Answer Sheet

Q1) Which of the following will impact the price paid for an EC2 instance? (Choose two)

- Number of private IPs
- ✅ Storage capacity

Explanation:-EC2 instance pricing varies depending on many variables:
- The buying option (On-demand, Reserved, Spot, Dedicated)
- Selected AMI
- Selected instance type
- Region
- Data Transfer in/out
- Storage capacity.

- The Availability Zone where the instance is provisioned
- ✅ Instance type

Explanation:-EC2 instance pricing varies depending on many variables:
- The buying option (On-demand, Reserved, Spot, Dedicated)
- Selected AMI
- Selected instance type
- Region
- Data Transfer in/out
- Storage capacity.

- Number of buckets

Q2) How are AWS customers billed for Linux-based Amazon EC2 usage?

- EC2 instances will be billed on one minute increments, with a minimum of one hour
- EC2 instances will be billed on one day increments, with a minimum of one month
- ✅ EC2 instances will be billed on one second increments, with a minimum of one minute

Explanation:-Pricing is per instance-hour consumed for each instance, from the time an instance is launched until it is terminated or stopped. Each partial instance-hour consumed will be billed per-second (minimum of 1 minute) for Linux or Ubuntu Instances and as a full hour for all other instance types.
Examples for Linux\Ubuntu based instances:
1- If you run a Linux instance for 4 seconds or 20 seconds or 59 seconds, you will be charged for one minute. (this is what we mean by minimum of 1 minute)
2- If you run a Linux instance for 1 minute and 3 seconds, you will be charged for 1 minute and 3 seconds.
3- If you run a Linux instance for 3 hours, 25 minutes and 7 seconds, you will be charged for 3 hours, 25 minutes and 7 seconds.
Examples for non-Linux\Ubuntu instances:
1- If you run an instance for 4 seconds or 20 seconds or 59 seconds, you will be charged for one hour.
2- If you run an instance for 1 minute and 3 seconds, you will be charged for one hour.
3- If you run an instance for 3 hours, 25 minutes and 7 seconds, you will be charged for 4 hours.
Per-second billing is available for instances launched in:
- On-Demand, Reserved and Spot forms
- All regions and Availability Zones
- Amazon Linux and Ubuntu

- EC2 instances will be billed on one hour increments, with a minimum of one day

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Q3) Which of the following is NOT a characteristic of Amazon Elastic Compute Cloud (Amazon EC2)?

- Amazon EC2 eliminates the need to invest in hardware upfront
- Amazon EC2 offers scalable computing
- ✅ Amazon EC2 is considered a Serverless Web Service

Explanation:-"Amazon EC2 is considered a Serverless Web Service" is not a characteristic of Amazon EC2 and thus is the correct choice.
Serverless allows customers to shift more operational responsibilities to AWS. Serverless allows customers to build and run applications and services without thinking about servers. Serverless eliminates infrastructure management tasks such as server or cluster provisioning, patching, operating system maintenance, and capacity provisioning.
Amazon EC2 is not a serverless service. EC2 instances are virtual servers in the cloud. Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) cloud. Using Amazon EC2 eliminates your need to invest in hardware upfront, so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.

- Amazon EC2 can launch as many or as few virtual servers as needed

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Q4)

Both AWS and traditional IT distributors provide a wide range of virtual servers to meet their customers' requirements.

What is the name of these virtual servers in AWS?

- Amazon EBS Snapshots
- ✅ Amazon EC2 Instances

Explanation:-Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Amazon EC2's simple web service interface allows you to obtain and configure capacity with minimal friction. It provides you with complete control of your computing resources and lets you run on Amazon's proven computing environment. Amazon EC2 reduces the time required to obtain and boot new server instances to minutes, allowing you to quickly scale capacity, both up and down, as your computing requirements change. Amazon EC2 changes the economics of computing by allowing you to pay only for capacity that you actually use. Amazon EC2 provides developers the tools to build failure resilient applications and isolate them from common failure

scenarios.
- AWS Managed Servers
- Amazon VPC

Q5) What is the AWS Compute service that executes code only when triggered by events?

- Amazon CloudWatch
- ✅ AWS Lambda

Explanation:-AWS Lambda is a serverless compute service that runs code in response to events. For example, you can create a Lambda function that creates thumbnail images when users upload images to Amazon S3. The Lambda event, in this case, will be the user's uploads. Once a user uploads an image to Amazon S3, AWS Lambda will automatically run the application and creates a thumbnail for that image.

- AWS Transit Gateway
- Amazon EC2

Q6) What is AWS Lambda?

- An AWS Service that deploys containerized applications to Amazon EC2 instances
- ✅ An AWS Service that allows customers to run code without provisioning or managing servers

Explanation:-AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume - there is no charge when your code is not running. 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.

- An AWS Service that provides object storage
- A fully managed non-relational database service

Q7) Which of the following is the most appropriate means for developers to store Docker container images in the AWS Cloud?

- Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon Elastic Container Service (Amazon ECS)
- ✅ Amazon Elastic Container Registry (Amazon ECR)

Explanation:-Amazon Elastic Container Registry (Amazon ECR) is a fully managed Docker container registry that makes it easy for developers to store, manage, and deploy Docker container images. Amazon ECR is integrated with Amazon Elastic Container Service (Amazon ECS), simplifying your development to production workflow. Amazon ECR eliminates the need to operate your own container repositories or worry about scaling the underlying infrastructure. Amazon ECR hosts your images in a highly available and scalable architecture, allowing you to reliably deploy containers for your applications.

- Amazon Elastic MapReduce (Amazon EMR)

Q8) An organization needs to analyze and process a large number of data sets. Which AWS service should they use?

- Amazon SQS
- Amazon MQ
- ✅ Amazon EMR

Explanation:-Amazon EMR helps you analyze and process vast amounts of data by distributing the computational work across a cluster of virtual servers running in the AWS Cloud. The cluster is managed using an open-source framework called Hadoop. Amazon EMR lets you focus on crunching or analyzing your data without having to worry about time-consuming setup, management, and tuning of Hadoop clusters or the compute capacity they rely on.

- Amazon SNS

Q9) Which of the following are use cases for Amazon EMR? (Choose two)

- Enables you to easily run and manage Docker containers
- ✅ Enables you to easily run and scale Apache Spark, Hadoop,and other Big Data frameworks

Explanation:-Amazon EMR is a web service that enables businesses, researchers, data analysts, and developers to easily and cost-effectively process vast amounts of data. It utilizes a hosted Hadoop framework running on the web-scale infrastructure of Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Simple Storage Service (Amazon S3).

Amazon EMR is ideal for problems that necessitate the fast and efficient processing of large amounts of data. EMR securely and reliably handles a broad set of big data use cases, including log analysis, web indexing, data transformations (ETL), machine learning, financial analysis, scientific simulation, and bioinformatics.

Amazon EMR lets you focus on crunching or analyzing your data without having to worry about time-consuming set-up, management or tuning of Hadoop clusters or the compute capacity upon which they sit.

- ✅ Enables you to analyze large amounts of datasets in a timely manner

Explanation:-Amazon EMR is a web service that enables businesses, researchers, data analysts, and developers to easily and cost-effectively process vast amounts of data. It utilizes a hosted Hadoop framework running on the web-scale infrastructure of Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Simple Storage Service (Amazon S3).

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Amazon EMR lets you focus on crunching or analyzing your data without having to worry about time-consuming set-up, management or tuning of Hadoop clusters or the compute capacity upon which they sit.

- Enables you to move Exabyte-scale data from on-premises resources to AWS
- Enables you to backup large amounts of data at very low costs

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Q10) A company is seeking to deploy an existing .NET application onto AWS as quickly as possible. Which AWS Service should the customer use to achieve this goal?

- AWS Trusted Advisor
- Amazon SNS

✅ AWS Elastic Beanstalk

Explanation:-AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS. Developers simply upload their application, and Elastic Beanstalk automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

⚪ AWS Systems Manager

Q11) Which of the following AWS offerings are serverless services? (Choose TWO)

⚪ Amazon EC2

⚪ Amazon EMR

✅ AWS Lambda

Explanation:-AWS Lambda is a compute service that lets customers run code without provisioning or managing servers. AWS Lambda executes code only when needed and scales automatically, from a few requests per day to thousands per second.
With DynamoDB, there are no servers to provision, patch, or manage and no software to install, maintain, or operate. DynamoDB automatically scales tables up and down to adjust for capacity and maintain performance.

⚪ Amazon RDS

✅ Amazon DynamoDB

Explanation:-AWS Lambda is a compute service that lets customers run code without provisioning or managing servers. AWS Lambda executes code only when needed and scales automatically, from a few requests per day to thousands per second.
With DynamoDB, there are no servers to provision, patch, or manage and no software to install, maintain, or operate. DynamoDB automatically scales tables up and down to adjust for capacity and maintain performance.

Q12)

A developer wants to quickly deploy and manage his application in the AWS Cloud, but he doesn't have any experience with cloud computing.

Which of the following AWS services would help him achieve his goal?

⚪ AWS X-Ray

✅ AWS Elastic Beanstalk

Explanation:-AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS. You can simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, auto-scaling to application health monitoring. At the same time, you retain full control over the AWS resources powering your application and can access the underlying resources at any time.

⚪ AWS Batch

⚪ AWS Fargate

Q13) You are using several on-demand EC2 Instances to run your development environment. What is the best way to reduce your charges when these instances are not in use?

⚪ Deleting all EBS volumes attached to the instances

⚪ You cannot minimize charges for this type of instances

⚪ Terminating the instances

✅ Stopping the instances

Explanation:-AWS doesn't charge usage for a stopped instance, or data transfer fees. For a stopped instance AWS will only charge you for the storage for any Amazon EBS volumes.

Q14) Which of the following compute resources are serverless? (Choose two)

⚪ Amazon EC2

✅ AWS Lambda

Explanation:-AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume, and there is no charge when your code is not running. 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.

⚪ Amazon ECS

⚪ Amazon EMR

✅ AWS Fargate

Explanation:-AWS Fargate is a compute engine for deploying and managing containers, which frees you from having to manage any of the underlying infrastructure. With AWS Fargate, you no longer have to provision, configure, and scale clusters of virtual machines to run containers. AWS Fargate seamlessly integrates with Amazon ECS, so you can deploy and manage containers without having to provision or manage servers.

Q15) Select the services that are server-based: (Choose two)

⚪ AWS Fargate

⚪ AWS Lambda

✅ Amazon EMR

Explanation:-Server-based services include: Amazon EC2, Amazon RDS, Amazon Redshift and Amazon EMR.
Serverless services include: AWS Lambda, AWS Fargate, Amazon SNS, Amazon SQS and Amazon DynamoDB.

✅ Amazon RDS

Explanation:-Server-based services include: Amazon EC2, Amazon RDS, Amazon Redshift and Amazon EMR.
Serverless services include: AWS Lambda, AWS Fargate, Amazon SNS, Amazon SQS and Amazon DynamoDB.

⚪ Amazon DynamoDB

Q16) Amazon EBS volumes can be attached to which of the following compute resources?

Lambda@Edge
Amazon EC2 instances
Explanation:-An Amazon EBS volume is a durable, block-level storage device that can be attached to a single EC2 instance. You can use EBS volumes as primary storage for data that requires frequent updates, such as the system drive for an instance or storage for database software.
AWS Lambda
AWS Fargate

Q17) What is the easiest way to launch and manage a virtual private server in AWS?

Using AWS Virtual Private Network
Using Amazon Virtual Private Cloud
Using Amazon Route 53
Using Amazon Lightsail
Explanation:-Amazon Lightsail is designed to be the easiest way to launch and manage a virtual private server with AWS. Lightsail plans include everything you need to jumpstart your project –a virtual machine, SSD-based storage, data transfer, DNS management, and a static IPaddress–for a low, predictable price.

Q18) Which of the following services allows you to install and run your custom relational database software?

Amazon Cognito
Amazon EC2
Explanation:-If you need a full control over your database, AWS provides a wide range of Amazon EC2 instances—with different hardware characteristics—on which you can install and run your custom relational database software.
Please note that if you use EC2 instead of RDS to run your relational database, you will be responsible for managing everything related to this database.
Amazon Inspector
Amazon RDS

Q19) You have just finished writing your application code. Which service can be used to automate the deployment and scaling of your application?

AWS CodeCommit
AWS Elastic Beanstalk
Explanation:-AWS Elastic Beanstalk is considered a Platform as a Service (PaaS). it is an easy-to-use service for deploying, scaling and updating web applications and services developed with Java, .NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS. You can simply upload your code and Elastic Beanstalk automatically handles the deployment, from capacity provisioning, load balancing, auto-scaling to application health monitoring. At the same time, you retain full control over the AWS resources powering your application and can access the underlying resources at any time.
Amazon Simple Storage Service
Amazon Elastic File System

Q20) Which of the following is NOT a benefit of using AWS Lambda?

There is no charge when your AWS Lambda code is not running
AWS Lambda runs code without provisioning or managing servers
AWS Lambda provides resizable compute capacity in the cloud
Explanation:-The option"AWS Lambda provides resizable compute capacity in the cloud" is not a benefit of AWS Lambda, and thus is the correct choice. AWS Lambda automatically runs your code without requiring you to adjust capacity or manage servers. AWS Lambda automatically scales your application by running code in response to each trigger. Your code runs in parallel and processes each trigger individually, scaling precisely with the size of the workload.
AWS Lambda can be called directly from any mobile app

Q21)

Engineers are wasting a lot of time and effort when installing and managing batch computing software in traditional data centers.

Which of the following AWS services allows them to easily run hundreds of thousands of batch computing jobs?

Lambda@Edge
Amazon EC2
AWS Batch
Explanation:-AWS Batch enables developers, scientists, and engineers to easily and efficiently run hundreds of thousands of batch computing jobs on AWS. AWS Batch dynamically provisions the optimal quantity and type of compute resources (e.g., CPU or memory-optimized instances) based on the volume and specific resource requirements of the batch jobs submitted. With AWS Batch, there is no need to install and manage batch computing software or server clusters that you use to run your jobs, allowing you to focus on analyzing results and solving problems. AWS Batch plans, schedules, and executes your batch computing workloads across the full range of AWS compute services and features, such as Amazon EC2 and Spot Instances.
AWS Fargate

Q22) What factors determine how you are charged when using AWS Lambda? (Choose two)

Storage consumed
Compute time consumed
Explanation:-With AWS Lambda, you pay only for what you use. You are charged based on the number of requests for your functions and the time it takes for your code to execute.
Number of requests to your functions

Explanation:-With AWS Lambda, you pay only for what you use. You are charged based on the number of requests for your functions and the time it takes for your code to execute.

- Number of volumes
- Compute capacity consumed

Q23) You manage a blog on AWS that has different stages such as development, testing, and production. How can you create a custom console in each stage to view and manage your resources easily?

- AWS Management Console
- AWS Placement Groups
- AWS Tag Editor
- ✅ AWS Resource Groups

Explanation:-If you work with multiple resources in multiple stages, you might find it useful to manage all the resources in each stage as a group rather than move from one AWS service to another for each task. Resource Groups help you do just that. By default, the AWS Management Console is organized by AWS service. But with the Resource Groups tool, you can create a custom console that organizes and consolidates information based on your project and the resources that you use.

Q24) What does the Amazon CloudFront service provide? (Choose two)

- Tracks user activity and API usage
- Enables faster disaster recovery
- Stores archived data at very low costs
- ✅ Caches common responses

Explanation:-Amazon CloudFront employs a global network of edge locations and regional edge caches that cache copies of your content close to your end-users. Amazon CloudFront ensures that end-user requests are serviced by the closest edge location. As a result, requests travel a short distance, improving performance for your end-users. To service requests for files not cached at the edge locations and the regional edge caches, Amazon CloudFront maintains persistent connections with your origin servers so that those files can be fetched from the origin servers as quickly as possible.

- ✅ Delivers content to end users with low latency

Explanation:-Amazon CloudFront employs a global network of edge locations and regional edge caches that cache copies of your content close to your end-users. Amazon CloudFront ensures that end-user requests are serviced by the closest edge location. As a result, requests travel a short distance, improving performance for your end-users. To service requests for files not cached at the edge locations and the regional edge caches, Amazon CloudFront maintains persistent connections with your origin servers so that those files can be fetched from the origin servers as quickly as possible.

Q25)

A company is running a large web application that needs to be available all the time. They want to ensure that all servers are working perfectly. One of the aspects to consider monitoring is CPU usage. The application tends to slow down when CPU usage is greater than 60%.

How can they track down when CPU usage goes above 60% for any of the EC2 Instances?

- Use CloudFront to monitor the CPU usage
- Use SNS to monitor the utilization of the server
- ✅ Use CloudWatch Alarms

Explanation:-Amazon CloudWatch monitors your Amazon Web Services (AWS) resources and the applications you run on AWS in real time. You can use CloudWatch to collect and track metrics, which are variables you can measure for your resources and applications. CloudWatch alarms send notifications or automatically make changes to the resources you are monitoring based on rules that you define. For example, you can monitor the CPU usage and disk reads and writes of your Amazon EC2 instances and then use this data to determine whether you should launch additional instances to handle increased load. You can also use this data to stop under-used instances to save money. In addition to monitoring the built-in metrics that come with AWS, you can monitor your own custom metrics. With CloudWatch, you gain system-wide visibility into resource utilization, application performance, and operational health.

- Set the AWS Config CPU threshold to 60% to receive a notification when EC2 usage exceeds that value

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Q26) What can you access by visiting the URL: http://status.aws.amazon.com?

- AWS Billing Dashboard
- AWS Cost Dashboard
- AWS Security Dashboard
- ✅ AWS Service Health Dashboard

Explanation:-The AWS Service Health Dashboard publishes AWS' most up-to-the-minute information on service availability. The dashboard provides access to current status and historical data about each and every Amazon Web Service. Just copy the URL to your browser and see the result.

Q27) Which of the below options is true of Amazon Cloud Directory?

- Amazon Cloud Directory allows for registration and management of domain names
- ✅ Amazon Cloud Directory allows organization of hierarchies of data across multiple dimensions

Explanation:-Amazon Cloud Directory is a cloud-native, highly scalable, high-performance directory service that provides web-based directories to make it easy for you to organize and manage all your application resources such as users, groups, locations, devices, and policies, and the rich relationships between them.

Unlike existing traditional directory systems, Cloud Directory does not limit organizing directory objects in a single fixed hierarchy. In Cloud Directory, you can organize directory objects into multiple hierarchies to support multiple organizational pivots and relationships across directory information. For example, a directory of users may provide a hierarchical view based on reporting structure, location, and project affiliation. Similarly, a directory of devices may have multiple hierarchical views based on its manufacturer, current owner, and physical location. With Cloud Directory, you can create directories for a variety of use cases, such as organizational charts, course catalogs, and device registries.

- Amazon Cloud Directory allows users to access AWS with their existing Active Directory credentials

- Amazon Cloud Directory enables the analysis of video and data streams in real time

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Q28) Your web application currently faces performance issues and suffers from long delays. Which of the following could help you in this situation?

- AWS Shield
- ✅ AWS X-Ray

Explanation:-AWS X-Ray helps you identify performance bottlenecks. X-Ray's service maps let you see relationships between services and resources in your application in real time. You can easily detect where high latencies are occurring, visualize node and edge latency distribution for services, and then drill down into the specific services and paths impacting application performance.

- AWS OpsWorks
- Amazon Aurora

Q29) An organization uses a hybrid cloud architecture to run their business, Which AWS service enables them to deploy their applications to any AWS or on-premises server?

- Amazon QuickSight
- Amazon Kinesis
- ✅ AWS CodeDeploy

Explanation:-AWS CodeDeploy is a service that automates application deployments to any instance, including Amazon EC2 instances and instances running on-premises. AWS CodeDeploy makes it easier for you to rapidly release new features, helps you avoid downtime during deployment, and handles the complexity of updating your applications. You can use AWS CodeDeploy to automate deployments, eliminating the need for error-prone manual operations, and the service scales with your infrastructure so you can easily deploy to one instance or thousands.
You can also use AWS OpsWorks to automate application deployments to any instance, including Amazon EC2 instances and instances running on-premises. OpsWorks is a service that helps you automate operational tasks like code deployment, software configurations, package installations, database setups, and server scaling using Chef and Puppet.

- Amazon Athena

Q30) What is the AWS repository management system that allows for storing, versioning, and managing your application code?

- Amazon Inspector
- AWS X-Ray
- ✅ AWS CodeCommit

Explanation:-AWS CodeCommit is designed for software developers who need a secure, reliable, and scalable source control system to store and version their code. In addition, AWS CodeCommit can be used by anyone looking for an easy to use, fully managed data store that is version controlled. For example, IT administrators can use AWS CodeCommit to store their scripts and configurations. Web designers can use AWS CodeCommit to store HTML pages and images.
AWS CodeCommit makes it easy for companies to host secure and highly available private Git repositories. Customers can use AWS CodeCommit to securely store anything from source code to binaries, and it works seamlessly with their existing Git tools.

- AWS CodePipeline

Q31)

Your CTO has asked you to contact the AWS support using the chat feature to ask for guidance related to EBS. However, when you open the AWS support center you can't see a way to contact support via Chat.

What should you do?

- The chat feature is available for all plans for additional fee, but you have to request it first
- There is no chat feature in AWS support
- Upgrade from Basic plan to Developer plan
- ✅ At a minimum, upgrade to Business support plan

Explanation:-Chat access to AWS Support Engineers is available at the Business and Enterprise level plans only.

Q32) Which of the following AWS Support Plans gives you 24/7 access to Cloud Support Engineers via email & phone? (Choose two)

- Premium
- Developer
- ✅ Business

Explanation:-For Technical Support, each of the Business and the Enterprise support plans provides 24x7 phone, email, and chat access to Support Engineers.

- ✅ Enterprise

Explanation:-For Technical Support, each of the Business and the Enterprise support plans provides 24x7 phone, email, and chat access to Support Engineers.

- Standard

Q33) What does the AWS Business support plan provide? (Choose two)

- ✅ AWS Support API

Explanation:-AWS recommend Business Support if you have production workloads on AWS and want 24x7 access to technical support and architectural guidance in the context of your specific use-cases.
In addition to what is available with Basic Support, Business Support provides:
1- AWS Trusted Advisor - Access to the full set of Trusted Advisor checks and guidance to provision your resources following best practices to help reduce costs, increase performance and fault tolerance, and improve security.
2- AWS Personal Health Dashboard - A personalized view of the health of AWS services, and alerts when your resources are impacted. Also includes the Health API for integration with your existing management systems.

3- Enhanced Technical Support – 24x7 access to Cloud Support Engineers via phone, chat, and email. You can have an unlimited number of contacts that can open an unlimited amount of cases.
Response times are as follows:
- General Guidance - < 24 hours
- System Impaired - < 12 hours
- Production System Impaired - < 4 hours
- Production System Down - < 1 hour
4- Architecture Support – Contextual guidance on how services fit together to meet your specific use-case, workload, or application.
5- AWS Support API - Programmatic access to AWS Support Center features to create, manage, and close your support cases, and operationally manage your Trusted Advisor check requests and status.
6- Third-Party Software Support - Guidance, configuration, and troubleshooting of AWS interoperability with many common operating systems, platforms, and application stack components.
7- Access to Proactive Support Programs – Ability to purchase Infrastructure Event Management for an additional fee. This provides Architecture and scaling guidance, and real-time operational support during the preparation and execution of planned events, product launches, and migrations.

- Proactive Technical Account Management
- Less than 15 minutes response-time support if your business critical system goes down
- ✅ Access to the full set of Trusted Advisor checks

Explanation:-AWS recommend Business Support if you have production workloads on AWS and want 24x7 access to technical support and architectural guidance in the context of your specific use-cases.
In addition to what is available with Basic Support, Business Support provides:
1- AWS Trusted Advisor - Access to the full set of Trusted Advisor checks and guidance to provision your resources following best practices to help reduce costs, increase performance and fault tolerance, and improve security.
2- AWS Personal Health Dashboard - A personalized view of the health of AWS services, and alerts when your resources are impacted. Also includes the Health API for integration with your existing management systems.
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6- Third-Party Software Support - Guidance, configuration, and troubleshooting of AWS interoperability with many common operating systems, platforms, and application stack components.
7- Access to Proactive Support Programs – Ability to purchase Infrastructure Event Management for an additional fee. This provides Architecture and scaling guidance, and real-time operational support during the preparation and execution of planned events, product launches, and migrations.

- Support Concierge

Q34) Which of the following AWS support plans provides access to only the seven core Trusted Advisor checks?

- Developer & Business
- Developer & Enterprise
- ✅ Basic & Developer

Explanation:-Basic and Developer support plans provide access to only 7 core Trusted Advisor checks and guidance to provision your resources following best practices to increase performance and improve security. Business and Enterprise level Support Plans provide access to a full set of Trusted Advisor checks. You can see this full set here: https://aws.amazon.com/premiumsupport/technology/trusted-advisor/best-practice-checklist/

- Business & Enterprise

Q35) Which service is used to ensure that messages between software components are not lost if one or more components fail?

- AWS Direct Connect
- Amazon SES
- ✅ Amazon SQS

Explanation:-Amazon Simple Queue Service (SQS) is a fully managed message queuing service that enables you to send, store, and receive messages between software components at any volume, without losing messages or requiring other services to be available. SQS lets you decouple application components so that they run independently, increasing the overall fault tolerance of the system. Multiple copies of every message are stored redundantly across multiple availability zones so that they are available whenever needed.

- Amazon Connect

Q36) Which AWS service can be used to store and reliably deliver messages across distributed systems?

- Amazon Simple Storage Service
- Amazon Simple Email Service
- AWS Storage Gateway
- ✅ Amazon Simple Queue Service

Explanation:-Amazon SQS is a highly reliable, scalable message queuing service that enables asynchronous message-based communication between distributed components of an application. 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.

Q37) What is the main purpose of using Amazon SWF?

- High-performance file system integrated with S3
- Threat detection
- ✅ Coordinate tasks across distributed application components

Explanation:-Amazon Simple Workflow Service (SWF) is a web service that makes it easy to coordinate work across distributed application

components. Amazon SWF enables applications for a range of use cases, including media processing, web application back-ends, business process workflows, and analytics pipelines, to be designed as a coordination of tasks. Tasks represent invocations of various processing steps in an application which can be performed by executable code, web service calls, human actions, and scripts. The coordination of tasks involves managing execution dependencies, scheduling, and concurrency in accordance with the logical flow of the application. With Amazon SWF, developers get full control over implementing processing steps and coordinating the tasks that drive them, without worrying about underlying complexities such as tracking their progress and keeping their state.

- Host and manage active directory

Q38)

Due to the nature of the traditional infrastructure environments and their upfront cost model, they involve using fixed, long-running servers that can become problematic as heterogeneous system configurations emerge from continual changes and software patches being applied overtime.

Which of the following approaches solves these problems in the AWS environment?

- ✅ Use disposable resources instead of fixed servers

Explanation:-This option is correct. With the immutable infrastructure pattern, if a problem happens with a server (EC2 instance), rather than updating, it is replaced with a new server containing the latest patches and configuration.

- Use provisional resources instead of fixed servers

Explanation:-This option is not correct. The proper term is Disposable Resources or Temporary Resources.

- Use continual resources instead of fixed servers

Explanation:-This option is not correct. The proper term is Disposable Resources or Temporary Resources.

- Use fixed resources instead of disposable servers

Explanation:-This option is not correct.

Q39)

Your company expects a response time of less than 15 minutes from support interactions about their business-critical systems that are hosted on

AWS. Which support plan is best suited to meet this requirement?

- Developer

Explanation:-This option is not correct.

- Business

Explanation:-This option is not correct.

- ✅ Enterprise

Explanation:-This option is correct. AWS support plans provide different response times based on the case's severity. For example, the Enterprise plan provides General Guidance within 24 hours. However, if the case involves a business-critical system being down, the company will get a response within 15 minutes.

- Basic

Explanation:-This option is not correct.

Q40) A company is planning to use Amazon S3 and Amazon CloudFront to distribute its video courses globally. What tool can the company use to estimate the costs of these services?

- AWS TCO Calculator
- ✅ AWS Simple Monthly Calculator

Explanation:-The AWS Simple Monthly Calculator helps you estimate your monthly AWS bill more efficiently. The calculator can be used to determine your best and worst case scenarios and identify areas of development to reduce your monthly costs. The AWS Simple Monthly Calculator is continuously updated with the latest pricing for all AWS services in all Regions. The AWS Simple Monthly Calculator is available at: https://calculator.s3.amazonaws.com/index.html

- AWS Budgets
- AWS Cost Explorer

Q41) Which of the following should be taken into account when performing a TCO analysis regarding the costs of running an application on AWS VS on-premises? (Choose TWO)

- Software architecture
- Amazon EBS computing power
- ✅ Cooling and power consumption

Explanation:-Weighing the financial considerations of owning and operating a data center facility versus employing a cloud infrastructure requires detailed and careful analysis. In practice, it is not as simple as just measuring potential hardware expense alongside utility pricing for compute and storage resources. The Total Cost of Ownership (TCO) is often the financial metric used to estimate and compare direct and indirect costs of a product or a service. Cooling and power consumption, data center space, data center real estate and Labor IT cost are examples of the indirect costs of a physical data center and should be included in TCO analysis.

- ✅ Labor and IT costs

Explanation:-Weighing the financial considerations of owning and operating a data center facility versus employing a cloud infrastructure requires detailed and careful analysis. In practice, it is not as simple as just measuring potential hardware expense alongside utility pricing for compute and storage resources. The Total Cost of Ownership (TCO) is often the financial metric used to estimate and compare direct and indirect costs of a product or a service. Cooling and power consumption, data center space, data center real estate and Labor IT cost are examples of the indirect costs of a physical data center and should be included in TCO analysis.

- Software compatibility

Q42) What does AWS Cost Explorer provide to help manage your AWS spend?

- Cost comparisons between AWS Cloud environments and on-premises environments

- Accurate estimates of AWS services costs based on your expected usage
- ✅ Highly accurate cost forecasts for up to 12 months ahead

Explanation:-AWS Cost Explorer has an easy-to-use interface that lets you visualize, understand, and manage your AWS costs and usage over time.
Cost Explorer's cost forecast capabilities use machine learning to learn each customer's historical spend patterns and use that information to forecast expected costs. Cost Explorer's forecasting enables you to get a better idea of what your costs and usage may look like in the future, so that you can plan ahead. Forecasting capabilities have been enhanced to support twelve month forecasts (previously forecasts were limited to three months) for multiple cost metrics, including unblended and amortized costs.

- Consolidated billing

Q43) Which of the following strategies help analyze costs in AWS?

- Configuring Amazon inspector to automatically analyze costs and email reports
- Using the AWS CloudFormation to automate the deployment of resources
- Deploying resources of the same type in different regions
- ✅ Using tags to group resources

Explanation:-Tags are key-value pairs that allow you to organize your AWS resources into groups.
You can use tags to:
1- Visualize information about tagged resources in one place, in conjunction with Resource Groups.
2- View billing information using Cost Explorer and the AWS Cost and Usage report.
3- Send notifications about spending limits using AWS Budgets.
It is recommended to use logical groupings of your resources that make sense for your infrastructure or business. You could organize your resources by: Project, Cost center, Development environment, Application or Department. For example, if you tag resources with an application name, you can track the total cost of a single application that runs on those resources.

Q44) Which tool can a non-AWS customer use to compare the cost of his current on-premises environment to AWS?

- AWS Cost Explorer
- AWS Budgets
- AWS Simple Monthly Calculator
- ✅ AWS TCO Calculator

Explanation:-AWS TCO Calculator helps you evaluate the savings from using AWS and compare an AWS Cloud environment to on-premises and co-location environments. This tool considers all the costs to run a solution, including physical facilities, power, and cooling, to provide a realistic, end-to-end comparison of your costs.

Q45) You have migrated your application to AWS recently. How can you view all the information you need about the AWS costs applied to your account?

- Using the Amazon VPC dashboard
- Using the AWS CloudWatch logs
- ✅ Using the AWS Cost & Usage Report

Explanation:-The AWS Cost & Usage Report is your one-stop shop for accessing the most detailed information available about your AWS costs and usage. The AWS Cost & Usage Report lists AWS usage for each service category used by an account and its IAM users in hourly or daily line items, as well as any tags that you have activated for cost allocation purposes.

- Using the Amazon Inspector dashboard

Q46) Where can AWS customers find their historical billing information?

- AWS Simple Monthly calculator
- ✅ Billing and Cost Management console

Explanation:-To view your AWS bill, open the "Bills" pane of the Billing and Cost Management console, and then choose the month you want to view from the drop-down menu.

- AWS Budgets
- AWS TCO

Q47) According to the AWS Shared responsibility model, which of the following are the responsibility of the customer? (Choose two)

- Controlling physical access to AWS Regions
- ✅ Patching applications installed on Amazon EC2

Explanation:-Data protection refers to protecting data while in-transit (as it travels to and from Amazon S3) and at rest (while it is stored on disks in AWS data centers). The AWS customer is responsible for protecting their data either at rest or in transit for all services (including S3).
Patch management is a shared control between AWS and the customer. AWS is responsible for patching the underlying hosts, updating the firmware, and fixing flaws within the infrastructure, but customers are responsible for patching their guest operating system and applications.

- Ensuring that the underlying EC2 host is configured properly
- Managing environmental events of AWS data centers
- ✅ Protecting the confidentiality of data in transit in Amazon S3

Explanation:-Data protection refers to protecting data while in-transit (as it travels to and from Amazon S3) and at rest (while it is stored on disks in AWS data centers). The AWS customer is responsible for protecting their data either at rest or in transit for all services (including S3).
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Q48) What is the AWS service that performs automated network assessments of Amazon EC2 instances to check for vulnerabilities?

- AWS Network Access Control Lists

✅ Amazon Inspector

Explanation:-Amazon Inspector is an automated security assessment service that helps you test the network accessibility of your Amazon EC2 instances and the security state of your applications running on the instances. Amazon Inspector allows you to create assessment templates to automate security vulnerability assessments throughout your development and deployment pipelines or for static production systems.

- Amazon Kinesis
- Security groups

Q49) Which of the following is equivalent to a user name and password and is used to authenticate your programmatic access to AWS services and APIs?

- MFA
- ✅ Access Keys

Explanation:-Access keys consist of two parts: an access key ID and a secret access key. You use access keys to sign programmatic requests that you make to AWS if you use AWS CLI commands (using the SDKs) or using AWS API operations. Like a user name and password, you must use both the access key ID and secret access key together to authenticate your requests.

- Instance Password
- Key pairs

Q50) Which of the following AWS services can help you perform security analysis and regulatory compliance auditing? (Choose two)

- AWS Batch
- ✅ Amazon Inspector

Explanation:-With AWS Config, you can discover existing and deleted AWS resources, determine your overall compliance against rules, and dive into configuration details of a resource at any point in time. These capabilities enable compliance auditing, security analysis, resource change tracking, and troubleshooting.
Amazon Inspector is an automated security assessment service that helps improve the security and compliance of applications deployed on AWS. Amazon Inspector automatically assesses applications for exposure, vulnerabilities, and deviations from best practices. This allows you to make security testing a more regular occurrence as part of development and IT operations.
Additional information:
One of the most important services that performs security analysis and compliance auditing is AWS CloudTrail. AWS CloudTrail simplifies your compliance audits by automatically recording and storing event logs for actions made within your AWS account. With AWS CloudTrail, you can discover and troubleshoot security and operational issues by capturing a comprehensive history of changes that occurred in your AWS account within a specified period of time.

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- Amazon ECS
- AWS Virtual Private Gateway

Q51) Which AWS Service is used to manage user permissions?

- Security Groups
- AWS Support
- ✅ AWS IAM

Explanation:-AWS Identity and Access Management (IAM) enables you to manage access to AWS services and resources securely. Using IAM, you can create and manage AWS users and groups, and use permissions to allow or deny their access to AWS resources.

- Amazon ECS

Q52)

A company is developing a mobile application and wants to allow users to use their Amazon, Apple, Facebook, or Google identities to authenticate to the application.

Which AWS Service should the company use for this purpose?

- Amazon EBS
- Amazon GuardDuty
- Amazon Inspector
- ✅ Amazon Cognito

Explanation:-Amazon Cognito lets customers add user sign-up, sign-in, and access control to their web and mobile apps quickly and easily. Amazon Cognito scales to millions of users and supports sign-in with social identity providers, such as Facebook, Google, and Amazon, and enterprise identity providers via SAML 2.0.

Q53) What does AWS offer to secure your network?

- Optimized instance types
- Instance reservations
- AWS-controlled network access control lists

✅ Customer-controlled encryption in transit

Explanation:-Data in transit (sometimes called data in motion) is a term used to describe data that is in transit through networks. Encrypting data in transit will add more security to your network by ensuring that data is unreadable as it travels from a service to another or from a network to another. The AWS Customer is responsible for encrypting their data either in transit or at rest.

Q54)

A developer needs to set up an SSL security certificate for a client's eCommerce website in order to use the HTTPS protocol.

Which of the following AWS services can be used to deploy the required SSL server certificates? (Choose TWO)

- AWS Directory Service
- AWS Data Pipeline
- Amazon Route 53
- ✅ AWS Identity & Access Management

Explanation:-To enable HTTPS connections to your website or application in AWS, you need an SSL/TLS server certificate. You can use a server certificate provided by AWS Certificate Manager (ACM) or one that you obtained from an external provider. You can use ACM or IAM to store and deploy server certificates. Use IAM as a certificate manager only when you must support HTTPS connections in a region that is not supported by ACM. IAM supports deploying server certificates in all regions, but you must obtain your certificate from an external provider for use with AWS. Amazon Route 53 is used to register domain names or use your own domain name to route your end users to Internet applications. Route 53 is not responsible for creating SSL certifications.

- ✅ AWS ACM

Explanation:-To enable HTTPS connections to your website or application in AWS, you need an SSL/TLS server certificate. You can use a server certificate provided by AWS Certificate Manager (ACM) or one that you obtained from an external provider. You can use ACM or IAM to store and deploy server certificates. Use IAM as a certificate manager only when you must support HTTPS connections in a region that is not supported by ACM. IAM supports deploying server certificates in all regions, but you must obtain your certificate from an external provider for use with AWS. Amazon Route 53 is used to register domain names or use your own domain name to route your end users to Internet applications. Route 53 is not responsible for creating SSL certifications.

Q55) Data security is one of the top priorities of AWS. How does AWS deal with old storage devices that have reached the end of their useful life?

- AWS sends the old devices for remanufacturing
- AWS stores the old devices in a secure place
- ✅ AWS destroys the old devices in accordance with industry-standard practices

Explanation:-When a storage device has reached the end of its useful life, AWS procedures include a decommissioning process that is designed to prevent customer data from being exposed to unauthorized individuals. AWS uses specific techniques to destroy data as part of the decommissioning process. All decommissioned magnetic storage devices are degaussed and physically destroyed in accordance with industry-standard practices.

- AWS sells the old devices to other hosting providers

Q56) What is the AWS IAM feature that provides an additional layer of security on top of user-name and password authentication?

- Access Keys
- ✅ MFA

Explanation:-AWS Multi-Factor Authentication (MFA) is a simple best practice that adds an extra layer of protection on top of your user name and password. With MFA enabled, when a user signs in to an AWS website, they will be prompted for their user name and password (the first factor—what they know), as well as for an authentication code from their AWS MFA device (the second factor—what they have). Taken together, these multiple factors provide increased security for your AWS account settings and resources.

- SDK
- Key Pair

Q57) What is the AWS' recommendation regarding access keys?

- Only share them with trusted people
- Save them within your application code
- Delete all access keys and use passwords instead
- ✅ Rotate them regularly

Explanation:-AWS recommends that you change your own passwords and access keys regularly, and make sure that all IAM users in your account do as well. That way, if a password or access key is compromised without your knowledge, you limit how long the credentials can be used to access your resources.

Q58) Which of the following services can be used to monitor the HTTP and HTTPS requests that are forwarded to Amazon CloudFront?

- AWS CloudTrail
- AWS Cloud9
- ✅ AWS WAF

Explanation:-AWS WAF is a web application firewall that lets customers monitor the HTTP and HTTPS requests that are forwarded to Amazon CloudFront or an Application Load Balancer. AWS WAF also lets customers control access to their content by defining customizable web security rules.

- Amazon CloudWatch

Q59) How does AWS notify customers about security and privacy events pertaining to AWS services?

- Using the AWS ACM service

- Using Compliance Resources
- Using the AWS Management Console
- ✅ Using Security Bulletins

Explanation:-AWS publishes security bulletins about the latest security and privacy events with AWS services on the Security Bulletins page.

Q60)

There is a requirement to grant a DevOps team full administrative access to all resources in an AWS account.

Who can grant them these permissions?

- AWS cloud support engineers
- AWS security team
- AWS technical account manager
- ✅ AWS account owner

Explanation:-The account owner is the entity that has complete control over all resources in his AWS account.

Q61) Which methods can be used by customers to interact with AWS Identity and Access Management (IAM)? (Choose TWO)

- AWS CodeCommit
- AWS Network Access Control Lists
- ✅ AWS CLI

Explanation:-Customers can work with AWS Identity and Access Management in any of the following ways:
1- AWS Management Console: The console is a browser-based interface that can be used to manage IAM and AWS resources.
2- AWS Command Line Tools: Customers can use the AWS command line tools to issue commands at your system's command line to perform IAM and AWS tasks. Using the command line can be faster and more convenient than the console. The command line tools are also useful if you want to build scripts that perform AWS tasks. AWS provides two sets of command line tools: the AWS Command Line Interface (AWS CLI) and the AWS Tools for Windows PowerShell.
3- AWS SDKs: AWS provides SDKs (software development kits) that consist of libraries and sample code for various programming languages and platforms (Java, Python, Ruby, .NET, iOS, Android, etc.). The SDKs provide a convenient way to create programmatic access to IAM and AWS. For example, the SDKs take care of tasks such as cryptographically signing requests, managing errors, and retrying requests automatically.

- ✅ AWS SDKs

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- AWS Security Groups

Q62) Which of the following factors should be considered when determining the region in which AWS Resources will be deployed? (Choose TWO)

- Geographic proximity to the company's location
- ✅ Data sovereignty

Explanation:-Per AWS Best Practices, proximity to your end users, regulatory compliance, data residency constraints, and cost are all factors you have to consider when choosing the most suitable AWS Region.

- ✅ Cost

Explanation:-Per AWS Best Practices, proximity to your end users, regulatory compliance, data residency constraints, and cost are all factors you have to consider when choosing the most suitable AWS Region.

- The planned number of VPCs
- The AWS Region’s security level

Q63) You want to create a backup of your data in another geographical location. Where should you create this backup?

- In another Availability Zone
- ✅ In another Region

Explanation:-Since you want to store your backup in another geographical location, then you should create it in another AWS Region. An AWS Region is a physical location around the world where AWS cluster data centers. AWS calls each group of logical data centers an Availability Zone. Each AWS Region consists of multiple, isolated, and physically separate Availability Zones within a geographic area.

- In another Edge location
- In another VPC

Q64) What does Amazon CloudFront use to distribute content to global users with low latency?

- AWS Data Centers
- ✅ AWS Edge Locations

Explanation:-To deliver content to global end users with lower latency, Amazon CloudFront uses a global network of Edge Locations and Regional Edge Caches in multiple cities around the world. Amazon CloudFront uses this network to cache copies of your content close to your end-users. Amazon CloudFront ensures that end-user requests are served by the closest edge location. As a result, end-user requests travel a short distance, improving performance for your end-users, while reducing the load on the origin servers.

- AWS Global Accelerator
- AWS Regions

Q65) AWS has created a large number of Edge Locations as part of its Global Infrastructure. Which of the following is NOT a benefit of using Edge Locations?

- Edge locations are used by CloudFront to improve your end usersâ€™ experience when uploading files
- ✓ Edge locations are used by CloudFront to distribute traffic across multiple instances to reduce latency

Explanation:-The AWS Edge Locations are not used to distribute traffic. Edge Locations are used in conjunction with the Cloudfront service to cache common responses and deliver content to end users with low latency. The AWS service that is used to distribute load is the AWS Elastic Load Balancing (ELB) service.

- Edge locations are used by CloudFront to distribute content to global users with low latency
- Edge locations are used by CloudFront to cache the most recent responses