#### **Answer Sheet**

### Q1) Which of the following objects are good candidates to store in a cache? (Choose 3 answers)

Product catalog

**Explanation:**-Many types of objects are good candidates to cache because they have the potential to be accessed by numerous users repeatedly. Even the balance of a bank account could be cached for short periods of time if the back-end database query is slow to respond.

Shopping cart

**Explanation:**-Many types of objects are good candidates to cache because they have the potential to be accessed by numerous users repeatedly. Even the balance of a bank account could be cached for short periods of time if the back-end database query is slow to respond.

Session state

**Explanation:**-Many types of objects are good candidates to cache because they have the potential to be accessed by numerous users repeatedly. Even the balance of a bank account could be cached for short periods of time if the back-end database query is slow to respond.

Bank account balance

### Q2) Which of the following cache engines are supported by Amazon ElastiCache? (Choose 2 answers)

Redis

Explanation:-Amazon ElastiCache supports Memcached and Redis cache engines. MySQL is not a cache engine, and Couchbase is not supported.

Memcached

Explanation:-Amazon ElastiCache supports Memcached and Redis cache engines. MySQL is not a cache engine, and Couchbase is not supported.

- MySQL
- Couchbase

## Q3) How many nodes can you add to an Amazon ElastiCache cluster running Memcached?

- **100**
- 20

Explanation:-The default limit is 20 nodes per cluster.

- **5**
- 1

## Q4) How many nodes can you add to an Amazon ElastiCache cluster running Redis?

**2** 

Explanation:-Redis clusters can only contain a single node; however, you can group multiple clusters together into a replication group.

- **5**
- **2**0
- **100**

# Q5) An application currently uses Memcached to cache frequently used database queries. Which steps are required to migrate the application to use Amazon ElastiCache with minimal changes? (Choose 2 answers)

- Connect to the Amazon ElastiCache nodes using Secure Shell (SSH) and install the latest version of Memcached.
- Configure a security group to allow access from the application servers.

**Explanation:**-Amazon ElastiCache is Application Programming Interface (API)-compatible with existing Memcached clients and does not require the application to be recompiled or linked against the libraries. Amazon ElastiCache manages the deployment of the Amazon ElastiCache binaries.

Update the configuration file with the endpoint for the Amazon ElastiCache cluster.

**Explanation:**-Amazon ElastiCache is Application Programming Interface (API)-compatible with existing Memcached clients and does not require the application to be recompiled or linked against the libraries. Amazon ElastiCache manages the deployment of the Amazon ElastiCache binaries.

Recompile the application to use the Amazon ElastiCache libraries.

## Q6) How can you back up data stored in Amazon ElastiCache running Redis? (Choose 2 answers)

Create a snapshot manually.

**Explanation:**-Amazon ElastiCache with the Redis engine allows for both manual and automatic snapshots. Memcached does not have a backup function.

Onfigure automatic snapshots to back up the cache environment every night.

Explanation:-Amazon ElastiCache with the Redis engine allows for both manual and automatic snapshots. Memcached does not have a backup

- Create an image of the Amazon Elastic Compute Cloud (Amazon EC2) instance.
- Redis clusters cannot be backed up.

## Q7) How can you secure an Amazon ElastiCache cluster? (Choose 3 answers)

Restrict network access using a network Access Control List (ACL).

Explanation:-Limit access at the network level using security groups or network ACLs, and limit infrastructure changes using IAM.

Restrict network access using security groups.

**Explanation:-**Limit access at the network level using security groups or network ACLs, and limit infrastructure changes using IAM.

- Change the Memcached root password.
- Restrict Application Programming Interface (API) actions using AWS Identity and Access Management (IAM) policies.

**Explanation:**-Limit access at the network level using security groups or network ACLs, and limit infrastructure changes using IAM.

Q8) You are working on a mobile gaming application and are building the leaderboard feature to track the top scores across millions of users. Which AWS services are best suited for this use case?

Amazon ElastiCache using Redis

**Explanation:**-Amazon ElastiCache with Redis provides native functions that simplify the development of leaderboards. With Memcached, it is more difficult to sort and rank large datasets. Amazon Redshift and Amazon S3 are not designed for high volumes of small reads and writes, typical of a mobile game.

- Amazon ElastiCache using Memcached
- Amazon Redshift
- Amazon Simple Storage Service (S3)

#### Q9)

You have built a large web application that uses Amazon ElastiCache using Memcached to store frequent query results. You plan to expand both the web fleet and the cache fleet multiple times over the next year to accommodate increased user traffic.

How do you minimize the amount of changes required when a scaling event occurs?

- Update the configuration file each time a new cluster
- Configure AutoDiscovery on the server side
- ✓ Configure AutoDiscovery on the client side

**Explanation:**-When the clients are configured to use AutoDiscovery, they can discover new cache nodes as they are added or removed. AutoDiscovery must be configured on each client and is not active server side. Updating the configuration file each time will be very difficult to manage. Using an Elastic Load Balancer is not recommended for this scenario.

Use an Elastic Load Balancer to proxy the requests

## Q10) Which cache engines does Amazon ElastiCache support? (Choose 2 answers)

Redis

**Explanation:**-Amazon ElastiCache supports both Memcached and Redis. You can run self- managed installations of Membase and Couchbase using Amazon Elastic Compute Cloud

Memcached

**Explanation:**-Amazon ElastiCache supports both Memcached and Redis. You can run self- managed installations of Membase and Couchbase using Amazon Elastic Compute Cloud

- Membase
- Couchbase

## Q11) What origin servers are supported by Amazon CloudFront? (Choose 3 answers)

- An Amazon EC2 Auto Scaling Group
- ✓ An HTTP server running on-premises

**Explanation:**-Amazon CloudFront can use an Amazon S3 bucket or any HTTP server, whether or not it is running in Amazon EC2. A Route 53 Hosted Zone is a set of DNS resource records, while an Auto Scaling Group launches or terminates Amazon EC2 instances automatically. Neither can be specified as an origin server for a distribution.

An HTTP server running on Amazon Elastic Compute Cloud (Amazon EC2)

**Explanation:**-Amazon CloudFront can use an Amazon S3 bucket or any HTTP server, whether or not it is running in Amazon EC2. A Route 53 Hosted Zone is a set of DNS resource records, while an Auto Scaling Group launches or terminates Amazon EC2 instances automatically. Neither can be specified as an origin server for a distribution.

- An Amazon Route 53 Hosted Zone
- ✓ An Amazon Simple Storage Service (Amazon S3) bucket

**Explanation:**-Amazon CloudFront can use an Amazon S3 bucket or any HTTP server, whether or not it is running in Amazon EC2. A Route 53 Hosted Zone is a set of DNS resource records, while an Auto Scaling Group launches or terminates Amazon EC2 instances automatically. Neither can be specified as an origin server for a distribution.

## Q12) Which of the following are good use cases for Amazon CloudFront? (Choose 2 answers)

- A corporate HR website that supports a global workforce. Because the site contains sensitive data, all users must connect through a corporate Virtual Private Network (VPN).
- A heavily used video and music streaming service that requires content to be delivered only to paid subscribers

**Explanation:**-The site in A is "popular" and supports "users around the world," key indicators that CloudFront is appropriate. Similarly, the site in C is "heavily used," and requires private content, which is supported by Amazon CloudFront. Both B and D are corporate use cases where the requests come from a single geographic location or appear to come from one (because of the VPN). These use cases will generally not see benefit from Amazon CloudFront.

- A corporate website that serves training videos to employees. Most employees are located in two corporate campuses in the same city.
- A popular software download site that supports users around the world, with dynamic content that changes rapidly

**Explanation:**-The site in A is "popular" and supports "users around the world," key indicators that CloudFront is appropriate. Similarly, the site in C is "heavily used," and requires private content, which is supported by Amazon CloudFront. Both B and D are corporate use cases where the requests come from a single geographic location or appear to come from one (because of the VPN). These use cases will generally not see benefit from Amazon CloudFront.

## Q13)

You are building a media-sharing web application that serves video files to end users on both PCs and mobile devices. The media files are stored as objects in an Amazon Simple Storage Service (Amazon S3) bucket, but are to be delivered through Amazon CloudFront.

What is the simplest way to ensure that only Amazon CloudFront has access to the objects in the Amazon S3 bucket?

- Use public and private keys with signed cookies.
- ✓ Use an Amazon CloudFront Origin Access Identifier (OAI).

**Explanation:**-Amazon CloudFront OAI is a special identity that can be used to restrict access to an Amazon S3 bucket only to an Amazon CloudFront distribution. Signed URLs, signed cookies, and IAM bucket policies can help to protect content served through Amazon CloudFront, but OAIs are the simplest way to ensure that only Amazon CloudFront has access to a bucket.

- Create Signed URLs for each Amazon S3 object.
- Use an AWS Identity and Access Management (IAM) bucket policy.

### Q14)

Your company data center is completely full, but the sales group has determined a need to store 200TB of product video. The videos were created over the last several years, with the most recent being accessed by sales the most often. The data must be accessed locally, but there is no space in the data center to install local storage devices to store this data.

What AWS cloud service will meet sales' requirements?

- Amazon Elastic Compute Cloud (Amazon EC2) instances with attached Amazon EBS Volumes
- AWS Storage Gateway Gateway-Cached volumes

**Explanation:**-AWS Storage Gateway allows you to access data in Amazon S3 locally, with the Gateway-Cached volume configuration allowing you to expand a relatively small amount of local storage into Amazon S3.

- AWS Storage Gateway Gateway-Stored volumes
- AWS Import/Export Disk

#### Q15)

Your company wants to extend their existing Microsoft Active Directory capability into an Amazon Virtual Private Cloud (Amazon VPC) without establishing a trust relationship with the existing on-premises Active Directory.

Which of the following is the best approach to achieve this goal?

- Create and connect an AWS Directory Service for Microsoft Active Directory (Enterprise Edition).
- Create and connect an AWS Directory Service Simple AD.

**Explanation:**-Simple AD is a Microsoft Active Directory-compatible directory that is powered by Samba 4. Simple AD supports commonly used Active Directory features such as user accounts, group memberships, domain-joining Amazon Elastic Compute Cloud (Amazon EC2) instances running Linux and Microsoft Windows, Kerberos-based Single Sign-On (SSO), and group policies.

- Create and connect an AWS Directory Service AD Connector.
- None of the above

### Q16) Which of the following are AWS Key Management Service (AWS KMS) keys that will never exit AWS unencrypted?

- Envelope encryption keys
- AWS KMS Customer Master Keys (CMKs)

Explanation:-AWS KMS CMKs are the fundamental resources that AWS KMS manages. CMKs can never leave AWS KMS unencrypted, but data keys can.

- AWS KMS data keys
- A and C

## Q17) Which cryptographic method is used by AWS Key Management Service (AWS KMS) to encrypt data?

- Password-based encryption
- Asymmetric
- Shared secret
- Envelope encryption

**Explanation:**-AWS KMS uses envelope encryption to protect data. AWS KMS creates a data key, encrypts it under a Customer Master Key (CMK), and returns plaintext and encrypted versions of the data key to you. You use the plaintext key to encrypt data and store the encrypted key alongside the encrypted data. You can retrieve a plaintext data key only if you have the encrypted data key and you have permission to use the corresponding master key.

Q18) Which AWS service records Application Program Interface (API) calls made on your account and delivers log files to your Amazon Simple Storage Service (Amazon S3) bucket?

- Amazon CloudWatch
- ✓ AWS CloudTrail

**Explanation:**-AWS CloudTrail records important information about each API call, including the name of the API, the identity of the caller, the time of the API call, the request parameters, and the response elements returned by the AWS Cloud service.

- Amazon Kinesis
- AWS Data Pipeline

## Q19) You are trying to decrypt ciphertext with AWS KMS and the decryption operation is failing. Which of the following are possible causes? (Choose 2 answers)

The ciphertext you are trying to decrypt is not valid.

**Explanation:**-Encryption context is a set of key/value pairs that you can pass to AWS KMS when you call the Encrypt, Decrypt, ReEncrypt, GenerateDataKey, and GenerateDataKeyWithoutPlaintext APIs. Although the encryption context is not included in the ciphertext, it is cryptographically bound to the ciphertext during encryption and must be passed again when you call the Decrypt (or ReEncrypt) API. Invalid ciphertext for decryption is plaintext that has been encrypted in a different AWS account or ciphertext th

The plaintext was encrypted along with an encryption context, and you are not providing the identical encryption context when calling the Decrypt

API

**Explanation:**-Encryption context is a set of key/value pairs that you can pass to AWS KMS when you call the Encrypt, Decrypt, ReEncrypt, GenerateDataKey, and GenerateDataKeyWithoutPlaintext APIs. Although the encryption context is not included in the ciphertext, it is cryptographically bound to the ciphertext during encryption and must be passed again when you call the Decrypt (or ReEncrypt) API. Invalid ciphertext for decryption is plaintext that has been encrypted in a different AWS account or ciphertext th

- The private key does not match the public key in the ciphertext.
- You are not providing the correct symmetric key to the Decrypt API.

## Q20)

Your company has 30 years of financial records that take up 15TB of on-premises storage. It is regulated that you maintain these records, but in the year you have worked for the company no one has ever requested any of this data.

Given that the company data center is already filling the bandwidth of its Internet connection, what is an alternative way to store the data on the most appropriate cloud storage?

AWS Import/Export to Amazon Glacier

**Explanation:**-Because the Internet connection is full, the best solution will be based on using AWS Import/Export to ship the data. The most appropriate storage location for data that must be stored, but is very rarely accessed, is Amazon Glacier.

- AWS Import/Export to Amazon Simple Storage Service (Amazon S3)
- Amazon Kinesis
- Amazon Elastic MapReduce (AWS EMR)

### Q21)

Your company collects information from the point of sale registers at all of its franchise locations. Each month these processes collect 200TB of information stored in Amazon Simple Storage Service (Amazon S3). Analytics jobs taking 24 hours are performed to gather knowledge from this data.

Which of the following will allow you to perform these analytics in a cost-effective way?

- Launch a d2.8xlarge (32 vCPU, 244GB RAM) Amazon Elastic Compute Cloud (Amazon EC2) instance, and run an application to read and process each object sequentially.
- Run a transient Amazon EMR cluster, and run the MapReduce jobs against the data directly in Amazon S3.

**Explanation:**-Because the job is run monthly, a persistent cluster will incur unnecessary compute costs during the rest of the month. Amazon Kinesis is not appropriate because the company is running analytics as a batch job and not on a stream. A single large instance does not scale out to accommodate the large compute needs.

- Create an application that reads the information of the Amazon S3 bucket and runs it through an Amazon Kinesis stream.
- Copy the data to a persistent Amazon Elastic MapReduce (Amazon EMR) cluster, and run the MapReduce jobs.

## Q22) Which service allows you to process nearly limitless streams of data in flight?

- Amazon Kinesis Firehose
- Amazon Elastic MapReduce (Amazon EMR)
- Amazon Redshift
- Amazon Kinesis Streams

**Explanation:**-The Amazon Kinesis services enable you to work with large data streams. Within the Amazon Kinesis family of services, Amazon Kinesis Firehose saves streams to AWS storage services, while Amazon Kinesis Streams provide the ability to process the data in the stream.

# Q23) What combination of services enable you to copy daily 50TB of data to Amazon storage, process the data in Hadoop, and store the results in a large data warehouse?

Amazon Simple Storage Service (Amazon S3), Amazon Data Pipeline, Amazon EMR, and Amazon Redshift

**Explanation:**-Amazon Data Pipeline allows you to run regular Extract, Transform, Load (ETL) jobs on Amazon and on-premises data sources. The best storage for large data is Amazon S3, and Amazon Redshift is a large-scale data warehouse service.

- Amazon Elastic Block Store (Amazon EBS), Amazon Data Pipeline, Amazon EMR, and Amazon Redshift
- Amazon Kinesis, Amazon Data Pipeline, Amazon Elastic MapReduce (Amazon EMR), and Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon S3, Amazon Simple Workflow, Amazon EMR, and Amazon DynamoDB

Q24) Your company has 50,000 weather stations around the country that send updates every 2 seconds. What service will enable you to ingest this stream of data and store it to Amazon Simple Storage Service (Amazon S3) for future processing?

- Amazon Elastic Compute Cloud (Amazon EC2)
- Amazon Kinesis Firehose

**Explanation:**-Amazon Kinesis Firehose allows you to ingest massive streams of data and store the data on Amazon S3 (as well as Amazon Redshift and Amazon Elasticsearch).

- Amazon Simple Queue Service (Amazon SQS)
- Amazon Data Pipeline

# Q25) Your organization uses Chef heavily for its deployment automation. What AWS cloud service provides integration with Chef recipes to start new application server instances, configure application server software, and deploy applications?

- Amazon Kinesis
- AWS OpsWorks

**Explanation:**-AWS OpsWorks uses Chef recipes to start new app server instances, configure application server software, and deploy applications. Organizations can leverage Chef recipes to automate operations like software configurations, package installations, database setups, server scaling, and code deployment.

AWS Elastic Beanstalk

AWS CloudFormation

### Q26)

A firm is moving its testing platform to AWS to provide developers with instant access to clean test and development environments. The primary requirement for the firm is to make environments easily reproducible and fungible.

What service will help the firm meet their requirements?

- Amazon Redshift
- AWS Config
- AWS CloudFormation

**Explanation:**-With AWS CloudFormation, you can reuse your template to set up your resources consistently and repeatedly. Just describe your resources once and then provision the same resources over and over in multiple stacks.

AWS Trusted Advisor

#### Q27)

Your company's IT management team is looking for an online tool to provide recommendations to save money, improve system availability and performance, and to help close security gaps.

What can help the management team?

- AWS Config
- AWS Trusted Advisor

**Explanation:**-AWS Trusted Advisor inspects your AWS environment and makes recommendations when opportunities exist to save money, improve system availability and performance, or help close security gaps. AWS Trusted Advisor draws upon best practices learned from the aggregated operational history of serving hundreds of thousands of AWS customers.

- Cloud-init
- Configuration Recorder

#### Q28)

Your company works with data that requires frequent audits of your AWS environment to ensure compliance with internal policies and best practices. In order to perform these audits, you need access to historical configurations of your resources to evaluate relevant configuration changes.

Which service will provide the necessary information for your audits?

- AWS Key Management Service (AWS KMS)
- AWS Config

**Explanation:**-AWS Config is a fully managed service that provides you with an AWS resource inventory, configuration history, and configuration change notifications to enable security and governance. 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.

- AWS CloudTrail
- AWS OpsWorks

Q29) All of the website deployments are currently done by your company's development team. With a surge in website popularity, the company is looking for ways to be more agile with deployments. What AWS cloud service can help the developers focus more on writing code instead of spending time managing and configuring servers, databases, load balancers, firewalls, and networks?

- AWS Config
- AWS Trusted Advisor
- Amazon Kinesis
- AWS Elastic Beanstalk

**Explanation:**-AWS Elastic Beanstalk is the fastest and simplest way to get an application up and running on AWS. Developers can simply upload their application code, and the service automatically handles all the details such as resource provisioning, load balancing, Auto Scaling, and monitoring.

Q30) AWS communicates with customers regarding its security and control environment through a variety of different mechanisms. Which of the following are valid mechanisms? (Choose 3 answers)

- Allowing customers' auditors direct access to AWS data centers, infrastructure, and senior staff
- Directly providing customers with certificates, reports, and other documentation (under NDA in some cases)

**Explanation:**-The option describe valid mechanisms that AWS uses to communicate with customers regarding its security and control environment. AWS does not allow customers' auditors direct access to AWS data centers, infrastructure, or staff.

Publishing information about security and AWS control practices via the website, whitepapers, and blogs

**Explanation:**-The option describe valid mechanisms that AWS uses to communicate with customers regarding its security and control environment. AWS does not allow customers' auditors direct access to AWS data centers, infrastructure, or staff.

Obtaining industry certifications and independent third-party attestations

**Explanation:**-The option describe valid mechanisms that AWS uses to communicate with customers regarding its security and control environment. AWS does not allow customers' auditors direct access to AWS data centers, infrastructure, or staff.

## Q31) Which of the following statements is true when it comes to the AWS shared responsibility model?

- The shared responsibility model is only applicable for customers who want to be compliant with ISO 27001.
- The shared responsibility model is only applicable for customers who want to be compliant with SOC 1 Type II.

The shared responsibility model is not just limited to security considerations; it also extends to IT controls.

Explanation:-The shared responsibility model can include IT controls, and it is not just limited to security considerations. Therefore, answer C is correct

The shared responsibility model is limited to security considerations only; it does not extend to IT controls.

## Q32) AWS provides IT control information to customers in which of the following ways?

- By using general control standard compliance and by complying with ISO 27001
- By using specific control definitions or through SAS 70
- By using specific control definitions or through general control standard compliance

Explanation:-AWS provides IT control information to customers through either specific control definitions or general control standard compliance.

By complying with ISO 27001 and SOC 1 Type II

## Q33) Which of the following is a valid report, certification, or third-party attestation for AWS? (Choose 3 answers)

SOC 4

Explanation:-There is no such thing as a SOC 4 report, therefore answer is incorrect.

- PCI DSS Level 1
- SOC 1
- ✓ ISO 27001

## Q34) Which of the following statements is true?

- AWS doesn't take risk management very seriously, and it's up to the customer to mitigate risks to the AWS infrastructure.
- The shared responsibility model applies to IT security only; it does not relate to governance.
- The AWS platform is PCI DSS-compliant to Level 1. Customers can deploy their web applications to this platform, and they will be PCI DSS-compliant automatically.
- IT governance is still the customer's responsibility, despite deploying their IT estate onto the AWS platform.

Explanation:-IT governance is still the customer's responsibility.

## Q35) Which of the following statements is true when it comes to the risk and compliance advantages of the AWS environment?

Few, many, or all components of a workload can be moved to the AWS Cloud, but it is the customer's responsibility to ensure that their entire workload remains compliant with various certifications and third-party attestations.

**Explanation:**-Any number of components of a workload can be moved into AWS, but it is the customer's responsibility to ensure that the entire workload remains compliant with various certifications and third-party attestations.

- The non-critical components of a workload must be moved entirely into the AWS Cloud in order to be compliant with various certifications and third-party attestations, but the critical components do not.
- Workloads must be moved entirely into the AWS Cloud in order to be compliant with various certifications and third-party attestations.
- The critical components of a workload must be moved entirely into the AWS Cloud in order to be compliant with various certifications and third-party attestations, but the non-critical components do not.

## Q36) Which of the following statements best describes an Availability Zone?

- Each Availability Zone consists of multiple discrete data centers with shared power and redundant networking/connectivity
- Each Availability Zone consists of multiple discrete regions, each with a single data center with redundant power and networking/connectivity.
- Each Availability Zone consists of multiple discrete data centers with redundant power and networking/connectivity.

**Explanation:**-An Availability Zone consists of multiple discrete data centers, each with their own redundant power and networking/connectivity, therefore answer is correct.

Each Availability Zone consists of a single discrete data center with redundant power and networking/connectivity.

# Q37) With regard to vulnerability scans and threat assessments of the AWS platform, which of the following statements are true? (Choose 2 answers)

- Customers can perform their own scans at any time without advance notice.
- AWS security notifies the appropriate parties to remediate any identified vulnerabilities.

**Explanation:**-AWS regularly scans public-facing, non-customer endpoint IP addresses and notifies appropriate parties. AWS does not scan customer instances, and customers must request the ability to perform their own scans in advance, therefore answers are correct.

- Scans performed by AWS include customer instances.
- AWS regularly performs scans of public-facing endpoint IP addresses for vulnerabilities.

**Explanation:**-AWS regularly scans public-facing, non-customer endpoint IP addresses and notifies appropriate parties. AWS does not scan customer instances, and customers must request the ability to perform their own scans in advance, therefore answers are correct.

## Q38) Which of the following best describes the risk and compliance communication responsibilities of customers to AWS?

- Both customers and AWS keep their security and control practices entirely confidential and do not share them in order to ensure the greatest security for all parties.
- Customers communicate their use and configurations to AWS at all times. AWS does not communicate AWS security and control practices to customers for security reasons.
- AWS and customers both communicate their security and control environment information to each other at all times.
- AWS publishes information about the AWS security and control practices online, and directly to customers under NDA. Customers do not need to communicate their use and configurations to AWS.

**Explanation:**-AWS publishes information publicly online and directly to customers under NDA, but customers are not required to share their use and configuration information with AWS, therefore answer is correct.

## Q39) When it comes to risk management, which of the following is true?

- Neither AWS nor the customer needs to worry about risk management, so no plan is needed from either party.
- AWS has developed a strategic business plan to identify any risks and implemented controls to mitigate or manage those risks. Customers do not need to develop and maintain their own risk management plans.
- AWS has developed a strategic business plan to identify any risks and has implemented controls to mitigate or manage those risks. Customers should also develop and maintain their own risk management plans to ensure they are compliant with any relevant controls and certifications **Explanation:**-AWS has developed a strategic business plan, and customers should also develop and maintain their own risk management plans, therefore answer is correct.
- AWS does not develop a strategic business plan; risk management and mitigation is entirely the responsibility of the customer.

# Q40) The AWS control environment is in place for the secure delivery of AWS Cloud service offerings. Which of the following does the collective control environment NOT explicitly include?

- Technology
- Energy

**Explanation:**-The collective control environment includes people, processes, and technology necessary to establish and maintain an environment that supports the operating effectiveness of AWS control framework. Energy is not a discretely identified part of the control environment, therefore this the correct answer.

- People
- Processes

### Q41) Who is responsible for the configuration of security groups in an AWS environment?

AWS provides the security group functionality as a service, but the customer is responsible for correctly and securely configuring their own security groups.

**Explanation:**-Customers are responsible for ensuring all of their security group configurations are appropriate for their own applications, therefore answer is correct.

- Neither AWS nor the customer is responsible for the configuration of security groups; security groups are intelligently and automatically configured using traffic heuristics.
- AWS is responsible for ensuring that all security groups are correctly and securely configured. Customers do not need to worry about security group configuration.
- The customer and AWS are both jointly responsible for ensuring that security groups are correctly and securely configured.

# Q42) Which of the following is NOT a recommended approach for customers trying to achieve strong compliance and governance over an entire IT control environment?

Implement generic control objectives that are not specifically designed to meet their organization's compliance requirements.

**Explanation:**-Customers should ensure that they implement control objectives that are designed to meet their organization's own unique compliance requirements, therefore answer is correct.

- Verify that all control objectives are met and all key controls are designed and operating effectively.
- Take a holistic approach: review information available from AWS together with all other information, and document all compliance requirements.
- Identify and document controls owned by all third parties.

## Q43)

You are changing your application to move session state information off the individual Amazon Elastic Compute Cloud (Amazon EC2) instances to take advantage of the elasticity and cost benefits provided by Auto Scaling.

Which of the following AWS Cloud services is best suited as an alternative for storing session state information?

- Amazon Storage Gateway
- Amazon Redshift
- Amazon DynamoDB

**Explanation:**-Amazon DynamoDB is a NoSQL database store that is a great choice as an alternative due to its scalability, high-availability, and durability characteristics. Many platforms provide open-source, drop-in replacement libraries that allow you to store native sessions in Amazon DynamoDB. Amazon DynamoDB is a great candidate for a session storage solution in a share-nothing, distributed architecture.

Amazon Kinesis

## Q44)

A media sharing application is producing a very high volume of data in a very short period of time. Your back-end services are unable to manage the large volume of transactions.

What option provides a way to manage the flow of transactions to your back-end services?

- Store the inbound transactions in an Amazon Elastic MapReduce (Amazon EMR) cluster so that your back-end services can retrieve them as time permits.
- Use an Amazon Simple Notification Service (Amazon SNS) topic to buffer the inbound transactions.
- Use an Amazon Simple Queue Service (Amazon SQS) queue to buffer the inbound transactions.

**Explanation:**-Amazon SQS is a fast, reliable, scalable, and fully managed message queuing service. Amazon SQS should be used to decouple the large volume of inbound transactions, allowing the back-end services to manage the level of throughput without losing messages.

Store the inbound transactions in an Amazon Relational Database Service (Amazon RDS) instance so that your back-end services can retrieve them as time permits.

# Q45) Which of the following are best practices for managing AWS Identity and Access Management (IAM) user access keys? (Choose 3 answers)

- Keep unused access keys for an indefinite period of time.
- Onfigure Multi-Factor Authentication (MFA) for your most sensitive operations.

**Explanation:**-You should protect AWS user access keys like you would your credit card numbers or any other sensitive secret. Use different access keys for different applications so that you can isolate the permissions and revoke the access keys for individual applications if an access key is exposed. Remember to change access keys on a regular basis. For increased security, it is recommended to configure MFA for any sensitive operations. Remember to remove any IAM users that are no longer needed.

Rotate access keys periodically.

**Explanation:**-You should protect AWS user access keys like you would your credit card numbers or any other sensitive secret. Use different access keys for different applications so that you can isolate the permissions and revoke the access keys for individual applications if an access key is exposed. Remember to change access keys on a regular basis. For increased security, it is recommended to configure MFA for any sensitive operations. Remember to remove any IAM users that are no longer needed.

- Embed access keys directly into application code.
- Use different access keys for different applications.

**Explanation:**-You should protect AWS user access keys like you would your credit card numbers or any other sensitive secret. Use different access keys for different applications so that you can isolate the permissions and revoke the access keys for individual applications if an access key is exposed. Remember to change access keys on a regular basis. For increased security, it is recommended to configure MFA for any sensitive operations. Remember to remove any IAM users that are no longer needed.

### Q46)

You need to implement a service to scan Application Program Interface (API) calls and related events' history to your AWS account. This service will detect things like unused permissions, overuse of privileged accounts, and anomalous logins.

Which of the following AWS Cloud services can be leveraged to implement this service? (Choose 3 answers)

- Amazon Route 53
- Auto Scaling
- AWS Lambda

**Explanation:**-You can enable AWS CloudTrail in your AWS account to get logs of API calls and related events' history in your account. AWS CloudTrail records all of the API access events as objects in an Amazon S3 bucket that you specify at the time you enable AWS CloudTrail. You can take advantage of Amazon S3's bucket notification feature by directing Amazon S3 to publish object-created events to AWS Lambda. Whenever AWS CloudTrail writes logs to your Amazon S3 bucket, Amazon S3 can then invoke your AWS Lambda.

Amazon Simple Storage Service (Amazon S3)

**Explanation:**-You can enable AWS CloudTrail in your AWS account to get logs of API calls and related events' history in your account. AWS CloudTrail records all of the API access events as objects in an Amazon S3 bucket that you specify at the time you enable AWS CloudTrail. You can take advantage of Amazon S3's bucket notification feature by directing Amazon S3 to publish object-created events to AWS Lambda. Whenever AWS CloudTrail writes logs to your Amazon S3 bucket, Amazon S3 can then invoke your AWS Lambda.

AWS CloudTrail

**Explanation:**-You can enable AWS CloudTrail in your AWS account to get logs of API calls and related events' history in your account. AWS CloudTrail records all of the API access events as objects in an Amazon S3 bucket that you specify at the time you enable AWS CloudTrail. You can take advantage of Amazon S3's bucket notification feature by directing Amazon S3 to publish object-created events to AWS Lambda. Whenever AWS CloudTrail writes logs to your Amazon S3 bucket, Amazon S3 can then invoke your AWS Lambda.

Q47) Government regulations require that your company maintain all correspondence for a period of seven years for compliance reasons. What is the best storage mechanism to keep this data secure in a cost-effective manner?

- Amazon EBS
- Amazon Glacier

**Explanation:**-Amazon Glacier enables businesses and organizations to retain data for months, years, or decades, easily and cost effectively. With Amazon Glacier, customers can retain more of their data for future analysis or reference, and they can focus on their business instead of operating and maintaining their storage infrastructure. Customers can also use Amazon Glacier Vault Lock to meet regulatory and compliance archiving requirements.

- Amazon S3
- Amazon EFS

## Q48)

Your company provides media content via the Internet to customers through a paid subscription model. You leverage Amazon CloudFront to distribute content to your customers with low latency.

What approach can you use to serve this private content securely to your paid subscribers?

- Use the Amazon CloudFront geo restriction feature to restrict access to all of the paid subscription media at the country level.
- Configure Amazon CloudFront to compress the media files automatically for paid subscribers.
- Use HTTPS requests to ensure that your objects are encrypted when Amazon CloudFront serves them to viewers.
- Provide signed Amazon CloudFront URLs to authenticated users to access the paid content.

**Explanation:**-Many companies that distribute content via the Internet want to restrict access to documents, business data, media streams, or content that is intended for selected users, such as users who have paid a fee. To serve this private content securely using Amazon CloudFront, you can require that users access your private content by using special Amazon CloudFront-signed URLs or signed cookies.

Q49) Your company provides transcoding services for amateur producers to format their short films to a variety of video formats. Which service provides the best option for storing the videos?

- Amazon Relational Database Service (Amazon RDS)
- ✓ Amazon Simple Storage Service (Amazon S3)

Amazon Glacier

AWS Storage Gateway

## Q50)

A week before Cyber Monday last year, your corporate data center experienced a failed air conditioning unit that caused flooding into the server racks. The resulting outage cost your company significant revenue. Your CIO mandated a move to the cloud, but he is still concerned about catastrophic failures in a data center.

What can you do to alleviate his concerns?

- Launch the compute for the processing services in a placement group.
- Use an Amazon Virtual Private Cloud (Amazon VPC) with subnets.
- ☑ Distribute the architecture across multiple Availability Zones.

**Explanation:**-An Availability Zone consists of one or more physical data centers. Availability zones within a region provide inexpensive, low-latency network connectivity to other zones in the same region. This allows you to distribute your application across data centers. In the event of a catastrophic failure in a data center, the application will continue to handle requests.

Purchase Reserved Instances for the processing services instances.