent?

A. Operational excellence
B. Cost optimization
C. Performance efficiency
D. Security

Correct Answer: A
Section:
Explanation:
This is the pillar of the AWS Well-Architected Framework that represents the philosophy of testing failure scenarios regularly and validating the understanding of the impact of potential failures. The operational excellence pillar covers the best practices for designing, running, monitoring, and improving systems in the AWS Cloud. Testing failure scenarios is one of the ways to improve the system's resilience, reliability, and recovery. You can learn more about the operational excellence pillar from this whitepaper or this digital course.

QUESTION 199
Which of the following are general AWS Cloud design principles described in the AWS Well-Architected Framework?

A. Consolidate key components into monolithic architectures.
B. Test systems at production scale.
C. Provision more capacity than a workload is expected to need.
D. Drive architecture design based on data collected about the workload behavior and requirements.
E. Make AWS Cloud architectural decisions static, one-time events.

Correct Answer: B, D
Section:
Explanation:
These are two of the general AWS Cloud design principles described in the AWS Well-Architected Framework. Testing systems at production scale means using tools such as AWS CloudFormation, AWS CodeDeploy, and AWS X-Ray to simulate real-world scenarios and measure the performance, scalability, and availability of the system. Driving architecture design based on data means using tools such as Amazon CloudWatch, AWS CloudTrail, and AWS Config to collect and analyze metrics, logs, and events about the system and use the insights to optimize the system's design and operation. You can learn more about the AWS Well-Architected Framework from this whitepaper or [this digital course].

QUESTION 200
Which scenarios represent the concept of elasticity on AWS? (Select TWO.)

A. Scaling the number of Amazon EC2 instances based on traffic
B. Resizing Amazon RDS instances as business needs change
C. Automatically directing traffic to less-utilized Amazon EC2 instances
D. Using AWS compliance documents to accelerate the compliance process
E. Having the ability to create and govern environments using code

Correct Answer: A, B
Section:
Explanation:
These are two scenarios that represent the concept of elasticity on AWS. Elasticity means the ability to adjust the resources and capacity of the system in response to changes in demand or environment. Scaling the number of Amazon EC2 instances based on traffic means using services such as AWS Auto Scaling or Elastic Load Balancing to add or remove instances as the traffic increases or decreases. Resizing Amazon RDS instances as business needs change means using the Amazon
RDS console or API to modify the instance type, storage type, or storage size of the database as the workload grows or shrinks. You can learn more about the concept of elasticity on AWS from [this webpage] or [this digital course].

QUESTION 201
An ecommerce company wants to distribute traffic between the Amazon EC2 instances that host its website.
Which AWS service or resource will meet these requirements?

A. Application Load Balancer
B. AWS WAF
C. AWS CloudHSM
D. AWS Direct Connect

Correct Answer: A
Section:
Explanation:
This is the AWS service or resource that will meet the requirements of distributing traffic between the Amazon EC2 instances that host the website. Application Load Balancer is a type of Elastic Load
Balancing that distributes incoming application traffic across multiple targets, such as Amazon EC2 instances, containers, IP addresses, and Lambda functions. Application Load Balancer operates at the application layer (layer 7) of the OSI model and supports advanced features such as path-based routing, host-based routing, health checks, and SSL termination. You can learn more about Application Load Balancer from [this webpage] or [this digital course].

QUESTION 202
Which AWS service will allow a user to set custom cost and usage limits, and will alert when the thresholds are exceeded?

A. AWS Organizations
B. AWS Budgets
C. Cost Explorer
D. AWS Trusted Advisor

Correct Answer: B
Section:
Explanation:
AWS Budgets allows you to set custom budgets that alert you when your costs or usage exceed (or are forecasted to exceed) your budgeted amount. You can also use AWS Budgets to set reservation utilization or coverage targets and receive alerts when your utilization drops below the threshold you define. AWS Budgets provides you with a comprehensive view of your cost and usage, as well as your reservation utilization and coverage1.

QUESTION 203
Which AWS service or feature can the company use to limit the access to AWS services for member accounts?

A. AWS Identity and Access Management (1AM)
B. Service control policies (SCPs)
C. Organizational units (OUs)
D. Access control lists (ACLs)

Correct Answer: B
Section:
Explanation:
Service control policies (SCPs) are a type of organization policy that you can use to manage permissions in your organization. SCPs offer central control over the maximum available permissions for all accounts in your organization, allowing you to ensure your accounts stay within your organization's access control guidelines2. SCPs are available only in an organization that has all features enabled2.

QUESTION 204
A company must archive Amazon S3 data that the company's business units no longer need to access.
Which S3 storage class will meet this requirement MOST cost-effectively?

A. S3 Glacier Instant Retrieval
B. S3 Glacier Flexible Retrieval
C. S3 Glacier Deep Archive
D. S3 One Zone-Infrequent Access (S3 One Zone-IA)

Correct Answer: C
Section:
Explanation:
S3 Glacier Deep Archive is Amazon S3's lowest-cost storage class and supports long-term retention and digital preservation for data that may be accessed once or twice in a year. It is designed for customers - particularly those in highly-regulated industries, such as the Financial Services, Healthcare, and Public Sectors - that retain data sets for 7-10 years or longer to meet regulatory compliance requirements. Customers can store large amounts of data at a very low cost, and reliably access it with a wait time of 12 hours3.

QUESTION 205
A company wants to build a new web application by using AWS services. The application must meet the on-demand load for periods of heavy activity.
Which AWS services or resources provide the necessary workload adjustments to meet these requirements? (Select TWO.)

A. Amazon Machine Image (AMI)
B. Amazon EC2 Auto Scaling
C. Amazon EC2 instance
D. AWS Lambda
E. EC2 Image Builder

Correct Answer: B, D
Section:
Explanation:
Amazon EC2 Auto Scaling helps you ensure that you have the correct number of Amazon EC2 instances available to handle the load for your application. You create collections of EC2 instances, called Auto Scaling groups. You can specify the minimum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes below this size. You can specify the maximum number of instances in each Auto Scaling group, and Amazon EC2 Auto Scaling ensures that your group never goes above this size4. AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume. With Lambda, you can run code for virtually any type of application or backend service - all with zero administration. Just upload your code and Lambda takes care of everything required to run and scale your code with high availability. You can set up your code to automatically trigger from other AWS services or call it directly from any web or mobile app.

QUESTION 206
Which AWS service or feature is an example of a relational database management system?

A. Amazon Athena
B. Amazon Redshift
C. Amazon S3 Select
D. Amazon Kinesis Data Streams

Correct Answer: B
Section:
Explanation:
Amazon Redshift is a fully managed, petabyte-scale data warehouse service in the cloud. You can start with just a few hundred gigabytes of data and scale to a petabyte or more. This enables you to use your data to acquire new insights for your business and customers. Amazon Redshift is a relational database management system (RDBMS), so it is compatible with other RDBMS applications. You can use standard SQL to query the data.

QUESTION 207
A company needs to apply security rules to specific Amazon EC2 instances.
Which AWS service or feature provides this functionality?

A. AWS Shield
B. Network ACLs
C. Security groups
D. AWS Firewall Manager

Correct Answer: C
Section:
Explanation:
Security groups act as a firewall for associated Amazon EC2 instances, controlling both inbound and outbound traffic at the instance level. You can use security groups to set rules that allow or deny traffic to or from your instances. You can modify the rules for a security group at any time; the new rules are automatically applied to all instances that are associated with the security group.

QUESTION 208
Which AWS service is deployed to VPCs and provides protection from common network threats?

A. AWSShield
B. AWSWAF
C. AWS Network Firewall
D. AWS FirewallManager

Correct Answer: C
Section:
Explanation:
AWS Network Firewall is a managed service that makes it easy to deploy essential network protections for all of your Amazon Virtual Private Clouds (VPCs). The service can be set up with just a few clicks from the AWS console or using APIs. AWS Network Firewall automatically scales with your network traffic, so you don't have to worry about deploying and managing any infrastructure. AWS Network Firewall provides protection from common network threats such as SQL injection, cross-site scripting, and DDoS attacks1.

QUESTION 209
Which option is a perspective that includes foundational capabilities of the AWS Cloud Adoption Framework (AWS CAF)?

A. Sustainability
B. Security
C. Performance efficiency
D. Reliability

Correct Answer: B
Section:
Explanation:
The AWS Cloud Adoption Framework (AWS CAF) helps organizations understand how cloud adoption transforms the way they work, and it provides structure to identify and address gaps in skills and processes. The AWS CAF

organizes guidance into six areas of focus, called perspectives. Each perspective reflects a different stakeholder viewpoint with its own distinct responsibilities, skills, and attributes. The Security Perspective helps you structure the selection and implementation of security controls that meet your organization's needs2.

QUESTION 210
A company needs to store data from a recommendation engine in a database.
Which AWS service provides this functionality with the LEAST operational overhead?

A. Amazon RDS for PostgreSQL
B. Amazon DynamoDB
C. Amazon Neptune
D. Amazon Aurora

Correct Answer: B
Section:
Explanation:
Amazon DynamoDB is a key-value and document database that delivers single-digit millisecond performance at any scale. It's a fully managed, multi-region, multi-active, durable database with built-in security, backup and restore, and in-memory caching for internet-scale applications.
DynamoDB can handle more than 10 trillion requests per day and can support peaks of more than 20 million requests per second. DynamoDB provides the least operational overhead for storing data from a recommendation engine, as it does not require any server provisioning, patching, or maintenance3

QUESTION 211
Which AWS Support plan is the minimum recommended tier for users who have production workloads on AWS?

A. AWS Developer Support
B. AWS Enterprise Support
C. AWS Business Support
D. AWS Enterprise On-Ramp Support

Correct Answer: C
Section:
Explanation:
AWS Business Support is the minimum recommended tier for users who have production workloads on AWS. AWS Business Support provides 24x7 access to cloud support engineers via phone, chat, or email, as well as a guaranteed response time of less than one hour for urgent issues. AWS Business Support also includes access to AWS Trusted Advisor, a tool that provides real-time guidance to help you provision your resources following AWS best practices4.

QUESTION 212
Which AWS service is an in-memory data store service?

A. Amazon Aurora
B. Amazon RDS
C. Amazon DynamoDB
D. Amazon ElastiCache

Correct Answer: D
Section:
Explanation:
Amazon ElastiCache is a fully managed in-memory data store and cache service that delivers submillisecond response times to applications. You can use ElastiCache as a primary data store for your applications, or as a cache to improve the performance of your existing databases. ElastiCache supports two popular open-source in-memory engines: Redis and Memcached5.

QUESTION 213
A company runs a MySQL database in its on-premises data center. The company wants to run a copy of this database in the AWS Cloud.
Which AWS service would support this workload?

A. Amazon RDS
B. Amazon Neptune
C. Amazon ElastiCache for Redis
D. Amazon Quantum Ledger Database (Amazon QLDB)

Correct Answer: A
Section:
Explanation:
Amazon Relational Database Service (Amazon RDS) is a web service that makes it easier to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity, while automating time-consuming administration tasks such as hardware provisioning, database setup, patching, and backups. Amazon RDS supports six popular database engines: Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle Database, and SQL Server. Amazon RDS can support running a copy of a MySQL database in the AWS Cloud, as it offers compatibility, scalability, and availability features.

QUESTION 214
A company uses AWS Organizations. The company wants to apply security best practices from the AWS Well-Architected Framework to all of its AWS accounts.
Which AWS service will meet these requirements?

A. Amazon Macie
B. Amazon Detective
C. AWS Control Tower
D. AWS Secrets Manager

Correct Answer: C
Section:
Explanation:
AWS Control Tower is the easiest way to set up and govern a secure, multi-account AWS environment based on best practices established through AWS's experience working with thousands of enterprises as they move to the cloud. With AWS Control Tower, builders can provision new AWS accounts in a few clicks, while you have peace of mind knowing your accounts conform to your organization's policies. AWS Control Tower automates the setup of a baseline environment, or landing zone, that is a secure, well-architected multi-account AWS environment1. AWS Control Tower helps you apply security best practices from the AWS Well-Architected Framework to all of your AWS accounts2.

QUESTION 215
A company uses AWS for its web application. The company wants to minimize latency and perform compute operations for the application as close to end users as possible.
Which AWS service or infrastructure component will provide this functionality?

A. AWS Regions
B. Availability Zones
C. Edge locations
D. AWS Direct Connect

Correct Answer: C
Section:
Explanation:
Edge locations are sites that Amazon CloudFront uses to cache copies of your content for faster delivery to users at any location. You can use Amazon CloudFront to deliver your entire website, including dynamic, static, streaming, and interactive content using a global network of edge locations. Requests for your content are automatically routed to the nearest edge location, so content is delivered with the best possible performance3. Edge locations can also host AWS Lambda functions to perform compute operations for your web application as close to end users as possible4.

QUESTION 216
A company wants to ensure that all of its Amazon EC2 instances have compliant operating system patches.
Which AWS service will meet these requirements?

A. AWS Compute Optimizer
B. AWS Elastic Beanstalk
C. AWS AppSync
D. AWS Systems Manager

Correct Answer: D
Section:
Explanation:
AWS Systems Manager gives you visibility and control of your infrastructure on AWS. Systems Manager provides a unified user interface so you can view operational data from multiple AWS services and allows you to automate operational tasks across your AWS resources. You can use Systems Manager to apply OS patches, create system images, configure Windows and Linux operating systems, and execute PowerShell commands5. Systems Manager can help you ensure that all of your Amazon EC2 instances have compliant operating system patches by using the Patch Manager feature.

QUESTION 217
Which task must a user perform by using the AWS account root user credentials?

A. Make changes to AWS production resources.
B. Change AWS Support plans.
C. Access AWS Cost and Usage Reports.
D. Grant auditors' access to an AWS account for a compliance audit.

Correct Answer: B
Section:
Explanation:
The AWS account root user is the email address that you used to sign up for AWS. The root user has complete access to all AWS services and resources in the account. You should use the root user only to perform a few account and service management tasks. One of these tasks is changing AWS
Support plans, which requires root user credentials. For other tasks, you should create an IAM user or role with the appropriate permissions and use that instead of the root user.

QUESTION 218
A company wants to integrate natural language processing (NLP) into business intelligence (BI) dashboards. The company wants to ask questions and receive answers with relevant visualizations.
Which AWS service or tool will meet these requirements?

A. Amazon Macie
B. Amazon Rekognition
C. Amazon QuickSight Q
D. Amazon Lex

Correct Answer: C
Section:
Explanation:
Amazon QuickSight Q is a natural language query feature that lets you ask questions about your data using everyday language and get answers in seconds. You can type questions such as "What are the total sales by region?" or "How did marketing campaign A perform?" and get answers in the form of relevant visualizations, such as charts or tables. You can also use Q to drill down into details, filter data, or perform calculations. Q uses machine learning to understand your data and your intent, and provides suggestions and feedback to help you refine your questions.

QUESTION 219

Which of the following is a pillar of the AWS Well-Architected Framework?

A. Redundancy
B. Operational excellence
C. Availability
D. Multi-Region

Correct Answer: B
Section:
Explanation:
The AWS Well-Architected Framework helps cloud architects build secure, high-performing, resilient, and efficient infrastructure for their applications and workloads. Based on five pillars - operational excellence, security, reliability, performance efficiency, and cost optimization - the Framework provides a consistent approach for customers and partners to evaluate architectures, and implement designs that can scale over time. Operational excellence is one of the pillars of the Framework, and it focuses on running and monitoring systems to deliver business value, and continually improving processes and procedures.

QUESTION 220
A company wants to integrate natural language processing (NLP) into business intelligence (BI) dashboards. The company wants to ask questions and receive answers with relevant visualizations.
Which AWS service or tool will meet these requirements?

A. Amazon Macie
B. Amazon Rekognition
C. Amazon QuickSight Q
D. Amazon Lex

Correct Answer: C
Section:
Explanation:
Amazon QuickSight Q is a natural language query feature that allows users to ask questions about their data and receive answers in the form of relevant visualizations1. Amazon Macie is a data security and data privacy service that uses machine learning and pattern matching to discover and protect sensitive data in AWS2. Amazon Rekognition is a computer vision service that can analyze images and videos for faces, objects, scenes, text, and more3. Amazon Lex is a service for building conversational interfaces using voice and text4.

QUESTION 221
Which option is an AWS Cloud Adoption Framework (AWS CAF) foundational capability for the operations perspective?

A. Performance and capacity management
B. Application portfolio management
C. Identity and access management
D. Product management

Correct Answer: C
Section:
Explanation:
Identity and access management is one of the foundational capabilities for the operations perspective of the AWS Cloud Adoption Framework (AWS CAF). It involves managing the identities, roles, permissions, and credentials of users and systems that interact with AWS resources.
Performance and capacity management is a capability for the platform perspective. Application portfolio management is a capability for the business perspective. Product management is a capability for the governance perspective.

QUESTION 222
A company needs to implement identity management for a fleet of mobile apps that are running in the AWS Cloud.

Which AWS service will meet this requirement?

A. Amazon Cognito
B. AWS Security Hub
C. AWS Shield
D. AWS WAF

Correct Answer: A
Section:
Explanation:
Amazon Cognito is a service that provides identity management for mobile and web applications, allowing users to sign up, sign in, and access AWS resources with different identity providers. AWS Security Hub is a service that provides a comprehensive view of the security posture of AWS accounts and resources. AWS Shield is a service that provides protection against distributed denial of service (DDoS) attacks. AWS WAF is a web application firewall that helps protect web applications from common web exploits.

QUESTION 223
Which AWS service or feature offers security for a VPC by acting as a firewall to control traffic in and out of subnets?

A. AWS Security Hub
B. Security groups
C. Network ACL
D. AWSWAF

Correct Answer: C
Section:
Explanation:
A network access control list (network ACL) is a feature that acts as a firewall for controlling traffic in and out of one or more subnets in a virtual private cloud (VPC). AWS Security Hub is a service that provides a comprehensive view of the security posture of AWS accounts and resources. Security groups are features that act as firewalls for controlling traffic at the instance level. AWS WAF is a web application firewall that helps protect web applications from common web exploits.

QUESTION 224
A company deployed an application on an Amazon EC2 instance. The application ran as expected for 6 months. In the past week, users have reported latency issues. A system administrator found that the CPU utilization was at 100%during business hours. The company wants a scalable solution to meet demand.
Which AWS service or feature should the company use to handle the load for its application during periods of high demand?

A. Auto Scaling groups
B. AWS Global Accelerator
C. Amazon Route 53
D. An Elastic IP address

Correct Answer: A
Section:
Explanation:
Auto Scaling groups are a feature that allows users to automatically scale the number of Amazon EC2 instances up or down based on demand or a predefined schedule. Auto Scaling groups can help improve the performance and availability of applications by adjusting the capacity in response to traffic fluctuations1. AWS Global Accelerator is a service that improves the availability and performance of applications by routing traffic through AWS edge locations2. Amazon Route 53 is a service that provides scalable and reliable domain name system (DNS) service3. An Elastic IP address is a static IPv4 address that can be associated with an Amazon EC2 instance4.

QUESTION 225
Which VPC component provides a layer of security at the subnet level?

A. Security groups
B. Network ACLs
C. NAT gateways
D. Route tables

Correct Answer: B
Section:
Explanation:
Network ACLs are a feature that provide a layer of security at the subnet level by acting as a firewall to control traffic in and out of one or more subnets. Network ACLs can be configured with rules that allow or deny traffic based on the source and destination IP addresses, ports, and protocols5.
Security groups are a feature that provide a layer of security at the instance level by acting as a firewall to control traffic to and from one or more instances. Security groups can be configured with rules that allow or deny traffic based on the source and destination IP addresses, ports, protocols, and security groups. NAT gateways are a feature that enable instances in a private subnet to connect to the internet or other AWS services, but prevent the internet from initiating a connection with those instances. Route tables are a feature that determine where network traffic from a subnet or gateway is directed.

QUESTION 226
For which AWS service is the customer responsible for maintaining the underlying operating system?

A. Amazon DynamoDB
B. Amazon S3
C. Amazon EC2
D. AWS Lambda

Correct Answer: C
Section:
Explanation:
Amazon EC2 is a service that provides resizable compute capacity in the cloud. Users can launch and manage virtual servers, known as instances, that run on the AWS infrastructure. Users are responsible for maintaining the underlying operating system of the instances, as well as any applications or software that run on them. Amazon DynamoDB is a service that provides a fully managed NoSQL database that delivers fast and consistent performance at any scale. Users do not need to manage the underlying operating system or the database software. Amazon S3 is a service that provides scalable and durable object storage in the cloud. Users do not need to manage the underlying operating system or the storage infrastructure. AWS Lambda is a service that allows users to run code without provisioning or managing servers. Users only need to upload their code and configure the triggers and parameters. AWS Lambda takes care of the underlying operating system and the execution environment.

QUESTION 227
According to the AWS shared responsibility model, who is responsible for the virtualization layer down to the physical security of the facilities in which AWS services operate?

A. It is the sole responsibility of the customer.
B. It is the sole responsibility of AWS.
C. It is a shared responsibility between AWS and the customer.
D. The customer's AWS Support plan tier determines who manages the configuration.

Correct Answer: B
Section:
Explanation:
According to the AWS shared responsibility model, AWS is responsible for the security of the cloud, which includes the virtualization layer down to the physical security of the facilities in which AWS services operate1. The customer is responsible for the security in the cloud, which includes the configuration and management of the AWS resources and applications that they use1.

QUESTION 228
A company wants to automatically set up and govern a multi-account AWS environment. Which benefit does AWS offer exclusively to users who have an AWS Enterprise Support plan?

A. Access to a technical project manager
B. Access to a technical account manager (TAM)
C. Access to a cloud support engineer
D. Access to a solutions architect

Correct Answer: B
Section:
Explanation:
AWS Enterprise Support plan is the highest level of support that AWS offers to its customers. One of the exclusive benefits of this plan is the access to a technical account manager (TAM), who is a dedicated point of contact for guidance, advocacy, and support2. A technical project manager, a cloud support engineer, and a solutions architect are not exclusive benefits of the AWS Enterprise Support plan, as they are also available to customers with lower-tier support plans or through other AWS services or programs345.

QUESTION 229
Which AWS service provides this functionality?

A. AWS 1AM Identity Center (AWS Single Sign-On)
B. AWS Systems Manager
C. AWS Config
D. AWS Control Tower

Correct Answer: D
Section:
Explanation:
AWS Control Tower is a service that provides an easy way to set up and govern a secure, multiaccount AWS environment. It automates the creation of accounts, organizational units, policies, and best practices based on the AWS Well-Architected Framework. AWS IAM Identity Center (AWS Single Sign-On) is a service that enables users to centrally manage access to multiple AWS accounts and business applications using a single sign-on experience. AWS Systems Manager is a service that provides operational management for AWS resources and applications. AWS Config is a service that enables users to assess, audit, and evaluate the configurations of AWS resources.

QUESTION 230
A company wants its AWS usage to be more sustainable. The company wants to track, measure, review, and forecast polluting emissions that result from its AWS applications.
Which AWS service or tool can the company use to meet these requirements?

A. AWS Health Dashboard
B. AWS customer carbon footprint tool
C. AWS Support Center
D. Amazon QuickSight

Correct Answer: B
Section:
Explanation:
AWS customer carbon footprint tool is a tool that helps customers measure and manage their carbon emissions from their AWS usage. It provides data on the carbon intensity, energy consumption, and estimated emissions of AWS services across regions and time periods. It also enables customers to review and forecast their emissions, and compare them with industry benchmarks. AWS Health Dashboard is a service that provides personalized information about the health and performance of AWS services and resources. AWS Support Center is a service that provides access to AWS support resources, such as cases, forums, and documentation. Amazon QuickSight is a service that provides business intelligence and analytics for AWS data sources.

QUESTION 231
A company has a large number of Linux Amazon EC2 instances across several Availability Zones in an AWS Region. Applications that run on the EC2 instances need access to a common set of files.

Which AWS service or device should the company use to meet this requirement?

A. AWS Backup
B. Amazon Elastic File System (Amazon EFS)
C. Amazon Elastic Block Store (Amazon EBS)
D. AWS Snowball Edge Storage Optimized

Correct Answer: B
Section:
Explanation:
Amazon Elastic File System (Amazon EFS) is a service that provides a scalable and elastic file system for Linux-based workloads. It can be mounted on multiple Amazon EC2 instances across different Availability Zones within a region, allowing applications to access a common set of files1. AWS Backup is a service that provides a centralized and automated way to back up data across AWS services. Amazon Elastic Block Store (Amazon EBS) is a service that provides persistent block storage volumes for Amazon EC2 instances. AWS Snowball Edge Storage Optimized is a device that provides a petabyte-scale data transport and edge computing solution.

QUESTION 232
Which of the following is a benefit that AWS Professional Services provides?

A. Management of the ongoing security of user data
B. Advisory solutions for AWS adoption
C. Technical support 24 hours a day, 7 days a week
D. Monitoring of monthly billing costs in AWS accounts

Correct Answer: B
Section:
Explanation:
AWS Professional Services is a team of experts that help customers achieve their desired outcomes using the AWS Cloud. One of the benefits that AWS Professional Services provides is advisory solutions for AWS adoption, which include guidance on cloud strategy, architecture, migration, and innovation2. Management of the ongoing security of user data, technical support 24 hours a day, 7 days a week, and monitoring of monthly billing costs in AWS accounts are not benefits that AWS Professional Services provides, as they are either the responsibility of the customer or the features of other AWS services or support plans3

QUESTION 233
Which of the following is a benefit of operating in the AWS Cloud?

A. The ability to migrate on-premises network devices to the AWS Cloud
B. The ability to expand compute, storage, and memory when needed
C. The ability to host custom hardware in the AWS Cloud
D. The ability to customize the underlying hypervisor layer for Amazon EC2

Correct Answer: B
Section:
Explanation:
One of the benefits of operating in the AWS Cloud is the ability to expand compute, storage, and memory when needed, which enables users to scale their applications and resources up or down based on demand. This also helps users optimize their costs and performance. The ability to migrate on-premises network devices to the AWS Cloud, the ability to host custom hardware in the AWS Cloud, and the ability to customize the underlying hypervisor layer for Amazon EC2 are not benefits of operating in the AWS Cloud, as they are either not possible or not recommended by AWS .

QUESTION 234
A company is operating several factories where it builds products. The company needs the ability to process data, store data, and run applications with local system interdependencies that require low latency.
Which AWS service should the company use to meet these requirements?

A. AWS IoT Greengrass
B. AWS Lambda
C. AWS Outposts
D. AWS Snowball Edge

Correct Answer: C
Section:
Explanation:
AWS Outposts is a service that provides fully managed AWS infrastructure and services on premises.
It allows users to run applications that require low latency and local data processing, while seamlessly connecting to the AWS Cloud for a consistent hybrid experience. AWS IoT Greengrass is a service that provides local compute, messaging, data caching, sync, and ML inference capabilities for connected devices. AWS Lambda is a service that allows users to run code without provisioning or managing servers. AWS Snowball Edge is a device that provides a petabyte-scale data transport and edge computing solution.

QUESTION 235
What is the LEAST expensive AWS Support plan that provides the full set of AWS Trusted Advisor best practice checks for cost optimization?

A. AWS Enterprise Support
B. AWS Business Support
C. AWS Developer Support
D. AWS Basic Support

Correct Answer: B
Section:
Explanation:
AWS Business Support is the least expensive AWS Support plan that provides the full set of AWS Trusted Advisor best practice checks for cost optimization. AWS Trusted Advisor is a service that provides best practices and recommendations for cost optimization, performance, security, and fault tolerance. AWS Business Support also provides other benefits, such as 24/7 technical support, unlimited cases, and faster response times. AWS Enterprise Support is the most expensive AWS Support plan that provides the same benefits as AWS Business Support, plus additional benefits, such as a technical account manager and enterprise concierge support. AWS Developer Support and AWS Basic Support are cheaper AWS Support plans that provide only a limited set of AWS Trusted Advisor best practice checks for cost optimization .

QUESTION 236
Which AWS service helps developers use loose coupling and reliable messaging between microservices?

A. Elastic Load Balancing
B. Amazon Simple Notification Service (Amazon SNS)
C. Amazon CloudFront
D. Amazon Simple Queue Service (Amazon SQS)

Correct Answer: D
Section:
Explanation:
Amazon Simple Queue Service (Amazon SQS) is a service that provides fully managed message queues for asynchronous communication between microservices. It helps developers use loose coupling and reliable messaging by allowing them to send, store, and receive messages between distributed components without losing them or requiring each component to be always available1.
Elastic Load Balancing is a service that distributes incoming traffic across multiple targets, such as Amazon EC2 instances, containers, and IP addresses. Amazon Simple Notification Service (Amazon SNS) is a service that provides fully managed pub/sub messaging for event-driven and push-based communication between microservices. Amazon CloudFront is a service that provides a fast and secure content delivery network (CDN) for web applications.

QUESTION 237
A company is building a mobile app to provide shopping recommendations to its customers. The company wants to use a graph database as part of the shopping recommendation engine.

Which AWS database service should the company choose?

A. Amazon DynamoDB
B. Amazon Aurora
C. Amazon Neptune
D. Amazon DocumentDB (with MongoDB compatibility)

Correct Answer: C
Section:
Explanation:
Amazon Neptune is a service that provides a fully managed graph database that supports property graphs and RDF graphs. It can be used to build applications that work with highly connected datasets, such as shopping recommendations, social networks, fraud detection, and knowledge graphs2. Amazon DynamoDB is a service that provides a fully managed NoSQL database that delivers fast and consistent performance at any scale. Amazon Aurora is a service that provides a fully managed relational database that is compatible with MySQL and PostgreSQL. Amazon DocumentDB (with MongoDB compatibility) is a service that provides a fully managed document database that is compatible with MongoDB.

QUESTION 238
Which option is the default pricing model for Amazon EC2 instances?

A. On-Demand Instances
B. Savings Plans
C. Spot Instances
D. Reserved Instances

Correct Answer: A
Section:
Explanation:
On-Demand Instances are the default pricing model for Amazon EC2 instances. They allow users to pay for compute capacity by the second, with no long-term commitments or upfront payments. They are suitable for applications with short-term, irregular, or unpredictable workloads that cannot be interrupted3. Savings Plans are a pricing model that offer significant savings on Amazon EC2 and AWS Fargate usage, in exchange for a commitment to a consistent amount of usage (measured in $/hour) for a 1-year or 3-year term. Spot Instances are a pricing model that offer spare Amazon EC2 compute capacity at up to 90% discount compared to On-Demand prices, but they can be interrupted by AWS with a two-minute notice when the demand exceeds the supply. Reserved Instances are a pricing model that offer up to 75% discount compared to On-Demand prices, in exchange for a commitment to use a specific instance type and size in a specific region for a 1-year or 3-year term.

QUESTION 239
Which AWS service can provide a dedicated network connection with consistent low latency from on premises to the AWS Cloud?

A. Amazon VPC
B. Amazon Kinesis Data Streams
C. AWS Direct Connect
D. Amazon OpenSearch Service

Correct Answer: C
Section:
Explanation:
AWS Direct Connect is a service that provides a dedicated network connection from on premises to the AWS Cloud. It can reduce network costs, increase bandwidth throughput, and provide a more consistent network experience than internet-based connections. It can also provide low latency for applications that require real-time data transfer4. Amazon VPC is a service that provides a logically isolated section of the AWS Cloud where users can launch AWS resources in a virtual network that they define. Amazon Kinesis Data Streams is a service that provides a scalable and durable stream of data records for real-time data processing. Amazon OpenSearch Service is a service that provides a fully managed, scalable, and secure search and analytics solution that is compatible with Elasticsearch.

QUESTION 240
A company simulates workflows to review and validate that all processes are effective and that staff are familiar with the processes.
Which design principle of the AWS Well-Architected Framework is the company following with this practice?

A. Perform operations as code.
B. Refine operation procedures frequently.
C. Make frequent, small, reversible changes.
D. Structure the company to support business outcomes.

Correct Answer: B
Section:
Explanation:
Refine operation procedures frequently is one of the design principles of the operational excellence pillar of the AWS Well-Architected Framework. It means that users should continuously review and validate their operational processes to ensure that they are effective and that staff are familiar with them. It also means that users should identify and address any gaps or issues in their processes, and incorporate feedback and lessons learned from operational events5. Perform operations as code is another design principle of the operational excellence pillar, which means that users should automate and script their operational tasks to reduce human error and enable consistent and repeatable execution. Make frequent, small, reversible changes is a design principle of the reliability pillar, which means that users should deploy changes in small increments that can be easily tested and rolled back if necessary. Structure the company to support business outcomes is a design principle of the performance efficiency pillar, which means that users should align their organizational structure and culture with their business goals and cloud strategy.

QUESTION 241
A company has designed its AWS Cloud infrastructure to run its workloads effectively. The company also has protocols in place to continuously improve supporting processes.
Which pillar of the AWS Well-Architected Framework does this scenario represent?

A. Security
B. Performance efficiency
C. Cost optimization
D. Operational excellence

Correct Answer: D
Section:
Explanation:
The scenario represents the operational excellence pillar of the AWS Well-Architected Framework, which focuses on running and monitoring systems to deliver business value and continually improve supporting processes and procedures1. Security, performance efficiency, cost optimization, and reliability are the other four pillars of the framework1.

QUESTION 242
Which AWS service is a continuous delivery and deployment solution?

A. AWSAppSync
B. AWS CodePipeline
C. AWS Cloud9
D. AWS CodeCommit

Correct Answer: B
Section:
Explanation:
AWS CodePipeline is a continuous delivery and deployment service that automates the release process of software applications across different stages, such as source code, build, test, and deploy2. AWSAppSync, AWS Cloud9, and AWS CodeCommit are other AWS services related to application development, but they do not provide continuous delivery and deployment solutions34 .

QUESTION 243
A company wants to set AWS spending targets and track costs against those targets.
Which AWS tool or feature should the company use to meet these requirements?

A. AWS Cost Explorer
B. AWS Budgets
C. AWS Cost and Usage Report
D. Savings Plans

Correct Answer: B
Section:
Explanation:
AWS Budgets is a tool that allows users to set AWS spending targets and track costs against those targets. Users can create budgets for various dimensions, such as service, linked account, tag, and more. Users can also receive alerts when the actual or forecasted costs exceed or are projected to exceed the budgeted amount. AWS Cost Explorer, AWS Cost and Usage Report, and Savings Plans are other AWS tools or features that can help users manage and optimize their AWS costs, but they do not enable users to set and track spending targets .

QUESTION 244
Which AWS services can be used to store files? (Select TWO.)

A. Amazon S3
B. AWS Lambda
C. Amazon Elastic Block Store (Amazon EBS)
D. Amazon SageMaker
E. AWS Storage Gateway

Correct Answer: A, C
Section:
Explanation:
Amazon S3 and Amazon EBS are two AWS services that can be used to store files . Amazon S3 is an object storage service that offers high scalability, durability, availability, and performance. Amazon EBS is a block storage service that provides persistent and low-latency storage volumes for Amazon EC2 instances. AWS Lambda, Amazon SageMaker, and AWS Storage Gateway are other AWS services that have different purposes, such as serverless computing, machine learning, and hybrid cloud storage .

QUESTION 245
A company's application has high customer usage during certain times of the day. The company wants to reduce the number of Amazon EC2 instances that run when application usage is low.
Which AWS service or instance purchasing option should the company use to meet this requirement?

A. EC2 Instance Savings Plans
B. Spot Instances
C. Reserved Instances
D. Amazon EC2 Auto Scaling

Correct Answer: D
Section:
Explanation:
Amazon EC2 Auto Scaling is an AWS service that can help users reduce the number of Amazon EC2 instances that run when application usage is low. Amazon EC2 Auto Scaling allows users to create scaling policies that automatically adjust the number of EC2 instances based on the demand or a schedule. EC2 Instance Savings Plans, Spot Instances, and Reserved Instances are instance purchasing options that can help users save money on EC2 usage, but they do not automatically scale the number of instances according to the application usage .

QUESTION 246
A company is running a workload in the AWS Cloud.
Which AWS best practice ensures the MOST cost-effective architecture for the workload?

A. Loose coupling
B. Rightsizing
C. Caching
D. Redundancy

Correct Answer: B
Section:
Explanation:
The AWS best practice that ensures the most cost-effective architecture for the workload is rightsizing. Rightsizing means selecting the most appropriate instance type or resource configuration that matches the needs of the workload. Rightsizing can help optimize performance and reduce costs by avoiding over-provisioning or under-provisioning of resources1. Loose coupling, caching, and redundancy are other AWS best practices that can improve the scalability, availability, and performance of the workload, but they do not necessarily ensure the most cost-effective architecture.

QUESTION 247
Which option is a benefit of the economies of scale based on the advantages of cloud computing?

A. The ability to trade variable expense for fixed expense
B. Increased speed and agility
C. Lower variable costs over fixed costs
D. Increased operational costs across data centers

Correct Answer: B
Section:
Explanation:
Economies of scale are the cost advantages that result from increasing the scale of production or operation. In cloud computing, economies of scale are achieved by pooling resources and sharing them among multiple users, which reduces the unit cost of computing and storage. One of the benefits of economies of scale in cloud computing is increased speed and agility, which means the ability to deploy applications faster and respond to changing business needs more quickly. Cloud computing allows users to access computing resources on demand, without having to invest in expensive infrastructure or wait for lengthy provisioning processes.This enables users to scale up or down as needed, experiment with new ideas, and deliver value to customers faster123.Reference:
Economics of Cloud Computing - GeeksforGeeks
What is Cloud Economics? | VMware Glossary
ECONOMIES OF SCALE WITH CLOUD COMPUTING & SERVICES PRACTICE - IDC-Online

QUESTION 248
Which AWS service or feature improves network performance by sending traffic through the AWS worldwide network infrastructure?

A. Route table
B. AWS Transit Gateway
C. AWS Global Accelerator
D. Amazon VPC

Correct Answer: C
Section:
Explanation:
AWS Global Accelerator is a service that improves network performance by sending traffic through the AWS worldwide network infrastructure. It uses the AWS global network to direct TCP or UDP traffic to a healthy application endpoint in the closest AWS Region to the client. This provides improvements in terms of latency, throughput, and jitter.Global Accelerator also introduces features such as TCP termination at the edge, jumbo

frame support, and large receive side window and TCP buffers to optimize data transfer12. Route table, AWS Transit Gateway, and Amazon VPC are not services or features that improve network performance by sending traffic through the AWS worldwide network infrastructure.Route table is a resource that defines how traffic is routed within a VPC3.AWS Transit Gateway is a service that enables you to connect your VPCs and on-premises networks to a single gateway4.Amazon VPC is a service that lets you provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you define5.Reference:Achieve up to 60% better performance for internet traffic with AWS Global Accelerator,Improving Performance on AWS and Hybrid Networks,Route tables,AWS Transit Gateway,Amazon Virtual Private Cloud (VPC)

QUESTION 249
Which tasks are the customer's responsibility, according to the AWS shared responsibility model? (Select TWO.)

A. Establish the global infrastructure.
B. Perform client-side data encryption.
C. Configure 1AM credentials.
D. Secure edge locations.
E. Patch Amazon RDS DB instances.

Correct Answer: B, C
Section:
Explanation:
According to the AWS shared responsibility model, AWS is responsible for the security of the cloud, while the customer is responsible for the security in the cloud. This means that AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud, such as the global network, the hardware, the software, and the facilities. The customer is responsible for properly configuring the security of the provided service, such as the guest operating system, the application software, the data, and the network traffic.For abstracted services, such as Amazon RDS, AWS operates the infrastructure layer, the operating system, and the database software, while the customer is responsible for managing their data, classifying their assets, and using IAM tools to apply the appropriate permissions12.
Therefore, the tasks that are the customer's responsibility are:
Perform client-side data encryption: The customer is responsible for encrypting their data before sending it to AWS, and decrypting it after receiving it from AWS. This ensures that the data is protected in transit and at rest.AWS provides various encryption options, such as AWS Key Management Service (AWS KMS), AWS CloudHSM, and AWS Certificate Manager (ACM)3.
Configure IAM credentials: The customer is responsible for creating and managing IAM users, groups, roles, and policies that control the access to AWS resources and services.IAM credentials include user names, passwords, access keys, and permissions4.
The tasks that are not the customer's responsibility are:
Establish the global infrastructure: AWS is responsible for building and maintaining the global network of regions, availability zones, and edge locations that provide low latency, high availability, and fault tolerance for the AWS Cloud5.
Secure edge locations: AWS is responsible for protecting the physical security of the edge locations, which are sites that deliver cached content to end users with improved performance6.
Patch Amazon RDS DB instances: AWS is responsible for applying patches and updates to the operating system and the database software of the Amazon RDS DB instances, which are managed relational database service for MySQL, PostgreSQL, Oracle, SQL Server, and Amazon Aurora.Reference:
Shared Responsibility Model - Amazon Web Services (AWS)
Shared responsibility model - Amazon Web Services: Risk and Compliance
Encryption - Amazon Web Services (AWS)
What Is IAM? - AWS Identity and Access Management
Global Infrastructure - Amazon Web Services (AWS)
Amazon CloudFront Features - Content Delivery Network (CDN)
[What Is Amazon Relational Database Service (Amazon RDS)? - Amazon Relational Database Service]

QUESTION 250
Which Amazon EC2 pricing model is the MOST cost efficient for an uninterruptible workload that runs once a year for 24 hours?

A. On-Demand Instances
B. Reserved Instances
C. Spot Instances
D. Dedicated Instances

Correct Answer: A
Section:
Explanation:
On-Demand Instances are the most cost-efficient pricing model for an uninterruptible workload that runs once a year for 24 hours. On-Demand Instances let you pay for compute capacity by the hour or second, depending on which instances you run. No long-term commitments or up-front payments are required.You can increase or decrease your compute capacity to meet the demands of your application and only pay the specified hourly rates for the instance you use1.This model is suitable for developing/testing applications with short-term or unpredictable workloads2. The other pricing models are not cost-efficient for this use case. Reserved Instances and Savings Plans require a commitment to a consistent amount of usage, in USD per hour, for a term of 1 or 3 years.They provide significant discounts compared to On-Demand Instances, but they are not flexible or scalable for workloads that run only once a year12. Spot Instances are the cheapest option, but they are not suitable for uninterruptible workloads, as they can be reclaimed by AWS at any time.They are recommended for applications that have flexible start and end times, or that are only feasible at very low compute prices12. Dedicated Instances are designed for compliance and licensing requirements, not for cost optimization.They are more expensive than the other options, as they run on single-tenant hardware12.Reference:Amazon EC2 -- Secure and resizable compute capacity -- AWS,Amazon EC2 - How AWS Pricing Works

QUESTION 251
Which AWS Cloud benefit gives a company the ability to quickly deploy cloud resources to access compute, storage, and database infrastructures in a matter of minutes?

A. Elasticity
B. Cost savings
C. Agility
D. Reliability

Correct Answer: C
Section:
Explanation:
Agility is the AWS Cloud benefit that gives a company the ability to quickly deploy cloud resources to access compute, storage, and database infrastructures in a matter of minutes.Agility means that you can reduce the time to make IT resources available to your developers from weeks to just minutes, resulting in a dramatic increase in innovation and responsiveness1.AWS provides a range of services and tools that enable you to launch, scale, and manage your cloud applications with ease and speed, such as AWS CloudFormation, AWS Elastic Beanstalk, AWS CodeDeploy, and AWS Quick Starts2345.Reference:
Six advantages of cloud computing - Overview of Amazon Web Services
[AWS CloudFormation]
[AWS Elastic Beanstalk]
[AWS CodeDeploy]
AWS Quick Starts

QUESTION 252
Which AWS service is used to provide encryption for Amazon EBS?

A. AWS Certificate Manager
B. AWS Systems Manager
C. AWS KMS
D. AWS Config

Correct Answer: C
Section:
Explanation:
AWS KMS is the service that is used to provide encryption for Amazon EBS. AWS KMS is a managed service that enables you to easily create and control the encryption keys used to encrypt your data. Amazon EBS uses AWS KMS to encrypt and decrypt your EBS volumes and snapshots. You can choose to use either the default AWS managed CMK or your own customer managed CMK for encryption.AWS KMS also provides features such as key rotation, audit logging, and access control policies to help you manage your encryption keys and protect your data12. The other services are not used to provide encryption for Amazon EBS.AWS Certificate Manager is a service that lets you provision, manage, and deploy public and private SSL/TLS certificates for use with AWS services and your internal connected resources3.AWS Systems Manager is a service that provides a unified user interface to view and manage your AWS resources, automate common operational tasks, and apply compliance policies4. AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources.Reference:Amazon EBS encryption,AWS Key Management Service,AWS Certificate Manager,AWS Systems Manager, [AWS Config]

QUESTION 253
A company operates a petabyte-scale data warehouse to analyze its data. The company wants a solution that will not require manual hardware and software management. Which AWS service will meet these requirements?

A. Amazon DocumentDB (with MongoDB compatibility)
B. Amazon Redshift
C. Amazon Neptune
D. Amazon ElastiCache

Correct Answer: B
Section:
Explanation:
Amazon Redshift is a fast, fully managed, petabyte-scale data warehouse service that makes it simple and cost-effective to analyze all your data using your existing business intelligence tools. You can start small with no commitments, and scale to petabytes for less than a tenth of the cost of traditional solutions.Amazon Redshift does not require manual hardware and software management, as AWS handles all the tasks such as provisioning, patching, backup, recovery, failure detection, and repair12. Amazon Redshift also offers serverless capabilities, which allow you to access and analyze data without any configurations or capacity planning.Amazon Redshift automatically scales the data warehouse capacity to deliver fast performance for even the most demanding and unpredictable workloads3. Therefore, Amazon Redshift meets the requirements of the company, compared to the other options.
The other options are not suitable for the company's requirements, because:
Amazon DocumentDB (with MongoDB compatibility) is a fast, scalable, highly available, and fully managed document database service that supports MongoDB workloads.It is not designed for petabyte-scale data warehousing or analytics4.
Amazon Neptune is a fast, reliable, and fully managed graph database service that makes it easy to build and run applications that work with highly connected datasets.It is not designed for petabyte-scale data warehousing or analytics5.
Amazon ElastiCache is a fully managed in-memory data store and cache service that supports Redis and Memcached. It is not designed for petabyte-scale data warehousing or analytics.
What is Amazon Redshift? - Amazon Redshift
Amazon Redshift Features - Amazon Redshift
Amazon Redshift Serverless - Amazon Redshift
What Is Amazon DocumentDB (with MongoDB compatibility)? - Amazon DocumentDB (with MongoDB compatibility)
What Is Amazon Neptune? - Amazon Neptune
[What Is Amazon ElastiCache for Redis? - Amazon ElastiCache for Redis]

QUESTION 254
A company needs to perform data processing once a week that typically takes about 5 hours to complete. Which AWS service should the company use for this workload?

A. AWS Lambda
B. Amazon EC2
C. AWS CodeDeploy
D. AWS Wavelength

Correct Answer: B
Section:
Explanation:
Amazon EC2 is the most suitable AWS service for this workload. Amazon EC2 provides secure, resizable compute capacity in the cloud. You can launch virtual servers, called instances, and configure them according to your needs. You can choose from different instance types, sizes, and families, and pay only for the resources you use.Amazon EC2 also offers features such as auto scaling, load balancing, security groups, and placement groups to optimize your performance, availability, and security1.Amazon EC2 is ideal for workloads that require consistent and reliable compute power, such as data processing, web hosting, gaming, and high-performance computing2.
The other services are not suitable for this workload. AWS Lambda is a serverless compute service that lets you run code without provisioning or managing servers. You pay only for the compute time you consume.Lambda is best for short-lived, stateless, and event-driven workloads that can be completed in under 15 minutes3. AWS CodeDeploy is a deployment service that automates application deployments to Amazon EC2 instances, on-premises instances, serverless Lambda functions, or Amazon ECS services.CodeDeploy is not a compute service, but a tool to help you update your applications with minimal downtime4. AWS Wavelength is a service that delivers ultra-low latency applications for 5G devices. Wavelength embeds AWS compute and storage services at the edge of telecommunications providers' 5G networks. Wavelength is designed for mobile edge computing, such as interactive gaming, video streaming, and augmented reality.Reference:Amazon EC2,Amazon EC2 Use Cases,AWS Lambda,AWS CodeDeploy, [AWS Wavelength]

QUESTION 255
A company wants to provide managed Windows virtual desktops and applications to its remote employees over secure network connections. Which AWS services can the company use to meet these requirements? (Select TWO.)

A. Amazon Connect
B. Amazon AppStream 2.0
C. Amazon Workspaces
D. AWS Site-to-Site VPN
E. Amazon Elastic Container Service (Amazon ECS)

Correct Answer: B, C
Section:
Explanation:
Amazon AppStream 2.0 and Amazon WorkSpaces are AWS services that can be used to provide managed Windows virtual desktops and applications to remote employees over secure network connections. Amazon AppStream 2.0 is a fully managed application streaming service that allows users to access Windows desktop applications from any device, without installing or managing any software.Amazon AppStream 2.0 delivers applications over an encrypted connection and isolates them from the underlying infrastructure, ensuring security and compliance1. Amazon WorkSpaces is a fully managed desktop virtualization service that allows users to access Windows or Linux desktops from any device, with a consistent user experience. Amazon WorkSpaces provides persistent, cloud-based virtual desktops that can be customized and scaled according to the user's needs.Amazon WorkSpaces also offers encryption, backup, and monitoring features to ensure security and reliability2.Reference:
Amazon AppStream 2.0
Amazon WorkSpaces

QUESTION 256
Which AWS Cloud service can send alerts to customers if custom spending thresholds are exceeded?

A. AWS Budgets
B. AWS Cost Explorer
C. AWS Cost Allocation Tags
D. AWS Organizations

Correct Answer: A
Section:
Explanation:
AWS Budgets is a service that allows you to set custom budgets for your AWS costs and usage, and receive alerts via email or Amazon SNS notifications if you exceed or are forecasted to exceed your budgeted amount1.You can create budgets based on different dimensions, such as service, linked account, tag, or purchase option, and define various types of alerts, such as actual, forecasted, or RI utilization alerts2.You can also configure custom actions to automatically execute remediation tasks or workflows when a budget threshold is breached3. AWS Budgets is the only service among the options that can send alerts to customers if custom spending thresholds are exceeded.The other options are not AWS services that provide this functionality.

QUESTION 257
Which options are AWS Cloud Adoption Framework (AWS CAF) cloud transformation journey recommendations? (Select TWO.)

A. Envision phase
B. Align phase
C. Assess phase
D. Mobilize phase
E. Migrate and modernize phase

Correct Answer: A, B

Section:
Explanation:
The AWS Cloud Adoption Framework (AWS CAF) is a tool that helps organizations plan and execute their cloud transformation journey. The AWS CAF defines four phases of the cloud transformation journey: Envision, Align, Launch, and Scale.Each phase has a specific purpose and outcome1:
Envision: This phase helps you define your vision, goals, and expected outcomes for your cloud transformation.It also helps you identify and prioritize transformation opportunities across four domains: business, people, governance, and platform2.
Align: This phase helps you identify capability gaps across six perspectives: business, people, governance, platform, security, and operations.It also helps you create strategies for improving your cloud readiness, ensure stakeholder alignment, and facilitate relevant organizational change management activities3.
Launch: This phase helps you deliver pilot initiatives in production and demonstrate incremental business value.It also helps you learn from pilots and adjust your approach before scaling to full production4.
Scale: This phase helps you expand production pilots and business value to desired scale and ensure that the business benefits associated with your cloud investments are realized and sustained.
The options A and B are the correct AWS CAF cloud transformation journey recommendations, as they are part of the four phases defined by the AWS CAF.The options C, D, and E are not AWS CAF cloud transformation journey recommendations, as they are not part of the four phases defined by the AWS CAF

QUESTION 258
Which responsibility belongs to AWS when a company hosts its databases on Amazon EC2 instances?

A. Database backups
B. Database software patches
C. Operating system patches
D. Operating system installations

Correct Answer: C
Section:
Explanation:
When a company hosts its databases on Amazon EC2 instances, AWS and the customer share the responsibility for the security and management of the database environment. According to the AWS shared responsibility model, AWS is responsible for the security of the cloud, while the customer is responsible for the security in the cloud. This means that AWS is responsible for protecting the infrastructure that runs the EC2 instances, such as the hardware, software, networking, and facilities.The customer is responsible for properly configuring the security of the provided service, such as the guest operating system, the database software, the data, and the network traffic12.
One of the tasks that belongs to AWS when a company hosts its databases on Amazon EC2 instances is operating system patches. AWS provides regular updates and patches to the operating system of the EC2 instances, which are applied automatically by default.The customer can also choose to manually apply the patches or schedule them for a specific time window3. Operating system patches are important for maintaining the security and performance of the EC2 instances and the databases running on them.
The other tasks that belong to AWS when a company hosts its databases on Amazon EC2 instances are:
Operating system installations: AWS provides a variety of operating system options for the EC2 instances, such as Linux, Windows, and Amazon Linux.The customer can choose the operating system that best suits their database needs and AWS will install it on the EC2 instances4.
Server maintenance: AWS performs regular maintenance and repairs on the physical servers that host the EC2 instances, ensuring that they are in optimal condition and have adequate power, cooling, and network connectivity5.
Hardware lifecycle: AWS manages the lifecycle of the hardware that supports the EC2 instances, such as replacing faulty components, upgrading equipment, and decommissioning old servers.
The tasks that do not belong to AWS when a company hosts its databases on Amazon EC2 instances are:
Database backups: The customer is responsible for backing up their data and databases on the EC2 instances, using tools such as Amazon S3, Amazon EBS snapshots, or AWS Backup. Database backups are essential for data protection and recovery in case of failures or disasters.
Database software patches: The customer is responsible for applying patches and updates to the database software on the EC2 instances, such as MySQL, PostgreSQL, Oracle, or SQL Server. Database software patches are important for fixing bugs, improving features, and addressing security vulnerabilities.
Database software install: The customer is responsible for installing the database software on the EC2 instances, choosing the version and configuration that meets their requirements. AWS provides some preconfigured AMIs (Amazon Machine Images) that include common database software, or the customer can use their own custom AMIs.
Shared Responsibility Model - Amazon Web Services (AWS)
Shared responsibility model - Amazon Web Services: Risk and Compliance
Patching Amazon EC2 instances - AWS Systems Manager
Amazon EC2 FAQs - Amazon Web Services
Maintenance and Retirements - Amazon Elastic Compute Cloud

[Hardware Lifecycle - Amazon Web Services (AWS)]
[Backing Up Your Data - Amazon Web Services (AWS)]
[Database Patching - Amazon Web Services (AWS)]
[Installing Database Software on Amazon EC2 Instances - Amazon Web Services (AWS)]

QUESTION 259
Which AWS service provides command line access to AWS tools and resources directly (torn a web browser?

A. AWS CloudHSM
B. AWS CloudShell
C. Amazon Workspaces
D. AWS Cloud Map

Correct Answer: B
Section:
Explanation:
AWS CloudShell is the service that provides command line access to AWS tools and resources directly from a web browser. AWS CloudShell is a browser-based shell that makes it easy to securely manage, explore, and interact with your AWS resources. It comes pre-authenticated with your console credentials and common development and administration tools are pre-installed, so no local installation or configuration is required. You can open AWS CloudShell from the AWS Management Console with a single click and start running commands and scripts using the AWS Command Line Interface (AWS CLI), Git, or SDKs.AWS CloudShell also provides persistent home directories with 1 GB of storage per AWS Region12. The other services do not provide command line access to AWS tools and resources directly from a web browser.AWS CloudHSM is a service that helps you meet corporate, contractual and regulatory compliance requirements for data security by using dedicated Hardware Security Module (HSM) appliances within the AWS Cloud3.Amazon WorkSpaces is a service that provides a fully managed, secure Desktop-as-a-Service (DaaS) solution that runs on AWS4.AWS Cloud Map is a service that makes it easy for your applications to discover and connect to each other using logical names and attributes5.Reference:AWS CloudShell,AWS CloudShell -- Command-Line Access to AWS Resources,AWS CloudHSM,Amazon WorkSpaces,AWS Cloud Map

QUESTION 260
A developer needs to maintain a development environment infrastructure and a production environment infrastructure in a repeatable fashion Which AWS service should the developer use to meet these requirements?

A. AWS Ground Station
B. AWS Shield
C. AWS loT Device Defender
D. AWS CloudFormation

Correct Answer: D
Section:
Explanation:
AWS CloudFormation is a service that allows developers to model and provision their AWS infrastructure in a repeatable and declarative way, using code and templates. AWS CloudFormation enables developers to define the resources they need for their development and production environments, such as compute, storage, network, and application services, and automate their creation and configuration.AWS CloudFormation also provides features such as change sets, nested stacks, and rollback triggers to help developers manage and update their infrastructure safely and efficiently12.Reference:
AWS CloudFormation
What is AWS CloudFormation?

QUESTION 261
A company wants to migrate its applications to the AWS Cloud. The company plans to identity and prioritize any business transformation opportunities and evaluate its AWS Cloud readiness. Which AWS service or tool should the company use to meet these requirements?

A. AWS Cloud Adoption Framework (AWS CAF)
B. AWS Managed Services (AMS)
C. AWS Well-Architected Framework

D. AWS Migration Hub

Correct Answer: A
Section:
Explanation:
AWS Cloud Adoption Framework (AWS CAF) is a set of best practices, tools, and guidance that helps organizations get started with cloud technologies. AWS CAF helps organizations identify and prioritize transformation opportunities, evaluate and improve their cloud readiness, and iteratively evolve their transformation roadmap. AWS CAF groups its capabilities in six perspectives: Business, People, Governance, Platform, Security, and Operations.Each perspective comprises a set of capabilities that functionally related stakeholders own or manage in the cloud transformation journey1
AWS Managed Services (AMS) is a service that operates AWS infrastructure on behalf of customers, providing a secure AWS Landing Zone, features that help meet various compliance program requirements, a proven enterprise operating model, on-going cost optimization, and day-to-day infrastructure management.AMS does not help customers identify and prioritize business transformation opportunities or evaluate their cloud readiness2
AWS Well-Architected Framework is a set of six pillars and lenses that help cloud architects design and run workloads in the cloud. It provides a consistent approach for customers and AWS Partners to evaluate and implement designs that scale with their needs.AWS Well-Architected Framework helps customers understand the pros and cons of decisions they make while building systems on AWS, but it does not help them identify and prioritize business transformation opportunities3
AWS Migration Hub is a tool that lets customers discover, plan, and track their existing servers and applications for migration to AWS. It offers journey templates, cross-team collaboration, application and server discovery, strategy recommendations, orchestration and simple dashboard.AWS Migration Hub simplifies the migration and modernization process, but it does not help customers identify and prioritize business transformation opportunities or evaluate their cloud readiness4

QUESTION 262
A social media company wants to protect its web application from common web exploits such as SQL injections and cross-site scripting. Which AWS service will meet these requirements?

A. Amazon Inspector
B. AWS WAF
C. Amazon GuardDuty
D. Amazon CloudWatch

Correct Answer: B
Section:
Explanation:
AWS WAF is a web application firewall service that helps protect web applications from common web exploits that could affect availability, compromise security, or consume excessive resources. AWS WAF gives you control over which traffic to allow or block to your web applications by defining customizable web security rules.You can use AWS WAF to create rules that block common attack patterns, such as SQL injection or cross-site scripting, and rules that filter out specific traffic patterns you define1.AWS WAF also integrates with other AWS services, such as Amazon CloudFront, Amazon API Gateway, AWS AppSync, and AWS Load Balancer, to provide a comprehensive defense against web attacks2. Therefore, AWS WAF meets the requirements of the social media company, compared to the other options.
The other options are not suitable for the social media company's requirements, because:
Amazon Inspector is an automated security assessment service that helps improve the security and compliance of applications deployed on AWS. Amazon Inspector automatically assesses applications for exposure, vulnerabilities, and deviations from best practices.However, Amazon Inspector does not provide a web application firewall service that can block malicious web requests3.
Amazon GuardDuty is a threat detection service that continuously monitors for malicious activity and unauthorized behavior to protect your AWS accounts, workloads, and data stored in Amazon S3. Amazon GuardDuty analyzes and processes the following data sources: VPC Flow Logs, AWS CloudTrail event logs, and DNS logs.However, Amazon GuardDuty does not provide a web application firewall service that can block malicious web requests4.
Amazon CloudWatch is a monitoring and observability service that provides data and actionable insights to monitor your applications, respond to system-wide performance changes, optimize resource utilization, and get a unified view of operational health. Amazon CloudWatch collects monitoring and operational data in the form of logs, metrics, and events, and visualizes it using automated dashboards, alarms, and notifications. However, Amazon CloudWatch does not provide a web application firewall service that can block malicious web requests.
What Is AWS WAF? - AWS WAF, AWS Firewall Manager, and AWS Shield Advanced
AWS WAF Features - AWS WAF, AWS Firewall Manager, and AWS Shield Advanced
What Is Amazon Inspector? - Amazon Inspector
What Is Amazon GuardDuty? - Amazon GuardDuty
[What Is Amazon CloudWatch? - Amazon CloudWatch]

QUESTION 263

Which AWS services or features provide disaster recovery solutions for Amazon EC2 instances? (Select TWO.)

A. EC2 Reserved Instances
B. EC2 Amazon Machine Images (AMIs)
C. Amazon Elastic Block Store (Amazon EBS) snapshots
D. AWS Shield
E. Amazon GuardDuty

Correct Answer: B, C
Section:
Explanation:
The correct answer isBandC. EC2 Amazon Machine Images (AMIs) and Amazon Elastic Block Store (Amazon EBS) snapshots are two AWS services that provide disaster recovery solutions for Amazon EC2 instances.
EC2 AMIsare preconfigured templates that contain the software configuration and data required to launch an EC2 instance. You can create AMIs from your running EC2 instances and use them to launch new instances in the same or different AWS Regions.This way, you can quickly recover your EC2 instances in case of a disaster that affects your primary Region or Availability Zone1.
Amazon EBS snapshotsare incremental backups of your Amazon EBS volumes. You can create snapshots of your volumes and store them in Amazon S3, which is a highly durable and scalable storage service. You can use snapshots to restore your volumes to a previous point in time or to create new volumes from snapshots.Snapshots can also be copied across AWS Regions, enabling you to recover your data in another Region in case of a disaster2.
The other options are not directly related to disaster recovery for EC2 instances:
EC2 Reserved Instancesare a pricing model that allows you to reserve EC2 capacity for a specific period of time and receive a discount on the hourly charge.Reserved Instances do not provide any disaster recovery benefits, as they are only a billing option3.
AWS Shieldis a managed service that protects your AWS resources from distributed denial-of-service (DDoS) attacks. AWS Shield provides basic protection for all AWS customers at no additional charge, and advanced protection for customers who need higher levels of detection and mitigation.AWS Shield does not provide any disaster recovery benefits, as it is only a security service4.
Amazon GuardDutyis a threat detection service that monitors your AWS account and workloads for malicious or unauthorized activity. Amazon GuardDuty analyzes various data sources, such as AWS CloudTrail, Amazon VPC Flow Logs, and DNS logs, to identify potential threats and alert you via Amazon CloudWatch Events or AWS Lambda.Amazon GuardDuty does not provide any disaster recovery benefits, as it is only a monitoring service5.

QUESTION 264
A user wants to allow applications running on an Amazon EC2 instance to make calls to other AWS services. The access granted must be secure. Which AWS service or feature should be used?

A. Security groups
B. AWS Firewall Manager
C. IAM roles
D. IAM user SSH keys

Correct Answer: C
Section:
Explanation:
IAM roles are a secure way to grant permissions to applications running on an Amazon EC2 instance to make calls to other AWS services. IAM roles are entities that have specific permissions policies attached to them. You can create an IAM role and associate it with an EC2 instance when you launch it or later. The applications on the instance can then use the temporary credentials provided by the role to access AWS resources that the role allows.This way, you do not have to store any long-term credentials or access keys on the instance, which reduces the risk of compromise or misuse12.
The other options are not correct, because:
Security groups are virtual firewalls that control the inbound and outbound traffic for your EC2 instances.Security groups do not grant permissions to access other AWS services, but rather filter the network traffic based on rules that you define3.
AWS Firewall Manager is a service that helps you centrally configure and manage firewall rules across your accounts and resources. AWS Firewall Manager works with AWS WAF, AWS Shield Advanced, and Amazon VPC security groups.AWS Firewall Manager does not grant permissions to access other AWS services, but rather helps you enforce consistent security policies across your AWS infrastructure4.
IAM user SSH keys are credentials that allow you to connect to your EC2 instance using SSH.SSH keys do not grant permissions to access other AWS services, but rather authenticate your identity when you log in to your instance5.
Using an IAM role to grant permissions to applications running on Amazon EC2 instances - AWS Identity and Access Management
IAM roles for Amazon EC2 - Amazon Elastic Compute Cloud

Security groups for your VPC - Amazon Virtual Private Cloud
What is AWS Firewall Manager? - AWS Firewall Manager
Connecting to your Linux instance using SSH - Amazon Elastic Compute Cloud

QUESTION 265
A company needs to track the activity in its AWS accounts, and needs to know when an API call is made against its AWS resources. Which AWS tool or service can be used to meet these requirements?

A. Amazon CloudWatch
B. Amazon Inspector
C. AWS CloudTrail
D. AWS IAM

Correct Answer: C
Section:
Explanation:
AWS CloudTrail is the service that can be used to meet these requirements. AWS CloudTrail is a service that records AWS API calls for your account and delivers log files to you.The recorded information includes the identity of the API caller, the time of the API call, the source IP address of the API caller, the request parameters, and the response elements returned by the AWS service1. You can use CloudTrail to track the activity in your AWS accounts, such as who made an API call, when it was made, and what resources were affected.You can also use CloudTrail to monitor the compliance, security, and governance of your AWS environment2. The other services are not designed to track the activity and API calls in your AWS accounts. Amazon CloudWatch is a service that monitors and collects metrics, logs, and events from your AWS resources and applications.You can use CloudWatch to set alarms, visualize data, and automate actions based on predefined thresholds or rules3. Amazon Inspector is a service that helps you improve the security and compliance of your applications running on AWS.Inspector automatically assesses applications for exposure, vulnerabilities, and deviations from best practices4. AWS IAM is a service that enables you to manage access to AWS services and resources securely. IAM allows you to create and manage AWS users and groups, and use permissions to allow and deny their access to AWS resources.Reference:AWS CloudTrail,AWS CloudTrail -- Capture AWS API Activity,Amazon CloudWatch,Amazon Inspector, [AWS IAM]

QUESTION 266
A systems administrator created a new 1AM user for a developer and assigned the user an access key instead of a user name and password. What is the access key used for?

A. To access the AWS account as the AWS account root user
B. To access the AWS account through the AWS Management Console
C. To access the AWS account through a CLI
D. To access all of a company's AWS accounts

Correct Answer: C
Section:
Explanation:
An access key is a pair of long-term credentials that consists of an access key ID and a secret access key. An access key is used to sign programmatic requests to the AWS CLI or AWS API (directly or using the AWS SDK).An access key allows a user to access the AWS account through a CLI, which is a tool that enables users to interact with AWS services using commands in a terminal or a script12.
The other options are not correct, because:
To access the AWS account as the AWS account root user, a user needs the email address and password associated with the account. The root user has complete access to all AWS resources and services in the account.However, it is not recommended to use the root user for everyday tasks3.
To access the AWS account through the AWS Management Console, a user needs a user name and password.The console is a web-based interface that allows users to manage their AWS resources and services using a graphical user interface4.
To access all of a company's AWS accounts, a user needs to use AWS Organizations, which is a service that enables users to centrally manage and govern multiple AWS accounts.AWS Organizations allows users to create groups of accounts and apply policies to them5.
Managing access keys for IAM users - AWS Identity and Access Management
What Is the AWS Command Line Interface? - AWS Command Line Interface
AWS account root user - AWS Identity and Access Management
What Is the AWS Management Console? - AWS Management Console
What Is AWS Organizations? - AWS Organizations

QUESTION 267
Which AWS service or feature provides log information of the inbound and outbound traffic on network interfaces in a VPC?

A. Amazon CloudWatch Logs
B. AWS CloudTrail
C. VPC Flow Logs
D. AWS Identity and Access Management (IAM)

Correct Answer: C
Section:
Explanation:
VPC Flow Logs is a feature that enables you to capture information about the IP traffic going to and from network interfaces in your VPC. Flow log data can be published to the following locations: Amazon CloudWatch Logs, Amazon S3, or Amazon Kinesis Data Firehose.You can use VPC Flow Logs to monitor network traffic, diagnose security issues, troubleshoot connectivity problems, and perform network forensics1.Reference:
Logging IP traffic using VPC Flow Logs - Amazon Virtual Private Cloud

QUESTION 268
Which tool should a developer use lo integrate AWS service features directly into an application?

A. AWS Software Development Kit
B. AWS CodeDeploy
C. AWS Lambda
D. AWS Batch

Correct Answer: A
Section:
Explanation:
AWS Software Development Kit (SDK) is a set of platform-specific tools for developers that let them integrate AWS service features directly into their applications. AWS SDKs provide libraries, code samples, documentation, and other resources to help developers write code that interacts with AWS APIs. AWS SDKs support various programming languages, such as Java, Python, Ruby, .NET, Node.js, Go, and more. AWS SDKs make it easier for developers to access AWS services, such as Amazon S3, Amazon EC2, Amazon DynamoDB, AWS Lambda, and more, from their applications.AWS SDKs also handle tasks such as authentication, error handling, retries, and data serialization, so developers can focus on their application logic.

QUESTION 269
Which AWS service enables companies to deploy an application dose to end users?

A. Amazon CloudFront
B. AWS Auto Scaling
C. AWS AppSync
D. Amazon Route S3

Correct Answer: A
Section:
Explanation:
Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment. CloudFront enables companies to deploy an application close to end users by caching the application's content at edge locations that are geographically closer to the users. This reduces the network latency and improves the user experience.CloudFront also integrates with other AWS services, such as Amazon S3, Amazon EC2, AWS Lambda, AWS Shield, and AWS WAF, to provide a secure and scalable solution for delivering applications12.Reference:
What Is Amazon CloudFront? - Amazon CloudFront
Amazon CloudFront Features - Amazon CloudFront

QUESTION 270
A company needs to evaluate its AWS environment and provide best practice recommendations in five categories: cost, performance, service limits, fault tolerance, and security. Which AWS service can the company use to meet these requirements?

A. AWS Shield
B. AWS WAF
C. AWS Trusted Advisor
D. AWS Service Catalog

Correct Answer: C
Section:
Explanation:
AWS Trusted Advisor is the service that can meet these requirements. AWS Trusted Advisor is a service that helps you optimize your AWS environment by providing recommendations based on AWS best practices. Trusted Advisor continuously evaluates your AWS resources and services across five categories: cost optimization, performance, service limits, fault tolerance, and security. You can view the recommendations on the Trusted Advisor console or access them programmatically using the Trusted Advisor API. You can also set up notifications and alerts for any changes in the status of your checks.Trusted Advisor can help you improve your AWS environment by reducing costs, enhancing performance, increasing security, and ensuring reliability12. The other services are not designed to provide best practice recommendations in five categories. AWS Shield is a service that protects your AWS resources from distributed denial-of-service (DDoS) attacks. AWS WAF is a service that helps you protect your web applications from common web exploits.AWS Service Catalog is a service that enables you to create and manage catalogs of IT services that are approved for use on AWS34.Reference:AWS Trusted Advisor,Achieve operational excellence with AWS Trusted Advisor,AWS Shield,AWS WAF, [AWS Service Catalog]

QUESTION 271
Which AWS service or feature allows users to create new AWS accounts, group multiple accounts to organize workflows, and apply policies to groups of accounts?

A. AWS Identity and Access Management (1AM)
B. AWS Trusted Advisor
C. AWS CloudFormation
D. AWS Organizations

Correct Answer: D
Section:
Explanation:
AWS Organizations is the AWS service or feature that allows users to create new AWS accounts, group multiple accounts to organize workflows, and apply policies to groups of accounts. AWS Organizations enables users to centrally manage and govern their AWS environment across multiple accounts. Users can create organizational units (OUs) to group accounts based on their business needs, such as by function, project, or region. Users can also apply service control policies (SCPs) to OUs or individual accounts to define the permissions and restrictions for the AWS services and resources that they can access.AWS Organizations also offers features such as consolidated billing, account creation automation, and trusted access12.Reference:
AWS Organizations
What is AWS Organizations?

QUESTION 272
A company is migrating to the AWS Cloud and plans to run experimental workloads for 3 to 6 months on AWS. Which pricing model will meet these requirements?

A. Use Savings Plans for a 3-year term.
B. Use Dedicated Hosts.
C. Buy Reserved Instances.
D. Use On-Demand Instances.

Correct Answer: D
Section:
Explanation:

On-Demand Instances are the most flexible and cost-effective pricing model for short-term, experimental, or unpredictable workloads on AWS. On-Demand Instances let you pay only for the resources you use, without any long-term commitments or upfront fees. You can easily start and stop instances as needed, and scale up or down depending on your demand.
Savings Plans, Reserved Instances, and Dedicated Hosts are all pricing models that require a commitment for a certain amount of usage or capacity for a one- or three-year term. These pricing models offer lower prices than On-Demand Instances, but they are not suitable for workloads that only run for 3 to 6 months or have variable usage patterns. Savings Plans and Reserved Instances also offer flexibility to change instance types, sizes, or regions within the same family or pool, while Dedicated Hosts are physical servers that can only run specific instance types.

QUESTION 273
Which action is a security best practice for access to sensitive data that is stored in an Amazon S3 bucket?

A. Enable S3 Cross-Region Replication (CRR) on the S3 bucket.
B. Use IAM roles for applications that require access to the S3 bucket.
C. Configure AWS WAF to prevent unauthorized access to the S3 bucket.
D. Configure Amazon GuardDuty to prevent unauthorized access to the S3 bucket.

Correct Answer: B
Section:
Explanation:
Understanding IAM Roles: IAM (Identity and Access Management) roles in AWS are designed to delegate access permissions without sharing long-term security credentials. This means applications and services can use temporary security credentials, which enhances security.
Why IAM Roles are Best Practice:
Least Privilege Principle: By using IAM roles, you can ensure that applications only have the minimum permissions they need to function, reducing the risk of unauthorized access.
Temporary Credentials: Roles provide temporary security credentials, which reduce the risk if they are compromised compared to long-term access keys.
Automated Rotation: Temporary credentials automatically expire and are rotated, which means you don't have to manage the rotation manually.
How to Implement IAM Roles:
Create an IAM Role: In the AWS Management Console, navigate to IAM, and create a new role. Choose the type of trusted entity (e.g., EC2, Lambda).
Attach Policies: Attach the necessary policies to the role that define the permissions for accessing the S3 bucket.
Assign Role to Service: Attach the IAM role to your EC2 instances, Lambda functions, or other AWS services that need to access the S3 bucket.
Use AWS SDKs: When accessing S3 from your application, use the AWS SDKs to automatically assume the IAM role and obtain temporary credentials.
AWS Identity and Access Management (IAM)
IAM Roles

QUESTION 274
Which AWS Well-Architected Framework pillar focuses on structured and streamlined allocation of computing resources?

A. Reliability
B. Operational excellence
C. Performance efficiency
D. Sustainability

Correct Answer: C
Section:
Explanation:
Understanding Performance Efficiency: This pillar of the AWS Well-Architected Framework focuses on using computing resources efficiently to meet system requirements and maintain that efficiency as demand changes and technologies evolve.
Key Aspects of Performance Efficiency:
Selection: Choose the right resources for the job. This includes using the most appropriate instance types, storage options, and database services.
Review: Regularly review your architecture to take advantage of the latest AWS services and features, and to ensure you're using the best possible resource for your needs.
Monitoring: Continuously monitor your system performance, gather metrics, and use those metrics to make informed decisions about scaling and performance optimization.
Trade-offs: Understand the trade-offs between various performance-related aspects, such as cost, latency, and durability, and make decisions that align with your business goals.

How to Implement Performance Efficiency:
Use Auto Scaling: Implement Auto Scaling to automatically adjust the number of resources based on the demand.
Choose Appropriate Storage Options: Select the right storage solution (e.g., S3, EBS, or EFS) based on performance and access patterns.
Optimize Networking: Utilize Amazon CloudFront, AWS Global Accelerator, and VPC to optimize your network performance.
Regular Review and Testing: Regularly review your architecture, test performance under various loads, and adjust configurations as needed.
AWS Well-Architected Framework
Performance Efficiency Pillar

QUESTION 275
A company has deployed a web application to Amazon EC2 instances. The EC2 instances have low usage. Which AWS service or feature should lite company use in rightsized the FC? instances?

A. AWS Config
B. AWS Cost Anomaly Detection
C. AWS Budgets
D. AWS Compute Optimizer

Correct Answer: D
Section:
Explanation:
Understanding AWS Compute Optimizer: AWS Compute Optimizer is a service that analyzes the configuration and utilization metrics of your AWS resources. It provides recommendations to help you select the optimal configurations for your workloads.
Why AWS Compute Optimizer for Rightsizing:
Resource Recommendations: It provides specific recommendations to rightsize your EC2 instances by suggesting instance types that match your actual usage patterns.
Cost Efficiency: By optimizing instance sizes, you can reduce costs associated with over-provisioned resources.
Performance Improvement: Ensures that you are using instances that provide the required performance without over-allocating resources.
How to Implement AWS Compute Optimizer:
Enable AWS Compute Optimizer: In the AWS Management Console, navigate to AWS Compute Optimizer and enable it for your account.
Review Recommendations: After a period of monitoring, review the recommendations provided for your EC2 instances.
Implement Changes: Follow the suggestions to resize or change instance types based on the recommendations, ensuring you balance cost savings with performance needs.
AWS Compute Optimizer

QUESTION 276
Which top-level key performance indicator (KPI) is available in AWS rightsizing recommendations of Cost Optimization?

A. Container modernization opportunities
B. Estimated monthly saving
C. Reserved instances savings
D. Compute savings recommendations

Correct Answer: B
Section:
Explanation:
Understanding Cost Optimization Recommendations: In AWS, cost optimization involves identifying ways to reduce costs while maintaining or improving performance and capacity.
Top-Level KPI - Estimated Monthly Saving:
Definition: This KPI provides an estimate of how much you can save per month by following the recommended actions.
Importance: It helps you quantify the potential cost savings from rightsizing, purchasing reserved instances, or optimizing resource usage.
Decision-Making: Provides a clear financial benefit to justify changes in your resource configurations.
How to Use Estimated Monthly Saving:
Access Recommendations: Navigate to the AWS Cost Management Console to view rightsizing recommendations.

Review Savings Estimates: Look at the estimated monthly savings for each recommendation to understand the potential financial impact.
Implement Recommendations: Prioritize actions based on the savings estimates to maximize cost reduction.
AWS Cost Management
AWS Rightsizing Recommendations

QUESTION 277
Which fully managed AWS service assists with the creation, testing, and management of custom Amazon EC? images?

A. EC2 Image Builder
B. Amazon Machine Image (AMI)
C. AWS Launch Wizard
D. AWS Elastic Beanstalk

Correct Answer: A
Section:
Explanation:
Understanding EC2 Image Builder: EC2 Image Builder is a fully managed service that simplifies the creation, maintenance, validation, and testing of Amazon Machine Images (AMIs).
Why Use EC2 Image Builder:
Automation: Automates the creation and management of AMIs, reducing manual efforts and the risk of errors.
Customization: Allows you to customize the images to include necessary software, configurations, and security settings.
Compliance: Ensures that the images comply with your security and operational standards through continuous monitoring and testing.
How to Implement EC2 Image Builder:
Create a Recipe: Define an image recipe specifying the base image and components to be included.
Build Pipeline: Set up an image pipeline that automates the building and testing of the AMI based on a schedule or trigger.
Distribute Images: Use the produced AMIs across multiple AWS regions and accounts as needed.
EC2 Image Builder