**26)** A customer would like to design and build a new workload on AWS Cloud but does not have the AWS- related software technical expertise in-house. Which of the following AWS programs can a customer take advantage of to achieve that outcome?

A. AWS Partner Network Technology Partners

B. AWS Marketplace

C. AWS Partner Network Consulting Partners

D. AWS Service Catalogue

**Correct Answer: C**

**27)** Which of the following is an advantage of consolidated billing on AWS?

A. Volume pricing qualification

B. Shared access permissions

C. Multiple bills per account

D. Eliminates the need for tagging

**Correct Answer: A**

**Explanation:**

If you have multiple standalone accounts, your charges might decrease if you add the accounts to an organization. AWS combines usage from all accounts in the organization to qualify you for volume pricing discounts.

Reference: https://help.nops.io/consolidated-billing

AWS Organizations allows you to set up and do reporting on multiple accounts

**28)** Which of the following steps should be taken by a customer when conducting penetration testing on AWS?

A. Conduct penetration testing using Amazon Inspector, and then notify AWS support.

B. Request and wait for approval from the customer's internal security team, and then conduct testing.

C. Notify AWS support, and then conduct testing immediately.

D. Request and wait for approval from AWS support, and then conduct testing.

**Explanation:**

**Correct Answer: B**

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

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

**You do not need to notify AWS that you are penetration testing.**

**They are always on alert.**

**29)** Which of the following AWS features enables a user to launch a pre-configured Amazon Elastic Compute Cloud (Amazon EC2) instance?

A. Amazon Elastic Block Store (Amazon EBS)

B. Amazon Machine Image

C. Amazon EC2 Systems Manager

D. Amazon AppStream 2.0

**Correct Answer: B**

**Explanation:**

To use Amazon EC2, you simply:

Select a pre-configured, templated Amazon Machine Image (AMI) to get up and running immediately.

Or create an AMI containing your applications, libraries, data, and associated configuration settings.

Configure security and network access on your Amazon EC2 instance.

Choose which instance type(s) you want, then start, terminate, and monitor as many instances of your AMI as needed, using the web service APIs or the variety of management tools provided.

Determine whether you want to run in multiple locations, utilize static IP endpoints, or attach persistent block storage to your instances.

Pay only for the resources that you actually consume, like instance-hours or data transfer.

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

Amazon EC2 Systems Manager ? EC2 console

Amazon AppStream 2.0 Amazon AppStream 2.0 is a fully managed application streaming service that provides users with instant access to their desktop applications from anywhere. AppStream 2.0 manages the AWS resources required to host and run your applications, scales automatically, and provides access to your users on demand. AppStream 2.0 provides users access to the applications they need on the device of their choice, with a responsive, fluid user experience that is indistinguishable from natively installed applications.

With AppStream 2.0, you can easily add your existing desktop applications to AWS and enable your users to instantly stream them. Windows users can use either the AppStream 2.0 client or an HTML5-capable web browser for application streaming. You can maintain a single version of each of your applications, which makes application management easier. Your users always access the latest versions of their applications. Your applications run on AWS compute resources, and data is never stored on users' devices, which means they always get a high performance, secure experience.

Unlike traditional on-premises solutions for desktop application streaming, AppStream 2.0 offers pay-as-you-go pricing, with no upfront investment and no infrastructure to maintain. You can scale instantly and globally, ensuring that your users always have the best possible experience.

**30)** How would an AWS customer easily apply common access controls to a large set of users?

A. Apply an IAM policy to an IAM group.

B. Apply an IAM policy to an IAM role.

C. Apply the same IAM policy to all IAM users with access to the same workload.

D. Apply an IAM policy to an Amazon Cognito user pool.

**Correct Answer: A**

**Explanation:**

Instead of defining permissions for individual IAM users, it's usually more convenient to create groups that relate to job functions (administrators, developers, accounting, etc.). Next, define the relevant permissions for each group. Finally, assign IAM users to those groups. All the users in an IAM group inherit the permissions assigned to the group. That way, you can make changes for everyone in a group in just one place. As people move around in your company, you can simply change what IAM group their IAM user belongs to.

Reference: https://docs.aws.amazon.com/IAM/latest/UserGuide/best-practices.html

**31)** Which AWS Cost Management tool allows you to view the most granular data about your AWS bill?

A. AWS Cost Explorer

B. AWS Budgets

C. AWS Cost and Usage report

D. AWS Billing dashboard

**Correct Answer: C**

**Explanation:**

The Cost & Usage Report is your one-stop-shop for accessing the most granular data about your AWS costs and usage. You can also load your cost and usage information into Amazon Athena, Amazon Redshift, AWS Quick Sight, or a tool of your choice.

Reference: https://aws.amazon.com/aws-cost-management/

**32)** Which of the following can an **AWS customer** use to launch a new Amazon Relational Database Service (Amazon RDS) cluster? (Select TWO.)

A. AWS Concierge

B. AWS CloudFormation

C. Amazon Simple Storage Service (Amazon S3)

D. Amazon EC2 Auto Scaling

E. AWS Management Console

**Correct Answer: BE**

**AS will launch on its own**

**AWS Concierge is a billing support team**

**S3 is object storage**

**Most all things can be launched from AWS Mgmt Console**

**CloudFormation deploys infrastructure and code.**

**33) Which of the following is an AWS Cloud architecture design principle?**

A. Implement single points of failure.

B. Implement loose coupling.

C. Implement monolithic design.

D. Implement vertical scaling.

**Correct Answer: B**

**Explanation:**

Loose coupling between services can also be done through asynchronous integration. It involves one component that generates events and another that consumes them. The two components do not integrate through direct point-to-point interaction, but usually through an intermediate durable storage layer. This approach decouples the two components and introduces additional resiliency. So, for example, if a process that is reading messages from the queue fails, messages can still be added to the queue to be processed when the system recovers.

Reference: https://www.botmetric.com/blog/aws-cloud-architecture-design-principles/

**See Well Architected Document**

**34)** Which of the following security measures protect access to an AWS account? (Select TWO.)

A. Enable AWS CloudTrail.

B. Grant least privilege access to IAM users.

C. Create one IAM user and share with many developers and users.

D. Enable Amazon CloudFront.

E. Activate multi-factor authentication (MFA) for privileged users.

**Correct Answer: BE**

**Explanation:**

If you decided to create service accounts (that is, accounts used for programmatic access by applications running outside of the AWS environment) and generate access keys for them, you should create a dedicated service account for each use case. This will allow you to restrict the associated policy to only the permissions needed for the particular use case, limiting the blast radius if the credentials are compromised. For example, if a monitoring tool and a release management tool both require access to your AWS environment, create two separate service accounts with two separate policies that define the minimum set of permissions for each tool.

Reference:

https://aws.amazon.com/blogs/security/guidelines-for-protecting-your-aws-account-while-using-programmatic-access/

**35)** Which service provides a hybrid storage service that enables on-premises applications to seamlessly use cloud storage?

A. Amazon Glacier

B. AWS Snowball

C. AWS Storage Gateway

D. Amazon Elastic Block Storage (Amazon EBS)

**Correct Answer: C**

**Explanation:**

AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. Customers use Storage Gateway to simplify storage management and reduce costs for key hybrid cloud storage use cases. These include moving tape backups to the cloud, reducing on-premises storage with cloud-backed file shares, providing low latency access to data in AWS for on- premises applications, as well as various migration, archiving, processing, and disaster recovery use cases.

**File**

**Tape**

**Volume Gateway**

**36)** Which of the following services falls under the responsibility of the customer to maintain operating system configuration, security patching, and networking?

A. Amazon RDS

B. Amazon EC2

C. Amazon ElastiCache

D. AWS Fargate

**Correct Answer: B**

**Explanation:**

The customer is responsible for managing, support, patching and control of the guest operating system and AWS services provided like EC2.

Reference: <https://www.whizlabs.com/blog/aws-security-shared-responsibility/>

What is ElastiCache

What is Fargate

**37)** Which of the following is an important architectural design principle when designing cloud applications?

A. Use multiple Availability Zones.

B. Use tightly coupled components.

C. Use open source software.

D. Provision extra capacity.

**Correct Answer: A**

**Explanation:**

Data Center resilience is practiced through Availability Zones across data centers that reduce the impact of failures. Fault isolation improvement can be made to traditional horizontal scaling by sharding (a method of grouping instances into groups called shards, instead of sending the traffic from all users to every node like in the traditional IT structure.)

Reference: https://www.botmetric.com/blog/aws-cloud-architecture-design-principles/

**38)** **Which AWS support plan includes a dedicated Technical Account Manager?**

A. Developer

B. Enterprise

C. Business

D. Basic

**Correct Answer: B**

**Explanation:**

The enterprise support plans support technical account manager. Developer and business support plans are devoid of this facility.

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

**39)** Amazon Relational Database Service (Amazon RDS) offers which of the following benefits over traditional database management?

A. AWS manages the data stored in Amazon RDS tables.

B. AWS manages the maintenance of the operating system.

C. AWS automatically scales up instance types on demand.

D. AWS manages the database type.

**Correct Answer: B**

**40)** **Which AWS services can host a Microsoft SQL Server database? (Select TWO.)**

A. Amazon EC2

B. Amazon Relational Database Service (Amazon RDS)

C. Amazon Aurora

D. Amazon Redshift

E. Amazon S3

**Correct Answer: AB**

**Explanation:**

https://aws.amazon.com/sql/

**What is Amazon Aurora?**

**What is Amazon Redshift?**

**41)** Which of the following allows users to provision a dedicated network connection from their internal network to AWS?

A. AWS CloudHSM

B. AWS Direct Connect

C. AWS VPN

D. Amazon Connect

**Correct Answer: B**

**Explanation:**

AWS Direct Connect lets you establish a dedicated network connection between your network and one of the AWS Direct Connect locations. Using industry standard 802.1q VLANs, this dedicated connection can be partitioned into multiple virtual interfaces. This allows you to use the same connection to access public resources such as objects stored in Amazon S3 using public IP address space, and private resources such as Amazon EC2 instances running within an Amazon Virtual Private Cloud (VPC) using private IP space, while maintaining network separation between the public and private environments. Virtual interfaces can be reconfigured at any time to meet your changing needs.

Reference: <https://aws.amazon.com/directconnect/>

What is AWS CloudHSM?

What is AWS VPN?

**42) Which services use AWS edge locations? (Choose two.)**

A. Amazon CloudFront

B. AWS Shield

C. Amazon EC2

D. Amazon RDS

E. Amazon ElastiCache

**Correct Answer: AC**

**43)** Which service would provide network connectivity in a hybrid architecture that includes the AWS Cloud?

A. Amazon VPC

B. AWS Direct Connect

C. AWS Directory Service

D. Amazon API Gateway

**Correct Answer: A**

**Explanation:**

Amazon Virtual Private Cloud (Amazon VPC) is a logically isolated, private section of the AWS Cloud to launch resources in a virtual data center in the cloud. Amazon VPC allows you to leverage multiple Availability Zones (AZ) within a region so that you can build greater fault tolerance within your workloads.

**What is AWS Directory Service?**

A picture containing screenshot

Description automatically generated

**What is AWS API Gateway?**

**44)** Which service is best for storing common database query results, which helps to alleviate database access load?

A. Amazon Machine Learning

B. Amazon SQS

C. Amazon ElastiCache

D. Amazon EC2 Instance Store

**Correct Answer: C**

**Explanation:**

Amazon ElastiCache for Redis is a great choice for implementing a highly available, distributed, and secure in-memory cache to decrease access latency, increase throughput, and ease the load off your relational or NoSQL databases and applications. ElastiCache can serve frequently requested items at sub-millisecond response times and enables you to easily scale for higher loads without growing the costlier backend databases. Database query results caching, persistent session caching, and full-page caching are all popular examples of caching with ElastiCache for Redis.

Reference: https://aws.amazon.com/products/databases/real-time-apps-elasticache-for-redis/

What is Amazon Machine Learning ?

What is Amazon SQS ?

What is Amazon ElastiCache ?

What is Amazon EC2 Instance Store ?

**45)** Which of the following is a component of the shared responsibility model managed entirely by AWS?

A. Patching operating system software

B. Encrypting data

C. Enforcing multi-factor authentication

D. Auditing physical data center assets

**Correct Answer: D**

**Explanation:**

Of course, Amazon is responsible for auditing physical data center assets and resources since it is the property of Amazon Inc. Customers have no access to physical sites, hence they are not responsible for maintaining physical data center assets.

**46)** Which options does AWS make available for customers who want to learn about security in the cloud in an instructor-led setting? (Select TWO.)

A. AWS Trusted Advisor

B. AWS Online Tech Talks

C. AWS Blog

D. AWS Forums

E. AWS Classroom Training

**Correct Answer: CE**

**Explanation:**

AWS Training and Certification builds your competence, confidence, and credibility through practical cloud skills that help you innovate and build your future. Our content is built by experts at AWS and updated regularly so you're always learning the latest and keeping your cloud skills fresh. Amazon offer both digital and classroom training including private on-site training. You can choose to learn online at your own pace or learn from an accredited AWS instructor. Whether you're just starting out, building on existing IT skills, or sharpening your cloud knowledge, AWS Training and Certification can help you be more effective and do more in the cloud.

Reference: <https://aws.amazon.com/training/course-descriptions/>

**47)** How can one AWS account use Reserved Instances from another AWS account?

A. By using Amazon EC2 Dedicated Instances

B. By using AWS Organizations consolidated billing

C. By using the AWS Cost Explorer tool

D. By using AWS Budgets

**Correct Answer: B**

**Explanation:**

The account that originally purchased the Reserved Instance receives the discount first. If the purchasing account doesn't have any instances that match the terms of the Reserved Instance, the discount for the Reserved Instance is assigned to any matching usage on another account in the organization.

Reference:

https://aws.amazon.com/premiumsupport/knowledge-center/ec2-ri-consolidated-billing/

**48)** A customer runs an On-Demand Amazon Linux EC2 instance for 3 hours, 5 minutes, and 6 seconds.

For how much time will the customer be billed?

A. 3 hours, 5 minutes

B. 3 hours, 5 minutes, and 6 seconds

C. 3 hours, 6 minutes

D. 4 hours

**Correct Answer: D**

**Explanation:**

https://aws.amazon.com/premiumsupport/knowledge-center/ec2-instance-hour-billing/

**49)** Which of the following AWS services provide compute resources? (Choose two.)

A. AWS Lambda

B. Amazon Elastic Container Service (Amazon ECS)

C. AWS CodeDeploy

D. Amazon Glacier

E. AWS Organizations

**Correct Answer: AB**

**Explanation:**

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/compute-services.html>

What is AWS Lambda?

**50)** Which of the following features can be configured through the Amazon Virtual Private Cloud (Amazon VPC) Dashboard? (Select TWO.)

A. Amazon CloudFront distributions

B. Amazon Route 53

C. Security Groups

D. Subnets

E. Elastic Load Balancing

**Correct Answer: CD**

**Explanation:**

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, including selection of your own IP address range, creation of subnets, and configuration of route tables and network gateways. You can use both IPv4 and IPv6 in your VPC for secure and easy access to resources and applications.

You can easily customize the network configuration for your Amazon VPC. For example, you can create a public-facing subnet for your web servers that has access to the Internet and place your backend systems such as databases or application servers in a private-facing subnet with no Internet access. You can leverage multiple layers of security, including security groups and network access control lists, to help control access to Amazon EC2 instances in each subnet.

Reference: https://aws.amazon.com/vpc/