1. Question

Gmail is an example of which of the following Cloud Computing Models?

Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

Software as a Service (SaaS)

Function as a Service (FaaS)

Incorrect

Correct option:

Software as a Service (SaaS)

Software as a Service (SaaS) provides you with a complete product that is run and managed by the service provider. With a SaaS offering, you don’t have to think about how the service is maintained or how the underlying infrastructure is managed. You only need to think about how you will use that particular software. Gmail is an example of a SaaS service.

Overview of Cloud Computing Types: via – https://aws.amazon.com/types-of-cloud-computing/

Incorrect options:

Infrastructure as a Service (IaaS) – Infrastructure as a Service (IaaS) contains the basic building blocks for cloud IT. It typically provides access to networking features, computers (virtual or on dedicated hardware), and data storage space. IaaS gives the highest level of flexibility and management control over IT resources. EC2 is an example of an IaaS service.

Platform as a Service (PaaS) – Platform as a Service (PaaS) removes the need to manage underlying infrastructure (usually hardware and operating systems), and allows you to focus on the deployment and management of your applications. You don’t need to worry about resource procurement, capacity planning, software maintenance, patching, or any of the other undifferentiated heavy lifting involved in running your application. Beanstalk is an example of a PaaS service.

Function as a Service (FaaS) – Function as a service (FaaS) is a category of cloud computing services that provides a platform allowing customers to develop, run, and manage application functionalities without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app. Lambda is an example of a FaaS service.

Reference:

https://aws.amazon.com/types-of-cloud-computing/

2. Question

Which of the following statements are CORRECT regarding Security Groups and Network Access Control Lists (NACLs)? (Select two)

A NACL is stateful, that is, it automatically allows the return traffic

A Security Group is stateless, that is, the return traffic must be explicitly allowed

A Security Group contains a numbered list of rules and evaluates these rules in the increasing order while deciding whether to allow the traffic

A NACL contains a numbered list of rules and evaluates these rules in the increasing order while deciding whether to allow the traffic

A Security Group is stateful, that is, it automatically allows the return traffic

Incorrect

Correct options:

A Security Group is stateful, that is, it automatically allows the return traffic

A NACL contains a numbered list of rules and evaluates these rules in the increasing order while deciding whether to allow the traffic

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. Security groups act at the instance level, not at the subnet level. Security groups are stateful — if you send a request from your instance, the response traffic for that request is allowed to flow in regardless of inbound security group rules. A security group evaluates all rules before deciding whether to allow traffic.

Security Group Overview: via – https://docs.aws.amazon.com/vpc/latest/userguide/VPC\_SecurityGroups.html

A Network Access Control List (NACL) is an optional layer of security for your VPC that acts as a firewall for controlling traffic in and out of one or more subnets (i.e. it works at subnet level). A network ACL contains a numbered list of rules. A NACL evaluates the rules in order, starting with the lowest numbered rule, to determine whether traffic is allowed in or out of any subnet associated with the network ACL. The highest number that you can use for a rule is 32766. AWS recommends that you start by creating rules in increments (for example, increments of 10 or 100) so that you can insert new rules where you need to later on.

Network Access Control List (NACL) Overview: via – https://docs.aws.amazon.com/vpc/latest/userguide/vpc-network-acls.html

Incorrect options:

A Security Group contains a numbered list of rules and evaluates these rules in the increasing order while deciding whether to allow the traffic

A NACL is stateful, that is, it automatically allows the return traffic

A Security Group is stateless, that is, the return traffic must be explicitly allowed

These three options contradict the details provided earlier in the explanation, so these options are incorrect.

References:

https://docs.aws.amazon.com/vpc/latest/userguide/VPC\_SecurityGroups.html

https://docs.aws.amazon.com/vpc/latest/userguide/vpc-network-acls.html

3. Question

Which of the following AWS services specialize in data migration from on-premises to AWS Cloud? (Select two)

Transit Gateway

Direct Connect

Site-to-Site VPN

Database Migration Service

Snowball

Incorrect

Correct options:

Snowball – AWS Snowball is a data transport solution that accelerates moving terabytes to petabytes of data into and out of AWS services using storage devices designed to be secure for physical transport.

Database Migration Service – AWS Database Migration Service helps you migrate databases from on-premises to AWS quickly and securely. The source database remains fully operational during the migration, minimizing downtime to applications that rely on the database. The AWS Database Migration Service can migrate your data to and from the most widely used commercial and open-source databases.

You can do both homogeneous and heterogeneous database migration using Database Migration Service: via – https://aws.amazon.com/dms/

via – https://aws.amazon.com/dms/

Incorrect options:

Site to Site VPN – AWS Site-to-Site VPN creates a secure connection between your data center or branch office and your AWS cloud resources. This connection goes over the public internet. Site to Site VPN is a connectivity service and it does not specialize in data migration.

Direct Connect – AWS Direct Connect creates a dedicated private connection from a remote network to your VPC. This is a private connection and does not use the public internet. Takes at least a month to establish this connection. Direct Connect is a connectivity service and it does not specialize in data migration.

Transit Gateway – AWS Transit Gateway connects VPCs and on-premises networks through a central hub. This simplifies your network and puts an end to complex peering relationships. It acts as a cloud router – each new connection is only made once. As you expand globally, inter-Region peering connects AWS Transit Gateways using the AWS global network. Your data is automatically encrypted and never travels over the public internet. Transit Gateway is a connectivity service and it does not specialize in data migration.

References:

https://aws.amazon.com/getting-started/projects/migrate-petabyte-scale-data/services-costs/

https://aws.amazon.com/dms/

https://aws.amazon.com/vpn/

https://aws.amazon.com/directconnect/

4. Question

A medical device company is looking for a durable and cost-effective way of storing their historic data. Due to compliance requirements, the data must be stored for 10 years. Which AWS Storage solution will you suggest?

S3 Glacier Deep Archive

S3 Glacier

AWS Storage Gateway

Amazon EFS

Incorrect

Correct option:

S3 Glacier Deep Archive

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. S3 Glacier Deep Archive can also be used for backup and disaster recovery use cases. It has a retrieval time (first byte latency) of 12 to 48 hours.

S3 Glacier Deep Archive Overview: via – https://aws.amazon.com/s3/storage-classes/

Incorrect options:

S3 Glacier – Amazon S3 Glacier is a secure, durable, and extremely low-cost Amazon S3 cloud storage class for data archiving and long-term backup. It is designed to deliver 99.999999999% durability, and provide comprehensive security and compliance capabilities that can help meet even the most stringent regulatory requirements. Glacier Deep Archive is a better fit as it is more cost-optimal than Glacier for the given use-case.

AWS Storage Gateway – AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. All data transferred between the gateway and AWS storage is encrypted using SSL (for all three types of gateways – File, Volume and Tape Gateways). Storage Gateway cannot be used for data archival.

Amazon EFS – Amazon Elastic File System (Amazon EFS) provides a simple, scalable, fully managed elastic NFS file system for use with AWS Cloud services and on-premises resources. It is built to scale on-demand to petabytes without disrupting applications, growing and shrinking automatically as you add and remove files, eliminating the need to provision and manage capacity to accommodate growth.

Reference:

https://aws.amazon.com/s3/storage-classes/

5. Question

A company has a static website hosted on an S3 bucket in an AWS Region in Asia. Although most of its users are in Asia, now it wants to drive growth globally. How can it improve the global performance of its static website?

Use CloudWatch to improve the performance of your website

Use CloudFront to improve the performance of your website

Use WAF to improve the performance of your website

Use S3 Transfer Acceleration to improve the performance of your website

Incorrect

Correct option:

Use CloudFront to improve the performance of your website

You can use Amazon CloudFront to improve the performance of your website. CloudFront makes your website files (such as HTML, images, and video) available from data centers around the world (called edge locations). When a visitor requests a file from your website, CloudFront automatically redirects the request to a copy of the file at the nearest edge location. This results in faster download times than if the visitor had requested the content from a data center that is located farther away.

Incorrect options:

Use CloudFormation to improve the performance of your website – AWS CloudFormation allows you to use programming languages or a simple text file to model and provision, in an automated and secure manner, all the resources needed for your applications across all regions and accounts. CloudFormation cannot be used to improve the performance of a static website.

Use WAF to improve the performance of your website – By using AWS WAF, you can configure web access control lists (Web ACLs) on your CloudFront distributions or Application Load Balancers to filter and block requests based on request signatures. Besides, by using AWS WAF’s rate-based rules, you can automatically block the IP addresses of bad actors when requests matching a rule exceed a threshold that you define. WAF cannot be used to improve the performance of a static website.

Use S3 Transfer Acceleration to improve the performance of your website – Amazon S3 Transfer Acceleration enables fast, easy, and secure transfers of files over long distances between your client and an S3 bucket. Transfer Acceleration takes advantage of Amazon CloudFront’s globally distributed edge locations. As the data arrives at an edge location, data is routed to Amazon S3 over an optimized network path. Transfer Acceleration cannot be used to improve the performance of a static website.

References:

https://docs.aws.amazon.com/AmazonS3/latest/dev/website-hosting-cloudfront-walkthrough.html

https://docs.aws.amazon.com/AmazonS3/latest/dev/transfer-acceleration.html

6. Question

Which of the following is the best way to protect your data from accidental deletion on Amazon S3?

S3 Transfer Acceleration

S3 Versioning

S3 Storage Classes

S3 lifecycle configuration

Incorrect

Correct option:

S3 Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures.

Versioning-enabled buckets enable you to recover objects from accidental deletion or overwrite. For example: if you delete an object, instead of removing it permanently, Amazon S3 inserts a delete marker, which becomes the current object version.

S3 Versioning Overview: via – https://docs.aws.amazon.com/AmazonS3/latest/dev/ObjectVersioning.html

Incorrect options:

S3 lifecycle configuration – To manage your S3 objects so that they are stored cost-effectively throughout their lifecycle, configure their Amazon S3 Lifecycle. With S3 Lifecycle configuration rules, you can tell Amazon S3 to transition objects to less expensive storage classes, or archive or delete them. Lifecycle configuration will do the hard lifting of moving your data into cost-effective storage classes without user intervention. Lifecycle configuration is not meant to protect from accidental deletion of data.

S3 Storage Classes – Amazon S3 offers a range of storage classes designed for different use cases. These include S3 Standard for general-purpose storage of frequently accessed data; S3 Intelligent-Tiering for data with unknown or changing access patterns; S3 Standard-Infrequent Access (S3 Standard-IA) and S3 One Zone-Infrequent Access (S3 One Zone-IA) for long-lived, but less frequently accessed data; and Amazon S3 Glacier (S3 Glacier) and Amazon S3 Glacier Deep Archive (S3 Glacier Deep Archive) for long-term archive and digital preservation. Storage classes are for different storage pattern needs that customers have, and not a data protection mechanism for S3.

S3 Transfer Acceleration – Amazon S3 Transfer Acceleration enables fast, easy, and secure transfers of files over long distances between your client and an S3 bucket. Transfer Acceleration takes advantage of Amazon CloudFront’s globally distributed edge locations. As the data arrives at an edge location, data is routed to Amazon S3 over an optimized network path. Transfer Acceleration cannot be used to protect from accidental deletion of data.

Reference:

https://docs.aws.amazon.com/AmazonS3/latest/dev/ObjectVersioning.html

7. Question

Which budget types can be created under AWS Budgets (Select three)?

Resource budget

Cost budget

Software budget

Hardware budget

Reservation budget

Usage budget

Incorrect

Correct options:

AWS Budgets enable you to plan your service usage, service costs, and instance reservations. AWS Budgets information is updated up to three times a day. Updates typically occur between 8 to 12 hours after the previous update. Budgets track your unblended costs, subscriptions, refunds, and RIs. There are four different budget types you can create under AWS Budgets – Cost budget, Usage budget, Reservation budget and Savings Plans budget.

Cost budget – Helps you plan how much you want to spend on a service.

Usage budget – Helps you plan how much you want to use one or more services.

Reservation budget – This helps you track the usage of your Reserved Instances (RI). Two ways of doing it – RI utilization budgets (This lets you see if your RIs are unused or under-utilized), RI coverage budgets (This lets you see how much of your instance usage is covered by a reservation).

Incorrect options:

Resource budget – This is a made-up option and has been added as a distractor

Software budget – This is a made-up option and has been added as a distractor

Hardware budget – This is a made-up option and has been added as a distractor

Reference:

This is a made-up option and has been added as a distractor

8. Question

Amazon CloudWatch billing metric data is stored in which AWS Region?

In the AWS Region where the AWS resource is provisioned

US West (N. California) - us-west-1

In the AWS Region where the AWS account is created

US East (N. Virginia) - us-east-1

Incorrect

Correct option:

US East (N. Virginia) – us-east-1

You can monitor your estimated AWS charges by using Amazon CloudWatch. Billing metric data is stored in the US East (N. Virginia) Region and represents worldwide charges. This data includes the estimated charges for every service in AWS that you use, in addition to the estimated overall total of your AWS charges.

Incorrect options:

In the AWS Region where the AWS account is created

In the AWS Region where the AWS resource is provisioned

US West (N. California) – us-west-1

These three options contradict the details provided earlier in the explanation, so these options are incorrect.

Reference:

https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/monitor\_estimated\_charges\_with\_cloudwatch.html

9. Question

Under the AWS Shared Responsibility Model, which of the following is the responsibility of a customer regarding lambda functions?

Maintain versions of a lambda function

Patch underlying OS for the lambda function infrastructure

Configure networking infrastructure for the lambda functions

Maintain all runtime environments for lambda functions

Incorrect

Correct option:

Maintain versions of a lambda function

Under the Shared Responsibility Model, AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

Under the Shared Responsibility Model, Customer’s responsibility is determined by the AWS Cloud services that a customer selects. For abstracted services, such as Amazon S3 and Amazon DynamoDB, AWS operates the infrastructure layer, the operating system, and platforms, and customers access the endpoints to store and retrieve data. Customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

For the given use-case, the customer is responsible for maintaining the versions of a lambda function.

Shared Responsibility Model Overview: via – https://aws.amazon.com/compliance/shared-responsibility-model/

Incorrect options:

Patch underlying OS for the lambda function infrastructure

Maintain all runtime environments for lambda functions

Configure networking infrastructure for the lambda functions

As mentioned earlier, all these options fall under the ambit of AWS as far as the Shared Responsibility Model is concerned.

Reference:

https://aws.amazon.com/compliance/shared-responsibility-model/

10. Question

Which AWS service will you use to privately connect your VPC to Amazon S3?

Amazon API Gateway

VPC Endpoint Gateway

AWS Direct Connect

AWS Transit Gateway

Incorrect

Correct option:

VPC Endpoint Gateway

A VPC endpoint enables you to privately connect your VPC to supported AWS services and VPC endpoint services powered by AWS PrivateLink without requiring an internet gateway, NAT device, VPN connection, or AWS Direct Connect connection. Instances in your VPC do not require public IP addresses to communicate with resources in the service. Traffic between your VPC and the other service does not leave the Amazon network.

There are two types of VPC endpoints: interface endpoints and gateway endpoints.

An interface endpoint is an elastic network interface with a private IP address from the IP address range of your subnet that serves as an entry point for traffic destined to a supported service. Interface endpoints are powered by AWS PrivateLink, a technology that enables you to privately access services by using private IP addresses.

A gateway endpoint is a gateway that you specify as a target for a route in your route table for traffic destined to a supported AWS service. The following AWS services are supported:

Amazon S3

DynamoDB

Exam Alert:

You may see a question around this concept in the exam. Just remember that only S3 and DynamoDB support VPC Endpoint Gateway. All other services that support VPC Endpoints use a VPC Endpoint Interface.

Incorrect options:

AWS Direct Connect – AWS Direct Connect is a cloud service solution that makes it easy to establish a dedicated network connection from your premises to AWS. You can use AWS Direct Connect to establish a private virtual interface from your on-premise network directly to your Amazon VPC. This private connection takes at least one month for completion.

AWS Transit Gateway – AWS Transit Gateway connects VPCs and on-premises networks through a central hub. This simplifies your network and puts an end to complex peering relationships. It acts as a cloud router – each new connection is only made once. This service is helpful in reducing the complex topology of VPC peering when a lot of systems are involved.

Amazon API Gateway – Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. APIs act as the “front door” for applications to access data, business logic, or functionality from your backend services.

Reference:

https://docs.aws.amazon.com/vpc/latest/userguide/vpc-endpoints.html

11. Question

Which AWS service can help you forecast your next AWS bill for the services you use?

AWS Total Cost of Ownership (TCO) Calculator

AWS Simple Monthly Calculator

AWS Billing and Cost Management

AWS Cost Explorer

Incorrect

Correct option:

AWS Cost Explorer

A forecast is a prediction of how much you will use AWS services over the forecast time period that you selected, based on your past usage. Forecasting provides an estimate of what your AWS bill will be and enables you to use alarms and budgets for amounts that you’re predicted to use.

AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time. At the top of the Cost Explorer page are the Month-to-date costs and Forecasted month end costs. The Forecasted month end costs show how much Cost Explorer estimates that you will owe at the end of the month and compares your estimates costs to your actual costs of the previous month.

AWS Cost Explorer Features: via – https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/ce-exploring-data.html

Incorrect options:

AWS Simple Monthly Calculator – The Simple Monthly Calculator provides an estimate of usage charges for AWS services based on certain information you provide. It helps customers and prospects estimate their monthly AWS bill more efficiently.

AWS Total Cost of Ownership (TCO) Calculator – To estimate the costs of migrating on-premises infrastructure to AWS, you use the AWS Total Cost of Ownership (TCO) Calculator. The calculator can be accessed from https://awstcocalculator.com/. You cannot use this service to forecast your next AWS bill.

AWS Billing and Cost Management – AWS Billing and Cost Management is the service that you use to pay your AWS bill, monitor your usage, and analyze and control your costs. It is the billing department for AWS services – with necessary tools and services under its hood. You cannot use this service to forecast your next AWS bill.

Reference:

https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/ce-exploring-data.html

12. Question

Which AWS service can be used to execute code triggered by new files being uploaded to S3?

EC2

SQS

ECS

Lambda

Incorrect

Correct option:

Lambda – 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 use Amazon S3 to trigger AWS Lambda to process data immediately after an upload. For example, you can use Lambda to thumbnail images, transcode videos, index files, process logs, validate content, and aggregate and filter data in real-time.

How Lambda executes code in response to a trigger from S3: via – https://aws.amazon.com/lambda/

Incorrect options:

EC2 – Amazon EC2 is a web service that provides secure, resizable compute capacity in the AWS cloud. You can use EC2 to provision virtual servers on AWS Cloud. EC2 cannot execute code via a trigger from S3.

ECS – Amazon Elastic Container Service (Amazon ECS) is a highly scalable, fast, container management service that makes it easy to run, stop, and manage Docker containers on a cluster. ECS cannot execute code via a trigger from S3.

SQS – Amazon Simple Queue Service (SQS) is a fully managed message queuing service that enables you to decouple and scale microservices, distributed systems, and serverless applications. Using SQS, you can send, store, and receive messages between software components at any volume, without losing messages or requiring other services to be available.

Although SQS can be triggered from an S3 event, but SQS cannot execute code as its a message queuing service.

Reference:

https://aws.amazon.com/lambda/

13. Question

Which AWS Support plan provides general architectural guidance on how services can be used for various use-cases, workloads, or applications?

Enterprise

Business

Basic

Developer

Incorrect

Correct option:

Developer – AWS recommends Developer Support plan if you are testing or doing early development on AWS and want the ability to get email-based technical support during business hours. This plan also supports general guidance on how services can be used for various use cases, workloads, or applications. You do not get access to Infrastructure Event Management with this plan.

Developer Support Plan Overview: via – https://aws.amazon.com/premiumsupport/plans/developers/

Incorrect options:

Enterprise – AWS Enterprise Support provides customers with concierge-like service where the main focus is helping the customer achieve their outcomes and find success in the cloud. With Enterprise Support, you get 24×7 technical support from high-quality engineers, tools and technology to automatically manage the health of your environment, consultative architectural guidance delivered in the context of your applications and use-cases, and a designated Technical Account Manager (TAM) to coordinate access to proactive/preventative programs and AWS subject matter experts.

Business – AWS recommends Business Support if you have production workloads on AWS and want 24×7 phone, email and chat access to technical support and architectural guidance in the context of your specific use-cases. You get full access to AWS Trusted Advisor Best Practice Checks.

Basic – The basic plan only provides access to the following:

Customer Service & Communities – 24×7 access to customer service, documentation, whitepapers, and support forums. AWS Trusted Advisor – Access to the 7 core Trusted Advisor checks and guidance to provision your resources following best practices to increase performance and improve security. AWS Personal Health Dashboard – A personalized view of the health of AWS services, and alerts when your resources are impacted.

Reference:

https://aws.amazon.com/premiumsupport/plans/developers/

14. Question

Once an AWS service has been provisioned, it is expected to work uninterrupted without any network or access issues. In case of any failures, the service should recover quickly. Which pillar of the AWS Well-Architected Framework caters to this ability?

Reliability

Security

Performance Efficiency

Operational Excellence

Incorrect

Correct option:

Reliability

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. It provides a way for you to consistently measure your architectures against best practices and identify areas for improvement.

The AWS Well-Architected Framework is based on five pillars — Operational Excellence, Security, Reliability, Performance Efficiency, and Cost Optimization.

The reliability pillar focuses on the ability to prevent, and quickly recover from failures to meet business and customer demand. Key topics include foundational elements around setup, cross-project requirements, recovery planning, and how we handle change.

Incorrect options:

Operational Excellence – The Operational Excellence pillar includes the ability to run and monitor systems to deliver business value and to continually improve supporting processes and procedures. In the cloud, you can apply the same engineering discipline that you use for application code to your entire environment. You can define your entire workload (applications, infrastructure) as code and update it with code. You can implement your operations procedures as code and automate their execution by triggering them in response to events.

Security – The security pillar focuses on protecting information & systems. Key topics include confidentiality and integrity of data, identifying and managing who can do what with privilege management, protecting systems, and establishing controls to detect security events.

Performance Efficiency – The performance efficiency pillar focuses on using IT and computing resources efficiently. Key topics include selecting the right resource types and sizes based on workload requirements, monitoring performance, and making informed decisions to maintain efficiency as business needs evolve.

Reference:

https://wa.aws.amazon.com/wat.pillar.reliability.en.html

15. Question

An IT company has deployed a static website on S3, but the website is still inaccessible. As a Cloud Practioner, which of the following solutions would you suggest to address this issue?

Fix the S3 bucket policy

Enable S3 replication

Disable S3 encryption

Enable S3 versioning

Incorrect

Correct options:

Fix the S3 bucket policy

To host a static website on Amazon S3, you configure an Amazon S3 bucket for website hosting and then upload your website content to the bucket. When you configure a bucket as a static website, you must enable website hosting, set permissions, and create and add an index document.

Hosting a static website on Amazon S3: via – https://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteHosting.html

If you want to configure an existing bucket as a static website that has public access, you must edit block public access settings for that bucket. You may also have to edit your account-level block public access settings. Amazon S3 applies the most restrictive combination of the bucket-level and account-level block public access settings.

Here is how you can edit Public Access settings for S3 buckets: via – https://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteAccessPermissionsReqd.html

Incorrect options:

Disable S3 encryption

Enable S3 versioning

Enable S3 replication

Disabling S3 encryption, enabling S3 versioning or replication have no bearing on deploying a static website on S3, so these options are not correct.

References:

https://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteHosting.html

https://docs.aws.amazon.com/AmazonS3/latest/dev/WebsiteAccessPermissionsReqd.html

16. Question

A research lab wants to optimize the caching capabilities for its scientific computations application running on EC2 instances. Which EC2 storage option is best suited for this use-case?

Amazon EBS

Amazon EC2 Instance Store

Amazon EFS

Amazon S3

Incorrect

Correct option:

Amazon EC2 Instance Store

An Instance Store provides temporary block-level storage for your EC2 instance. This storage is located on disks that are physically attached to the host computer. Instance store is ideal for the temporary storage of information that changes frequently, such as buffers, caches, scratch data, and other temporary content, or for data that is replicated across a fleet of instances, such as a load-balanced pool of web servers. Instance storage is temporary, data is lost if instance experiences failure or is terminated.

Instance Store Overview: via – https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html

Incorrect options:

Amazon EBS – Amazon Elastic Block Store (EBS) is an easy to use, high-performance block storage service designed for use with Amazon Elastic Compute Cloud (EC2) for both throughput and transaction-intensive workloads at any scale. A broad range of workloads, such as relational and non-relational databases, enterprise applications, containerized applications, big data analytics engines, file systems, and media workflows are widely deployed on Amazon EBS. EBS is not a good fit for caching information on EC2 instances.

Amazon EFS – Amazon Elastic File System (Amazon EFS) provides a simple, scalable, fully managed, elastic NFS file system. It is built to scale on-demand to petabytes without disrupting applications, growing and shrinking automatically as you add and remove files, eliminating the need to provision and manage capacity to accommodate growth. Amazon EFS is designed to provide massively parallel shared access to thousands of Amazon EC2 instances, enabling your applications to achieve high levels of aggregate throughput and IOPS with consistent low latencies. EFS is not a good fit for caching information on EC2 instances.

Amazon S3 – Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. S3 is not a good fit for caching information on EC2 instances.

Reference:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html

17. Question

According to the AWS Shared Responsibility Model, which of the following are responsibilities of the customer (select 2)?

Operating system patches and updates of an EC2 instance

Compliance validation of Cloud infrastructure

AWS Global Network Security

Ensuring AWS employees cannot access customer data

Enabling data encryption of data stored in S3 buckets

Incorrect

Correct options:

Under the Shared Responsibility Model, AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services. Customer’s responsibility is determined by the AWS Cloud services that a customer selects.

Security and Compliance is a shared responsibility between AWS and the customer. This shared model can help relieve the customer’s operational burden as AWS operates, manages and controls the components from the host operating system and virtualization layer down to the physical security of the facilities in which the service operates.

Operating system patches and updates of an EC2 instance – Security “in” the cloud is the responsibility of the customer. A service such as Amazon Elastic Compute Cloud (Amazon EC2) is categorized as Infrastructure as a Service (IaaS) and, as such, requires the customer to perform all of the necessary security configuration and management tasks.

Enabling data encryption of data stored in S3 buckets – In the Shared Responsibility Model, customers are responsible for managing their data (including encryption options), classifying their assets, and using IAM tools to apply the appropriate permissions.

Shared Responsibility Model Overview: via – https://aws.amazon.com/compliance/shared-responsibility-model/

Incorrect options:

AWS Global Network Security – Cloud infrastructure management is the responsibility of AWS.

Ensuring AWS employees cannot access customer data – Ensuring protection of customer data and keeping it safe from AWS employees is the responsibility of AWS.

Compliance validation of Cloud infrastructure – Cloud security and compliance are the responsibilities of AWS.

Reference:

https://aws.amazon.com/compliance/shared-responsibility-model/

18. Question

Amazon Macie discovers and protects your sensitive data on which of the following AWS services?

Amazon Elastic File System (Amazon EFS)

AWS Storage Gateway

Amazon Elastic Block Store (Amazon EBS)

Amazon Simple Storage Service (Amazon S3)

Incorrect

Correct option:

Amazon Simple Storage Service (Amazon S3)

Amazon Macie is a fully managed data security and data privacy service that uses machine learning and pattern matching to discover and protect your sensitive data in AWS. Macie automatically provides an inventory of Amazon S3 buckets including a list of unencrypted buckets, publicly accessible buckets, and buckets shared with AWS accounts outside those you have defined in AWS Organizations. Then, Macie applies machine learning and pattern matching techniques to the buckets you select to identify and alert you to sensitive data, such as personally identifiable information (PII).

Incorrect options:

Amazon Elastic Block Store (Amazon EBS) – Amazon Elastic Block Store (EBS) is an easy to use, high-performance block storage service designed for use with Amazon Elastic Compute Cloud (EC2). Macie is not integrated with EBS.

Amazon Elastic File System (Amazon EFS) – Amazon Elastic File System (Amazon EFS) provides a simple, scalable, fully managed elastic NFS file system for use with AWS Cloud services and on-premises resources. Macie is not integrated with EFS.

AWS Storage Gateway – AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. Macie is not integrated with Storage Gateway.

Reference:

https://aws.amazon.com/macie/

19. Question

What is the primary benefit of deploying an RDS database in a Read Replica configuration?

Read Replica enhances database availability

Read Replica improves database scalability

Read Replica reduces database usage costs

Read Replica protects the database from a regional failure

Incorrect

Correct option:

Read Replica improves database scalability

Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud. Read Replicas allow you to create read-only copies that are synchronized with your master database. Read Replicas are used for improved read performance. You can also place your read replica in a different AWS Region closer to your users for better performance. Read Replicas are an example of horizontal scaling of resources.

Read Replica Overview: via – https://aws.amazon.com/rds/features/multi-az/

Exam Alert:

Please review the differences between Multi-AZ, Multi-Region and Read Replica deployments for RDS: via – https://aws.amazon.com/rds/features/multi-az/

Incorrect options:

Read Replica enhances database availability -Amazon RDS Multi-AZ deployments provide enhanced availability and durability for RDS database (DB) instances, making them a natural fit for production database workloads. When you provision a Multi-AZ DB Instance, Amazon RDS automatically creates a primary DB Instance and synchronously replicates the data to a standby instance in a different Availability Zone (AZ). Read Replica cannot enhance database availability.

Read Replica protects the database from a regional failure – You need to use RDS in Multi-Region deployment configuration to protect from a regional failure. Read Replica cannot protect from a regional failure.

Read Replica reduces database usage costs – RDS with Read Replicas increases the database costs compared to the standard deployment. So this option is incorrect.

Reference:

https://aws.amazon.com/rds/features/multi-az/

20. Question

An IT company would like to move its IT infrastructure from an AWS Region in the US to another AWS Region in Europe. Which of the following represents the correct solution for this use-case?

The company should use CloudFormation to move the resources from source AWS Region to destination AWS Region

The company should use Database Migration Service to move the resources from source AWS Region to destination AWS Region

The company should raise a ticket with AWS Support for this infrastructure migration

The company should just start creating new resources in the destination AWS Region and then migrate the relevant data and applications into this new AWS Region

Incorrect

Correct option:

The company should just start creating new resources in the destination AWS Region and then migrate the relevant data and applications into this new AWS Region – The company needs to create resources in the new AWS Region and then move the relevant data and applications into the new AWS Region. There is no off-the-shelf solution or service that the company can use to facilitate this transition.

Incorrect options:

The company should use CloudFormation to move the resources from source AWS Region to destination AWS Region – AWS CloudFormation allows you to use programming languages or a simple text file to model and provision, in an automated and secure manner, all the resources needed for your applications across all regions and accounts. CloudFormation cannot help with IT infrastructure migration.

The company should use Database Migration Service to move the resources from source AWS Region to destination AWS Region – AWS Database Migration Service helps you migrate databases to AWS quickly and securely. The source database remains fully operational during the migration, minimizing downtime to applications that rely on the database. The AWS Database Migration Service can migrate your data to and from the most widely used commercial and open-source databases. Database Migration Service cannot help with the entire IT infrastructure migration.

The company should raise a ticket with AWS Support for this infrastructure migration – This option has been added as a distractor. AWS Support cannot help with IT infrastructure migration.

21. Question

What are the benefits of having infrastructure hosted in the AWS Cloud? (Choose two)

A. All of the physical security and most of the data/network security are taken care of for you

B. Having complete control over the physical infrastructure

C. Increase speed and agility

D. Competitive upfront costs

E. There is no need to worry about security

Incorrect

Option A :

\*\* All of the physical security are taken care of for you. Amazon data centers are surrounded by three physical layers of security. “Nothing can go in or out without setting off an alarm”. It’s important to keep bad guys out, but equally important to keep the data in which is why Amazon monitors incoming gear, tracking every disk that enters the facility. And “if it breaks we don’t return the disk for warranty. The only way a disk leaves our data center is when it’s confetti.”

\*\* Most (not all) data and network security are taken care of for you. When we talk about the data/network security, AWS has a “shared responsibility model” where AWS and the customer share the responsibility of securing them. For example the customer is responsible for creating rules to secure his network traffic using the security groups and is also responsible for protecting data with encryption.

Option C:

In a cloud computing environment, new IT resources are only a click away, which means it requires less time to make those resources available to developers – from weeks to just minutes. This results in a dramatic increase in agility for the organization, since the cost and time it takes to experiment and develop is significantly lower.

Option B is not correct. The Physical infrastructure is a responsibility of AWS and not the customer. Hence it is not an advantage of moving to the AWS Cloud.

Option D is not correct. In AWS, most of the services are available with no upfront costs as it follows the pay-as-you-go pricing.

AWS allows you to pay upfront for some services to get more discounts, but you have the choice to pay upfront or pay as you go. By contrast, traditional IT providers require you to pay upfront for all of their services.

Option E is not correct. As mentioned above, security is a shared responsibility between AWS and the customer. For example, the customer has to manage who can access and use AWS resources using the IAM service.

References:

https://docs.aws.amazon.com/aws-technical-content/latest/aws-overview/six-advantages-of-cloud-computing.html

22. Question

You want to monitor the CPU utilization of an EC2 resource in AWS. Which of the below services can help in this regard?

A. AWS Config

B. AWS Inspector

C. AWS Cloudwatch

D. AWS Trusted Advisor

Incorrect

Amazon CloudWatch is a service that monitors AWS cloud resources and the applications you run on AWS. You can use Amazon CloudWatch to collect and track metrics, collect and monitor log files, set alarms, and automatically react to changes in your AWS resources. Amazon CloudWatch can monitor AWS resources such as Amazon EC2 instances, Amazon DynamoDB tables, and Amazon RDS DB instances, as well as custom metrics generated by your applications and services, and any log files your applications generate.

Option A is not correct. AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources.

Option B is not correct. Amazon Inspector is an automated security assessment service that helps improve the security and compliance of applications deployed on AWS.

Option D is not correct. AWS Trusted Advisor is an online tool that provides real time guidance to help you provision your resources following AWS best practices.

References:

https://aws.amazon.com/cloudwatch/

23. Question

Which of the following is not a part of the Cloud Computing models?

A. Infrastructure as a Service (IaaS)

B. Hardware as a Service (HaaS)

C. Platform as a Service (PaaS)

D. Software as a Service (SaaS)

Incorrect

There are three Cloud Computing Models:

1) Infrastructure as a Service (IaaS) – Infrastructure as a Service (IaaS) contains the basic building blocks for cloud IT and typically provide access to networking features, computers (virtual or on dedicated hardware), and data storage space. IaaS provides you with the highest level of flexibility and management control over your IT resources and is most similar to existing IT resources that many IT departments and developers are familiar with today.

2) Platform as a Service (PaaS) – Platform as a Service (PaaS) removes the need for your organization to manage the underlying infrastructure (usually hardware and operating systems) and allows you to focus on the deployment and management of your applications. This helps you be more efficient as you don’t need to worry about resource procurement, capacity planning, software maintenance, patching, or any of the other undifferentiated heavy lifting involved in running your application.

3) Software as a Service (SaaS) – Software as a Service (SaaS) provides you with a completed product that is run and managed by the service provider. In most cases, people referring to Software as a Service are referring to end-user applications. With a SaaS offering you do not have to think about how the service is maintained or how the underlying infrastructure is managed; you only need to think about how you will use that particular piece of software. A common example of a SaaS application is web-based email which you can use to send and receive email without having to manage feature additions to the email product or maintain the servers and operating systems that the email program is running on.

References:

https://docs.aws.amazon.com/aws-technical-content/latest/aws-overview/types-of-cloud-computing.html

24. Question

Which of the following can be used to control access to your Amazon EC2 instances?

A. DB security groups

B. IAM policies

C. EC2 security groups

D. None of these

Incorrect

Security groups are used to define and control the way you want your instances to be accessed, and whether or not certain kind of communications is allowed. AWS security groups provide security at the protocol and port access level. You can add rules to each security group that allow traffic to or from its associated instances.

Option A is not correct. DB security groups are used to control access to the databases.

Option B is not correct.IAM policies are used to grant users permissions to perform specific actions on EC2. A user can only access the instance and perform these actions if his IP address is allowed in the security group that is attached to the instance. In brief, security groups are used to control who can access the instance. IAM policies are used to control what actions can a specific user perform after accessing the instance.

References:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/UsingIAM.html

https://docs.aws.amazon.com/vpc/latest/userguide/VPC\_SecurityGroups.html

25. Question

You want to run a questionnaire application for only one day (without interruption), which AWS EC2 purchase option would you choose?

A. Reserved instances

B. Spot instances

C. Dedicated instances

D. On-demand instances

Incorrect

With On-Demand instances, you pay for compute capacity by the hour with no long-term commitments. You can increase or decrease your compute capacity depending on the demands of your application and only pay the specified hourly rate for the instances you use. The use of On-Demand instances frees you from the costs and complexities of planning, purchasing, and maintaining hardware and transforms what are commonly large fixed costs into much smaller variable costs. On-Demand instances also remove the need to buy “safety net” capacity to handle periodic traffic spikes.

Option A is not correct. Reserved instances are not appropriate in this case because you have to purchase capacity for at least one year.

Option B is not correct. Spot is not a good choice as the application must run without interruption.

Option C is not correct. Dedicated instances can be used if you require your instance be physically isolated at the host hardware level from instances that belong to other AWS accounts.

References:

https://d1.awsstatic.com/whitepapers/aws-overview.pdf

26. Question

A company decides to migrate its Oracle database to AWS. Which AWS service can help achieve this without negatively impacting the functionality of the source database?

A. RDS Multi-AZ

B. AWS Server Migration Service

C. AWS Application Discovery Service

D. AWS Database Migration Service

Incorrect

AWS Database Migration Service (DMS) helps you migrate databases to AWS easily and securely. The source database remains fully operational during the migration, minimizing downtime to applications that rely on the database. The AWS Database Migration Service can migrate your data to and from most widely used commercial and open-source databases. The service supports homogeneous migrations such as Oracle to Oracle, as well as heterogeneous migrations between different database platforms, such as Oracle to Amazon Aurora or Microsoft SQL Server to MySQL. It also allows you to stream data to Amazon Redshift from any of the supported sources including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle, SAP ASE, and SQL Server, enabling consolidation and easy analysis of data in the petabyte-scale data warehouse. AWS Database Migration Service can also be used for continuous data replication with high availability.

Option A is not correct. RDS Multi-AZ is a feature of Amazon RDS that is used to increase the availability of the database.

Option B is not correct. AWS Server Migration Service (SMS) is used to migrate your on-premises workloads to AWS.

Option C is not correct. AWS Application Discovery Service helps enterprise customers plan migration projects by gathering information about their on-premises data centers.

References:

https://d1.awsstatic.com/whitepapers/aws-overview.pdf

27. Question

A company has developed an eCommerce web application and the application needs an uptime of at least 99.5%. Which of the following deployment strategies should they use?

A. Deploying the application across multiple VPC’s

B. Deploying the application across multiple Regions

C. Deploying the application across Edge locations

D. Deploying the application across multiple subnets

Incorrect

The AWS Global infrastructure is built around Regions and Availability Zones (AZs). Each AWS Region is a separate geographic area. Each AWS Region has multiple, isolated locations known as Availability Zones. Availability Zones in a region are connected with low latency, high throughput, and highly redundant networking. These Availability Zones offer AWS customers an easier and more effective way to design and operate applications and databases, making them more highly available, fault tolerant, and scalable than traditional single datacenter infrastructures or multi-datacenter infrastructures.

In addition to replicating applications and data across multiple data centers in the same Region using Availability Zones, you can also choose to increase redundancy and fault tolerance further by replicating data between geographic Regions (especially if you are serving customers from all over the world). You can do so using both private, high speed networking and public internet connections to provide an additional layer of business continuity, or to provide low latency access across the globe.

Option A is not correct. VPC refers to the virtual private cloud which is a virtual network that you define. Deploying the application across multiple VPC’s in the same region will not help your global customers. This option can only be true if the VPCs are created in multiple regions worldwide.

Option C is not correct. Edge locations are not used to host applications. Edge locations are used by CloudFront to cache and distribute content to your global customers with low latency.

Option D is not correct. A subnet is a range of IP addresses in your VPC.

References:

https://aws.amazon.com/about-aws/global-infrastructure/

28. Question

Which of the following services provides object-level storage in AWS?

A. Amazon EBS

B. Amazon S3

C. Amazon Storage Gateway

D. Amazon SQS

Incorrect

Amazon S3 is an object level storage built to store and retrieve any amount of data from anywhere – web sites and mobile apps, corporate applications, and data from IoT sensors or devices. It is designed to deliver 99.999999999% durability, and stores data for millions of applications used by market leaders in every industry.

Option A is not correct. Amazon EBS is a block level storage technology.

Option C is not correct. AWS Storage Gateway is a hybrid storage service that enables your on-premises applications to seamlessly use AWS cloud storage. The gateway connects to AWS storage services – such as Amazon S3 (which is object level) and Amazon EBS (which is block level) – and provides storage for files, volumes, snapshots, and virtual tapes in AWS.

Option D is not correct. Amazon SQS is not a storage service. It is a message queue service that enables you to decouple microservices, distributed systems, and serverless applications.

References:

https://aws.amazon.com/s3/

29. Question

One of the benefits of the AWS Cloud is that there are many services available to use of which you don’t need to manage their underlying infrastructure. Which of the following are examples of these services? (Choose TWO)

A. DynamoDB

B. EC2

C. Amazon Elastic MapReduce.

D. Amazon VPC.

Incorrect

The Amazon Elastic MapReduce and DynamoDB are managed services that you don’t need to manage their underlying infrastructure. Other managed services include: Amazon S3, Amazon RDS, Amazon Redshift, Amazon WorkSpaces, Amazon CloudFront, Amazon CloudSearch and several other services.

Option B is not correct. Amazon EC2 is a service that gives you complete control over your compute resources. You are responsible for managing almost everything in your server instances when using Amazon EC2.

Option D is not correct. Amazon Virtual Private Cloud (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. You have complete control over your virtual networking environment. Amazon VPC is not a managed service, you are responsible for managing almost everything when using the Amazon VPC service.

References:

https://aws.amazon.com/dynamodb/

https://aws.amazon.com/emr/

30. Question

Which service provides DNS in the AWS cloud?

A. Route 53

B. VPC

C. Direct Connect

D. VPN

Incorrect

Amazon Route 53 provides highly available and scalable Domain Name System (DNS) services, domain name registration, and health-checking web services. It is designed to give developers and businesses an extremely reliable and cost effective way to route end users to Internet applications by translating names like example.com into the numeric IP addresses, such as 192.0.2.1, that computers use to connect to each other.

Option B is not correct. Amazon VPC allows you to create a virtual network in the cloud.

Option C is not correct. AWS Direct Connect is a cloud service solution that is used to establish a dedicated network connection from your premises to AWS.

Option D is not correct. AWS Virtual Private Network (AWS VPN) is used to establish a secure and private tunnel from your network or device to the AWS global network.

References:

https://aws.amazon.com/route53/

31. Question

A company has a DevOps team in its organizational structure. They are looking forward to moving to the AWS Cloud. They are wondering if there is an AWS service that can help them manage infrastructure as code. Which of the following would you suggest for them?

A. AWS Inspector

B. AWS Config

C. AWS CloudFormation

D. Amazon EMR

Incorrect

AWS CloudFormation is a service that helps you model and set up your Amazon Web Services resources so that you can spend less time managing those resources and more time focusing on your applications that run in AWS. You create a template that describes all the AWS resources that you want (like Amazon EC2 instances or Amazon RDS DB instances), and AWS CloudFormation takes care of provisioning and configuring those resources for you. You don’t need to individually create and configure AWS resources and figure out what’s dependent on what; AWS CloudFormation handles all of that.

Option A is not correct. Amazon Inspector is an automated security assessment service that helps improve the security and compliance of applications deployed on AWS.

Option B is not correct. AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources.

Option D is not correct. Amazon EMR is used to run and scale Apache Spark, Hadoop, HBase, Presto, Hive, and other Big Data Frameworks.

References:

https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/Welcome.html

32. Question

When using on-demand instances in AWS, which of the following is a false statement about its cost?

A. There are no upfront costs for the instance

B. You have to pay the termination fees if you terminate the instance

C. You are charged per second based on an hourly rate

D. You pay only for what you use.

Incorrect

You don’t have to pay any fees when terminating your EC2 Instances.

References:

https://aws.amazon.com/ec2/pricing/

33. Question

A company is planning to develop an application consisting of hundreds of microservices. They decide to host the application on the AWS Cloud. Since there are a large number of services produced by the application, it needs a powerful tool for analysis and debugging. Which of the following services can best meet this requirement?

A. AWS OpsWorks

B. AWS CloudWatch

C. Amazon Aurora

D. AWS X-Ray

Incorrect

AWS X-Ray helps developers analyze and debug production, distributed applications, such as those built using a microservices architecture. With X-Ray, you can understand how your application and its underlying services are performing to identify and troubleshoot the root cause of performance issues and errors. X-Ray provides an end-to-end view of requests as they travel through your application, and shows a map of your application’s underlying components. You can use X-Ray to analyze both applications in development and in production, from simple three-tier applications to complex microservices applications consisting of thousands of services.

Option A is not correct. AWS OpsWorks is a configuration management service that provides managed instances of Chef and Puppet.

Option B is not correct. The main purpose of the AWS CloudWatch is to monitor the utilization of your AWS resources.

Option C is not correct. Amazon Aurora is a database service.

References:

https://aws.amazon.com/xray/

34. Question

Upgrading a server with a larger hard drive is an example of \_\_\_\_\_\_\_\_\_\_ , while adding more hard drives to a storage array is an example of \_\_\_\_\_\_\_\_\_\_ .

A. Vertical Scaling, Horizontal Scaling.

B. Vertical Scaling, Vertical Scaling.

C. Horizontal Scaling, Vertical Scaling.

D. Horizontal Scaling, Horizontal Scaling.

Incorrect

\*\* Scaling Vertically:

Scaling vertically takes place through an increase in the specifications of an individual resource (e.g., upgrading a server with a larger hard drive, adding more memory, or provisioning a faster CPU). On Amazon EC2,this can easily be achieved by stopping an instance and resizing it to an instance type that has more RAM, CPU, IO,or networking capabilities. This way of scaling can eventually hit a limit and it is not always a cost efficient or highly available approach. However, it is very easy to implement and can be sufficient for many use cases especially in the short term.

\*\* Scaling Horizontally:

Scaling horizontally takes place through an increase in the number of resources (e.g., adding more hard drives to a storage array or adding more servers to support an application). This is a great way to build Internet-scale applications that leverage the elasticity of cloud computing.

References:

https://d1.awsstatic.com/whitepapers/AWS\_Cloud\_Best\_Practices.pdf

35. Question

A user is planning to host a scalable, dynamic web application on AWS. Which service may not be required by the user to achieve automated scalability?

A. CloudWatch

B. S3

C. AutoScaling

D. AWS EC2 instances

Incorrect

The question asks for the service that may NOT be required by the user when architecting for an automatically scalable application.

S3 is not required, and thus is the correct answer.

The user can achieve automated scalability by configuring the AutoScaling service to run the required number of EC2 instances based on the conditions that he define. Cloudwatch is used to monitor the utilization of the running instances and allow AutoScaling to automatically scale up (by launching more instances) or down (by terminating instances) based on changes on demand.

Based on the application requirements, a developer may decide not to use S3. The storage resource in this case will be the EBS volumes that are attached to the Amazon EC2 instances.

References:

https://aws.amazon.com/autoscaling/

https://aws.amazon.com/cloudwatch/

https://aws.amazon.com/ec2/

36. Question

An organization has 500 employees. The organization wants to set up AWS access for each department. Which of the below-mentioned options is a possible solution?

A. Create IAM roles based on the permission and assign users to each role.

B. Create IAM users and provide individual permission for each one of them.

C. Create an IAM group for each department and assign IAM users to the groups.

D. It is not possible to manage more than 100 IAM users with AWS

Incorrect

An IAM group is a collection of IAM users that are managed as a unit. Groups let you specify permissions for multiple users, which can make it easier to manage the permissions for those users. For example, you could have a group called Admins and give that group the types of permissions that administrators typically need. Any user in that group automatically has the permissions that are assigned to the group. If a new user joins your organization and needs administrator privileges, you can assign the appropriate permissions by adding the user to that group. Similarly, if a person changes jobs in your organization, instead of editing that user’s permissions, you can remove him or her from the old groups and add him or her to the appropriate new groups.

Option A is not correct. An IAM role is very similar to a user, in that it is an identity with permission policies that determine what the identity can and cannot do in AWS. However, a role does not have any credentials (password or access keys) associated with it. Instead of being uniquely associated with one person, a role is intended to be assumable by anyone who needs it (Note: we mean by anyone: any user who has permission to assume the role).

Option B is not correct. It is not an effective solution and waste of time.

Option D is not correct. The current limit of users in an AWS account is 5000.

References:

https://docs.aws.amazon.com/IAM/latest/UserGuide/id.html

37. Question

How can you view the distribution of AWS spending in one of your AWS accounts?

A. By contacting the AWS Finance team

B. By contacting the AWS Support team

C. By using AWS Cost Explorer

D. By using Amazon VPC console

Incorrect

AWS Cost Explorer is a free tool that you can use to view your costs and usage. You can view data up to the last 13 months, forecast how much you are likely to spend for the next three months, and get recommendations for what Reserved Instances to purchase. You can use AWS Cost Explorer to see patterns in how much you spend on AWS resources over time, identify areas that need further inquiry, and see trends that you can use to understand your costs. You can also specify time ranges for the data, and view time data by day or by month.

Option A is not correct. The AWS Finance Team provides data driven analysis, strategic decision support, financial planning, and controllership to teams that plan and build data centers, design and source servers, and develop and sell cloud services at massive scale to developers and businesses all over the world.

Option B is not correct. The AWS support team will direct you to use AWS Cost Explorer.

Option D is not correct. You can use the Amazon Virtual Private Cloud console to launch AWS resources, such as Amazon EC2 instances. You can use it to specify an IP address range for the VPC, add subnets, associate security groups, and configure route tables.

References:

https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/cost-explorer-what-is.html

38. Question

Which of the following can be used to provide an additional level of security above your username and password when logging into the AWS Console?

A. Encrypted keys.

B. Email verification.

C. Root access privileges.

D. Multi-Factor Authentication (MFA)

Incorrect

AWS Multi-Factor Authentication (MFA) is a simple best practice that adds an extra layer of protection on top of using just your user name and password to authenticate.

Option A is not correct. Logging to the AWS management console doesn’t require encrypted keys.

Option B is not correct. Email verification is the process of verifying your ownership of an account’s e-mail address.

Option C is not correct. Root access privileges are used by the account owner to perform certain actions on AWS that cannot be performed using user credentials.

References:

https://aws.amazon.com/iam/details/mfa/

39. Question

Your company is developing a critical application and the security of the application is one of the top priorities. Which of the following AWS services will provide infrastructure security optimization recommendations?

A. AWS Shield

B. AWS Management Console

C. Amazon Aurora

D. AWS Trusted Advisor

Incorrect

AWS Trusted Advisor is an online resource to help you reduce cost, increase performance, and improve security by optimizing your AWS environment. Trusted Advisor provides real time guidance to help you provision your resources following AWS best practices.

Option A is not correct. AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that safeguards applications running on AWS.

Option B is not correct. The AWS Management Console is used to access and manage Amazon Web Services through a simple and intuitive web-based user interface. The console itself doesn’t provide any recommendations.

Option C is not correct. Amazon Aurora is a database service.

References:

https://aws.amazon.com/premiumsupport/trustedadvisor/

40. Question

You are planning to host a large eCommerce application on the AWS Cloud. One of your major concerns is Internet attacks, such as DDoS attacks. Which of the following services can help mitigate this concern? (Choose 2 answers)

A. CloudFront

B. AWS Shield

C. AWS EC2

D. AWS Config

Incorrect

AWS provides flexible infrastructure and services that help customers implement strong DDoS mitigations and create highly available application architectures that follow AWS Best Practices for DDoS Resiliency. These include services such as Amazon Route 53, Amazon CloudFront, Elastic Load Balancing, and AWS WAF to control and absorb traffic, and deflect unwanted requests. These services integrate with AWS Shield, a managed DDoS protection service that provides always-on detection and automatic inline mitigations to safeguard web applications running on AWS.

Option C is not correct. Amazon Elastic Compute Cloud (Amazon EC2) is a compute service.

Option D is not correct. AWS Config is a service that enables you to assess, audit, and evaluate the configurations of your AWS resources.

References:

https://aws.amazon.com/answers/networking/aws-ddos-attack-mitigation/

41. Question

You have developed a web application that has a “.NET layer” that connects to a MySQL database. Which of the following AWS database deployments would provide automated backups to your application?

A. Aurora

B. DynamoDB

C. An EC2 instance with MySQL installed.

D. An EC2 instance with Aurora installed.

Incorrect

Amazon Aurora is a MySQL and PostgreSQL-compatible relational database built for the cloud. Amazon Aurora combines the performance and availability of traditional enterprise databases with the simplicity and cost-effectiveness of open source databases. It delivers up to five times the throughput of standard MySQL and up to three times the throughput of standard PostgreSQL. Amazon Aurora is designed to be compatible with MySQL and with PostgreSQL, so that existing applications and tools can run without requiring modification. It is available through Amazon Relational Database Service (RDS), freeing you from time-consuming administrative tasks such as provisioning, patching, backup, recovery, failure detection, and repair.

Option B is not correct. DynamoDB provides a NoSQL database NOT MySQL.

Option C is not correct. You can Install MySQL on EC2, however you have to manage everything yourself (i.e. there are no automated backups).

Option D is not correct. You cannot install Aurora on EC2. It is a managed service that is already installed on the AWS Cloud. You can launch Amazon Aurora using the Amazon RDS Management Console.

References:

https://aws.amazon.com/rds/aurora/

42. Question

A company has decided to migrate to AWS. What design principles should they consider to facilitate good design in the cloud?

A. Analyze your on-premises usage to guess your capacity needs on AWS.

B. Use AWS reservations to reduce costs when testing your production environment.

C. Automate to make architectural experimentation easier.

D. Spend more time and effort when architecting your environment, it is not easy to change your decisions later.

Incorrect

The Well-Architected Framework identifies a set of general design principles to facilitate good design in the cloud:

1- Stop guessing your capacity needs: Eliminate guessing about your infrastructure capacity needs. When you make a capacity decision before you deploy a system, you might end up sitting on expensive idle resources or dealing with the performance implications of limited capacity. With cloud computing, these problems can go away. You can use as much or as little capacity as you need, and scale up and down automatically.

2- Test systems at production scale: In the cloud, you can create a production-scale test environment on demand, complete your testing, and then decommission the resources. Because you only pay for the test environment when it’s running, you can simulate your live environment for a fraction of the cost of testing on premises.

3- Automate to make architectural experimentation easier: Automation allows you to create and replicate your systems at low cost and avoid the expense of manual effort. You can track changes to your automation, audit the impact, and revert to previous parameters when necessary.

4- Allow for evolutionary architectures: Allow for evolutionary architectures. In a traditional environment, architectural decisions are often implemented as static, one-time events, with a few major versions of a system during its lifetime. As a business and its context continue to change, these initial decisions might hinder the system’s ability to deliver changing business requirements. In the cloud, the capability to automate and test on demand lowers the risk of impact from design changes. This allows systems to evolve over time so that businesses can take advantage of innovations as a standard practice.

5- Drive architectures using data: In the cloud you can collect data on how your architectural choices affect the behavior of your workload. This lets you make fact-based decisions on how to improve your workload. Your cloud infrastructure is code, so you can use that data to inform your architecture choices and improvements over time.

6- Improve through game days: Test how your architecture and processes perform by regularly scheduling game days to simulate events in production. This will help you understand where improvements can be made and can help develop organizational experience in dealing with events.

Option A is not correct. Pay-as-you-go pricing eliminates the need to guess your capacity needs.

Option B is not correct. Reservations in AWS are not an appropriate choice when you need to test your AWS environment since it requires you to pay for at least one year.

Option D is not correct. In AWS, you can test and provision your resources on-demand and pay only for what you use with no long term contracts. This enables you to make any changes you want in your architecture design at any time without any risks.

References:

https://d1.awsstatic.com/whitepapers/architecture/AWS\_Well-Architected\_Framework.pdf page 5

43. Question

In order to implement best practices when dealing with a “Single Point of Failure,” you should aim to build as much automation as possible in both detecting and reacting to failure. Which of the following AWS services would help? (Choose two)

A. ELB

B. ECR

C. Auto Scaling

D. Amazon Athena

E. Amazon EC2

Incorrect

You should aim to build as much automation as possible in both detecting and reacting to failure. You can use services like ELB and Amazon Route53 to configure health checks and mask failure by only routing traffic to healthy endpoints. In addition, Auto Scaling can be configured to automatically replace unhealthy nodes. You can also replace unhealthy nodes using the Amazon EC2 auto-recovery feature or services such as AWS OpsWorks and AWS Elastic Beanstalk. It won’t be possible to predict every possible failure scenario on day one. Make sure you collect enough logs and metrics to understand normal system behavior. After you understand that, you will be able to set up alarms that trigger automated response or manual intervention.

Option B is not correct. Amazon Elastic Container Registry (ECR) is a Docker container registry that allows developers to store, manage, and deploy Docker container images.

Option D is not correct. Amazon Athena is an interactive query service that is mainly used to analyze data in Amazon S3 using standard SQL.

Option E is not correct. Amazon EC2 is a server-based compute service. Fault tolerance is not built-in, you have to architect for fault tolerance using the services we mentioned above.

Additional information:

Lambda is a serverless compute service. Serverless computing provides built-in fault tolerance. You don’t need to architect for this capability since the services running the application provide it by default.

References:

https://d1.awsstatic.com/whitepapers/AWS\_Cloud\_Best\_Practices.pdf

44. Question

You are working on a project that involves creating thumbnails of millions of images; however, consistent uptime is not really an issue, and continuous processing is not required. Which type of EC2 buying option would be the most cost-effective?

A. Reserved instances

B. Spot instances

C. On-demand instances

D. Dedicated instances

Incorrect

Spot Instances are a cost-effective choice if you can be flexible about when your applications run and if you don’t mind if your applications get interrupted. For example, Spot Instances are well-suited for data analysis, batch jobs, background processing, and optional tasks.

Option A is not correct. Reserved instances are recommended for Customers that can commit to using EC2 over a 1 or 3 year term to reduce their total computing costs. In our case if you need the instances for one year Spot Instances would still be the best option as it provides the largest discount(up to 90%) compared to the other buying options.

Option C is not correct. On-demand instances are not a cost effective solution here since spot instances can fulfill the requirements.

Option D is not correct. Dedicated instances are used when you need your instances to be physically isolated at the host hardware level from instances that belong to other AWS accounts. Dedicated instances are also not a cost effective solution here since hardware isolation is not required.

References:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-spot-instances.html

45. Question

Which statement is true regarding the AWS shared responsibility model?

A. Security of the IaaS services is the responsibility of AWS.

B. Security of the managed services is the responsibility of the customer.

C. Responsibilities vary depending on the services used.

D. Patching the guest OS is the responsibility of AWS for all services.

Incorrect

Customers should be aware that their responsibilities may vary depending on the AWS services chosen. For example, when using Amazon EC2, you are responsible for applying operating system and application security patches regularly. However, such patches are applied automatically when using Amazon RDS.

Option A is not correct. AWS products that fall into the well-understood category of Infrastructure as a Service (IaaS)—such as Amazon EC2, Amazon VPC, and Amazon S3—are completely under your control and require you to perform all of the necessary security configuration and management tasks. For example, for EC2 instances, you’re responsible for management of the guest OS (including updates and security patches), any application software or utilities you install on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance. These are basically the same security tasks that you’re used to performing no matter where your servers are located.

Option B is not correct. AWS is responsible for the security configuration of its products that are considered managed services. Examples of these types of services include Amazon DynamoDB, Amazon RDS, Amazon Redshift, Amazon Elastic MapReduce, Amazon WorkSpaces, etc. For these services, AWS will handle basic security tasks like guest operating system (OS) and database patching, firewall configuration, and disaster recovery. For most of these managed services, all you have to do is configure logical access controls on the resources and protect your account credentials. A few of them may require additional tasks, such as setting up database user accounts, but overall the security configuration work is performed by the service.

Option D is not correct. Patching the guest OS is the responsibility of AWS for the managed services only. The customer is responsible for other services (such as Amazon EC2).

References:

https://aws.amazon.com/compliance/shared-responsibility-model/

46. Question

You are trying to organize and import gigabytes of data into AWS that are currently structured in JSON-like, name-value documents. Which AWS service would best fit your needs?

A. Lambda

B. Aurora

C. RDS

D. DynamoDB

Incorrect

DynamoDB is AWS’ NoSQL database offering. NoSQL databases are used for non-structured data that are typically stored in JSON-like, name-value documents.

Option A is not correct. Lambda is a serverless compute service.

Option B is not correct. Aurora is a MySQL and PostgreSQL-compatible relational database NOT a key-value database.

Option C is not correct. RDS is a relational database NOT a key-value database.

References:

https://aws.amazon.com/dynamodb/

https://aws.amazon.com/products/databases/

47. Question

A company is currently using the Enterprise Support plan. They want quick and efficient guidance with their billing and account inquiries. Which of the following included services could assist them?

A. AWS Support API

B. AWS Support Concierge

C. AWS Advisor

D. None of the above.

Incorrect

Included as part of the Enterprise Support plan, the Support Concierge Team are AWS billing and account experts that specialize in working with enterprise accounts. The Concierge team will quickly and efficiently assist you with your billing and account inquiries, and work with you to help implement billing and account best practices so that you can focus on running your business.

Support Concierge service includes:

\*\* 24 x7 access to AWS billing and account inquires.

\*\* Guidance and best practices for billing allocation, reporting, consolidation of accounts, and root-level account security.

\*\* Access to Enterprise account specialists for payment inquiries, training on specific cost reporting, assistance with service limits, and facilitating bulk purchases.

Option A is not correct. The AWS Support API provides access to some of the features of the AWS Support Center through an API. The service currently provides two different groups of operations: 1- Support Case Management operations to manage the entire life cycle of your AWS support cases, from creating a case to resolving it. 2- Trusted Advisor operations to access the checks provided by AWS Trusted Advisor.

Option C is not correct. AWS Advisor is a bogus option.

References:

https://aws.amazon.com/premiumsupport/features/

48. Question

As part of the Enterprise support plan, who is the primary point of contact for ongoing support needs?

A. TAM

B. IEM

C. ISM

D. TSM

Incorrect

For Enterprise-level customers, a TAM (Technical Account Manager) provides technical expertise for the full range of AWS services and obtains a detailed understanding of your use case and technology architecture. TAMs work with AWS Solution Architects to help you launch new projects and give best practices recommendations throughout the implementation life cycle. Your TAM is the primary point of contact for ongoing support needs, and you have a direct telephone line to your TAM.

Option B is not correct. AWS Infrastructure Event Management(IEM) is a structured program available to Enterprise Support customers (and Business Support customers for an additional fee) that helps you plan for large-scale events such as product or application launches, infrastructure migrations, and marketing events. With Infrastructure Event Management, you get strategic planning assistance before your event, as well as real-time support during these moments that matter most for your business.

Options C&D are not correct. ISM & TSM are bogus options.

References:

https://aws.amazon.com/premiumsupport/plans/

49. Question

You have developed a web application targeting a global audience. Which of the following will help you achieve the highest redundancy and fault tolerance?

A. Deploy the application in a Single Availability Zone (AZ).

B. Deploy the application in Multiple AZs in many AWS regions.

C. Deploy the application in Multiple AZs in a Single AWS region.

D. Nothing from the above would help.

Incorrect

Since you are targeting a global audience then you should use many AWS regions around the world. The deployment option that gives you the highest redundancy is to deploy the application in multiple AZs within many AWS regions. This redundancy will also increase the fault tolerance of the application because if there is an outage in an AZ, the other AZs can handle requests.

Additional information:

It is important to understand that the AWS Cloud infrastructure is built around Regions and Availability Zones (AZs). A Region is a physical location in the world where we have multiple AZs. AZs consist of one or more discrete data centers, each with redundant power, networking, and connectivity, housed in separate facilities. These AZs offer you the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible from a single data center. Each Amazon Region is designed to be completely isolated from the other Amazon Regions. This achieves the greatest possible fault tolerance and stability. Each AZ is isolated, but the AZs in a Region are connected through low-latency links. Each Availability Zone is designed as an independent failure zone. This means that Availability Zones are physically separated within a typical metropolitan region and are located in lower risk flood plains (specific flood zone categorization varies by Region). In addition to discrete uninterruptable power supply (UPS) and onsite backup generation facilities, they are each fed via different grids from independent utilities to further reduce single points of failure.

References:

https://d1.awsstatic.com/whitepapers/aws-overview.pdf

50. Question

One of the main benefits of using AWS as a cloud computing service is reliability. What does it actually mean? (Choose 2)

A. Ability to recover quickly from failures.

B. Apply the principle of least privilege to all of its resources.

C. Automatically provision new resources to meet demand.

D. Provide compensation to the customers if any issue occurred.

Incorrect

The reliability term encompasses the ability of a system to recover from infrastructure or service disruptions, dynamically acquire computing resources to meet demand, and mitigate disruptions such as mis-configurations or transient network issues.

Option B is not correct. Principle of least privilege is a security concept much more related to access management.

Option D is not correct. Customers compensation is not related to the reliability of AWS.

References:

https://d1.awsstatic.com/whitepapers/architecture/AWS-Reliability-Pillar.pdf

51. Question

An organization has decided to reserve EC2 compute capacity for three years to get more discounts. Their application workloads are likely to change during this time period. What is the EC2 Reserved Instance (RI) type that allows them to change the attributes of the RI whenever they need?

A. Standard RIs

B. Convertible RIs

C. Scheduled RIs

D. Elastic RIs

Incorrect

Convertible RIs provide a discount (up to 54% off On-Demand) and the capability to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value. These attributes include instance family, instance type, platform, scope, and tenancy.

Option A is not correct. Standard RIs provide the most significant discount (up to 75% off On-Demand) and are best suited for steady-state usage.

Option C is not correct. Scheduled RIs are available to launch within the time windows you reserve. This option allows you to match your capacity reservation to a predictable recurring schedule that only requires a fraction of a day, a week, or a month.

Option D is not correct. Elastic RI is not a valid RI type.

References:

https://aws.amazon.com/ec2/pricing/reserved-instances/

52. Question

What does the AWS Snowball provide?

A. A direct encrypted connection to Amazon S3.

B. Secure transfer of large amounts of data into and out of the AWS Cloud.

C. A backup solution that provides on-premises Cloud storage.

D. An encrypted SSL endpoint for backups in the Cloud.

Incorrect

Snowball is a petabyte-scale data transport solution that uses devices designed to be secure to transfer large amounts of data into and out of the AWS Cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns. Customers today use Snowball to migrate analytics data, genomics data, video libraries, image repositories, backups, and to archive part of data center shutdowns, tape replacement or application migration projects. Transferring data with Snowball is simple, fast, more secure, and can be as little as one-fifth the cost of transferring data via high-speed Internet.

References:

https://aws.amazon.com/snowball/

53. Question

Your logs show that one or more AWS-owned IP addresses are sending packets to multiple ports on your server, and you believe this is an attempt to discover unsecured ports. What should you do?

A. Contact the AWS Security team.

B. Contact the AWS Concierge team.

C. Contact the AWS Abuse team.

D. Contact the AWS Customer Service team.

Incorrect

The AWS Abuse team can assist you when AWS resources are being used to engage in the following types of abusive behavior:

I. Spam: You are receiving unwanted emails from an AWS-owned IP address, or AWS resources are being used to spam websites or forums.

II. Port scanning: Your logs show that one or more AWS-owned IP addresses are sending packets to multiple ports on your server, and you believe this is an attempt to discover unsecured ports.

III. Denial of service attacks (DOS): Your logs show that one or more AWS-owned IP addresses are being used to flood ports on your resources with packets, and you believe this is an attempt to overwhelm or crash your server or software running on your server.

IV. Intrusion attempts: Your logs show that one or more AWS-owned IP addresses are being used to attempt to log in to your resources.

V. Hosting objectionable or copyrighted content: You have evidence that AWS resources are being used to host or distribute illegal content or distribute copyrighted content without the consent of the copyright holder.

VI. Distributing malware: You have evidence that AWS resources are being used to distribute software that was knowingly created to compromise or cause harm to computers or machines on which it is installed.

Option A is not correct. The AWS Security team is responsible for the security of services offered by AWS.

Option B is not correct. The AWS Concierge team can assist you with the issues that are related to your billing and account management.

Option D is not correct. The AWS Customer Service team is at the forefront of this transformational technology assisting a global list of customers that are taking advantage of a growing set of services and features to run their mission-critical applications. The team helps AWS customers understand what Cloud Computing is all about, and whether it can be useful for their business needs.

References:

https://aws.amazon.com/premiumsupport/knowledge-center/report-aws-abuse/

54. Question

What are the characteristics of Amazon S3? (Choose TWO)

A. S3 allows you to store unlimited amounts of data.

B. S3 allows you to store objects of virtually unlimited size.

C. S3 should be used to host a relational database.

D. Objects are directly accessible via a URL.

Incorrect

Each object does have a size limitation in S3, but you can store virtually unlimited amounts of data. Also each object gets a directly accessible URL.

Option B is not correct. S3 limits object size. Individual Amazon S3 objects can range in size from a minimum of 0 bytes to a maximum of 5 terabytes.

Option C is not correct. S3 is object storage not block storage which means it cannot host an OS or database on it.

References:

https://aws.amazon.com/s3/

55. Question

The principle “design for failure and nothing will fail” is very important when designing your AWS Cloud architecture. Which of the following would help adhere to this principle? (Choose two)

A. Availability Zones

B. AWS KMS

C. Elastic File System

D. Elastic Load Balancer

E. Elastic MapReduce

Incorrect

Each AWS Region is a separate geographic area. Each AWS Region has multiple, isolated locations known as Availability Zones. When designing your AWS Cloud architecture, you should make sure that your system will continue to run even if failures happen. You can achieve this by deploying your AWS resources in multiple Availability zones. Availability zones are isolated from each other, therefore if one availability zone goes down, the other AZ’s will still be up and running and hence your application will be more fault tolerant. In addition to availability zones you can build a disaster recovery solution by deploying your AWS resources in other regions. If an entire region goes down you will still have resources in another region able to continue to provide a solution. Finally, you can use the Elastic Load Balancer to regularly perform health checks and distribute traffic only to the healthy instances.

Option B is not correct. AWS KMS refers to the AWS Key Management Service which enables you to easily encrypt your data. AWS KMS provides a highly available key storage, management, and auditing solution for you to encrypt data within your own applications and control the encryption of stored data across AWS services.

Option C is not correct. Amazon Elastic File System (Amazon EFS) is a storage service that provides a scalable, elastic, shared file system for use with AWS Cloud services and on-premises resources.

Option E is not correct. Amazon Elastic MapReduce (EMR) provides a managed Hadoop framework that makes it easy, fast, and cost-effective to process vast amounts of data across dynamically scalable Amazon EC2 instances.

References:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html

https://aws.amazon.com/elasticloadbalancing/

56. Question

You are going to create snapshots from EBS volumes in another geographical location using the console. Where would you create the snapshots?

A. In another Availability Zone

B. In another data center

C. In another Edge location

D. In another Region

Incorrect

Since you are going to create snapshots in another geographical location then you will create them in another AWS Region.

References:

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.RegionsAndAvailabilityZones.html

57. Question

Which of the following can be described as a global content delivery network (CDN) service?

A. Amazon SES

B. Amazon Cloudtrail

C. Amazon CloudFront

D. Amazon S3

Incorrect

”

Amazon CloudFront is a global content delivery network (CDN) service that gives businesses and web application developers an easy and cost effective way to distribute content (such as videos, data, applications, and APIs) with low latency and high data transfer speeds. Like other AWS services, Amazon CloudFront is a self-service, pay-per-use offering, requiring no long term commitments or minimum fees. With CloudFront, your files are delivered to end-users using a global network of edge locations. CloudFront is integrated with other AWS services such as AWS Shield for DDoS mitigation, Amazon S3, Elastic Load Balancing or Amazon EC2 as origins for your applications, and Lambda@Edge to run custom code close to your viewers.

Option A is not correct. Amazon SES refers to the Amazon Simple Email service.

Option B is not correct. The main purpose of Amazon CloudTrail is to track user activity and API usage.

Option D is not correct. Amazon S3 is a storage service.

References:

https://aws.amazon.com/cloudfront/

“

58. Question

Your web application is generating digital policy files for verifying users. Once the files are verified, they may not be required in the future unless there are some compliance issues. If you want to save them in a cost-effective way, what is the best possible solution?

A. S3 Intelligent-Tiering

B. AWS RDS

C. AWS EBS

D. AWS Glacier

Incorrect

Amazon Glacier is an extremely low-cost storage service that provides secure, durable, and flexible storage for long-term data backup and archival. With Amazon Glacier, customers can reliably store their data for as little as $0.004 per gigabyte per month. Amazon Glacier enables customers to offload the administrative burdens of operating and scaling storage to AWS, so that they don’t have to worry about capacity planning, hardware provisioning, data replication, hardware failure detection and repair, or time-consuming hardware migrations.

Option A is not correct. S3 Intelligent-Tiering is is ideal for data with unknown or changing access patterns.

S3 Intelligent-Tiering is the first cloud object storage class that delivers automatic cost savings by moving data between two access tiers — frequent access and infrequent access — when access patterns change.

Option B is not correct. AWS RDS is a database service.

Option C is not correct. AWS EBS is a block level storage that provides storage volumes for use with Amazon EC2 and Amazon RDS.

References:

https://aws.amazon.com/glacier/

59. Question

A company has moved to AWS recently. They have a lot of concerns about their security. Which of the following would help them ensure that the right security settings are put in place? (Choose two)

A. AWS Inspector

B. AWS Kinesis

C. Concierge Support Team.

D. AWS Trusted Advisor

E. AWS CloudWatch

Incorrect

\*\*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 vulnerabilities or deviations from best practices. After performing an assessment, Amazon Inspector produces a detailed list of security findings prioritized by level of severity. These findings can be reviewed directly or as part of a detailed assessment report which is available via the Amazon Inspector console or API. To help get started quickly, Amazon Inspector includes a knowledge base of hundreds of rules mapped to common security best practices and vulnerability definitions. Examples of built-in rules include checking for remote root login being enabled, or vulnerable software versions installed. These rules are regularly updated by AWS security researchers.

\*\*AWS Trusted Advisor gives you proactive recommendations to optimize your AWS environment for cost, performance, security, fault tolerance, and service limits. Like your customized cloud security expert, AWS Trusted Advisor analyzes your AWS environment and provides security recommendations to protect your AWS environment. The service improves the security of your applications by closing gaps, examining permissions, and enabling various AWS security features.

Option B is not correct. Amazon Kinesis is used to collect, process, and analyze video and data streams in real time.

Option C is not correct. The Support Concierge Team will quickly and efficiently assist you with your billing and account inquiries.

Option E is not correct. AWS CloudWatch is used to monitor the utilization of AWS resources and services. You can use CloudWatch to visualize system metrics, take automated actions, troubleshoot performance issues, discover insights to optimize your applications, and ensure they are running smoothly.

References:

https://aws.amazon.com/premiumsupport/trustedadvisor/

https://aws.amazon.com/inspector/

60. Question

One of the most important AWS best practices to follow is the cloud architecture principle of elasticity. How does following this principle improve your architecture’s design?

A. By reducing interdependencies between application components wherever possible

B. By automatically scaling your on-premises resources based on changes in demand

C. By automatically provisioning the required AWS resources based on changes in demand.

D. None of the above.

Incorrect

The concept of Elasticity involves the ability of a service to automatically scale its resources up or down based on changes in demand. For example, Amazon EC2 Autoscaling can help automate the process of adding or removing Amazon EC2 instances as demand increases or decreases.

Option A is not correct. Reducing interdependencies between application components is much more related to the concept of “Loose Coupling”. Loose coupling is an approach that involves interconnecting the components in a system or network so that those components depend on each other to the least extent practical. Engineers should architect their system or application such that failure in one component does not negatively affect other components. Loosely coupled components make the system resilient and allow it to recover gracefully from failure.

Option B is not correct. It is not possible to scale on-premises resources automatically. When deploying on-premises, you have to guess on your infrastructure capacity needs.

References:

https://aws.amazon.com/ec2/autoscaling/

https://d1.awsstatic.com/whitepapers/AWS\_Cloud\_Best\_Practices.pdf

61. Question

Your company has a microservices data store that requires access to a NoSQL database. Your IT department has no desire to manage the NoSQL servers. Which Amazon service provides a fully-managed and highly available NoSQL service?

A. SimpleDB

B. Amazon RDS

C. ElasticMap Reduce

D. DynamoDB

Incorrect

Amazon DynamoDB is a fast and flexible NoSQL database service for all applications that need consistent, single-digit millisecond latency at any scale. It is a fully managed cloud database and supports both document and key-value store models. Its flexible data model, reliable performance, and automatic scaling of throughput capacity, makes it a great fit for mobile, web, gaming, ad tech, IoT, and many other applications.

Option A is not correct. SimpleDB doesn’t stand out against other database platforms by performance, computing capacity or storage facilities. Nevertheless, it’s beneficial to use it as an auxiliary service for other AWS products or as a simple database for non-complex needs. SimpleDB is not suitable for the Microservices Data Store application.

Option B is not correct. Amazon RDS doesn’t support NoSQL databases.

Option C is not correct. Amazon EMR provides a managed Hadoop framework.

References:

https://aws.amazon.com/dynamodb/

62. Question

What does Amazon CloudFront use to distribute content to global users with low latency?

A. AWS Availability Zones

B. AWS Data Centers

C. AWS Regions

D. AWS Edge Locations

Incorrect

To deliver content to end users with lower latency, Amazon CloudFront uses a global network of 169 Points of Presence (158 Edge Locations and 11 Regional Edge Caches) in 68 cities across 29 countries.

References:

https://aws.amazon.com/cloudfront/

63. Question

What is the main benefit of decoupling an application?

A. Make updates quickly and easily.

B. Optimize costs

C. Increase the integrity of the application's components

D. Reduce inter-dependencies so failures do not impact other components of the application.

Incorrect

As application complexity increases, a desirable attribute of an IT system is that it can be broken into smaller, loosely coupled components. This means that IT systems should be designed in a way that reduces interdependencies—a change or a failure in one component should not cascade to other components. On the other hand if the components of an application are tightly coupled and one component fails, the entire application will also fail. Therefore when designing your application, you should always decouple its components.

References:

https://d1.awsstatic.com/whitepapers/AWS\_Cloud\_Best\_Practices.pdf

64. Question

Which of the following allows you to carve out a portion of the AWS Cloud?

A. AWS Subnets

B. AWS Regions

C. AWS VPC

D. AWS Availability Zones

Incorrect

Amazon Virtual Private Cloud (Amazon VPC) enables you to launch AWS resources into a virtual network that you’ve defined. This virtual network closely resembles a traditional network that you’d operate in your own data center, with the benefits of using the scalable infrastructure of AWS.

Option A is not correct. A subnet is a range of IP addresses in your VPC.

Option B is not correct. An AWS Region is a physical location in the world. Each Amazon Region is designed to be completely isolated from the other Amazon Regions. This achieves the greatest possible fault tolerance and stability.

Option D is not correct. Each region has multiple, isolated locations known as Availability Zones. Availability Zones consist of one or more discrete data centers, each with redundant power, networking, and connectivity, housed in separate facilities. These Availability Zones offer you the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible to operate out of a single data center.

References:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-vpc.html

65. Question

You have just set up a brand-new AWS account. You want to keep monthly billing under $100, but you are worried about going over that limit. What can you use in order to be notified when the monthly bill approaches $100?

A. A CloudTrail billing alarm that triggers an SNS notification to your email address.

B. A SNS billing alarm that triggers a CloudWatch notification to your email address.

C. A CloudWatch billing alarm that triggers an SNS notification to your email address.

D. A CloudWatch billing alarm that triggers a CloudTrail notification to your email address.

Incorrect

In CloudWatch, you can set up a billing alarm that triggers if your costs exceed a threshold that you set. This CloudWatch alarm can also be configured to trigger an SNS notification to your email address.

Option A is not correct. AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. You cannot use it to setup billing alarms.

Option B is not correct. SNS is the service that is used to send email notifications.

Option D is not correct. CloudTrail cannot be used to send email notifications.

References:

https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/monitor\_estimated\_charges\_with\_cloudwatch.html

66. Question

Derek is running a web application and is noticing that he is paying for way more server capacity than required. What AWS feature should Derek set up and configure to ensure that his application is automatically adding/removing server capacity to closely match the required demand?

A. AWS EC2

B. AWS Autoscaling

C. AWS ELB

D. AWS Inspector

Incorrect

Auto scaling is the feature that automates the process of adding/removing the server capacity (based on demand). Autoscaling allows you to reduce your costs by automatically turning off resources that aren’t in use. On the other hand Autoscaling ensures that your application runs effectively by provisioning more server capacity if required.

Option A is not correct. AWS EC2 is the service that provides the compute capacity that your applications need.

Option C is not correct. AWS ELB is the service that distributes the incoming application traffic to multiple targets that you define.

Option D is not correct. AWS Inspector is an automated security assessment service to help improve the security and compliance of applications deployed on AWS

References:

https://aws.amazon.com/autoscaling/

67. Question

You work as an on-premises MySQL DBA. The work of database configuration, backups, patching, and DR can be time-consuming and repetitive. Your company has decided to migrate to the AWS Cloud. Which of the following can help save time on the regular database tasks so you can focus on giving users the fast performance and high availability that they need?

A. Amazon Redshift

B. Amazon RDS

C. Amazon DynamoDB

D. Amazon CloudWatch

Incorrect

Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud. It provides cost-efficient, resizable capacity while automating time-consuming administration tasks such as hardware provisioning, database setup, patching and backups. It frees you to focus on your applications so you can give them the fast performance, high availability, security and compatibility they need.

Option A is not correct. Amazon Redshift is a fast, fully managed data warehouse that makes it simple and cost-effective to analyze all your data using standard SQL and your existing Business Intelligence (BI) tools.

Option C is not correct. Amazon DynamoDB is a NoSQL database service.

Option D is not correct. Amazon CloudWatch is a monitoring service that gives you complete visibility of your cloud resources and applications

References:

https://aws.amazon.com/rds/

68. Question

A company is planning to introduce a new product to their customers. They are expecting high traffic to their web application. As part of the Enterprise support plan, which of the following could provide them with architectural and scaling guidance?

A. Infrastructure Event Management

B. AWS Management Support

C. AWS Support API

D. AWS Support Concierge Service

Incorrect

AWS Infrastructure Event Management is a short-term engagement with AWS Support, included in the Enterprise-level Support product offering, and available for additional purchase for Business-level Support subscribers. AWS Infrastructure Event Management partners with your technical and project resources to gain a deep understanding of your use case and provide architectural and scaling guidance for an event. Common use-case examples for AWS Event Management include advertising launches, new product launches, and infrastructure migrations to AWS.

Option B is not correct. AWS Management Support is a bogus option.

Option C is not correct. The AWS Support API provides access to some of the features of the AWS Support Center via an API.

Option D is not correct. AWS Support Concierge Service can help you with your account and billing inquiries.

References:

https://aws.amazon.com/premiumsupport/features/

69. Question

What are the benefits provided by the AWS Personal Health Dashboard? (Choose two)

A. Personalized View of Service Health

B. Detailed Troubleshooting Guidance

C. Check your applications for vulnerabilities

D. Cost Optimization

E. Published information about the current status and availability of AWS services

Incorrect

AWS Personal Health Dashboard provides alerts and remediation guidance when AWS is experiencing events that may impact you. While the Service Health Dashboard displays the general status of AWS services, Personal Health Dashboard gives you a personalized view into the performance and availability of the AWS services underlying your AWS resources.

The benefits of the AWS personal health dashboard include:

\*\*A personalized View of Service Health: Personal Health Dashboard gives you a personalized view of the status of the AWS services that power your applications, enabling you to quickly see when AWS is experiencing issues that may impact you. For example, in the event of a lost EBS volume associated with one of your EC2 instances, you would gain quick visibility into the status of the specific service you are using, helping save precious time troubleshooting to determine root cause.

\*\*Proactive Notifications: The dashboard also provides forward looking notifications, and you can set up alerts across multiple channels, including email and mobile notifications, so you receive timely and relevant information to help plan for scheduled changes that may affect you. In the event of AWS hardware maintenance activities that may impact one of your EC2 instances, for example, you would receive an alert with information to help you plan for, and proactively address any issues associated with the upcoming change.

\*\*Detailed Troubleshooting Guidance: When you get an alert, it includes remediation details and specific guidance to enable you to take immediate action to address AWS events impacting your resources. For example, in the event of an AWS hardware failure impacting one of your EBS volumes, your alert would include a list of your affected resources, a recommendation to restore your volume, and links to the steps to help you restore it from a snapshot. This targeted and actionable information reduces the time needed to resolve issues.

Option C is not correct. You can check your applications for vulnerabilities using other services such as Amazon Inspector.

Option D is not correct. You can get help about cost optimization using other services such as the AWS Trusted Advisor.

Option E is not correct. You can get information about the current status and availability of the AWS services any time using the AWS Service Health Dashboard that is available at this link: https://status.aws.amazon.com/

References:

https://aws.amazon.com/premiumsupport/phd/

70. Question

You have 2 accounts in AWS. One for Dev and the other for QA. All are part of consolidated billing. The master account has purchased 4 reserved instances. The Dev department is currently using 2 reserved instances. The QA team is planning on using 3 instances, which are of the same instance type. What is the pricing tier of the instances that can be used by the QA Team?

A. No Reserved and 3 on-demand

B. One Reserved and 2 on-demand

C. Two Reserved and 1 on-demand

D. Three Reserved and one on-demand

Incorrect

For billing purposes, the consolidated billing feature of AWS Organizations treats all the accounts in the organization as one account. This means that all accounts in the organization can receive the hourly cost benefit of Reserved Instances that are purchased by any other account. Since 2 reserved instances are already used by the Dev team , then there are another 2 instances that can be used by the QA team. The rest of the instances can be on-demand instances. Therefore the correct answer is 2 reserved and 1 on-demand.

References:

https://docs.aws.amazon.com/aws-technical-content/latest/cost-optimization-reservation-models/consolidated-billing.html

71. Question

AWS allows users to manage their resources using a web based user interface. What is the name of this interface?

A. AWS CLI

B. AWS SDK

C. AWS Management Console

D. AWS API

Incorrect

The AWS Management Console allows you to access and manage Amazon Web Services through a simple and intuitive web-based user interface. You can also use the AWS Console mobile app to quickly view resources on the go.

Option A is not correct. The AWS Command Line Interface (CLI) is a unified tool to manage your AWS services. With just one tool to download and configure, you can control multiple AWS services from the command line and automate them through scripts.

Option B is not correct. The AWS SDK (Software Development Kit) allows you to interact with AWS services using your preferred programming language.

Option D is not correct. AWS API refers to the AWS application programming interface.

References:

https://aws.amazon.com/console/

72. Question

According to the AWS Acceptable Use Policy, penetration testing of EC2 instances:

A. Will be performed by AWS upon customer request.

B. May be performed by the customer on their own instances with prior authorization from AWS.

C. Are expressly prohibited under all circumstances.

D. May be performed by the customer on their own instances without prior authorization from AWS.

Incorrect

AWS customers are welcome to carry out security assessments and penetration tests against their AWS infrastructure without prior approval for 8 services:

1- Amazon EC2 instances, NAT Gateways, and Elastic Load Balancers.

2- Amazon RDS.

3- Amazon CloudFront.

4- Amazon Aurora.

5- Amazon API Gateways.

6- AWS Lambda and Lambda Edge functions.

7- Amazon Lightsail resources.

8- Amazon Elastic Beanstalk environments.

References:

https://aws.amazon.com/security/penetration-testing/

73. Question

What best describes the “Principle of Least Privilege”?

A. All users should have the same baseline permissions granted to them to use basic AWS services.

B. Users should always have a little more permissions granted to them, just in case they end up needed them in the future.

C. Users should submit all access request in written so that there is a paper trail of who needs access to different AWS resources.

D. Users should be granted permissions to access only the resources they need to do their assigned job.

Incorrect

The principle of least privilege is one of the most important security practices and it means granting users the required permissions to perform the tasks entrusted to them and nothing more. The security administrator determines what tasks users need to perform and then attach the policies that allow them to perform only those tasks. You should start with a minimum set of permissions and grant additional permissions when necessary. Doing so is more secure than starting with permissions that are too lenient and then trying to tighten them later. For example, a user with one primary job of creating backups does not need to install software, therefore you should grant that user only the required permissions to take backups and run backup-related applications.

References:

https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html#grant-least-privilege

74. Question

Which of the following should an IAM user provide to interact with AWS services using the AWS CLI?

A. User name and password

B. Secret token

C. Access keys

D. User ID

Incorrect

Access keys consist of an access key ID and secret access key, which are used to sign programmatic requests to AWS using the CLI or the SDK.

References:

https://docs.aws.amazon.com/IAM/latest/UserGuide/id\_credentials\_access-keys.html

75. Question

An organization has set up consolidated billing with 3 different AWS accounts. Which of the following advantages will the organization receive in terms of the AWS pricing?

A. The free usage tier for all the 3 accounts will be 3 years and not a single year

B. All AWS accounts will be charged for S3 storage by combining the total storage of each account

C. The EC2 instances of each account will receive a total of 750\*3 micro instance hours free

D. The consolidated billing does not bring any cost advantage for the organization

Incorrect

AWS consolidated billing enables an organization to consolidate payments for multiple Amazon Web Services (AWS) accounts within a single organization by making a single paying account. For billing purposes, AWS treats all the accounts on the consolidated bill as one account. Some services, such as Amazon EC2 and Amazon S3 have volume pricing tiers across certain usage dimensions that give the user lower prices when they use the service more. For example if you use 50 TB in each account you would normally be charged $23 \*50\*3 (because they are 3 different accounts), But with consolidated billing you would be charged $23\*50+$22\*50\*2 (because they are treated as one account) which means that you would save $100.

References:

https://aws.amazon.com/s3/pricing/

https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/consolidated-billing.html

76. Question

Which of the following S3 storage classes is ideal for data with unpredictable access patterns?

A. Amazon S3 Intelligent-Tiering.

B. Amazon S3 On-demand-Tiering.

C. Amazon S3 Standard.

D. Amazon S3 Standard-Infrequent Access.

E. Amazon S3 Glacier.

Incorrect

The S3 Intelligent-Tiering storage class is designed to optimize costs by automatically moving data to the most cost-effective access tier, without performance impact or operational overhead. It works by storing objects in two access tiers: one tier that is optimized for frequent access and another lower-cost tier that is optimized for infrequent access. For a small monthly monitoring and automation fee per object, Amazon S3 monitors access patterns of the objects in S3 Intelligent-Tiering, and moves the ones that have not been accessed for 30 consecutive days to the infrequent access tier. If an object in the infrequent access tier is accessed, it is automatically moved back to the frequent access tier. There are no retrieval fees when using the S3 Intelligent-Tiering storage class, and no additional tiering fees when objects are moved between access tiers. It is the ideal storage class for long-lived data with access patterns that are unknown or unpredictable.

Option B is not correct. Amazon S3 On-demand is not a valid storage class option.

Option C is not correct. S3 Standard offers high durability, availability, and performance object storage for frequently accessed data.

Option D is not correct. Amazon S3 Standard-Infrequent Access (S3 Standard-IA) is for data that is accessed less frequently, but requires rapid access when needed.

Option E is not correct. S3 Glacier is a low-cost storage class for data archiving.

References:

https://aws.amazon.com/s3/storage-classes/

77. Question

You noticed that several critical Amazon Elastic Compute Cloud (Amazon EC2) instances have been terminated. Which of the following AWS services would help you determine who took this action?

A. AWS Trusted Advisor

B. Amazon EC2 Instance Usage report

C. Amazon CloudWatch

D. AWS CloudTrail

Incorrect

AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. With CloudTrail, you can log, continuously monitor, and retain account activity related to actions across your AWS infrastructure. CloudTrail provides event history of your AWS account activity, including actions taken through the AWS Management Console, AWS SDKs, command line tools, and other AWS services. This event history simplifies security analysis, resource change tracking, and troubleshooting.

Option A is not correct. AWS Trusted Advisor is an online tool that provides real time guidance to help provision resources following AWS best practices.

Option B is not correct. The report provides a preconfigured view, based on fixed filter settings, that displays information about your usage and cost trends.

Option C is not correct. Amazon CloudWatch is used to monitor AWS resources. For example you can use it to monitor the performance of your EBS volumes.

References:

https://aws.amazon.com/cloudtrail/

78. Question

A company has decided to migrate to the AWS Cloud. AWS offers a wide range of services and instance types. They want to reduce costs as much as possible. Which of the following is the main factor to consider when choosing the instance type of services like Amazon RDS and Amazon Redshift?

A. Your team experience with these services.

B. Workload utilization of CPU & RAM.

C. The type of your current on-premise database.

D. Sources of traffic.

Incorrect

AWS offers a broad range of resource types and configurations to suit a plethora of use cases. For example, services like Amazon EC2, Amazon RDS, Amazon Redshift, and Amazon Elasticsearch Service(Amazon ES) give you a lot of choice of instance types. In some cases, you should select the cheapest type that suits your workload’s requirements. In other cases, using fewer instances of a larger instance type might result in lower total cost or better performance. You should benchmark and select the right instance type depending on how your workload utilizes CPU, RAM, network, storage size, and I/O.

Option A is not correct. The services mentioned and most of the AWS services are easy to set up, deploy, and manage. These services automate most of the common administrative tasks to manage, monitor, and scale your AWS resources.

Option C is not correct. You can migrate your current on-premise database data to and from most widely used commercial and open-source databases using the AWS database migration service.

Option D is not correct. In Web analytics, traffic sources is a report that provides an overview of the different kinds of sources that send traffic to your Web site, for example direct traffic (clicks from bookmarks or visitors who know your URL) , Web search engines, referring URLs(other Web sites directing traffic to you), … etc. Sources of traffic are an important factor when analyzing your marketing procedures NOT when choosing an instance type.

References:

https://d1.awsstatic.com/whitepapers/AWS\_Cloud\_Best\_Practices.pdf page 33

79. Question

Select TWO examples of the AWS shared controls.

A. Datacenter operations.

B. Patch Management.

C. Configuration Management.

D. VPC Management.

E. IAM Management.

Incorrect

Shared Controls are controls which apply to both the infrastructure layer and customer layers, but in completely separate contexts or perspectives. In a shared control, AWS provides the requirements for the infrastructure and the customer must provide their own control implementation within their use of AWS services.

Examples include:

\*\* Patch Management – AWS is responsible for patching and fixing flaws within the infrastructure, but customers are responsible for patching their guest OS and applications.

\*\* Configuration Management – AWS maintains the configuration of its infrastructure devices, but a customer is responsible for configuring their own guest operating systems, databases, and applications.

\*\* Awareness & Training – AWS trains AWS employees, but a customer must train their own employees.

Option A is not correct. Data Center operations are an AWS responsibility.

Options D&E are not correct. VPC and IAM management are customer responsibilities.

References:

https://aws.amazon.com/compliance/shared-responsibility-model/

80. Question

What should you do in order to keep the data on EBS volumes safe?

A. Store a backup daily in an external drive.

B. Create EBS snapshots

C. Attach the volumes to EC2 Instances

D. Create copies of EBS Volumes

Incorrect

Creating snapshots of EBS Volumes can help ensure that you have a backup of your EBS volumes just in case any issues arise.

Option A is not correct. To make a backup of your EBS volumes you should use the Snapshot feature. Snapshots can provide a Copy-on-Write Consistency (reflect the exact image of the volume at the point-in-time of the snapshot). Also, EBS Snapshots are incremental backups, which means that only the blocks on the device that have changed after your last snapshot are saved. This minimizes the time required to create the snapshot and saves on storage costs by not duplicating data.

Option C is not correct. Attaching the volumes to EC2 Instances doesn’t protect the data. You can protect the data using the snapshots you take regularly and using encryption.

Option D is not correct. It is “Snapshots” NOT “Copies”.

References:

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebs-creating-snapshot.html