

Q1) In regards to Amazon SQS how many times will you receive each message?

- ☐ Exactly once
- ☒ At least once

Explanation:-Amazon SQS is engineered to provide “at least once” delivery of all messages in its queues. Although most of the time, each message will be delivered to your application exactly once, you should design your system so that processing a message more than once does not create any errors or inconsistencies.

- ☐ At least twice
- ☐ As many times as you want

Q2) Which one of the following data types does Amazon DynamoDB not support?

- ☐ Binary
- ☒ Arrays

Explanation:-Amazon DynamoDB supports the following data types:

Scalar data types (like Number, String, and Binary)

Multi-valued types (like String Set, Number Set, and Binary Set).

- ☐ String
- ☐ Number Set

Q3) Which OS does the current version of AWS Elastic Beanstalk use?

- ☐ Windows Server 2008 R2 AMI only
- ☐ Amazon Linux AMI, Windows Server 2003 R2 AMI or the Windows Server 2008 R2 AMI
- ☒ Amazon Linux AMI or the Windows Server 2008 R2 AMI

Explanation:-The current version of AWS Elastic Beanstalk uses the Amazon Linux AMI or the Windows Server 2008 R2 AMI.

- ☐ Amazon Linux AMI only

Q4) In DynamoDB, to get a detailed listing of secondary indexes on a table, you can use the _____ action.

- ☐ TableName
- ☒ DescribeTable

Explanation:-In DynamoDB, DescribeTable returns information about the table, including the current status of the table, when it was created, the primary key schema, and any indexes on the table.

- ☐ GetItem
- ☐ BatchGetItem

Q5) AWS CloudFormation Parameter values that you override at runtime are returned as part of the “aws cloudformation describe-stacks” command, unless you suppress that in the parameter declaration by _____.

- ☐ including the Echo property with a value of false.
- ☒ including the NoEcho property with a value of true.

Explanation:-In AWS CloudFormation, the default value is overridden if you specify a value for the parameter as part of the aws cloudformation create-stack --parameters option. Parameter values you override at runtime are returned as part of the aws cloudformation describe-stacks command, unless you suppress that in the parameter declaration by including the NoEcho property with a value of true.

- ☐ including the NoEcho property with a value of false.
- ☐ including the Echo property with a value of true.

Q6)

A user has setup Multi AZ with the MS SQL RDS instance.

Which of the below mentioned functionalities can be achieved by the user?

- ☐ Scalability
- ☒ MS SQL does not support Multi AZ

Explanation:-The Multi AZ feature allows the user to achieve High Availability. MS SQL does not support Multi AZ.

- ☐ High availability
- ☐ Disaster recovery

Q7) True or False: AWS CloudFormation allows you to create Microsoft Windows stacks.

- ☐ False, you cannot create Windows stacks.
- ☒ True

Explanation:-AWS CloudFormation allows you to create Microsoft Windows stacks based on Amazon EC2 Windows Amazon Machine Images (AMIs) and provides you with the ability to install software, to use remote desktop to access your stack, and to update and configure your stack.

- ☐ False, Amazon doesn't support Microsoft Windows.
- ☐ False, AWS CloudFormation does not support Microsoft Windows.

Q8)

A user is trying to create a list of IAM users with the AWS console.

When the IAM users are created which of the below mentioned credentials will be enabled by default for the user?

- ☐ IAM passwords
- ☒ Nothing. Everything is disabled by default

Explanation:-Newly created IAM users have no password and no access key (access key ID and secret access key). If the user needs to administer your AWS resources using the AWS Management Console, you can create a password for the user. If the user needs to interact with AWS programmatically (using the command line interface (CLI), the AWS SDK, or service-specific APIs), you can create an access key for that user. The credentials you create for users are what they use to uniquely identify themselves to AWS.

- ☐ IAM access key and secret access key
- ☐ IAM X.509 certificates

Q9) In Amazon SNS, to send push notifications to mobile devices using Amazon SNS and ADM, you need to obtain the following, except:

- ☐ Registration ID
- ☐ Client secret
- ☐ Client ID
- ☒ Device token

Explanation:-To send push notifications to mobile devices using Amazon SNS and ADM, you need to obtain the following: Registration ID and Client secret.

Q10)

A user is trying to configure access with S3.

Which of the following options is not possible to provide access to the S3 bucket / object?

- ☐ Define the ACL for the object
- ☐ Define the policy for the bucket
- ☐ Define the policy for the IAM user
- ☒ Define the policy for the object

Explanation:-Amazon S3 offers access policy options broadly categorized as resource-based policies and user policies. Access policies, such as ACL and resource policy can be attached to the bucket. With the object the user can only have ACL and not an object policy. The user can also attach access policies to the IAM users in the account. These are called user policies.

Q11)

A user has set an IAM policy where it allows all requests if a request from IP 10.10.10.1/32.

Another policy allows all the requests between 5 PM to 7 PM.

What will happen when a user is requesting access from IP 10.10.10.1/32 at 6 PM?

- ☐ IAM will throw an error for policy conflict
- ☐ It is not possible to set a policy based on the time or IP
- ☒ It will deny access

Explanation:-With regard to IAM, when a request is made, the AWS service decides whether a given request should be allowed or denied. The evaluation logic follows these rules:

By default, all requests are denied. (In general, requests made using the account credentials for resources in the account are always allowed.)

An explicit allow policy overrides this default.

An explicit deny policy overrides any allows.

- ☐ It will allow access

Q12) When a user is launching an instance with EC2, which of the below mentioned options is not available during the instance launch console for a key pair?

- ☐ Select an existing key pair
- ☒ Upload a new key pair

Explanation:-While launching an EC2 instance, the user can create a new key pair, select an existing key pair or proceed without a key pair. The user cannot upload a new key pair in the EC2 instance launch console.

- ☐ Create a new key pair
- ☐ Proceed without the key pair

Q13) Amazon DynamoDB supports these scalar data types: _____.

- ☐ Number and Binary
- ☒ Number, String, and Binary

Explanation:-Amazon DynamoDB supports three scalar data types: Number, String, and Binary. Additionally, Amazon DynamoDB supports multi-valued types: Number Set, String Set, and Binary Set.

- ☐ Number and String
- ☐ Number, String, Binary and Datetime

Q14) A user has created a MySQL RDS instance. Which of the below mentioned options is mandatory to configure while creating an instance?

- ☐ Availability Zone
- ☒ Multi AZ deployment setup

Explanation:-When creating an RDS instance, the user needs to specify whether it is Multi AZ or not. If the user does not provide the value for the

zone, the maintenance window or automated backup window, RDS will automatically select the value.

- ☐ Automated backup window
- ☐ Maintenance window

Q15) In DynamoDB, could you use IAM to grant access to Amazon DynamoDB resources and API actions?

- ☐ No
- ☐ In DynamoDB there is no need to grant access
- ☒ Yes

Explanation:-Amazon DynamoDB integrates with AWS Identity and Access Management (IAM). You can use AWS IAM to grant access to Amazon DynamoDB resources and API actions. To do this, you first write an AWS IAM policy, which is a document that explicitly lists the permissions you want to grant. You then attach that policy to an AWS IAM user or role.

- ☐ Depended to the type of access

Q16) True or False: In DynamoDB, Scan operations are always eventually consistent.

- ☐ No, scan is like Query operation
- ☐ No, scan is strongly consistent by default
- ☐ No, you can optionally request strongly consistent scan.
- ☒ Yes

Explanation:-In DynamoDB, Scan operations are always eventually consistent.

Q17) Regarding Amazon SQS, what happens if there is no activity against a queue for more than 30 consecutive days?

- ☐ Your account will be suspended
- ☒ The queue may be deleted

Explanation:-AWS reserve the right to delete a queue if none of the following requests have been issued against the queue for more than 30 consecutive days:

SendMessage

ReceiveMessage

DeleteMessage

GetQueueAttributes

SetQueueAttributes

You should design your application with this in mind.

- ☐ The queue will be deleted
- ☐ Nothing

Q18) Each AWS CloudFormation account is limited to a maximum of ____ stacks.

- ☒ 20

Explanation:-In AWS CloudFormation, each AWS CloudFormation account is limited to a maximum of 20 stacks.

- ☐ 10
- ☐ 60
- ☐ 50

Q19)

A user is launching an AWS RDS instance with MySQL. The user wants to enable the Multi AZ feature.

Which of the below mentioned parameters will not be allowed to configure by RDS?

- ☐ DB subnet group
- ☒ Availability Zone

Explanation:-If the user is launching RDS with Multi AZ the user cannot provision the Availability Zone. RDS is launched automatically instead

- ☐ Region
- ☐ Database port

Q20) By using _____, you simply upload your application, and it automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

- ☐ Amazon CloudFront
- ☒ AWS Elastic Beanstalk

Explanation:-AWS Elastic Beanstalk is an easy way for you to quickly deploy and manage applications in the AWS cloud. You simply upload your application, and Elastic Beanstalk automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

- ☐ AWS OpsWorks
- ☐ AWS CloudFormation

Q21)

A user has launched an RDS instance. The user has created 3 databases on the same server.

What can the maximum size be for each database?

- ☐ The size of each DB cannot be more than 3 TB
- ☒ The total instance storage size cannot be more than 3 TB

Explanation:-The AWS RDS DB instance is an isolated DB environment provided by AWS in which the user can create more than 1 database. The

maximum size of the instance should be between 5 GB and 3 TB. The size of each DB can be anything in this range.

- ☐ It is not possible to have more than one DB on a single instance
- ☐ The size of each DB cannot be more than 1 TB

Q22)

A user has attached an EBS volume to a running Linux instance as a “/dev/sdf” device. The user is unable to see the attached device when he runs the command “df -h”.

What is the possible reason for this?

- ☐ The volume is not attached as a root device
- ☒ The volume is not mounted

Explanation:-When a user creates an EBS volume and attaches it as a device, it is required to mount the device. If the device/volume is not mounted it will not be available in the listing.

- ☐ The volume is not formatted
- ☐ The volume is not in the same AZ of the instance

Q23) In DynamoDB, if you create a table and request 10 units of write capacity and 200 units of read capacity of provisioned throughput, how much would you be charged in US East (Northern Virginia) Region?

- ☐ \$0.10 per hour
- ☒ \$0.05 per hour

Explanation:-To understand pricing in DynamoDB, consider the following example. If you create a table and request 10 units of write capacity and 200 units of read capacity of provisioned throughput, you would be charged: $\$0.01 + (4 \times \$0.01) = \$0.05$ per hour

- ☐ \$0.03 per hour
- ☐ \$0.15 per hour

Q24) Regarding Amazon SNS, when you want to subscribe to a topic and receive notifications to your email, in the Protocol drop-down box, you should select _____.

- ☐ Message
- ☒ Email

Explanation:-In Amazon SNS, when you want to subscribe to a topic and receive notifications to your email, select Email in the Protocol drop-down box. Enter an email address you can use to receive the notification in the Endpoint field.

- ☐ IMAP
- ☐ SMTP

Q25) How can a user configure three termination policies for the AutoScaling group?

- ☐ Define multiple policies in random order
- ☐ The user cannot specify more than two policies for AutoScaling
- ☒ Define multiple policies in the ordered list

Explanation:-To configure the Auto Scaling termination policy, the user can either specify any one of the policies as a standalone policy or list multiple policies in an ordered list. The policies are executed in the order that they are listed.

- ☐ Keep updating the AutoScaling group with each policy

Q26) A user is accessing an EC2 instance on the SSH port for IP 10.20.30.40. Which one is a secure way to configure that the instance can be accessed only from this IP?

- ☐ In the security group, open port 22 for IP 10.20.30.40/0
- ☐ In the security group, open port 22 for IP 10.20.30.40
- ☒ In the security group, open port 22 for IP 10.20.30.40/32

Explanation:-In AWS EC2, while configuring a security group, the user needs to specify the IP address in CIDR notation. The CIDR IP range 10.20.30.40/32 says it is for a single IP 10.20.30.40. If the user specifies the IP as 10.20.30.40 only, the security group will not accept and ask it in a CIRD format.

- ☐ In the security group, open port 22 for IP 10.20.30.40/24

Q27)

A user has created an application which sends data to a log file. The server hosting the log files can be unavailable due to any reason.

The user wants to make it so that whenever the log server is up it should be receiving the messages.

Which of the below mentioned AWS services helps achieve this functionality?

- ☐ AWS Simple Notification Service
- ☒ AWS Simple Queue Service

Explanation:-Amazon Simple Queue Service (SQS) is a fast, reliable, scalable, and fully managed message queuing service. SQS provides a simple and cost-effective way to decouple the components of an application. The user can use SQS to transmit any volume of data without losing messages or requiring other services to always be available. Using SQS, the application has to just send the data to SQS and SQS transmits it to the log file whenever it is available.

- ☐ AWS Simple Workflow
- ☐ AWS Simple Task Service

Q28) In DynamoDB, the default table size is:

- ☐ 1 GB

✓ There is no table size

Explanation:-DynamoDB has seamless scalability with no table size limits and unlimited storage, so you shouldn't be worried about managing storage on the host or to provisioning more drive, as your data requirement changes.

- ☐ 10 GB
- ☐ 5 GB

Q29)

A user is enabling logging on a particular bucket.

Which of the below mentioned options may be best suitable to allow access to the log bucket?

- ☐ Create an IAM policy and allow log access
- ✓ Provide ACL for the logging group

Explanation:-The only recommended use case for the S3 bucket ACL is to grant the write permission to the Amazon S3 Log Delivery group to write access log objects to the user's bucket.

- ☐ Create an IAM Role which has access to the log bucket
- ☐ It is not possible to enable logging on the S3 bucket

Q30) How do you configure SQS to support longer message retention?

- ☐ You need to request it from AWS
- ✓ Set the MessageRetentionPeriod attribute using the SetQueueAttributes method

Explanation:-To configure the message retention period, set the MessageRetentionPeriod attribute using the SetQueueAttributes method. This attribute is used to specify the number of seconds a message will be retained by SQS. Currently the default value for the message retention period is 4 days. Using the MessageRetentionPeriod attribute, the message retention period can be set anywhere from 60 seconds (1 minute), up to 1209600 seconds (14 days).

- ☐ Using a Lambda function
- ☐ You can't. It is set to 14 days and cannot be changed

Q31) What AWS native tool can be used to trace requests through microservices?

- ☐ AWS Tracer
- ☐ AWS CloudTrail
- ✓ AWS X-Ray

Explanation:-X-Ray is a tool designed explicitly for microservice architectures, and one of its primary functions is to trace calls throughout the application including up and downstream services. AWS Tracer is not a product in AWS. Though AWS CloudTrail is a way to log the API calls themselves, it is not a way to 'trace' a request through a series of microservices. And finally, AWS CloudWatch is a metrics and logging service, but not used for trace functionality.

- ☐ AWS CloudWatch

Q32)

CloudFront is commonly viewed as a Content Distribution Network for distributing content.

Can it be used to ingest data?

- ☐ No
- ✓ Yes, POST operations into S3 through CloudFront is supported

Explanation:-CloudFront can certainly accept POST requests. In doing so, data could be sent to S3, or even be leveraged with services like Lambda@edge, running Lambda functions as close to the user in the CloudFront Edge location. This is a great way to ingest data optimally, getting into the AWS network sooner and closer to the user. "Yes, CloudFront could be used to send data directly into DynamoDB" is incorrect because a translation would need to occur here; however, if lambda@edge were running, Lambda could in turn write to DynamoDB. "Yes, CloudFront can accept POST operations and translate to s/FTP or SSH sessions" is incorrect because CloudFront will not work with other protocols. CloudFront only supports HTTP/s operations.

- ☐ Yes, CloudFront could be used to send data directly into DynamoDB
- ☐ Yes, CloudFront can accept POST operations and translate to s/FTP or SSH sessions

Q33)

You are creating a client-side JavaScript application where you need to have some server-side actions to be performed upon "click" in the application.

How can this be accomplished? (Choose 2)

- ☐ It can't since JavaScript will run in the browser and be unable to do server-side processing.
- ✓ Use API Gateway and develop API's which can be called from the JavaScript code directly to run Lambda functions for server-side processing.

Explanation:-Either creating an API Gateway front-end, or directly invoking Lambda through Cognito authentication are both valid options for JavaScript to be able to interact with back-end Lambda functions. "It can't since JavaScript will run in the browser and be unable to do server-side processing" is incorrect because although JavaScript will run in the browser, it can make the necessary API calls to interact with a back-end. "Embed AWS API credentials in a secure cookie and use those credentials to make AWS API calls directly to Lambda to invoke" is incorrect because storing credentials on the client is typically a bad idea.

- ✓ Use Amazon Cognito to authenticate and generate temporary credentials, then JavaScript can directly invoke a Lambda function with the provided credentials.

Explanation:-Either creating an API Gateway front-end, or directly invoking Lambda through Cognito authentication are both valid options for JavaScript to be able to interact with back-end Lambda functions. "It can't since JavaScript will run in the browser and be unable to do server-side processing" is incorrect because although JavaScript will run in the browser, it can make the necessary API calls to interact with a back-end. "

Embed AWS API credentials in a secure cookie and use those credentials to make AWS API calls directly to Lambda to invoke" is incorrect because storing credentials on the client is typically a bad idea.

- Embed AWS API credentials in a secure cookie and use those credentials to make AWS API calls directly to Lambda to invoke.

Q34) What template formats can I write CloudFormation templates? (Choose 2)

- Extensible Markup Language (XML)
- ✓ Java Script Object Notation (JSON)

Explanation:-CloudFormation supports JSON and YAML for its template languages.

- CloudFormation Markup Language (CML)
- ✓ Yet Another Markup Language (YAML)

Explanation:-CloudFormation supports JSON and YAML for its template languages.

- HashiCorp Configuration Language (HCL)

Q35) Which services could be used to stream custom application logs?

- AWS CloudTrail
- ✓ AWS CloudWatch Logs

Explanation:-The Kinesis agent could be used, or one could use the Kinesis Producer Library (KPL) to stream the logs. If using CloudWatch logs, the CloudWatch logs agent would need to be installed to stream the logs. AWS CloudTrail is incorrect because it will only collect AWS API Call Logs; custom application logs cannot be streamed to CloudTrail.

- ✓ AWS Kinesis Data Streams

Explanation:-The Kinesis agent could be used, or one could use the Kinesis Producer Library (KPL) to stream the logs. If using CloudWatch logs, the CloudWatch logs agent would need to be installed to stream the logs. AWS CloudTrail is incorrect because it will only collect AWS API Call Logs; custom application logs cannot be streamed to CloudTrail.

- ✓ AWS Kinesis Firehose

Explanation:-The Kinesis agent could be used, or one could use the Kinesis Producer Library (KPL) to stream the logs. If using CloudWatch logs, the CloudWatch logs agent would need to be installed to stream the logs. AWS CloudTrail is incorrect because it will only collect AWS API Call Logs; custom application logs cannot be streamed to CloudTrail.

Q36) How are 4xx error codes handled by an application?

- Simply retry the operation
- ✓ Make necessary application adjustments and try again

Explanation:-A 4xx (e.g. 400, 401, 402, 403, etc.) error code suggests that there is typically something wrong on the client side. An invalid URL or an invalid resource could create a 4xx error. Simply retrying will typically not result in a resolution unless the other end is unresponsive. "Make necessary application adjustments and try again" is the correct answer because this may require adjusting the client side (use correct/valid URL as an example). "Verify credentials and try again" is incorrect because 400 and 500 errors are not credential errors. "Do nothing, a 4xx error is benign" is incorrect because simply doing nothing will result in a non-action being performed.

- Verify credentials and try again
- Do nothing, a 4xx error is benign

Q37) Who is responsible for patching your EC2 instances?

- AWS
- ✓ The EC2 Customer/Administrator

Explanation:-EC2 instances are owned and managed by the customer/administrator. AWS does not have OS access to your instance, and the customer is responsible for patching the system. This could be set up in an automated fashion, but the customer must manage such process.

- AWS Partners
- No one; EC2 instances patch themselves

Q38) Which actions (permissions) are used to assume a role? (Pick 2)

- iam:AssumeRole
- ✓ sts:AssumeRole

Explanation:-sts:AssumeRole and sts:AssumeRoleWithSAML are correct because STS (Secure Token Service) is the service required to assume a role. When a role is created, credentials are generated for the role along with a token. The STS service is the one generating those tokens and thus require permissions to execute that action. A third assume role action may be sts:AssumeRoleWithWebIdentity if using a web IdP. iam:AssumeRole and iam:AssumeRoleWithSAML are incorrect because 'iam' itself does issue the credentials for the role. This action in essence is permitting the generation of the tokens required. Note that, this does not grant trust to the role. The role will have a Trust Policy as well, granting the entity the ability to assume the role.

- iam:AssumeRoleWithSAML
- ✓ sts:AssumeRoleWithSAML

Explanation:-sts:AssumeRole and sts:AssumeRoleWithSAML are correct because STS (Secure Token Service) is the service required to assume a role. When a role is created, credentials are generated for the role along with a token. The STS service is the one generating those tokens and thus require permissions to execute that action. A third assume role action may be sts:AssumeRoleWithWebIdentity if using a web IdP. iam:AssumeRole and iam:AssumeRoleWithSAML are incorrect because 'iam' itself does issue the credentials for the role. This action in essence is permitting the generation of the tokens required. Note that, this does not grant trust to the role. The role will have a Trust Policy as well, granting the entity the ability to assume the role.

Q39)

You want to modify resources in a CloudFormation template but do not know the effects the change may have.

What would you use to be able to evaluate such changes to the stack and have the ability to review how the changes will impact the running resources?

- AWS Template Evaluator
 - ✓ Change Sets
- Explanation:-**Change Sets will produce a summary of changes and their impact on the resources. For example, will the resource be impacted at all, be rebooted, or deleted and re-created? AWS Template Evaluator and Template deployment tool are incorrect because those are made up. StackSets is used for deploying or managing template resources across accounts and/or regions.
- StackSets
 - Template deployment tool
-

Q40)

An IAM user is explicitly denied an action in their associated IAM policy (a Deny statement exists).

The user assumes a role that permits the action.

What is the net result?

- ✓ The role is permitted, thus the user assuming the role is permitted.

Explanation:-Normally a Deny wins in the typical evaluation logic over any Allow statements; however, when an AWS entity assumes a role, it “becomes” that role. That role’s permissions overrule any other permissions that the user may have at that time. Assuming a role does not augment your user permissions, it replaces them during that session. “Not enough information provided” is incorrect because we don’t need anything more when assuming a role; no other evaluation matters. “It depends on the user group’s hierarchy” is incorrect because there is no such thing as a group hierarchy; there are no nested groups.

- The user is denied and Denies overrule all Allows, thus the IAM user is denied no matter what.
 - Not enough information provided.
 - It depends on the user group’s hierarchy.
-

Q41)

You are trying to issue calls to a DynamoDB table in North Virginia from within your code.

Through debugging, you discover there is a problem with your endpoint to the service.

Your calls are going to: <https://dynamodb.us-east-1a.amazonaws.com>.

What is the problem with this endpoint?

- Nothing, the service is likely down and not responding
- API calls are sent to http, not https; SSL/TLS is not supported
- ✓ The region is wrong

Explanation:-The region is wrong is the correct answer. The endpoint is regional, not AZ specific. This “region” identifier is pointing to the AZ. AZ A is us-east-1a, while the North Virginia region identifier is simply us-east-1. The “a” here is breaking the endpoint URL. “Nothing, the service is likely down and not responding” incorrect because the URL is simply wrong. “API calls are sent to http, not https; SSL/TLS is not supported” is incorrect, as HTTPS is supported, and in fact a recommendation in most cases. “The endpoint should point to [api.dynamodb.us-east1a.amazonaws.com](https://dynamodb.us-east-1a.amazonaws.com)” is incorrect because that is not the URL structure.

- The endpoint should point to [api.dynamodb.us-east1a.amazonaws.com](https://dynamodb.us-east-1a.amazonaws.com)
-

Q42)

You have developed a website which runs on an Apache webserver, in an auto-scaled fleet.

You want the logs to be processed off-instance in near real-time.

Which solution is ideal with as little work involved in implementing, lowest support burden, while keeping the costs low?

- Create a CRON job that copies the log files every few minutes to S3. Produce an S3 event handler to process the logs with Lambda and place into DynamoDB.

- ✓ Using the CloudWatch Logs agent, stream log events to CloudWatch Logs in real time.

Explanation:-“Using the CloudWatch Logs agent, stream log events to CloudWatch Logs in real time” is correct because it could be implemented very quickly. The CloudWatch Logs agent can handle Apache log files “out of the box”. This solution involves as few components as possible, making it simple and fast to implement and at the same time keeping the costs low with fewer components. “Create a CRON job that copies the log files every few minutes to S3. Produce an S3 event handler to process the logs with Lambda and place into DynamoDB” can technically work, but it is incorrect because of the work involved in writing the process, while also implementing no fewer than three separate components to manage and fund. This option is simply over-engineered, resulting in a more complicated process. “Use the Kinesis Agent to stream log events in real time to Kinesis Firehose. Set Kinesis Firehose to write to S3 every 30 seconds. Use Athena or S3 Select to query the data inside the log files” would be a highly possible solution, except for the fact that Kinesis Data Firehose can only write to S3 every minute or more. The 30 seconds minimum of Firehose makes this option invalid. “Send log files to SQS every 1 minute, and have a Lambda function poll the queue regularly processing the logs and placing in an RDBMS” is incorrect because this is also going to require more development efforts, has more moving parts to manage, and SQS will have a limit of 256 KB for each message. This could also be a factor in larger log files due to the issues of scale.

- Use the Kinesis Agent to stream log events in real time to Kinesis Firehose. Set Kinesis Firehose to write to S3 every 30 seconds. Use Athena or S3 Select to query the data inside the log files.
 - Send log files to SQS every 1 minute, and have a Lambda function poll the queue regularly processing the logs and placing in an RDBMS.
-

Q43) What would you call a single CloudFormation template used to deploy similar resources across regions and accounts?

- Stack
- Change Set
- ✓ StackSet

Explanation:-A single CloudFormation template can be used across regions and accounts by creating targets with a StackSet. Stack is incorrect because a Stack is a single CloudFormation template in the same account and same region. Change Set is incorrect because a Change Set is used to evaluate changes to a stack. Master Template is incorrect because it has nothing to do with deploying or managing resources across accounts or regions and is simply a loose unofficial term used for a parent template.

Q44)

You are writing a Lambda function and are wondering about producing its log output.

What is logged and how are logs typically generated from within Lambda? (Pick 2)

- You must write logging code to make calls to an external logging service like Splunk or Logstash
- The function stdout is auto-stored in CloudTrail
- ✓ You must use the logging calls built into the language used

Explanation:-By default, Lambda logs all stdout for a lambda function to CloudWatch Logs. Then any additional logging calls used in the function will also be sent to CloudWatch Logs. Though one could think of "You must write logging code to make calls to an external logging service like Splunk or Logstash" as being a possible answer, it would be considered highly inefficient, most likely an anti-practice, and reliant on external connectivity to Lambda. "The function stdout is auto-stored in CloudTrail" is incorrect because though stdout is logged, it is sent to CloudWatch Logs, not CloudTrail.

- ✓ All stdout is logged and sent to CloudWatch Logs

Explanation:-By default, Lambda logs all stdout for a lambda function to CloudWatch Logs. Then any additional logging calls used in the function will also be sent to CloudWatch Logs. Though one could think of "You must write logging code to make calls to an external logging service like Splunk or Logstash" as being a possible answer, it would be considered highly inefficient, most likely an anti-practice, and reliant on external connectivity to Lambda. "The function stdout is auto-stored in CloudTrail" is incorrect because though stdout is logged, it is sent to CloudWatch Logs, not CloudTrail.

Q45) Upon un-deploying an application with AWS CodeDeploy, which CodeDeploy command will allow the underlying AWS EC2 resource to be removed (terminated)?

- Specify EC2.Terminate in the Appspec file
- Run the CodeDeploy EC2onTerminate action in a script after the undeploy is successful
- CodeDeploy will invoke the EC2 Terminate Instances API call automatically
- ✓ You cannot terminate EC2 Instances with CodeDeploy

Explanation:-CodeDeploy has no action to remove the underlying resources. This must be handled outside of CodeDeploy.

Q46)

Your organization requires the use of static publicly addressable IP addresses used to reach a load balanced web application.

How is this achieved?

- Assign Elastic IP address(es) to the account, then associate with the EC2 instances
- Assign Elastic IP address(es) to the account, then associate with the ALB
- ✓ Assign Elastic IP address(es) to the account, then use with the NLB

Explanation:-"Assign Elastic IP address(es) to the account, then use with the NLB" is correct, as this is the only Load Balancing option that supports the use of Elastic IPs. "Assign Elastic IP address(es) to the account, then associate with the EC2 instances" is incorrect because, though you could do this, it would be highly inefficient use of addressing, and not truly using load balancing. For a load balanced application, it would be ideal to place behind a load balancer.

- Assign Elastic IP address(es) to the account, then associate with the ELB

Q47)

You are developing your first complete application built upon microservice design architecture.

In doing so, you have realized that you require the ability to trace requests through microservices and handle exception collections throughout.

What product in AWS will help us with such a need?

- AWS EMSE (Elastic Microservice Engine)
- ✓ AWS X-Ray

Explanation:-AWS X-Ray is designed for microservice architecture, and to be able to trace requests through the various microservices as well as handle exceptions and profiling needs. AWS EMSE is incorrect as it is made up. AWS CodeStar is incorrect because CodeStar is designed to work with the whole CI/CD pipeline and the various integration of developer tools in AWS; CodeStar will not trace requests. AWS CodePipeline is incorrect because AWS CodePipeline is designed to manage the actual automation actions from one step to another in our CI/CD pipeline; it will not help us on tracing AWS requests throughout our application.

- AWS CodeStar
- AWS CodePipeline

Q48)

You have an employee CSV that resides in a structure in S3 that looks like this: "s3://bucket/department//employees.csv". Each department has an "employees.csv" object.

You are tasked with creating a lifecycle policy for all employees.csv objects to transition to S3 Standard-IA.

How would you reference s3 properly in such a lifecycle policy?

- You cannot achieve this because S3 only supports prefixes; thus each employees.csv file will need to be explicitly called out.
- Since S3 is a flat file system, you can use wildcards here. You can create a lifecycle policy that references the S3 location: "s3://bucket/department/*employees.csv". This will capture every employees.csv in any department.
- ✓ Tag all employees.csv with a unique tag, and create the lifecycle policy based on tag.

Explanation:-S3 lifecycle policies allow for prefix or tags. Because this does not work off a common prefix, tags will need to be used. "Tag all

employees.csv with a unique tag, and create the lifecycle policy based on tag" is correct. "You cannot achieve this because S3 only supports prefixes; thus each employees.csv file will need to be explicitly called out" is incorrect because prefixes are one of two options. A tag would solve this challenge. "Since S3 is a flat file system, you can use wildcards here. You can create a lifecycle policy that references the S3 location: "s3://bucket/department/*/employees.csv". This will capture every employees.csv in any department" is incorrect because, though in IAM policies, a wildcard like this may work, lifecycle policies only work with prefixes – wildcards in the middle of the key is not allowed. "You can extend S3 lifecycle policies with custom Lambda logic. This will require Lambda to perform the lifecycle actions to transition data to other storage classes" is incorrect because Lambda cannot be used to extend lifecycle policies, though one could create completely custom Lambda functions outside of the lifecycle S3 feature to perform these actions as an alternate option.

- You can extend S3 lifecycle policies with custom Lambda logic. This will require Lambda to perform the lifecycle actions to transition data to other storage classes.

Q49) An IAM user is part of multiple IAM Groups. One group has a policy that allows an action and another group's policy denies the action, what is the net effect?

- It depends on the IAM Groups precedence value
- It depends on the IAM Policy precedence value
- ✔ The action is denied

Explanation:-If a 'deny' is present, there is no way to override the 'deny'. There is no hierarchy to IAM policies or groups. The evaluation logic starts with looking for denies. If a 'deny' is present that matches the action, resource, and conditions, then the action is denied. It does not matter what 'allows' exist at that point. "It depends on the IAM Groups precedence value" and "It depends on the IAM Policy precedence value" are incorrect, as there is no such thing as a hierarchy, and precedence is a made up term in this set of answers. "Not enough information is provided" is incorrect, as we know plenty of information; the user is denied.

- Not enough information is provided

Q50) What is the cloud-based IDE option in AWS?

- CloudIDE
- ✔ Cloud9

Explanation:-Cloud9 is the only real product on this list.

- PyCloud
- AWS CodeIDE

Q51)

You are working on a CloudFormation template that was created for a specific region.

When trying to run in another region, you realize the AMI ID was hardcoded.

You would like to make the template to dynamically choose what AMI to use when running in another region.

What method would you use?

- ✔ Create a mapping and use the function Fn::FindInMap to perform a dynamic lookup.

Explanation:-CloudFormation has logic already established for a key/value pair lookup table to be defined in the template. This can be used to dynamically insert values. Since the ID's are typically not going to be memorized by a user/human, it is unlikely putting it into a Parameter would result in successful choices consistently. Using the FindInMap function will make this an automatic selection. "Create a DynamoDB table with the various AMI's to use, and create a Lambda function to be run from within the template to perform a lookup" is incorrect simply because it is a classic example of over-architecting something that is available in a much simpler fashion. "Create a SimpleDB table to perform a lookup" is incorrect for many of the same reasons – a Lambda function would still be required and other components most likely to leverage the SimpleDB to perform this. Use the built-in function for this purpose.

- Create a parameter for the associated AMI selection, and use ref: to reference it in the AMI field.
- Create a DynamoDB table with the various AMI's to use, and create a Lambda function to be run from within the template to perform a lookup.
- Create a SimpleDB table to perform a lookup.

Q52) What is the name of the AWS Python SDK?

- ✔ Boto

Explanation:-The Python SDK is titled Boto. Boto3 is the current SDK version.

- PyAWS
- Python SDK (It has no name)
- BotoPy

Q53)

When using AWS Multipart Upload, an upload fails mid-way and you choose not to resume the upload.

What could be a negative consequence, if any?

- ✔ All parts of a multipart upload will be retained indefinitely, thus a cleanup effort will need to be performed to delete old parts when appropriate.

Explanation:-S3 retains all parts indefinitely. This allows indefinite ability to resume object upload. If an object is decided to be abandoned, we won't retry, we will have abandoned parts in S3 which will continue to consume storage. These partial uploads can add up over time. It is good practice to run a job on these parts to clean them up, remove them when appropriate. "S3 will make the object available, even though it didn't get uploaded entirely. We will need to perform a deletion action on the partial object, as it won't be valid" is incorrect, as S3 won't present the part as an object at all and will be hidden from view. If an empty S3 bucket has a bunch of partial uploads, it will still look empty; however there will be charges incurred. These parts can only be seen and worked from within the CLI, SDK, or API's. "S3 performs all maintenance; there is no need to be concerned with any further actions" is incorrect, as S3 will not auto-purge data. That is up to the customer. "My application will need to start all over and retry the upload from scratch when the time is appropriate" is incorrect because if we used the multi-part resume feature properly, we wouldn't have to start all over, as we could resume where we left off.

- S3 will make the object available, even though it didn't get uploaded entirely. We will need to perform a deletion action on the partial object, as it

won't be valid.

- S3 performs all maintenance; there is no need to be concerned with any further actions.
- My application will need to start all over and retry the upload from scratch when the time is appropriate

Q54)

You would like to implement a serverless, hosted Git repository.

What is the product in AWS that you should be using?

- AWS CodeDeploy
- ✓ AWS CodeCommit

Explanation:-AWS CodeCommit is a hosted and serverless Git repository. AWS CodeDeploy is incorrect because AWS CodeDeploy is a deployment tool. AWS GitRepo is incorrect because AWS GitRepo is not a product. AWS CodeStar is incorrect because AWS CodeStar is a workspace designed to pull CI/CD development teams and agile project management together.

- AWS GitRepo
- AWS CodeStar

Q55) What is an availability zone?

- A single datacenter
- A cluster of servers for high availability
- ✓ One or more physically distinct datacenters

Explanation:-Most AWS Availability Zones consist of many datacenters. At the time of creating this question, the biggest zone of AWS consisted of 14 datacenters. Though one datacenter can suffice in extremely rare cases, multiple datacenters are the standard.

- An automatic failover mechanism between two EC2 instances

Q56) In DynamoDB, a table is a collection of_____.

- Values
- ✓ Items

Explanation:-In Amazon DynamoDB, a database is a collection of tables. A table is a collection of items and each item is a collection of attributes.

- Fields
- Attributes

Q57)

An organization has 20 employees. The organization wants to give all the users access to the organization AWS account.

Which of the below mentioned options is the right solution?

- It is not advisable to give AWS access to so many users
- Share the root credentials with all the users
- ✓ Create an IAM user for each employee and provide access to them

Explanation:-AWS Identity and Access Management is a web service that enables the AWS customers to manage users and user permissions in AWS. The IAM is targeted at organizations with multiple users or systems that use AWS products such as Amazon EC2, Amazon RDS, and the AWS Management Console. With IAM, the organization can centrally manage users, security credentials such as access keys, and permissions that control which AWS resources users can access.

- Use the IAM role to allow access based on STS

Q58) Can a user associate and use his own DNS with ELB instead of the DNS provided by AWS ELB?

- Yes, only through Route 53 by mapping ELB and DNS
- ✓ Yes, by creating a CNAME with the existing domain name provider

Explanation:-The AWS ELB allows mapping a custom domain name with ELB. The user can map ELB with DNS in two ways: 1) By creating CNAME with the existing domain name service provider or 2) By creating a record with Route 53.

- No
- Yes, by configuring DNS in the AWS Console

Q59) A user is creating an EBS volume. He asks for your advice. Which advice mentioned below should you not give to the user for creating an EBS volume?

- Attach multiple volumes to the same instance
- ✓ Create an AMI from the attached volume

Explanation:-When a user creates an EBS volume, the user can attach it to a running instance. The user can attach multiple volumes to the same instance and stripe them together to increase the I/O. The user can take a snapshot from the existing volume but cannot create an AMI from the volume. However, the user can create an AMI from a snapshot.

- Take the snapshot of the volume when the instance is stopped
- Stripe multiple volumes attached to the same instance

Q60) In CloudFormation stack options, Tags are _____ that can be used to identify your stack for purposes such as cost allocation.

- Mandatory key-value pairs
- Mandatory String value
- Arbitrary integer ID
- ✓ Arbitrary key-value pairs

Explanation:-In AWS CloudFormation, tags are arbitrary key-value pairs that can be used to identify your stack for purposes such as cost allocation. A Key consists of any alphanumeric characters but must not contain any spaces. Tag keys can be up to 127 characters long. A Value consists of any alphanumeric characters or spaces. Tag values can be up to 255 characters long.

Q61)

A user is enabling a static website hosting on an S3 bucket.

Which of the below mentioned parameters cannot be configured by the user?

- ☐ Index document
- ☒ Conditional error on object name

Explanation:-To host a static website, the user needs to configure an Amazon S3 bucket for website hosting and then upload the website contents to the bucket. The user can configure the index, error document as well as configure the conditional routing of on object name.

- ☐ Conditional redirection on object name
 - ☐ Error document
-

Q62)

Company C is currently hosting their corporate site in an Amazon S3 bucket with Static Website Hosting enabled.

Currently, when visitors go to `http://www.companyc.com` the `index.html` page is returned.

Company C now would like a new page `welcome.html` to be returned when a visitor enters `http://www.companyc.com` in the browser.

Which of the following steps will allow Company C to meet this requirement? (Choose two.)

- ☐ Move the `index.html` page to a `welcome` subfolder
 - ☒ Set the Index Document property to `welcome.html`
 - ☐ Create a `welcome` subfolder in their S3 bucket
 - ☒ Upload an html page named `welcome.html` to their S3 bucket
 - ☐ Set the Error Document property to `welcome.html`
-