

What are the advantages of cloud computing over computing on-premises? (Select the best answer.)

- Avoid large capital purchases
- Use on-demand capacity
- Go global in minutes
- Increase speed and agility
- All of the above

What is the pricing model that enables AWS customers to pay for resources on an as-needed basis? (Select the best answer.)

- Pay as you decommission
- Pay as you go
- Pay as you buy
- Pay as you reserve

Which of these is NOT a cloud deployment model? (Select the best answer.)

- Platform as a service
- Infrastructure as a service
- System administration as a service
- Software as a service

True or False? AWS owns and maintains the network-connected hardware required for application services, while you provision and use what you need.

True

False

Which of these is NOT a benefit of cloud computing over on-premises computing? (Select the best answer.)

Increase speed and agility

Pay for racking, stacking, and powering servers

Eliminate guessing on your infrastructure capacity needs

Trade capital expense for variable expense

Benefit from massive economies of scale

Which of the following are NOT benefits of AWS Cloud computing? (Choose two.)

Multiple procurement cycles

High availability

High latency

Temporary and disposable resources

Fault-tolerant databases

Which of the following is a compute service? (Select the best answer)

- Amazon VPC
- Amazon S3
- Amazon EC2
- Amazon CloudFront
- Amazon Redshift

True or False? Cloud computing provides a simple way to access servers, storage, databases, and a broad set of application services over the internet. You own the network-connected hardware required for these services and Amazon Web Services provisions what you need.

- True
- False

Economies of scale result from _____. (Select the best answer.)

- having many different cloud providers
- having hundreds of thousands of customers aggregated in the cloud
- having hundreds of cloud services available over the internet
- having to invest heavily in data centers and servers

Which of these are ways to access AWS core services? (Choose three.)

- Technical support calls
- AWS Marketplace
- AWS Management Console
- AWS Command Line Interface (AWS CLI)
- Software Development Kits (SDKs)

MODULE 2

For certain services like Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Relational Database Service (Amazon RDS), you can invest in reserved capacity. What options are available for Reserved Instances? (Choose three.)

- AURI
- MURI
- NURI
- PURI
- DURI

Where can a customer go to get more details about Amazon Elastic Compute Cloud (Amazon EC2) billing activity that took place 3 months ago? (Select the best answer.)

- Amazon EC2 dashboard
- AWS Cost Explorer
- AWS Trusted Advisor dashboard
- AWS CloudTrail logs stored in Amazon Simple Storage Service (Amazon S3)

True or false? To receive the discounted rate associated with Reserved Instances, you must make a full, upfront payment for the term of the agreement. (Select the best answer.)

True

False

There is no charge for which of the following? (Choose two answers.)

Compute

Storage

Inbound data transfer (with some exceptions)

Outbound data transfer

Data transfer between services within the same AWS Region

What are the four support plans offered by AWS Support? (Select the best answer.)

Basic, Developer, Business, Enterprise

Basic, Startup, Business, Enterprise

Free, Bronze, Silver, Gold

All support is free

What AWS tool lets you explore AWS services and create an estimate for the cost of your use cases on AWS? (Select the best answer.)

AWS Pricing Calculator

AWS Budgets

AWS Cost and Usage Report

AWS Billing Dashboard

As AWS grows, the cost of doing business is reduced and savings are passed back to the customer with lower pricing. What is this optimization called? (Select the best answer.)

- Expenditure awareness
- Economies of scale
- Matching supply and demand
- EC2 Right Sizing

True or false? AWS offers some services at no charge, such as, Amazon Virtual Private Cloud, AWS Identity and Access Management, Consolidated Billing, AWS Elastic Beanstalk, automatic scaling, AWS OpsWorks and AWS CloudFormation. However, you might be charged for other AWS services that you use in conjunction with these services.

- True
- False

When are free data transfers applicable across AWS? (Choose two.)

- Free inbound data transfer across all AWS services in all Regions
- Free outbound data transfer across all AWS services in all Regions
- Free inbound data transfer for Amazon Elastic Compute Cloud (Amazon EC2) instances
- Free outbound data transfer between AWS services within the same Region

True or false? Unlimited services are available with the AWS Free Tier to new AWS customers for 12 months following their AWS sign-up date. (Select the best answer.)

- True
- False

MODULE 3

Which component of the AWS Global Infrastructure does Amazon CloudFront use to ensure low-latency delivery? (Select the best answer.)

- AWS Regions
- AWS edge locations
- AWS Availability Zones
- Amazon Virtual Private Cloud (Amazon VPC)

You can run applications and workloads from a Region closer to the end users to _____ latency.

- increase
- decrease

True or False? Networking, storage, compute, and databases are examples of service categories that AWS offers.

- True
- False

Which of the following are geographic areas that host two or more Availability Zones? (Select the best answer.)

- AWS Origins
- AWS Regions
- Compute zones
- Edge locations

_____ means the infrastructure has built-in component redundancy and _____ means that resources dynamically adjust to increases or decreases in capacity requirements.

- No human intervention, fault tolerant
- Elastic and scalable, no human intervention
- Fault tolerant, elastic and scalable
- Fault tolerant, no human intervention
- Elastic and scalable, fault tolerant

True or False? Availability Zones within a Region are connected through low-latency links.

- True
- False

Which of these statements about Availability Zones is not true? (Select the best answer.)

- Availability Zones are designed for fault isolation.
- Availability Zones are made up of one or more data centers.
- A data center can be used for more than one Availability Zone.
- Availability Zones are connected to each other using high-speed private links.

What is true about Regions? (Choose two.)

- All Regions are located in one specific geographic area.
- A Region is a physical location that has multiple Availability Zones.
- They are the physical locations of your customers.
- Each Region is located in a separate geographic area.

AWS highly recommends provisioning your compute resources across _____ Availability Zones. (Select the best answer.)

- single
- multiple
- all
- no

True or False? Edge locations are only located in the same general area as Regions.

- True
- False

MODULE 4

In the shared responsibility model, AWS is responsible for providing what? (Select the best answer.)

- Security of the cloud
- Security to the cloud
- Security for the cloud
- Security in the cloud

In the shared responsibility model, which of the following are examples of "security in the cloud"? (Choose two.)

- Compliance with compute security standards and regulations
- Physical security of the facilities in which the services operate
- Security group configurations
- Encryption of data at rest and data in transit
- Protecting the global infrastructure

Which of the following is the responsibility of AWS under the AWS shared responsibility model? (Select the best answer.)

- Configuring third-party applications
- Maintaining physical hardware
- Security application access and data
- Managing custom Amazon Machine Images (AMIs)

When creating an AWS Identity and Access Management (IAM) policy, what are the two types of access that can be granted to a user? (Choose two.)

- Institutional access
- Authorized access
- Programmatic access
- AWS Management Console access
- Administrative root access

True or False? AWS Organizations enables you to consolidate multiple AWS accounts so that you centrally manage them.

- True
- False

Which of the following are best practices to secure your account using AWS Identity and Access Management (IAM)? (Choose two.)

- Provide users with default administrative privileges.
- Leave unused and unnecessary users and credentials in place.
- Manage access to AWS resources.
- Avoid using IAM groups to grant the same access permissions to multiple users.
- Define fine-grained access rights.

Which of the following should be done by the AWS account root user? (Select the best answer.)

- Secure access for applications
- Integrate with other AWS services
- Change granular permissions
- Change the AWS support plan

After initial login, what does AWS recommend as the best practice for the AWS account root user? (Select the best answer.)

- Delete the AWS account root user
- Revoke all permissions on the AWS account root user
- Restrict permission on the AWS account root user
- Delete the access keys of the AWS account root user

How would a system administrator add an additional layer of login security to a user's AWS Management Console? (Select the best answer.)

- Use Amazon Cloud Directory
- Audit AWS Identity and Access Management (IAM) roles
- Enable multi-factor authentication
- Enable AWS CloudTrail

True or False? AWS Key Management Service (AWS KMS) enables you to assess, audit, and evaluate the configurations of your AWS resources.

- True
- False

MODULE 5

With Amazon Virtual Private Cloud (Amazon VPC), what is the smallest size subnet you can have in a VPC? (Select the best answer.)

- /26
- /28
- /24
- /30

With Amazon Virtual Private Cloud (Amazon VPC), what is the maximum size IP address range you can have in a VPC? (Select the best answer.)

- /24
- /30
- /16
- /28

You need to allow resources in a private subnet to access the internet. Which of the following must be present to enable this access? (Select the best answer.)

- NAT gateway
- Security groups
- Network access control lists
- Route tables

Which AWS networking service enables a company to create a virtual network within AWS? (Select the best answer.)

- AWS Config
- Amazon Virtual Private Cloud (Amazon VPC)
- Amazon Route 53
- AWS Direct Connect

True or False? Private subnets have direct access to the internet.

- True
- False

Which component of AWS Global Infrastructure does Amazon CloudFront use to ensure low-latency delivery? (Select the best answer.)

- AWS edge locations
- AWS Regions
- AWS Availability Zones
- Amazon Virtual Private Cloud (Amazon VPC)

Which of the following is an optional security control that can be applied at the subnet layer of a VPC? (Select the best answer.)

- Security group
- Web application firewall
- Firewall
- Network ACL

What happens when you use Amazon Virtual Private Cloud (Amazon VPC) to create a new VPC? (Select the best answer.)

- A main route table is created by default.
- An internet gateway is created by default.
- Three subnets are created by default: one for each Availability Zone.
- Three subnets are created by default in one Availability Zone.

Which of the following can be used to protect Amazon Elastic Compute Cloud (Amazon EC2) instances hosted in AWS? (Select the best answer.)

- AMI
- Security group
- Internet Gateway
- All of the above

You are a solutions architect who works at a large retail company that is migrating its existing infrastructure to AWS. You recommend that they use a custom VPC. When you create a VPC, you assign it to an IPv4 Classless Inter-Domain Routing (CIDR) block of 10.0.1.0/24 (which has 256 total IP addresses). How many IP addresses are available? (Select the best answer.)

- 246
- 251
- 250
- 256

MODULE 6

Why is AWS more economical than traditional data centers for applications with varying compute workloads? (Select the best answer)

- Amazon EC2 costs are billed on a monthly basis.
- Customers retain full administrative access to their Amazon EC2 instances.
- Customers can permanently run enough instances to handle peak workloads.
- Amazon EC2 instances can be launched on-demand when needed.

If your project requires monthly reports that iterate through very large amounts of data, which Amazon Elastic Compute Cloud (Amazon EC2) purchasing option should you consider? (Select the best answer)

- Spot Instances
- Scheduled Reserved Instances
- Dedicated Hosts
- On-Demand Instances

What is included in an Amazon Machine Image (AMI)? (Select the best answer)

- A template for the root volume for the instance
- Launch permissions that control which AWS accounts can use the AMI to launch instances.
- A block device mapping that specifies the volumes to attach to the instance when it's launched
- All of the above

Which Amazon Elastic Compute Cloud (Amazon EC2) feature ensures your instances will not share a physical host with instances from any other AWS customer? (Select the best answer)

- Amazon VPC
- Placement groups
- Dedicated Instances
- Reserved Instances

Which of the following services is a serverless compute service in AWS?
(Select the best answer)

- AWS Config
- AWS Lambda
- AWS OpsWorks
- Amazon EC2

What is the service provided by AWS that enables developers to easily deploy and manage applications in the cloud? (Select the best answer)

- Amazon Elastic Container Service
- AWS Elastic Beanstalk
- AWS Opswork
- AWS CloudFormation

Your web application needs four instances to support steady traffic all of the time. On the last day of the month, the traffic triples. What is the most cost-effective way to handle this pattern? (Select the best answer)

- Run 12 Reserved Instances all of the time.
- Run four On-Demand Instances constantly, then add eight more On-Demand Instances on the last day of each month.
- Run four Reserved Instances constantly, then add eight On-Demand Instances on the last day of each month.
- Run four On-Demand Instances constantly, then add eight Reserved Instances on the last day of each month.

True or False? Containers contain an entire operating system.

- True
- False

Which Amazon EC2 option is best for long-term workloads with predictable usage patterns? (Select the best answer)

- Spot Instances
- On-Demand Instances
- Reserved Instances

Which of the following must be specified when launching a new Amazon Elastic Compute Cloud (Amazon EC2) Windows instance? (Choose two)

- Password for the administrator account
- The Amazon EC2 instance ID
- Amazon EC2 instance type
- Amazon Machine Image (AMI)

MODULE 7

True or False? Amazon Simple Storage Service (Amazon S3) is an object storage suitable for the storage of flat files like Microsoft Word documents, photos, etc.

- True
- False

Amazon S3 replicates all objects _____. (Select the best answer)

- on multiple volumes within an Availability Zone
- in multiple Availability Zones within the same Region
- across multiple Regions for higher durability
- on multiple S3 buckets

Which of the following can be used as a storage class for an S3 object lifecycle policy? (Choose three)

- S3 - Standard Access
- AWS Storage Gateway
- S3 - Infrequent Access
- Simple Storage Service Glacier
- S3 - Reduced Redundancy Storage
- Amazon Dynamo DB

The name of an S3 bucket must be unique _____. (Select the best answer)

- worldwide across all AWS accounts
- within a Region
- across all your AWS accounts
- within your AWS account

You can use Amazon Elastic File System (Amazon EFS) to: (Select the best answer)

- provide simple, scalable, elastic file storage for use only within AWS.
- implement storage for Amazon EC2 instances that multiple virtual machines can access at the same time.
- host a robust CDN to deliver entire web sites with dynamic, static, and streaming content.
- generate user-specific content.

Amazon Elastic Block Store (Amazon EBS) is recommended when data _____ and _____. (Choose two)

- requires object-level storage
- must be quickly accessible, requiring long-term persistence
- requires an encryption solution
- needs to be stored in a different Availability Zone than the one the EC2 instance is in

True or False? By default, all data stored in Amazon S3 is viewable by the public.

- True
- False

Regarding Amazon S3 Glacier, what is a Vault? (Select the best answer)

- The rules that determine who may (or may not) access archives
- An object (photos, videos, files, or documents)
- A container for storing archives
- A policy that identifies who can access content stored in Glacier

True or False? When you create a bucket in Amazon S3, it is associated with a specific AWS Region.

- True
- False

Which of the following are features of Amazon Elastic Block Store (Amazon EBS)? (Choose two)

- Data stored on Amazon EBS is automatically replicated within an Availability Zone.
- Data on an Amazon EBS volume is lost when the attached instance is stopped.
- Amazon EBS volumes can be encrypted transparently to workloads on the attached instance.
- Amazon EBS data is automatically backed up to tape.

MODULE 8

You are designing an ecommerce web application that will scale to hundreds of thousands of concurrent users. Which database technology is best suited to hold the session state in this example?

- Amazon Relational Database Service (Amazon RDS)
 - Amazon DynamoDB
 - Amazon Redshift
 - Amazon Simple Storage Service (Amazon S3)
-

You need to find an item in an Amazon DynamoDB table using an attribute other than the item's primary key. Which of the following operations should you use? (Select the best answer.)

- PutItem
- Scan
- Query
- GetItem

In Amazon DynamoDB, what does the query operation enable you to do? (Select the best answer.)

- Query a table using the partition key and an optional sort key filter
- Query any secondary indexes that exist for a table
- Efficiently retrieve items from a table or secondary index
- All of the above

Which AWS Cloud service is best suited for analyzing your data by using standard structured query language (SQL) and your existing business intelligence (BI) tools? (Select the best answer.)

- Amazon Relational Database Service (Amazon RDS)
- Amazon Simple Storage Service Glacier
- Amazon DynamoDB
- Amazon Redshift

In Amazon DynamoDB, an attribute is _____. (Select the best answer.)

- a fundamental data element
- a collection of items
- a collection of attributes

If you are developing an application that requires a database with extremely fast performance, fast scalability, and flexibility in the database schema, which service should you consider? (Select the best answer.)

- Amazon Relational Database Service (Amazon RDS)
- Amazon ElastiCache
- Amazon DynamoDB
- Amazon Redshift

Which of the following use cases is appropriate for using Amazon Relational Database Service (Amazon RDS)? (Select the best answer.)

- Massive read/write rates
- Simple GET or PUT requests
- Complex transactions
- All of the above

A company has an application, which consists of a .NET layer that connects to a MySQL database. They want to move this application on to AWS and use AWS features such as high availability and automated backups. Which of the following would be an ideal database for this use case? (Select the best answer)

- Amazon DynamoDB
- Amazon Aurora
- Amazon Redshift
- Amazon RDS

True or false? Amazon RDS automatically patches the database software and backs up your database, storing the backups for a user-defined retention period and enabling point-in-time recovery.

- True
- False

What should you consider when choosing a database type? (Select the best answer.)

- Data size
- Data access period
- Query frequency
- Highly available
- All of the above

MODULE 9

Which of the following is not one of the four areas of the Performance Efficiency pillar of the AWS Well-Architected Framework? (Select the best answer.)

- Tradeoffs
- Selection
- Traceability
- Monitoring

Which of the following is a principle when designing cloud-based systems? (Select the best answer.)

- Build tightly-coupled components
- Make infrequent, large batch changes
- Assume everything will fail
- Use as many services as possible

Which of the following are pillars of the AWS Well-Architected Framework? (Choose three.)

- Security
- Persistence
- Operational Excellence
- Cost Optimization

Which design principles are recommended when considering performance efficiency? (Choose two.)

- Match supply with demand
- Analyze and attribute expenditure
- Use serverless architectures
- Enable traceability
- Democratize advanced technologies

AWS Trusted Advisor provides insight regarding which five categories of an AWS account? (Select the best answer.)

- Security, fault tolerance, high availability, connectivity, service limits
- Security, access control, high availability, performance, service limits
- Performance, cost optimization, access control, connectivity, security
- Performance, cost optimization, security, fault tolerance, service limits

The AWS Well-Architected Framework is organized into how many pillars? (Select the best answer.)

- 3
- 4
- 5
- None of the above

After you move to the AWS Cloud, you want to ensure that the right security settings are put in place. Which online tool can assist in security compliance? (Select the best answer.)

- Amazon Kinesis
- AWS Support
- AWS Trusted Advisor
- Amazon CloudWatch

Which of the following is a measure of your system's ability to provide functionality when desired by the user? (Select the best answer.)

- Availability
- Fault Tolerance
- Reliability
- Performance efficiency

What is defined as the ability for a system to remain operational even if some of the components of that system fail? (Select the best answer.)

- High durability
- Fault tolerance
- High availability
- High durability

Which of the following best describes a system that can withstand some measures of degradation, experiences minimal downtime, and requires minimal human intervention? (Select the best answer.)

- Scalable
- Fault-tolerant
- Elastic
- Highly available

MODULE 10

Which of the following AWS tools help your application scale up or down based on demand? (Choose two.)

- Availability Zones
- Amazon EC2 Auto Scaling
- AWS CloudFormation
- Elastic Load Balancing
- AWS Config

Which service would you use to send alerts based on Amazon CloudWatch alarms? (Select the best answer.)

- Amazon Simple Notification Service (Amazon SNS)
- AWS CloudTrail
- AWS Trusted Advisor
- Amazon Route 53

Which of the following are characteristics of Amazon EC2 Auto Scaling? (Choose three.)

- Only supports dynamic scaling
- Responds to changing conditions by adding or terminating instances
- Delivers push notifications
- Launches instances from a specified Amazon Machine Image (AMI)
- Enforces a minimum number of running Amazon EC2 instances

Which of the following must be configured on an Elastic Load Balancing load balancer to expect incoming traffic? (Select the best answer.)

- A port
- A network interface
- A listener
- An instance

Which of the following elements are used to create an Amazon EC2 Auto Scaling launch configuration? (Choose three.)

- Amazon Machine Image (AMI)
- Load balancer
- Instance type
- Virtual private cloud (VPC) and subnets
- Amazon Elastic Block Store (Amazon EBS) volumes

Which of the following services can help you collect important metrics from Amazon Relational Database Service (Amazon RDS) and Amazon Elastic Compute Cloud (Amazon EC2) instances? (Select the best answer.)

- Amazon CloudFront
- Amazon CloudSearch
- Amazon CloudWatch
- AWS CloudTrail
- Amazon EC2 Auto Scaling

Which of the following are elements of an Auto Scaling group? (Choose three.)

- Minimum size
- Health checks
- Desired capacity
- Maximum size

There is an audit at your company and they need to have a log of all access to AWS resources in the account. Which of the following services can assist in providing these details? (Select the best answer.)

- Amazon CloudWatch
- AWS CloudTrail
- Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon Simple Notification Service (Amazon SNS)

In Elastic Load Balancing, when the load balancer detects an unhealthy target, which of the following are true? (Choose three.)

- Stops routing traffic to that target
- Triggers an alarm
- Resumes routing traffic when it detects that the target is healthy again
- Resumes routing traffic when manually restarted
- Routes traffic to a healthy target

What are the three types of load balancers that Elastic Load Balancing offers?

- Internet Load Balancer
- Application Load Balancer
- Network Load Balancer
- Compute Load Balancer
- Classic Load Balancer
- Auto Scaling Load Balancer

MODULE 11 FINAL(ignore forse)

What is caching?

- A high-speed data storage layer
- A way to store passwords
- A global network for content distribution
- An in-memory database

Which types of data should you cache?

- Data that can be retrieved quickly with simple queries
- Dynamically generated web content
- Static data that is frequently accessed
- Specialized data that is needed by a subset of users

What is a benefit of caching?

- Reduced response latency
- Load balancing the application
- Increased application reliability
- Decreased costs

What does Amazon CloudFront enable?

- Bidirectional caching between users and an origin host
- Multi-tiered and regional caching of content
- Transactional processing with an in-memory database
- Automatic creation of a time-to-live value

How does Amazon CloudFront use edge locations?

- It caches all content from an origin distribution at the edge location, and delivers the content to clients through the fastest edge location.
- It caches local content at edge locations. It delivers the cached content to clients through the edge location that requires the fewest network hops to reach those clients.
- It caches frequently accessed content at edge locations. It delivers the cached content to clients through the edge location with the lowest latency to those clients.
- It caches Regional data at Regional edge locations, and delivers the content to clients through their Regional edge locations.

Where is application session data cached when using sticky sessions?

- Web server
- Web browser
- Elastic Load Balancing load balancer
- Amazon CloudFront

Which statement best describes an efficient way to deliver on-demand streaming content by using Amazon CloudFront?

- CloudFront does not work with streaming content.
- A best practice is to create separate origin servers for each Region where you serve streaming content.
- A best practice is to create distributions for each Region where you serve streaming content.
- A best practice is to create video segments and store them in an Amazon Simple Storage Service (Amazon S3) bucket. Then, use CloudFront to cache the segments.

What is Amazon DynamoDB Accelerator (DAX)?

- A fully managed, highly available, in-memory cache for DynamoDB
- A feature of DynamoDB that automatically adjusts read/write capacity to handle load
- A fully managed, highly available cache that is backed by DynamoDB
- A feature of DynamoDB that enables fast lookup of items by using secondary keys

How can an application use Amazon ElastiCache to improve database read performance? (Select TWO.)

- Read data from the database first and write the most frequently read data to ElastiCache.
- Direct all read requests to the database and configure it to read from ElastiCache when a cache miss occurs.
- Read data from ElastiCache first and write to ElastiCache when a cache miss occurs.
- Write data to ElastiCache whenever the application writes to the database.
- Replicate the database in ElastiCache, and direct all reads to ElastiCache and all writes to the database.

Which role does Amazon CloudFront play in protecting against distributed denial of service (DDoS) attacks?

- Routes traffic through edge locations
- Controls traffic by the source IP addresses of requests
- Restricts traffic by geography to help block attacks that originate from specific countries
- Performs deep packet inspection to detect attacks