AWS Cloud Practitioner Essentials:

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# Module 1: Introduction

Q: What is cloud computing?  
A: On-demand delivery of IT resources and applications through the internet with pay-as-you-go pricing

Q: What is another name for on-premises deployment?

A: Private cloud deployment

Q: How does the scale of cloud computing help you to save costs?

A: The aggregated cloud usage from a large number of customers results in lower pay-as-you-go prices.

# Module 2: Compute in the Cloud

Amazon EC2 instance types

* **General purpose instances** provide a balance of compute, memory, and networking resources.
* **Compute optimized instances** are ideal for compute-bound applications that benefit from high-performance processors.
* **Memory optimized instances** are designed to deliver fast performance for workloads that process large datasets in memory.
* **Storage optimized instances** are designed for workloads that require high, sequential read and write access to large datasets on local storage.

Q: Which AWS service is the best choice for publishing messages to subscribers?  
A: Amazon Simple Notification Service (Amazon SNS)

Q: You want to use an Amazon EC2 instance for a batch processing workload. What would be the best Amazon EC2 instance type to use?  
A: Compute optimized

Q: What are the contract length options for Amazon EC2 Reserved Instances?   
A: 1 & 3 years

Q: You have a workload that will run for a total of 6 months and can withstand interruptions. What would be the most cost-efficient Amazon EC2 purchasing option?  
A: Spot Instance

Q: Which process is an example of Elastic Load Balancing?  
A: Ensuring that no single Amazon EC2 instance has to carry the full workload on its own

Q: You want to deploy and manage containerized applications. Which service should you use?  
A: Amazon Elastic Kubernetes Service (Amazon EKS)

# Module 3: Global Infrastructure and Reliability

Q: Which statement best describes an Availability Zone?  
A: A single data center or group of data centers within a Region

Q: Which statement is TRUE for the AWS global infrastructure?  
A: A Region consists of two or more Availability Zones.

Q: Which factors should be considered when selecting a Region? (Select TWO.)  
A: Compliance with data governance and legal requirements, Proximity to your customers

Q: Which statement best describes Amazon CloudFront?  
A: A global content delivery service

Q: Which site does Amazon CloudFront use to cache copies of content for faster delivery to users at any location?  
A: Edge location

Q: Which action can you perform with AWS Outposts?  
A: Extend AWS infrastructure and services to your on-premises data center.

# Module 4: Networking

**Subnets and network access control lists**

* **Private Subnet**: Isolate databases containing customers' personal information.
* **Virtual Private Gateway**: Create a VPN connection between the VPC and the internal corporate network.
* **Public Subnet**: Support the customer-facing website.
* **AWS Direct Connect**: Establish a dedicated connection between the on-premises data center and the VPC.

Q: Which statement best describes an AWS account’s default network access control list?  
A: It is stateless and allows all inbound and outbound traffic

Q: Which statement best describes DNS resolution?  
A: Translating a domain name to an IP address

Q: Your company has an application that uses Amazon EC2 instances to run the customer-facing website and Amazon RDS database instances to store customers’ personal information. How should the developer configure the VPC according to best practices?  
A: Place the Amazon EC2 instances in a public subnet and the Amazon RDS database instances in a private subnet.

Q: Which component or service can be used to establish a private dedicated connection between your company’s data center and AWS?  
A: AWS Direct Connect

Q: Which statement best describes security groups?  
A: They are stateful and deny all inbound traffic by default.

Q: Which component is used to connect a VPC to the internet?  
A: Internet gateway

Q: Which service is used to manage the DNS records for domain names?  
A: Amazon Route 53

# Module 5: Storage and Databases

|  |  |
| --- | --- |
| **Instance Store** | **Amazon EBS Volumes** |
| Best for temporary data that is not kept long term | Data remains available after stopping or terminating an EC2 instance |
| Data is deleted after stopping or terminating an EC2 instance | Best for data that requires retention |

Q: You want to store data that is infrequently accessed but must be immediately available when needed. Which Amazon S3 storage class should you use?  
A: S3 Standard-IA

Q: What are the scenarios in which you should use Amazon Relational Database Service (Amazon RDS)? (Select TWO.)?  
A: Using SQL to organize data, Storing data in an Amazon Aurora database

Q: Which Amazon S3 storage classes are optimized for archival data? (Select TWO.)  
A: S3 Glacier, S3 Glacier Deep Archive

Q: Which statement or statements are TRUE about Amazon EBS volumes and Amazon EFS file systems?  
A: EBS volumes store data within a single Availability Zone. Amazon EFS file systems store data across multiple Availability Zones.

Q: You want to store data in an object storage service. Which AWS service is best for this type of storage?  
A: Amazon Simple Storage Service (Amazon S3)

Q: Which statement best describes Amazon DynamoDB?  
A: A serverless key-value database service

Q: Which service is used to query and analyze data across a data warehouse?  
A: Amazon Redshift

# Module 6: Security

Q: Which tasks are the responsibilities of customers? (Select TWO.)  
A: Patching software on Amazon EC2 instances, Setting permissions for Amazon S3 objects

Q: You are configuring service control policies (SCPs) in AWS Organizations. Which identities and resources can SCPs be applied to? (Select TWO.)  
A: An individual member account, An organizational unit (OU)

Q: Which tasks can you complete in AWS Artifact? (Select TWO.)  
A: Access AWS compliance reports on-demand, Review, accept, and manage agreements with AWS.

Q: Which statement best describes an IAM policy?  
A: A document that grants or denies permissions to AWS services and resources

Q: An employee requires temporary access to create several Amazon S3 buckets. Which option would be the best choice for this task?  
A: IAM role

Q: Which statement best describes the principle of least privilege?  
A: Granting only the permissions that are needed to perform specific tasks

Q: Which service helps protect your applications against distributed denial-of-service (DDoS) attacks?  
A: AWS Shield

Q: Which task can AWS Key Management Service (AWS KMS) perform?  
A: Create cryptographic keys.

# Module 7: Monitoring and Analytics

Q: Which tasks can you perform using AWS CloudTrail? (Select TWO.)  
A: Track user activities and API requests throughout your AWS infrastructure, Filter logs to assist with operational analysis and troubleshooting

Q: Which actions can you perform using Amazon CloudWatch? (Select TWO.)  
A: Monitor your resources’ utilization and performance, Access metrics from a single dashboard

Q: Which service enables you to review the security of your Amazon S3 buckets by checking for open access permissions?  
A: AWS Trusted Advisor

Q: Which categories are included in the AWS Trusted Advisor dashboard? (Select TWO.)  
A: Performance, Fault tolerance

# Module 8: Pricing and Support

Q: The AWS Free Tier includes offers that are available to new AWS customers for a certain period of time following their AWS sign-up date. What is the duration of this period?  
A: 12 months

Q: Which Support plan includes all AWS Trusted Advisor checks at the lowest cost?  
A: Business

Q: Which action can you perform with consolidated billing?  
A: Combine usage across accounts to receive volume pricing discounts.

Q: Which pricing tool is used to visualize, understand, and manage your AWS costs and usage over time?  
A: AWS Cost Explorer

Q: Which pricing tool enables you to receive alerts when your service usage exceeds a threshold that you have defined?  
A: AWS Budgets

Q: Your company wants to receive support from an AWS Technical Account Manager (TAM). Which support plan should you choose?  
A: Enterprise

Q: Which service or resource is used to find third-party software that runs on AWS?  
A: AWS Marketplace

# Module 9: Migration and Innovation

Q: Which Perspective of the AWS Cloud Adoption Framework helps you design, implement, and optimize your AWS infrastructure based on your business goals and perspectives?  
A: Platform Perspective

Q: Which migration strategy involves moving to a different product?  
A: Repurchasing

Q: What is the storage capacity of Snowball Edge Storage Optimized?  
A: 80 TB

Q: Which service enables you to quickly build, train, and deploy machine learning models?  
A: Amazon SageMaker

Q: Which Perspective of the AWS Cloud Adoption Framework helps you structure the selection and implementation of permissions?  
A: Security Perspective

Q: Which strategies are included in the six strategies for application migration? (Select TWO.)  
A: Retaining, Rehosting

Q: What is the storage capacity of AWS Snowmobile?  
A: 100 PB

Q: Which statement best describes Amazon Lex?  
A: A service that enables you to build conversational interfaces using voice and text

# Module 10: The Cloud Journey

Q: Which pillar of the AWS Well-Architected Framework focuses on the ability of a workload to consistently and correctly perform its intended functions?  
A: Reliability

Q: Which process is an example of benefiting from massive economies of scale?  
A: Receiving lower pay-as-you-go prices as the result of AWS customers’ aggregated usage of services

Q: Which pillar of the AWS Well-Architected Framework includes the ability to run workloads effectively and gain insights into their operations?  
A: Operational Excellence

Q: What are the benefits of cloud computing? (Select TWO.)  
A: Increase speed and agility., Stop spending money running and maintaining data centers.

# Final Assessment

Q: You want to store data in a volume that is attached to an Amazon EC2 instance. Which service should you use?  
A: Amazon Elastic Block Store (Amazon EBS)

Q: Which service is used to run containerized applications on AWS?  
A: Amazon Elastic Kubernetes Service (Amazon EKS)

Q: Which service enables you to review details for user activities and API calls that have occurred within your AWS environment?  
A: AWS CloudTrail

Q: Which tool enables you to visualize, understand, and manage your AWS costs and usage over time?  
A: AWS Cost Explorer

Q: Which Perspective of the AWS Cloud Adoption Framework focuses on recovering IT workloads to meet the requirements of your business stakeholders?  
A: Operations Perspective

Q: Which service is used to transfer up to 100 PB of data to AWS?

A: AWS Snowmobile

Q: You are running an Amazon EC2 instance and want to store data in an attached resource. Your data is temporary and will not be kept long term. Which resource should you use?  
A: Instance store

Q: Which tool is used to automate actions for AWS services and applications through scripts?

A: AWS Command Line Interface

Q: You want to send and receive messages between distributed application components. Which service should you use?     
A: Amazon Simple Queue Service (Amazon SQS)

Q: Which statement is TRUE for AWS Lambda?  
A: You pay only for compute time while your code is running.

Q: Which virtual private cloud (VPC) component controls inbound and outbound traffic for Amazon EC2 instances?  
A: Security group

Q: Which action can you perform in Amazon CloudFront?  
A: Deliver content to customers through a global network of edge locations.

Q: Which statement best describes an Availability Zone?  
A: A fully isolated portion of the AWS global infrastructure

Q: Which migration strategy involves changing how an application is architected and developed, typically by using cloud-native features?  
A: Refactoring

Q: Which tasks are the responsibilities of AWS? (Select TWO.)  
A: Configuring AWS infrastructure devices, Maintaining virtualization infrastructure

Q: Which component or service enables you to establish a dedicated private connection between your data center and virtual private cloud (VPC)?  
A: AWS Direct Connect

Q: Which actions can you perform in Amazon Route 53? (Select TWO.)  
A: Connect user requests to infrastructure in AWS and outside of AWS., Manage DNS records for domain names.

Q: You want to store data in a key-value database. Which service should you use?  
A: Amazon DynamoDB

Q: Which AWS Trusted Advisor category includes checks for your service limits and overutilized instances?  
A: Performance

Q: Which statement best describes AWS Marketplace?

A: A digital catalog that includes thousands of software listings from independent software vendors

Q: Which compute option reduces costs when you commit to a consistent amount of compute usage for a 1-year or 3-year term?  
A: Savings Plans

Q: Which service enables you to consolidate and manage multiple AWS accounts from a central location?

A: AWS Organizations

Q: Which service is used to quickly deploy and scale applications on AWS?  
A: AWS Elastic Beanstalk

Q: Which Support plans include access to all AWS Trusted Advisor checks? (Select TWO.)  
A: Enterprise, Business

Q: Which statement best describes Elastic Load Balancing?  
A: A service that distributes incoming traffic across multiple targets, such as Amazon EC2 instances

Q: You want Amazon S3 to monitor your objects’ access patterns. Which storage class should you use?   
A: S3 Intelligent-Tiering

Q: Which service enables you to build the workflows that are required for human review of machine learning predictions?  
A: Amazon Augmented AI

Q: Which pillar of the AWS Well-Architected Framework focuses on using computing resources in ways that meet system requirements?  
A: Performance Efficiency

Q: In the S3 Intelligent-Tiering storage class, Amazon S3 moves objects between a frequent access tier and an infrequent access tier. Which storage classes are used for these tiers? (Select TWO.)  
A: S3 Standard-IA, S3 Standard