Q1)

A cell phone company is running dynamic-content television commercials for a contest. They want their website to handle traffic spikes that come after a commercial airs. The website is interactive, offering personalized content to each visitor based on location, purchase history, and the current commercial airing.

Which architecture will configure Auto Scaling to scale out to respond to spikes of demand, while minimizing costs during quiet periods?

⬤ Use Amazon CloudFront and Amazon Simple Storage Service (Amazon S3) to cache changing content, with the Auto Scaling group set as the origin. Configure Auto Scaling to have sufficient instances necessary to initially populate CloudFront and Amazon ElastiCache, and then scale in after the cache is fully populated.

✅ Configure Auto Scaling to scale out as traffic increases. Configure the launch configuration to start new instances from a preconfigured Amazon Machine Image (AMI).

Explanation:-Auto Scaling is designed to scale out based on an event like increased traffic while being cost effective when not needed.

⬤ Set the minimum size of the Auto Scaling group so that it can handle high traffic volumes without needing to scale out.

⬤ Create an Auto Scaling group large enough to handle peak traffic loads, and then stop some instances. Configure Auto Scaling to scale out when traffic increases using the stopped instances, so new capacity will come online quickly.

Q2) For an application running in the ap-northeast-1 region with three Availability Zones (apnortheast-1a, ap-northeast-1b, and ap-northeast-1c), which instance deployment provides high availability for the application that normally requires nine running Amazon Elastic Compute Cloud (Amazon EC2) instances but can run on a minimum of 65 percent capacity while Auto Scaling launches replacement instances in the remaining Availability Zones?

⬤ Deploy the application on nine servers in ap-northeast-1b, and keep nine stopped instances in ap-northeast-1a as reserve.

⬤ Deploy the application on six servers in ap-northeast-1b and three servers in apnortheast-1c.

✅ Deploy the application on three servers in ap-northeast-1a, three servers in apnortheast-1b, and three servers in ap-northeast-1c.

Explanation:-Auto Scaling will provide high availability across three Availability Zones with three Amazon EC2 instances in each and keep capacity above the required minimum capacity, even in the event of an entire Availability Zone becoming unavailable.

⬤ Deploy the application on four servers in ap-northeast-1a and five servers in apnortheast-1b, and keep five stopped instances in ap-northeast-1a as reserve.

Q3) Which of the following are characteristics of the Auto Scaling service on AWS? (Choose 3 answers)

✅ Enforces a minimum number of running Amazon EC2 instances

Explanation:-Auto Scaling responds to changing conditions by adding or terminating instances, launches instances from an AMI specified in the launch configuration associated with the Auto Scaling group, and enforces a minimum number of instances in the min-size parameter of the Auto Scaling group.

⬤ Collects and tracks metrics and sets alarms

⬤ Delivers push notifications

✅ Launches instances from a specified Amazon Machine Image (AMI)

Explanation:-Auto Scaling responds to changing conditions by adding or terminating instances, launches instances from an AMI specified in the launch configuration associated with the Auto Scaling group, and enforces a minimum number of instances in the min-size parameter of the Auto Scaling group.

⬤ Sends traffic to healthy instances

✅ Responds to changing conditions by adding or terminating Amazon Elastic Compute Cloud (Amazon EC2) instances

Explanation:-Auto Scaling responds to changing conditions by adding or terminating instances, launches instances from an AMI specified in the launch configuration associated with the Auto Scaling group, and enforces a minimum number of instances in the min-size parameter of the Auto Scaling group.

Q4) Why is the launch configuration referenced by the Auto Scaling group instead of being part of the Auto Scaling group?

✅ All of the above

Explanation:-All statements are true about launch configurations being loosely coupled and referenced by the Auto Scaling group instead of being part of the Auto Scaling group.

⬤ It allows you to change security groups associated with the instances launched without having to make changes to the Auto Scaling group.

⬤ It facilitates rolling out a patch to an existing set of instances managed by an Auto Scaling group.

⬤ It allows you to change the Amazon Elastic Compute Cloud (Amazon EC2) instance type and Amazon Machine Image (AMI) without disrupting the Auto Scaling group.

⬤ None of these

Q5) An Auto Scaling group may use: (Choose 2 answers)

⬤ On-premises instances

⬤ Already running instances if they use the same Amazon Machine Image (AMI) as the Auto Scaling group's launch configuration and are not already part of another Auto Scaling group

⬤ Stopped instances

✅ Spot Instances

Explanation:-An Auto Scaling group may use On-Demand and Spot Instances. An Auto Scaling group may not use already stopped instances, instances running someplace other than AWS, and already running instances not started by the Auto Scaling group itself.

✅ On-Demand Instances

Explanation:-An Auto Scaling group may use On-Demand and Spot Instances. An Auto Scaling group may not use already stopped instances, instances running someplace other than AWS, and already running instances not started by the Auto Scaling group itself.

Q6) Amazon CloudWatch supports which types of monitoring plans? (Choose 2 answers)

⚪ Detailed monitoring, which is free

✅ Detailed monitoring, which has an additional cost

Explanation:-Amazon CloudWatch has two plans: basic, which is free, and detailed, which has an additional cost. There is no ad hoc plan for Amazon CloudWatch.

⚪ Ad hoc monitoring, which has an additional cost

⚪ Ad hoc monitoring, which is free

⚪ Basic monitoring, which has an additional cost

✅ Basic monitoring, which is free

Explanation:-Amazon CloudWatch has two plans: basic, which is free, and detailed, which has an additional cost. There is no ad hoc plan for Amazon CloudWatch.

Q7) Elastic Load Balancing health checks may be _____. (Choose 3 answers)

✅ A page request

Explanation:-An Elastic Load Balancing health check may be a ping, a connection attempt, or a page that is checked

✅ A connection attempt

Explanation:-An Elastic Load Balancing health check may be a ping, a connection attempt, or a page that is checked

⚪ A key pair verification

✅ A ping

Explanation:-An Elastic Load Balancing health check may be a ping, a connection attempt, or a page that is checked

⚪ An Amazon Elastic Compute Cloud (Amazon EC2) instance status check

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Q8) When an Amazon Elastic Compute Cloud (Amazon EC2) instance registered with an Elastic Load Balancing load balancer using connection draining is deregistered or unhealthy, which of the following will happen? (Choose 2 answers)

⚪ Forcibly close all connections to that instance after a timeout period.

✅ Redirect the requests to a user-defined error page like "Oops this is embarrassing" or "Under Construction."

Explanation:-When connection draining is enabled, the load balancer will stop sending requests to a deregistered or unhealthy instance and attempt to complete in-flight requests until a connection draining timeout period is reached, which is 300 seconds by default.

✅ Keep the connections open to that instance, and attempt to complete in-flight requests.

Explanation:-When connection draining is enabled, the load balancer will stop sending requests to a deregistered or unhealthy instance and attempt to complete in-flight requests until a connection draining timeout period is reached, which is 300 seconds by default.

⚪ Immediately close all existing connections to that instance.

⚪ Leave the connections open as long as the load balancer is running.

Q9) Elastic Load Balancing supports which of the following types of load balancers? (Choose 3 answers)

✅ Hypertext Transfer Protocol Secure (HTTPS) using Secure Sockets Layer (SSL)

Explanation:-Elastic Load Balancing supports Internet-facing, internal, and HTTPS load balancers.

⚪ Interim

⚪ Itinerant

✅ Internal

Explanation:-Elastic Load Balancing supports Internet-facing, internal, and HTTPS load balancers.

⚪ Cross-region

✅ Internet-facing

Explanation:-Elastic Load Balancing supports Internet-facing, internal, and HTTPS load balancers.

Q10) Which of the following methods will allow an application using an AWS SDK to be authenticated as a principal to access AWS Cloud services? (Choose 2 answers)

✅ Run the application on an Amazon EC2 instance with an assigned IAM role.

Explanation:-Programmatic access is authenticated with an access key, not with user names/passwords. IAM roles provide a temporary security token to an application using an SDK.

✅ Create an IAM user and store both parts of the access key for the user in the application's configuration.

Explanation:-Programmatic access is authenticated with an access key, not with user names/passwords. IAM roles provide a temporary security token to an application using an SDK.

⚪ Create an IAM user and store the user name and password for the user in the application's configuration.

⚪ Make all the API calls over an SSL connection.

Q11) Which of the following are found in an IAM policy? (Choose 2 answers)

✅ Action

Explanation:-IAM policies are independent of region, so no region is specified in the policy. IAM policies are about authorization for an already-authenticated principal, so no password is needed.

⚪ Region

✅ Service Name

Explanation:-IAM policies are independent of region, so no region is specified in the policy. IAM policies are about authorization for an already-authenticated principal, so no password is needed.

⚪ Password

Q12)

Your AWS account administrator left your company today. The administrator had access to the root user and a personal IAM administrator account. With these accounts, he generated other IAM accounts and keys.

Which of the following should you do today to protect your AWS infrastructure? (Choose 4 answers)

- ⚪ Delete all IAM accounts.
- ✅ Delete the administrator's personal IAM account.
Explanation:-Locking down your root user and all accounts to which the administrator had access is the key here. Deleting all IAM accounts is not necessary, and it would cause great disruption to your operations. Amazon EC2 roles use temporary security tokens, so relaunching Amazon EC2 instances is not necessary.
- ✅ Rotate keys and change passwords for IAM accounts.
Explanation:-Locking down your root user and all accounts to which the administrator had access is the key here. Deleting all IAM accounts is not necessary, and it would cause great disruption to your operations. Amazon EC2 roles use temporary security tokens, so relaunching Amazon EC2 instances is not necessary.
- ✅ Put an IP restriction on the root user.
Explanation:-Locking down your root user and all accounts to which the administrator had access is the key here. Deleting all IAM accounts is not necessary, and it would cause great disruption to your operations. Amazon EC2 roles use temporary security tokens, so relaunching Amazon EC2 instances is not necessary.
- ✅ Change the password and add MFA to the root user.
Explanation:-Locking down your root user and all accounts to which the administrator had access is the key here. Deleting all IAM accounts is not necessary, and it would cause great disruption to your operations. Amazon EC2 roles use temporary security tokens, so relaunching Amazon EC2 instances is not necessary.
- ⚪ Relaunch all Amazon EC2 instances with new roles.

Q13) Which of the following actions can be authorized by IAM? (Choose 2 answers)

- ⚪ Querying an Oracle database
- ✅ Adding a message to an Amazon Simple Queue Service (Amazon SQS) queue
Explanation:-IAM controls access to AWS resources only. Installing ASP.NET will require Windows operating system authorization, and querying an Oracle database will require Oracle authorization.
- ⚪ Installing ASP.NET on a Windows Server
- ✅ Launching an Amazon Linux EC2 instance
Explanation:-IAM controls access to AWS resources only. Installing ASP.NET will require Windows operating system authorization, and querying an Oracle database will require Oracle authorization.

Q14) Which of the following are IAM security features? (Choose 2 answers)

- ✅ MFA
Explanation:-Amazon DynamoDB global secondary indexes are a performance feature of Amazon DynamoDB; Consolidated Billing is an accounting feature allowing all bills to roll up under a single account. While both are very valuable features, neither is a security feature.
- ⚪ Amazon DynamoDB global secondary indexes
- ✅ Password policies
Explanation:-Amazon DynamoDB global secondary indexes are a performance feature of Amazon DynamoDB; Consolidated Billing is an accounting feature allowing all bills to roll up under a single account. While both are very valuable features, neither is a security feature.
- ⚪ Consolidated Billing

Q15) Which of the following are benefits of using Amazon EC2 roles? (Choose 2 answers)

- ✅ Key rotation is not necessary.
Explanation:-Amazon EC2 roles must still be assigned a policy. Integration with Active Directory involves integration between Active Directory and IAM via SAML.
- ✅ Credentials do not need to be stored on the Amazon EC2 instance.
Explanation:-Amazon EC2 roles must still be assigned a policy. Integration with Active Directory involves integration between Active Directory and IAM via SAML.
- ⚪ No policies are required.
- ⚪ Integration with Active Directory is automatic.

Q16) Which of the following are based on temporary security tokens? (Choose 2 answers)

- ⚪ Root user
- ✅ Federation
Explanation:-Amazon EC2 roles provide a temporary token to applications running on the instance; federation maps policies to identities from other sources via temporary tokens.
- ⚪ MFA
- ✅ Amazon EC2 roles
Explanation:-Amazon EC2 roles provide a temporary token to applications running on the instance; federation maps policies to identities from other sources via temporary tokens.

Q17)

Your security team is very concerned about the vulnerability of the IAM administrator user accounts (the accounts used to configure all IAM features and accounts).

What steps can be taken to lock down these accounts? (Choose 3 answers)

- ✅ Apply a source IP address condition to the policy that only grants permissions when the user is on the corporate network.
Explanation:-Neither B nor E are features supported by IAM.
- ✅ Implement a password policy on the AWS account.
Explanation:-Neither B nor E are features supported by IAM.
- ⚪ Limit logins to a particular U.S. state.

✅ Add multi-factor authentication (MFA) to the accounts.
Explanation:-Neither B nor E are features supported by IAM.
⚪ Add a CAPTCHA test to the accounts.

Q18) You want to grant the individuals on your network team the ability to fully manipulateAmazon EC2 instances. Which of the following accomplish this goal? (Choose 2answers)

⚪ Create a NetworkTeam IAM group, and have each team member log in to the AWS Management Console using the user name/password for the group.
✅ Create a new policy that grants EC2:* actions on all resources, and assign that policy to each individual's IAM user account on the network team.
Explanation:-Access requires an appropriate policy associated with a principal. Response A is merely a policy with no principal, and response D is not a principal as IAM groups do not have user names and passwords. Response B is the best solution; response C will also work but it is much harder to manage.
⚪ Create a new policy allowing EC2:* actions, and name the policy NetworkTeam.
✅ Assign the managed policy, EC2FullAccess, to a group named NetworkTeam, and assign all the team members' IAM user accounts to that group.
Explanation:-Access requires an appropriate policy associated with a principal. Response A is merely a policy with no principal, and response D is not a principal as IAM groups do not have user names and passwords. Response B is the best solution; response C will also work but it is much harder to manage.

Q19) What is the format of an IAM policy?

✅ JSON
Explanation:-An IAM policy is a JSON document.
⚪ Key/value pairs
⚪ XML
⚪ Tab-delimited text

Q20) Which of the following is not a supported Amazon Simple Notification Service (Amazon SNS) protocol?

⚪ Email-JSON
✅ Amazon DynamoDB
Explanation:-Amazon DynamoDB is not a supported Amazon SNS protocol.
⚪ AWS Lambda
⚪ HTTPS

Q21) When you create a new Amazon Simple Notification Service (Amazon SNS) topic, which of the following is created automatically?

⚪ A subscriber
⚪ An Amazon Simple Queue Service (Amazon SQS) queue to deliver your Amazon SNS topic
✅ An Amazon Resource Name (ARN)
Explanation:-When you create a new Amazon SNS topic, an Amazon ARN is created automatically.
⚪ A message

Q22) Which of the following are features of Amazon Simple Notification Service (Amazon SNS)? (Choose 3 answers)

✅ Topic
Explanation:-Publishers, subscribers, and topics are the correct answers. You have subscribers to an Amazon SNS topic, not readers.
⚪ Readers
✅ Subscribers
Explanation:-Publishers, subscribers, and topics are the correct answers. You have subscribers to an Amazon SNS topic, not readers.
✅ Publishers
Explanation:-Publishers, subscribers, and topics are the correct answers. You have subscribers to an Amazon SNS topic, not readers.

Q23) What is the default time for an Amazon Simple Queue Service (Amazon SQS) visibility timeout?

⚪ 60 seconds
✅ 30 seconds
Explanation:-The default time for an Amazon SQS visibility timeout is 30 seconds
⚪ 1 hour
⚪ 12 hours

Q24) What is the longest time available for an Amazon Simple Queue Service (Amazon SQS) visibility timeout?

✅ 12 hours
Explanation:-The maximum time for an Amazon SQS visibility timeout is 12 hours
⚪ 1 hour
⚪ 60 seconds
⚪ 30 seconds

Q25) Which of the following options are valid properties of an Amazon Simple Queue Service (Amazon SQS) message? (Choose 2 answers)

⚪ Type
✅ Body

Explanation:-The valid properties of an SQS message are Message ID and Body. Each message receives a system-assigned Message ID that Amazon SQS returns to you in the SendMessage response. The Message Body is composed of name/value pairs and the unstructured, uninterpreted content.

⬤ Destination
✅ Message ID

Explanation:-The valid properties of an SQS message are Message ID and Body. Each message receives a system-assigned Message ID that Amazon SQS returns to you in the SendMessage response. The Message Body is composed of name/value pairs and the unstructured, uninterpreted content.

Q26)

You are a solutions architect who is working for a mobile application company that wants to use Amazon Simple Workflow Service (Amazon SWF) for their new takeout ordering application. They will have multiple workflows that will need to interact.

What should you advise them to do in structuring the design of their Amazon SWF environment?

⬤ Workflows cannot interact with each other; they would be better off using Amazon Simple Queue Service (Amazon SQS) and Amazon Simple Notification Service (Amazon SNS) for their application.
⬤ Use a single domain with a single workflow and collapse all activities to within this single workflow.
⬤ Use multiple domains, each containing a single workflow, and design the workflows to interact across the different domains.
✅ Use a single domain containing multiple workflows. In this manner, the workflows will be able to interact.
Explanation:-Use a single domain with multiple workflows. Workflows within separate domains cannot interact.

Q27) In Amazon Simple Workflow Service (Amazon SWF), which of the following are actors? (Choose 3 answers)

✅ Deciders
Explanation:-In Amazon SWF, actors can be activity workers, workflow starters, or deciders.
✅ Workflow starters
Explanation:-In Amazon SWF, actors can be activity workers, workflow starters, or deciders.
✅ Activity workers
Explanation:-In Amazon SWF, actors can be activity workers, workflow starters, or deciders.
⬤ Activity tasks

Q28)

You are designing a new application, and you need to ensure that the components of your application are not tightly coupled. You are trying to decide between the different AWS Cloud services to use to achieve this goal. Your requirements are that messages between your application components may not be delivered more than once, tasks must be completed in either a synchronous or asynchronous fashion, and there must be some form of application logic that decides what do when tasks have been completed.

What application service should you use?

⬤ Amazon Simple Storage Service (Amazon S3)
✅ Amazon Simple Workflow Service (Amazon SWF)
Explanation:-Amazon SWF would best serve your purpose in this scenario because it helps developers build, run, and scale background jobs that have parallel or sequential steps. You can think of Amazon SWF as a fully-managed state tracker and task coordinator in the Cloud.
⬤ Amazon Simple Queue Service (Amazon SQS)
⬤ Amazon Simple Email Service (Amazon SES)

Q29) How does Amazon Simple Queue Service (Amazon SQS) deliver messages?

⬤ Sequentially
✅ Amazon SQS doesn't guarantee delivery of your messages in any particular order.
Explanation:-Amazon SQS does not guarantee in what order your messages will be delivered
⬤ First In, First Out (FIFO)
⬤ Last In, First Out (LIFO)

Q30) Of the following options, what is an efficient way to fanout a single Amazon Simple Notification Service (Amazon SNS) message to multiple Amazon Simple Queue Service (Amazon SQS) queues?

⬤ Amazon SNS allows exactly one subscriber to each topic, so fanout is not possible.
⬤ Create an Amazon SNS topic using Amazon SNS. Create an application that subscribes to that topic and duplicates the message. Send copies to multiple Amazon SQS queues.
⬤ Create one Amazon SQS queue that subscribes to multiple Amazon SNS topics.
✅ Create an Amazon SNS topic using Amazon SNS. Then create and subscribe multiple Amazon SQS queues sent to the Amazon SNS topic.
Explanation:-Multiple queues can subscribe to an Amazon SNS topic, which can enable parallel asynchronous processing.

Q31)

Your application polls an Amazon Simple Queue Service (Amazon SQS) queue frequently and returns immediately, often with empty ReceiveMessageResponses.

What is one thing that can be done to reduce Amazon SQS costs?

⬤ Pricing on Amazon SQS does not include a cost for service requests; therefore, there is no concern.
⬤ Increase the timeout value for short polling to wait for messages longer before returning a response.
⬤ Change the message visibility value to a higher number.

✅ Use long polling by supplying a WaitTimeSeconds of greater than 0 seconds when calling ReceiveMessage.

Explanation:-Long polling allows your application to poll the queue, and, if nothing is there, Amazon Elastic Compute Cloud (Amazon EC2) waits for an amount of time you specify (between 1 and 20 seconds). If a message arrives in that time, it is delivered to your application as soon as possible. If a message does not arrive in that time, you need to execute the ReceiveMessage function again.

Q32) What is the longest time available for an Amazon Simple Queue Service (Amazon SQS) long polling timeout?

⚪ 30 seconds
✅ 20 seconds
Explanation:-The maximum time for an Amazon SQS long polling timeout is 20 seconds
⚪ 10 seconds
⚪ 1 hour

Q33) What is the longest configurable message retention period for Amazon Simple Queue Service (Amazon SQS)?

⚪ 30 seconds
✅ 14 days
Explanation:-The longest configurable message retention period for Amazon SQS is 14 days.
⚪ 4 days
⚪ 30 minutes

Q34) What is the default message retention period for Amazon Simple Queue Service (Amazon SQS)?

⚪ 30 seconds
✅ 4 days
Explanation:-The default message retention period that can be set in Amazon SQS is four days.
⚪ 30 minutes
⚪ 14 days

Q35)

Amazon Simple Notification Service (Amazon SNS) is a push notification service that lets you send individual or multiple messages to large numbers of recipients.

What types of clients are supported?

⚪ Mobile and AMQP support for publisher and subscriber client types
✅ Publisher and subscriber client types
Explanation:-With Amazon SNS, you send individual or multiple messages to large numbers of recipients using publisher and subscriber client types.
⚪ Producers and consumers supported by C and C++ clients
⚪ Java and JavaScript clients that support publisher and subscriber types

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Q36) In Amazon Simple Workflow Service (Amazon SWF), a decider is responsible for what?

⚪ Executing your workflow
✅ Defining work coordination logic by specifying work sequencing, timing, and failure conditions
Explanation:-The decider schedules the activity tasks and provides input data to the activity workers. The decider also processes events that arrive while the workflow is in progress and closes the workflow when the objective has been completed.
⚪ Executing each step of the work
⚪ Registering activities and workflow with Amazon SWF