SAA-CO1

QUESTION 4 ???, low cost.

A customer owns a simple API for their website that receives about 1,000 requests each day and has an average response time of 50 ms. It is currently hosted on one c4.large instance.

Which changes to the architecture will provide high availability at the LOWEST cost?

1. Create an Auto Scaling group with a minimum of one instance and a maximum of two instances, then use an Application Load Balancer to balance the traffic.
2. Recreate the API using Amazon API Gateway and use AWS Lambda as the service backend.
3. Create an Auto Scaling group with a maximum of two instances, then use an Application Load Balancer to balance the traffic.
4. Recreate the API using Amazon API Gateway and integrate the new API with the existing backend service.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 7 ???,

A Solutions Architect is designing a solution that includes a managed VPN connection. To monitor whether the VPN connection is up or down, the Architect should use:

1. an external service to ping the VPN endpoint from outside the VPC.
2. AWS CloudTrail to monitor the endpoint.
3. the CloudWatch TunnelState Metric.
4. an AWS Lambda function that parses the VPN connection logs.

Correct Answer: C

Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/monitoring-cloudwatch-vpn.html

QUESTION 17??? A or C

A Solutions Architect is designing a mobile application that will capture receipt images to track expenses. The Architect wants to store the images on Amazon S3. However, uploading images through the web server will create too much traffic.
What is the MOST efficient method to store images from a mobile application on Amazon S3?

1. Upload directly to S3 using a pre-signed URL.
2. Upload to a second bucket, and have a Lambda event copy the image to the primary bucket.
3. Upload to a separate Auto Scaling group of servers behind an ELB Classic Load Balancer, and have them write to the Amazon S3 bucket.
4. Expand the web server fleet with Spot Instances to provide the resources to handle the images.

Correct Answer: C Section: (none) Explanation

QUESTION 19 E-no usage of ALB for front

A Solutions Architect has a multi-layer application running in Amazon VPC. The application has an ELB Classic Load Balancer as the front end in a public subnet, and an Amazon EC2-based reverse proxy that performs content-based routing to two backend Amazon EC2 instances hosted in a private subnet. The Architect sees tremendous traffic growth and is concerned that the reverse proxy and current backend set up will be insufficient.

Which actions should the Architect take to achieve a cost-effective solution that ensures the application automatically scales to meet traffic demand? (Select two.)

1. Replace the Amazon EC2 reverse proxy with an ELB internal Classic Load Balancer.
2. Add Auto Scaling to the Amazon EC2 backend fleet.
3. Add Auto Scaling to the Amazon EC2 reverse proxy layer.
4. Use t2 burstable instance types for the backend fleet.
5. Replace both the frontend and reverse proxy layers with an ELB Application Load Balancer.

Correct Answer: AB Section: (none) Explanation

QUESTION 31??? C-Need to customize cloudwatch agent.

A Solutions Architect is about to deploy an API on multiple EC2 instances in an Auto Scaling group behind an ELB. The support team has the following operational requirements:

1. They get an alert when the requests per second go over 50,000
2. They get an alert when latency goes over 5 seconds
3. They can validate how many times a day users call the API requesting highly- sensitive data

Which combination of steps does the Architect need to take to satisfy these operational requirements? (Select two.)

1. Ensure that CloudTrail is enabled.
2. Create a custom CloudWatch metric to monitor the API for data access.
3. Configure CloudWatch alarms for any metrics the support team requires.
4. Ensure that detailed monitoring for the EC2 instances is enabled.
5. Create an application to export and save CloudWatch metrics for longer term trending analysis.

Correct Answer: BD Section: (none) Explanation

Explanation/Reference:

QUESTION 36??? C? not migrate, change type

An AWS workload in a VPC is running a legacy database on an Amazon EC2 instance. Data is stored on a 200GB Amazon EBS (gp2) volume. At peak load times, logs show excessive wait time.

What solution should be implemented to improve database performance using persistent storage?

1. Migrate the data on the Amazon EBS volume to an SSD-backed volume.
2. Change the EC2 instance type to one with EC2 instance store volumes.
3. Migrate the data on the EBS volume to provisioned IOPS SSD (io1).
4. Change the EC2 instance type to one with burstable performance.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/aws-technical-content/latest/oracle-database-aws-best-practices/ architecting-for-security-and-performance.html

QUESTION 37???c? sequential is stream

A company's website receives 50,000 requests each second, and the company wants to use multiple applications to analyze the navigation patterns of the users on their website so that the experience can be personalized.

What can a Solutions Architect use to collect page clicks for the website and process them sequentially for each user?

1. Amazon Kinesis Stream
2. Amazon SQS standard queue
3. Amazon SQS FIFO queue
4. AWS CloudTrail trail

Correct Answer: A Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/blogs/aws/amazon-kinesis-real-time-processing-of-streamed-data/

QUESTION 39 ???D – config inbound only in security group.

A company hosts a two-tier application that consists of a publicly accessible web server that communicates with a private database. Only HTTPS port 443 traffic to the web server must be allowed from the Internet.

Which of the following options will achieve these requirements? (Choose two.)

1. Security group rule that allows inbound Internet traffic for port 443.
2. Security group rule that denies all inbound Internet traffic except port 443.
3. Network ACL rule that allows port 443 inbound and all ports outbound for Internet traffic.
4. Security group rule that allows Internet traffic for port 443 in both inbound and outbound.
5. Network ACL rule that allows port 443 for both inbound and outbound for all Internet traffic.

Correct Answer: AE Section: (none) Explanation

QUESTION 41 ??? b?

A Solutions Architect is architecting a workload that requires a performant object-based storage system that must be shared with multiple Amazon EC2 instances.

Which AWS service meets this requirement?

1. Amazon EFS
2. Amazon S3
3. Amazon EBS
4. Amazon ElastiCache

Correct Answer: A Section: (none) Explanation

Explanation/Reference: Explanation: https://aws.amazon.com/efs/

QUESTION 43 , key word, disk i/o is low, exclude options with ssd

A company runs a legacy application with a single-tier architecture on an Amazon EC2 instance. Disk I/O is low, with occasional small spikes during business hours. The company requires the instance to be stopped from 8 PM to 8 AM daily.

Which storage option is MOST appropriate for this workload?

1. Amazon EC2 instance storage
2. Amazon EBS General Purpose SSD (gp2) storage
3. Amazon S3
4. Amazon EBS Provision IOPS SSD (io1) storage

Correct Answer: C Section: (none) Explanation

QUESTION 44 , customer is using existing indentity provider, can't use cognito.

As part of securing an API layer built on Amazon API gateway, a Solutions Architect has to authorize users who are currently authenticated by an existing identity provider. The users must be denied access for a period of one hour after three unsuccessful attempts.

How can the Solutions Architect meet these requirements?

1. Use AWS IAM authorization and add least-privileged permissions to each respective IAM role.
2. Use an API Gateway custom authorizer to invoke an AWS Lambda function to validate each user's identity.
3. Use Amazon Cognito user pools to provide built-in user management.
4. Use Amazon Cognito user pools to integrate with external identity providers.

Correct Answer: B Section: (none) Explanation

QUESTION 49 c??? ip can be changed, and acl impact others.

Two Auto Scaling applications, Application A and Application B, currently run within a shared set of subnets. A Solutions Architect wants to make sure that Application A can make requests to Application B, but Application B should be denied from making requests to Application A.

Which is the SIMPLEST solution to achieve this policy?

1. Using security groups that the security groups of the other application
2. Using security groups that the application server's IP addresses
3. Using Network Access Control Lists to allow/deny traffic based on application IP addresses
4. Migrating the applications to separate subnets from each other

Correct Answer: A Section: (none) Explanation

QUESTION 53 b??? Gateway endpoint is for S3 and DynamoDB only, So choose C, interface endpoint for other service.

An application is running on an Amazon EC2 instance in a private subnet. The application needs to read and write data onto Amazon Kinesis Data Streams, and corporate policy requires that this traffic should not go to the internet.

How can these requirements be met?

1. Configure a NAT gateway in a public subnet and route all traffic to Amazon Kinesis through the NAT gateway.
2. Configure a gateway VPC endpoint for Kinesis and route all traffic to Kinesis through the gateway VPC endpoint.
3. Configure an interface VPC endpoint for Kinesis and route all traffic to Kinesis through the gateway VPC endpoint.
4. Configure an AWS Direct Connect private virtual interface for Kinesis and route all traffic to Kinesis through the virtual interface.

Correct Answer: C Section: (none) Explanation

QUESTION 55 c???

A Solutions Architect is defining a shared Amazon S3 bucket where corporate applications will save objects.

How can the Architect ensure that when an application uploads an object to the Amazon S3 bucket, the object is encrypted?

1. Set a CORS configuration.
2. Set a bucket policy to encrypt all Amazon S3 objects.
3. Enable default encryption on the bucket.
4. Set permission for users.

Correct Answer: B Section: (none)

Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/blogs/security/how-to-prevent-uploads-of-unencrypted-objects-to-amazon-s3/

QUESTION 58 BD???

A Solutions Architect needs to allow developers to have SSH connectivity to web servers. The requirements are as follows:

- Limit access to users origination from the corporate network.
- Web servers cannot have SSH access directly from the Internet.
- Web servers reside in a private subnet.

Which combination of steps must the Architect complete to meet these requirements? (Choose two.)

1. Create a bastion host that authenticates users against the corporate directory.

2. Create a bastion host with security group rules that only allow traffic from the corporate network.
3. Attach an IAM role to the bastion host with relevant permissions.
4. Configure the web servers' security group to allow SSH traffic from a bastion host.
5. Deny all SSH traffic from the corporate network in the inbound network ACL.

Correct Answer: AC

Section: (none) Explanation

Explanation/Reference:

QUESTION 59

A Solutions Architect needs to use AWS to implement pilot light disaster recovery for a three-tier web application hosted in an on-premises datacenter.

Which solution allows rapid provision of working, fully-scaled production environment?

1. Continuously replicate the production database server to Amazon RDS.
   Use AWS CloudFormation to deploy the application and any additional servers if necessary.
2. Continuously replicate the production database server to Amazon RDS.
   Create one application load balancer and register on-premises servers.
   Configure ELB Application Load Balancer to automatically deploy Amazon EC2 instances for application and additional servers if the on-premises application is down.
3. Use a scheduled Lambda function to replicate the production database to AWS.
   Use Amazon Route 53 health checks to deploy the application automatically to Amazon S3 if production is unhealthy.
4. Use a scheduled Lambda function to replicate the production database to AWS.
   Register on-premises servers to an Auto Scaling group and deploy the application and additional servers if production is unavailable.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 64 a??? CloudWatch Events can't know when termination happens? Lambda can be used to launch new instance? A should be correct.

An organization has a long-running image processing application that runs on Spot Instances that will be terminated when interrupted. A highly available workload must be designed to respond to Spot Instance interruption notices. The solution must include a two-minute warning when there is not enough capacity. How can these requirements be met?

1. Use Amazon CloudWatch Events to invoke an AWS Lambda function that can launch On-Demand Instances.
2. Regularly store data from the application on Amazon DynamoDB. Increase the maximum number of instances in the AWS Auto Scaling group.
3. Manually place a bid for additional Spot Instances at a higher price in the same AWS Region and Availability Zone.
4. Ensure that the Amazon Machine Image associated with the application has the latest configurations for the launch configuration.

Correct Answer: B Section: (none) Explanation

QUESTION 65 D??? B is right.

A company has an Amazon RDS-managed online transaction processing system that has very heavy read and write. The Solutions Architect notices throughput issues with the system.

How can the responsiveness of the primary database be improved?

1. Use asynchronous replication for standby to maximize throughput during peak demand.
2. Offload SELECT queries that can tolerate stale data to READ replica.
3. Offload SELECT and UPDATE queries to READ replica.
4. Offload SELECT query that needs the most current data to READ replica.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

https://aws.amazon.com/rds/faqs/

QUESTION 70 Cognito is used for manager authentication.

An organization designs a mobile application for their customers to upload photos to a site. The application needs a secure login with MFA. The organization wants to limit the initial build time and maintenance of the solution.

Which solution should a Solutions Architect recommend to meet the requirements?

1. Use Amazon Cognito Identity with SMS-based MFA.
2. Edit AWS IAM policies to require MFA for all users.
3. Federate IAM against corporate AD that requires MFA.
4. Use Amazon API Gateway and require SSE for photos.

Correct Answer: A Section: (none) Explanation

QUESTION 71 only s3 has unlimited size

A Solutions Architect is designing a solution to monitor weather changes by the minute. The frontend application is hosted on Amazon EC2 instances. The backend must be scalable to a virtually unlimited size, and data retrieval must occur with minimal latency.

Which AWS service should the Architect use to store the data and achieve these requirements?

1. Amazon S3
2. Amazon DynamoDB
3. Amazon RDS
4. Amazon EBS

Correct Answer: A Section: (none) Explanation

QUESTION 74 A? B is the first condition. Most instances->oldest launch template->oldest-launch configuration-> next billing hour.

A media company has deployed a multi-tier architecture on AWS. Web servers are deployed in two Availability Zones using an Auto Scaling group with a default Auto Scaling termination policy. The web servers' Auto Scaling group currently has 15 instances running.

Which instance will be terminated first during a scale-in operation?

1. The instance with the oldest launch configuration.
2. The instance in the Availability Zone that has most instances.
3. The instance closest to the next billing hour.
4. The oldest instance in the group.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 79 cross-region is the best choice for such questions. The farer the better.

A company has a legal requirement to store point-in-time copies of its Amazon RDS PostGreSQL database instance in facilities that are at least 200 miles apart.

Use of which of the following provides the easiest way to comply with this requirement?

1. Cross-region read replica
2. Multiple Availability Zone snapshot copy
3. Multiple Availability Zone read replica
4. Cross-region snapshot copy

Correct Answer: D Section: (none) Explanation

QUESTION 83 C??? No need to use data warehouse or data analytics. B is enough.

An organization must process a stream of large-volume hashtag data in real time and needs to run custom SQL queries on the data to get insights on certain tags. The organization needs this solution to be elastic and does not want to manage clusters.

Which of the following AWS services meets these requirements?

1. Amazon Elasticsearch Service
2. Amazon Athena
3. Amazon Redshift
4. Amazon Kinesis Data Analytics

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/blogs/machine-learning/build-a-social-media-dashboard-using-machine-learning- and-bi-services/

QUESTION 84 To stop but not terminate, persistent type must be set.

Which requirements must be met in order for a Solutions Architect to specify that an Amazon EC2 instance should stop rather than terminate when its Spot Instance is interrupted? (Choose two.)

1. The Spot Instance request type must be one-time.
2. The Spot Instance request type must be persistent.
3. The root volume must be an Amazon EBS volume.
4. The root volume must be an instance store volume.
5. The launch configuration is changed.

Correct Answer: BC Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/spot-interruptions.html#interruption-behavior

QUESTION 87 B? little latency, hdd is not good

A company wants to durably store data in 8 KB chunks. The company will access the data once every few months. However, when the company does access the data, it must be done with as little latency as possible.

Which AWS service should a Solutions Architect recommend if cost is NOT a factor?

1. Amazon DynamoDB
2. Amazon EBS Throughput Optimized HDD Volumes
3. Amazon EBS Cold HDD Volumes
4. Amazon ElastiCache

Correct Answer: A Section: (none) Explanation

QUESTION 89 ???C?

An on-premises database is experiencing significant performance problems when running SQL queries. With 10 users, the lookups are performing as expected. As the number of users increases, the lookups take three times longer than expected to return values to an application.

Which action should a Solutions Architect take to maintain performance as the user count increases?

1. Use Amazon SQS.
2. Deploy Multi-AZ RDS MySQL
3. Configure Amazon RDS with additional read replicas.
4. Migrate from MySQL to RDS Microsoft SQL Server.

Correct Answer: B Section: (none) Explanation

QUESTION 93

Which tool analyzes account resources and provides a detailed inventory of changes over time?

1. AWS Config

2. AWS CloudFormation
3. Amazon CloudWatch
4. AWS Service Catalog

Correct Answer: A Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/config/latest/developerguide/WhatIsConfig.html

QUESTION 94 should be c.

A Solutions Architect is designing a solution that will include a database in Amazon RDS. Corporate security policy mandates that the database, its logs, and its backups are all encrypted. Which is the MOST efficient option to fulfill the security policy using Amazon RDS?

1. Launch an Amazon RDS instance with encryption enabled. Enable encryption for logs and backups.
2. Launch an Amazon RDS instance. Enable encryption for database, logs and backups.
3. Launch an Amazon RDS instance with encryption enabled. Logs and backups are automatically encrypted.
4. Launch an Amazon RDS instance. Enable encryption for backups. Encrypt logs with a database-engine feature.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.Encryption.html

QUESTION 99 CD???

A Solutions Architect is designing a customer order processing application that will likely have high usage spikes.

What should the Architect do to ensure that customer orders are not lost before being written to an Amazon RDS database? (Choose two.)

1. Use Amazon CloudFront to deliver the application front end.
2. Use Elastic Load Balancing with a round-robin routing algorithm.
3. Have the orders written into an Amazon SQS queue.
4. Scale the number of processing nodes based on pending order volume.
5. Have a standby Amazon RDS instance in a separate Availability Zone.

Correct Answer: AB Section: (none) Explanation

QUESTION 101 ???C

A restaurant reservation application needs the ability to maintain a waiting list. When a customer tries to reserve a table, and none are available, the customer must be put on the waiting list, and the application must notify the customer when a table becomes free.

What service should the Solutions Architect recommend to ensure that the system respects the order in which the customer requests are put onto the waiting list?

1. Amazon SNS
2. AWS Lambda with sequential dispatch
3. A FIFO queue in Amazon SQS
4. A standard queue in Amazon SQS

Correct Answer: D Section: (none) Explanation

QUESTION 103 D

A company has a popular multi-player mobile game hosted in its on-premises datacenter. The current infrastructure can no longer keep up with demand and the company is considering a move to the cloud.

Which solution should a Solutions Architect recommend as the MOST scalable and cost-effective solution to meet these needs?

1. Amazon EC2 and an Application Load Balancer
2. Amazon S3 and Amazon CloudFront
3. Amazon EC2 and Amazon Elastic Transcoder
4. AWS Lambda and Amazon API Gateway

Correct Answer: B Section: (none) Explanation

QUESTION 104 ???D, Should be B. VPC endpoint is for s3 and DynamoDB only.

A company has instances in private subnets that require outbound access to the internet. This requires:

1. Assigning a public IP address to the instance.
2. Updating the route table associated with the subnet to point internet traffic through a NAT gateway.
3. Updating the security group associated with the subnet to allow ingress on 0.0.0.0/0.
4. Routing traffic from the instance through a VPC endpoint that has internet access.

Correct Answer: B Section: (none) Explanation

QUESTION 107 SNS->SQS->Lambda

An application publishes Amazon SNS messages in response to several events. An AWS Lambda function subscribes to these messages. Occasionally the function will fail while processing a message, so the original event message must be preserved for root cause analysis.

What architecture will meet these requirements without changing the workflow?

1. Subscribe an Amazon SQS queue to the Amazon SNS topic and trigger the Lambda function from the queue.
2. Configure Lambda to write failures to an SQS Dead Letter Queue.
3. Configure a Dead Letter Queue for the Amazon SNS topic.
4. Configure the Amazon SNS topic to invoke the Lambda function synchronously.

Correct Answer: A Section: (none) Explanation

https://docs.aws.amazon.com/AWSSimpleQueueService/latest/SQSDeveloperGuide/sqs-dead-letter-queues.html

QUESTION 110 , large volume data, scale, query, BI

A business team requires a structured storage solution to store all of a company's historical sales data. Currently there are 4 TB of data, which will grow to hundreds of terabytes within a few years. The team must be able to regularly run queries against the data using current business intelligence tools. Fast performance is required despite the dataset growth.

Which solution should the company use?

1. Amazon Redshift
2. Amazon Aurora
3. Amazon DynamoDB
4. Amazon S3

Correct Answer: A Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/blogs/aws/category/amazon-redshift/

QUESTION 111 , no hardware, single function.

A prediction process requires access to a trained model that is stored in an Amazon S3 bucket. The process takes a few seconds to process an image and make a prediction. The process is not overly resource-intensive, does not require any specialized hardware, and takes less than 512 MB of memory to run.

What would be the MOST effective compute solution for this use case?

1. Amazon ECS
2. Amazon EC2 Spot instances
3. AWS Lambda functions
4. AWS Elastic Beanstalk

Correct Answer: C Section: (none) Explanation

QUESTION 114 ???C???, user need to choose which way to encrypt. D is correct.

A company is using Amazon S3 as its local repository for weekly analysis reports. One of the company-wide requirements is to secure data at rest using encryption. The company chose Amazon S3 server-side encryption. The company wants to know how the object is decrypted when a GET request is issued.
Which of the following answers this question?

1. The user needs to place a PUT request to decrypt the object.
2. The user needs to decrypt the object using a private key.
3. Amazon S3 manages encryption and decryption automatically.
4. Amazon S3 provides a server-side key for decrypting the object.

Correct Answer: D Section: (none) Explanation

QUESTION 115 state information, or session data, DynamoDB is good fit.

A company is looking for a fully-managed solution to store its players' state information for a rapidly growing game. The application runs on multiple Amazon EC2 nodes, which can scale according to the incoming traffic.

The request can be routed to any of the nodes, therefore, the state information must be stored in a centralized database. The players' state information needs to be read with strong consistency and needs conditional updates for any changes.

Which service would be MOST cost-effective, and scale seamlessly?

1. Amazon S3
2. Amazon DynamoDB
3. Amazon RDS
4. Amazon Redshift

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 118 AD? Should be AD

A Solutions Architect is designing a web application that will be hosted on Amazon EC2 instances in a public subnet. The web application uses a MySQL database in a private subnet. The database should be accessible to database administrators.

Which of the following options should the Architect recommend? (Choose two.)

1. Create a bastion host in a public subnet, and use the bastion host to connect to the database.
2. Log in to the web servers in the public subnet to connect to the database.
3. Perform DB maintenance after using SSH to connect to the NAT Gateway in a public subnet.
4. Create an IPSec VPN tunnel between the customer site and the VPC, and use the VPN tunnel to connect to the database.
5. Attach an Elastic IP address to the database.

Correct Answer: BD Section: (none) Explanation

QUESTION 119 DynamoDB Auto Scaling, create an Application Auto Scaling policy for your DynamoDB table.

A web application running on Amazon EC2 instances writes data synchronously to an Amazon DynamoDB table configured for 60 write capacity units. During normal operation the application writes 50 KB/s to the tale, but can scale up to 500 KB/ s during peak hours. The application is currently throttling errors from the DynamoDB table during peak hours.

What is the MOST cost-efficient change to support the increased traffic with minimal changes to the application?

1. Use Amazon SQS to manage the write operations to the DynamoDB table.
2. Change DynamoDB table configuration to 600 write capacity units.
3. Increase the number of Amazon EC2 instances to support the traffic.
4. Configure Amazon DynamoDB Auto Scaling to handle the extra demand.

Correct Answer: D Section: (none) Explanation

QUESTION 121

A Solutions Architect is designing a service that must have four Amazon EC2 instances running between 8 AM and 6 PM daily. The service requires one EC2 instance outside of those hours.

What is the MOST cost-effective way to provide enough compute?

1. Use one Amazon EC2 Reserved Instance and use an Auto Scaling group to add and remove EC2 instances based on CPU utilization.
2. Use one Amazon EC2 On-Demand instance and use an Auto Scaling group to add and remove EC2 instances based on CPU utilization.
3. Use one Amazon EC2 On-Demand instance and use an Auto Scaling Group scheduled action to add three EC2 Spot instances at 7:30 AM and remove three instances at 6:10 PM.
4. Use one Amazon EC2 Reserved Instance and use an Auto Scaling Group scheduled action to add three EC2 On-Demand instances at 7:30 AM and remove three instances at 6:10 PM.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 122 D??? One public subnet for ELB is fine.

A company plans to use an Amazon VPC to deploy a web application consisting of an elastic load balancer, a fleet of web and application servers, and an Amazon RDS MySQL database that should not be accessible from the Internet. The proposed design must be highly available and distributed over two Availability Zones.

What would be the MOST appropriate VPC design for this specific use case?

1. Two public subnets for the elastic load balancer, two public subnets for the web servers, and two public subnets for Amazon RDS.
2. One public subnet for the elastic load balancer, two private subnets for the web servers, and two private subnets for Amazon RDS.
3. One public subnet for the elastic load balancer, one public subnet for the web servers, and one private subnet for the database.
4. Two public subnets for the elastic load balancer, two private subnets for the web servers, and two private subnets for RDS.

Correct Answer: B Section: (none) Explanation

QUESTION 124 not D

A Solutions Architect is developing a new web application on AWS. The services must scale to support an increasing load. The Architect wants to focus on software development and deploying new features rather than provisioning or managing servers.

Which AWS service is appropriate?

1. Auto Scaling
2. Elastic Beanstalk
3. EC2 Container Service
4. CloudFormation

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/elasticbeanstalk/

QUESTION 128 ???B, bottleneck is the webserver, so C.

A university is running an internal web application on AWS that students can access from the university network to check their exam results. The web application runs on Amazon EC2 instances and pulls results from an Amazon DynamoDB table. Auto Scaling is currently configured to add a new web server when CPU is greater than 80% for 5 minutes. DynamoDB is configured to increase both read and write capacity units by five when utilization is greater than 80%. Exam results are released at 9:00 a.m. each Monday, and 80% of students, attempt to access their unique result within the first 30 minutes. Despite Auto Scaling being enabled, students are complaining of slow response times and errors when they view the site. There are no performance complaints after 9:30 a.m. on Monday.

Which recommendation should a Solutions Architect make to improve performance in a cost-effective manner?

1. Scale out the EC2 instances to ensure that the environment scales up and down based on the highest load.
2. Implement Amazon DynamoDB Accelerator to improve database performance and remove the need to scale the read/write units.
3. Use a scheduled job to scale out EC2 before 9:00 a.m. on Monday and to scale down after 9:30 a.m.
4. Use Amazon CloudFront to cache web request and reduce the load on EC2 and DynamoDB.

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 129 ???C

As part of a migration strategy, a Solutions Architect needs to analyze workloads that can be optimized for performance and cost. The Solutions Architect has identified a stateless application that serves static content as a potential candidate to move to the cloud. The Solutions Architect has the flexibility to choose an identity solution between Facebook, Twitter, and Amazon.

Which AWS solution offers flexibility and ease of use, and the LEAST operational overhead for this migration?

1. Use AWS Identity and Access Management (IAM) for managing identities, and migrate the application to run on Amazon S3, Amazon API Gateway, and AWS Lambda.
2. Use a third-party solution for managing identities, and migrate the application to run on Amazon S3, EC2 Spot Instances, and Amazon EC2.
3. Use Amazon Cognito for managing identities, and migrate the application to run on Amazon S3, Amazon API Gateway, and AWS Lambda.
4. Use Amazon Cognito for managing identities, and migrate the application to run on Amazon S3, EC2 Spot Instances, and Amazon EC2.

Correct Answer: A Section: (none) Explanation

QUESTION 132 , share with other others, EFS is the best.

A Solutions Architect is designing a web application for document sharing. The users will upload documents that are then made available to other users. There will be tens of thousands of these documents.

What is the MOST cost-effective storage solution?

1. Amazon EFS
2. Amazon S3
3. Amazon Glacier
4. Amazon EBS

Correct Answer: A Section: (none) Explanation

Explanation/Reference:
Explanation: https://dzone.com/articles/confused-by-aws-storage-options-s3-ebs-amp-efs-explained

QUESTION 133 C? yes, C.

A Solutions Architect was tasked with reviewing several templates that build VPCs and ensuring that they meet specific security requirements. After reviewing the templates, the Architect realizes that all of the templates are missing important security best practices.

What should the Architect do to implement security best practices in an efficient manner?

1. Use VPC peering to enforce network consistency
2. Restrict users from deploying an AWS CloudFormation template
3. Provide the teams a nested AWS CloudFormation template that builds the VPC correctly
4. Create AWS Identity and Access Management (IAM) policies that enforce the corporate VPC architecture standards

Correct Answer: D Section: (none) Explanation

QUESTION 134 ???D, B is enough, requirement is not mentioning about cross AZ. Subnet can't cross AZ.

A Solutions Architect has been given the following requirements for a company's VPC: The solution is a two-tiered application with a web tier and a database tier.

- All web traffic to the environment must be directed from the Internet to an Application Load Balancer.
- The web servers and the databases should not obtain public IP addresses or be directly accessible from the public Internet.
- Because of security requirements, databases may not share a route table or subnet with any other service. The environment must be highly available within the same VPC for all services.

What is the minimum number of subnets that the Solutions Architect will need based on these requirements and best practices?

A. 2 B. 3 C. 4 D. 6

Correct Answer: B Section: (none) Explanation

QUESTION 136 ???A, events-stream, message-SQS.

A company is building a critical ingestion service on AWS that will receive 1,000 incoming events per second. The events must be processed in order, and no events may be lost. Multiple applications will need to process each event. The company will expose the service as RESTful calls through an API Gateway.

What should a Solutions Architect use to receive the events based on these requirements?

1. Amazon Kinesis Data Stream
2. Amazon DynamoDB
3. Amazon SQS
4. Amazon SNS

Correct Answer: A Section: (none) Explanation

QUESTION 139 ??? invalidation, should be B, no cache refresh for cloudfront.

A company has an application that uses Amazon CloudFront for content that is hosted on an Amazon S3 bucket. After an unexpected refresh, the users are still seeing old content.

Which step should the Solutions Architect take to ensure that new content is displayed?

1. Perform a cache refresh on the CloudFront distribution that is serving the content.
2. Perform an invalidation on the CloudFront distribution that is serving the content.
3. Create a new cache behavior path with the updated content.
4. Change the TTL value for removing the old objects.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 144 Host-based and path-based in application load balancer.

A company has asked the Solutions Architect to modify its AWS-hosted internal application to allow for load balancing. The customer requests always come from the company domain (example.net). The company requires that incoming HTTP and HTTPS traffic is routed based on the path element of the URL in the request.

Which implementation can satisfy all requirements?

1. Configure a Network Load Balancer with listeners for appropriate path patterns for the target groups.
2. Configure an Application Load Balancer with host-based routing based on the domain field in the HTTP header.
3. Configure a Network Load Balancer and enable cross-zone load balancing to ensure that all EC2 instances are used.
4. Configure an Application Load Balancer with listeners for appropriate path patterns for the target group.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/blogs/aws/new-host-based-routing-support-for-aws-application-load-balancers/

QUESTION 145 should be C. A-no need to be scheduled.

A Solutions Architect is asked to improve the fault tolerance of an existing Python application. The web application places 1-MB images is an S3 bucket. The application then uses a single t2.large instance to transform the image to include a watermark with the company's brand before writing the image back to the S3 bucket.

What should the Solutions Architect recommend to increase the fault tolerance of the solution?

1. Convert the code to a Lambda function triggered by scheduled Amazon CloudWatch Events.
2. Increase the instance size to m4.xlarge and configure Enhanced Networking.
3. Convert the code to a Lambda function triggered by Amazon S3 events.
4. Create an Amazon SQS queue to send the images to the t2.large instance.

Correct Answer: A Section: (none) Explanation

QUESTION 146 signed-URLs + OAI?

A Solutions Architect has been asked to deliver video content stored on Amazon S3 to specific users from Amazon CloudFront while restricting access by unauthorized users.

How can the Architect implement a solution to meet these requirements?

1. Configure CloudFront to use signed-URLs to access Amazon S3.
2. Store the videos as private objects in Amazon S3, and let CloudFront serve the objects by using only Origin Access Identity (OAI).
3. Use Amazon S3 static website as the origin of CloudFront, and configure CloudFront to deliver the videos by generating a signed URL for users.
4. Use OAI for CloudFront to access private S3 objects and select the Restrict Viewer Access option in CloudFront cache behavior to use signed URLs.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access- to-s3.html

QUESTION 148 : Web Application Firewall

A company has a website running on Amazon EC2. The application DNS name points to an Elastic IP address associated with the EC2 instance. In the event of an attack on the website coming from a specific IP address, the company wants a way to block the offending IP address.

Which tool or service should a Solutions Architect recommend to block the IP address?

1. Security groups
2. Network ACL
3. AWS WAF
4. AWS Shield

Correct Answer: C Section: (none) Explanation

QUESTION 151 not a, DynamoDB+ DAX, ElasticCache for RDS

A company has a Node.js application running on Amazon EC2 that currently retrieves data for customers from a DynamoDB table. The company is seeing many repeat queries for the same items, and the number of queries is continuing to increase as the application gains popularity.

What solution will reduce the number of read capacity units (RCUs) required while minimizing the amount of refactoring that must be done to the application?

1. Use Amazon ElastiCache to provide a caching layer
2. Use a Lambda function to make concurrent requests for caching
3. Use Amazon DynamoDB Accelerator (DAX) to provide a caching layer
4. Obtain Reserved Capacity for Amazon DynamoDB to manage the increased number of queries

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 153: A

A team is launching a marketing campaign and the peak database read activity in Amazon Aurora for MySQL is expected to increase. A Solutions Architect decides to add two Read Replicas to the cluster.

How should the Solutions Architect ensure that the connections for read activities are load balanced?

1. Reader endpoint for Amazon Aurora
2. Cluster endpoint for Amazon Aurora
3. Primary DB instance endpoint for Amazon Aurora
4. Replica DB instances endpoint for Aurora

Correct Answer: C Section: (none) Explanation

https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/Aurora.Overview.Endpoints.html

QUESTION 154 why d?, exclude. Serverless-lamda, across the world-CloudFront, maintain session-dynamoDB or ElasticCache.

A company plans to migrate a website to AWS to use a serverless architecture. The website contains both static and dynamic content and is accessed by users across the world. The website should maintain sessions for returning users to improve the user experience.

Which service should a Solutions Architect use for a cost-efficient solution with the LOWEST latency?

1. Amazon S3, AWS Lambda, Amazon API Gateway, and Amazon DynamoDB
2. Amazon CloudFront, AWS Lambda, API Gateway, and Amazon RDS
3. Amazon CloudFront, Elastic Load Balancing, Amazon EC2, and Amazon RDS
4. Amazon S3, Amazon CloudFront, AWS Lambda, Amazon API Gateway, and Amazon DynamoDB.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 156 why ad? C: Network ACL must config inbound and outbound for 443.

A Solution Architect is designing a two-tier application for maximum security, with a web tier running on EC2 instances and the data stored in an RDS DB instance. The web tier should accept user access only through HTTPS connections (port 443) from the Internet, and the data must be encrypted in transit to and from the database.

What combination of steps will MOST securely meet the stated requirements? (Choose two.)

1. Create a security group for the web tier instances that allows inbound traffic only over port 443.
2. Enforce Transparent Data Encryption (TDE) on the RDS database.
3. Create a network ACL that allows inbound traffic only over port 443.
4. Configure the web servers to communicate with RDS by using SSL, and issue certificates to the web tier EC2 instances.
5. Create a customer master key in AWS KMS and apply it to encrypt the RDS instance.

Correct Answer: AD Section: (none) Explanation

Explanation/Reference:

QUESTION 157 C

A credit card processing application, hosted on an on-premises server, needs to communicate directly with a database hosted on an Amazon EC2 instance running in a private subnet of a VPC. Compliance requirements state that end-to-end communication should be encrypted.

Which solution will ensure that this requirement is met?

1. Use HTTPS for traffic over VPC peering between the VPC and the on-premises datacenter.
2. Use HTTPS for traffic over the Internet between the on-premises server and the Amazon EC2 instance.
3. Use HTTPS for traffic over a VPN connection between the VPC and the on-premises datacenter.
4. Use HTTPS for traffic over gateway VPC endpoints that have been configured for the Amazon EC2 instance.

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 162 Instance health check + ELB health check, And condition.

A client has set up an Auto Scaling group associated with a load balancer. The client has noticed that instances launched by the Auto Scaling group are reported unhealthy as the result of an Elastic Load Balancing (ELB) health check, but these unhealthy instances are not being terminated.

What can a Solutions Architect do to ensure that the instances marked unhealthy will be terminated and replaced?

1. Increase the value for the health check interval set on the ELB load balancer.
2. Change the thresholds set on the Auto Scaling group health check.

3. Change the health check type to ELB for the Auto Scaling group.
4. Change the health check set on the ELB load balancer to use TCP rather than HTTP checks.

Correct Answer: C Section: (none) Explanation

Explanation/Reference:
Explanation: http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/as-add-elb-healthcheck.html

QUESTION 164

An organization is deploying Amazon ElastiCache for Redis and requires password protection to improve their data security posture.

Which solution should a Solutions Architect recommend?

1. Redis Auth
2. AWS Single Sign-On
3. IAM database authentication
4. VPC security group for Redis

Correct Answer: A Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/AmazonElastiCache/latest/red-ug/auth.html

QUESTION 167 ???C, There is no way auto scale RDB performance, only the storage. D is the only option.

An application running on Amazon EC2 has been experiencing performance issues when accessing an Amazon RDS for Oracle database. The database has been provisioned correctly for average workloads, but there are several usage spikes each day that have saturated the database, causing the application to time out. The application is write-heavy, updating information more often than reading information. A Solutions Architect has been asked to review the application design.

What should the Solutions Architect recommend to improve performance?

1. Put an Amazon ElastiCache cluster in front of the database and use lazy loading to limit database access during peak periods.
2. Put an Amazon Elasticsearch domain in front of the database and use a Write-Through cache to reduce database access during peak periods.
3. Configure an Amazon RDS Auto Scaling group to automatically scale the RDS instance during load spikes.
4. Change the Amazon RDS instance storage type from General Purpose SSD to provisioned IOPS SSD.

Correct Answer: D Section: (none) Explanation

QUESTION 168 ??? BD? D is not applicable. BC is correct

During performance testing of an application, the Amazon RDS database caused a performance bottleneck. What steps can be taken to improve the database performance? (Choose two.)

1. Change the RDS database instance to multiple Availability Zones.
2. Scale up to a larger RDS instance type.

3. Redirect read queries to RDS read replicas.
4. Scale out using an Auto Scaling group for RDS.
5. Use RDS in a separate AWS Region.

Correct Answer: BC Section: (none) Explanation

QUESTION 169 CE, BC, reduce partition to save cost.

A Solutions Architect must design an Amazon DynamoDB table to store data about customer activities. The data is used to analyze recent customer behavior, so data that is less than a week old is heavily accessed and older data is accessed infrequently. Data that is more than one month old never needs to be referenced by the application, but needs to be archived for year-end analytics.

What is the MOST cost-efficient way to meet these requirements? (Choose two.)

1. Use DynamoDB time-to-live settings to expire items after a certain time period.
2. Provision a higher write capacity unit to minimize the number of partitions.
3. Create separate tables for each week's data with higher throughput for the current week.
4. Pre-process data to consolidate multiple records to minimize write operations.
5. Export the old table data from DynamoDB to Amazon S3 using AWS Data Pipeline, and delete the old table.

Correct Answer: BC Section: (none) Explanation

QUESTION 170 IP, CIDR, another security group.

A Solutions Architect is concerned that the current security group rules for a database tier are too permissive and may permit requests that should be restricted. Below are the current security group permissions for the database tier:

Protocol: TCP
Port Range: 1433 (MS SQL)
Source: ALL

Currently, the only identified resource that needs to connect to the databases is the application tier consisting of an Auto Scaling group of EC2 instances.
What changes can be made to this security group that would offer the users LEAST privilege?

1. Change the source to -1 to remove source IP addresses previously unseen.
2. Change the source to the VPC CIDR block.
3. Change the source to the application instances IDs.
4. Change the source to the security group ID attached to the application instances.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

安全组的 source 只能填写 CIDR IP 和安全组 id， IP.

QUESTION 171 AC? If A is correct, then C must be correct, so C.

A large media site has multiple applications in Amazon ECS. A Solutions Architect needs to use content metadata and route traffic to specific services.
What is the MOST efficient method to perform this task?

1. Use an AWS Classic Load Balancer with a host-based routing option to route traffic to the correct service.
2. Use the AWS CLI to update Amazon Route 53 hosted zone to route traffic as services get updated.
3. Use an AWS Application Load Balancer with host-based routing option to route traffic to the correct service.
4. Use Amazon CloudFront to manage and route traffic to the correct service.

Correct Answer: A Section: (none) Explanation

QUESTION 172 ???D, GLACIER is not readily available.

A Solutions Architect must build a secure document storage platform that allows clients to access data stored on Amazon S3. Documents must be readily available for the first 15 days. After that, documents need not be readily available, and storage costs should be reduced as much as possible.

Which of the following approaches will satisfy these requirements?

1. Create a lifecycle rule to transition the documents from the STANDARD storage class to the STANDARD_IA storage class after 15 days, and then to the GLACIER storage class after an additional 15 days.
2. Create a lifecycle rule to transition the documents from the STANDARD storage class to the GLACIER storage class after 30 days.
3. Create a lifecycle rule to transition documents from the STANDARD storage class to the STANDARD_IA storage class after 30 days and then to the GLACIER storage class after an additional 30 days.
4. Create a lifecycle rule to transition the documents from the STANDARD storage class to the GLACIER storage class after 15 days.

Correct Answer: A Section: (none) Explanation

QUESTION 173 ???A, B

A Solutions Architect needs to configure scaling policies based on Amazon CloudWatch metrics for an Auto Scaling group. The application running on the instances is memory intensive.

How can the Architect meet this requirement?

1. Enable detailed monitoring on the Amazon EC2 instances.
2. Publish custom metrics to CloudWatch from the application.
3. Configuration lifecycle policies for the Amazon EC2 instances.
4. Set up high-resolution alarms for the Auto Scaling group

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://medium.com/qbits/autoscaling-using-custom-metrics-5f977903bc45

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/mon-scripts.html

QUESTION 175 the question is about how to solve the performance issue.

A company uses AWS Elastic Beanstalk to deploy a web application running on c4.large instances. Users are reporting high latency and failed requests. Further investigation reveals that the EC2 instances are running at or near 100% CPU utilization.

What should a Solutions Architect do to address the performance issues?

1. Use time-based scaling to scale the number of instances based on periods of high load.
2. Modify the scaling triggers in Elastic Beanstalk to use the CPUUtilization metric.
3. Swap the c4.large instances with the m4.large instance type.
4. Create an additional Auto Scaling group, and configure Amazon EBS to use both Auto Scaling groups to increase the scaling capacity.

Correct Answer: D Section: (none) Explanation

QUESTION 176 B? shouldn't expose lambda. C is the only option.

A Solutions Architect is working on a PCI-compliant architecture that needs to call an external service provider's API. The external provider requires IP whitelisting to verify the calling party.

How should the Solutions Architect provide the external party with the IP addresses for whitelisting?

1. Use an API Gateway in proxy mode, and provide the API Gateway's IP address to the external service provider.
2. Associate a public elastic network interface to a published stage/endpoint in API Gateway, exposing the AWS Lambda function, and provide the IP address for the public network interface to the external party to whitelist.
3. Deploy the Lambda function in private subnets and route outbound traffic through a NAT gateway. Provide the NAT gateway's Elastic IP address to the external service provider.
4. Provide the external party the allocated AWS IP address range for Lambda functions, and send change notifications by using a subscription to the AmazonIpSpaceChanged SNS topic.

Correct Answer: C Section: (none) Explanation

QUESTION 177 ???A, D is better, use Role.

A Solutions Architect is designing a shared file system for a company. Multiple users will be accessing it at any given time. Different teams will have their own directories, and the company wants to secure files so that users can access only files owned by their team.

How should the Solutions Architect design this?

1. Use Amazon EFS and control permissions by using file-level permissions.
2. Use Amazon S3 and control permissions by using ACLs.
3. Use Amazon EFS and control permissions by using security groups.
4. Use AWS Storage Gateway and control permissions by using AWS Identity and Access Management (IAM)

Correct Answer: D Section: (none) Explanation

Explanation/Reference: Explanation:

https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html

QUESTION 178 ???C, HA, so Multi AZ is enough, C has IOPS as well, which is not necessary.

A company requires operating system permission on a relational database server.
What should a Solutions Architect suggest as a configuration for a highly available database architecture?

1. Multiple EC2 instances in a database replication configuration that uses two Availability Zones.
2. A standalone Amazon EC2 instance with a selected database installed.
3. Amazon RDS in a Multi-AZ configuration with Provisioned IOPS.
4. Multiple EC2 instances in a replication configuration that uses two placement groups.

Correct Answer: A Section: (none) Explanation

QUESTION 179 egress-only only support IPv6., B should be correct.

An application has a web tier that runs on EC2 instances in a public subnet. The application tier instances run in private subnets across two Availability Zones. All traffic is IPv4 only, and each subnet has its own custom route table.

A new feature requires that application tier instances can call an external service over the Internet; however, they must still not be accessible to Internet traffic.

What should be done to allow the application servers to connect to the Internet, maintain high availability, and minimize administrative overhead?

1. Add an Amazon egress-only internet gateway to each private subnet. Alter each private subnet's route table to include a route from 0.0.0.0/0 to the egress-only internal gateway in the same Availability Zone.
2. Add an Amazon NAT Gateway to each public subnet. Alter each private subnet's route table to include a route from 0.0.0.0/0 to the NAT Gateway in the same Availability Zone.
3. Add an Amazon NAT instance to one of the public subnets Alter each private subnet's route table to include a route from 0.0.0.0/0 to the Internet gateway in the VPC.
4. Add an Amazon NAT Gateway to each private subnet. Alter each private subnet's route table to include a route from 0.0.0.0/0 to the NAT Gateway in the other Availability Zone.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 180 ???A

An application uses an Amazon SQS queue as a transport mechanism to deliver data to a group of EC2 instances for processing. The application owner wants to add a mechanism to archive the incoming data without modifying application code on the EC2 instances.

How can this application be re-architected to archive the data without modifying the processing instances?

1. Trigger a Lambda function by using Amazon CloudWatch Events to retrieve messages from the SQS queue and archive to Amazon S3.
2. Use an Amazon SNS topic to fan out the data to the SQS queue in addition to a Lambda function that records the data to an S3 bucket.

3. Set up an Amazon Kinesis Data Stream so that multiple instances can receive data. Add a separate EC2 instance that is configured to archive all data it receives.
4. Write the data to an S3 bucket, and use an SQS queue for S3 event notifications to tell the instances where to retrieve the data.

Correct Answer: B Section: (none) Explanation

QUESTION 181 , serverless, cost-efficient.

A Solutions Architect must select the most cost-efficient architecture for a service that responds to web requests. These web requests are small and query a DynamoDB table. The request rate ranges from zero to several hundred each second, without any predictable patterns.

What is the MOST cost-efficient architecture for this service?

1. Network Load Balancer/Amazon EC2
2. Application Load Balancer/Amazon ECS
3. API Gateway/AWS Lambda
4. AWS Elastic Beanstalk/AWS Lambda

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 182 ???BE, B is incorrect, database can only be in one container.

A company has a web application running in a Docker container that connects to a MySQL server in an on-premises data center. The deployment and maintenance of this application are becoming time-consuming and slowing down new feature releases. The company wants to migrate the application to AWS and use services that helps facilitate infrastructure management and deployment.

Which architectures should the company consider on AWS? (Choose two.)

1. Amazon ECS for the web application, and an Amazon RDS for MySQL for the database.
2. AWS Elastic Beanstalk Docker Multi-container either for the web application or database.
3. AWS Elastic Beanstalk Docker Single Container for the web application, and an Amazon RDS for MySQL for the database.
4. AWS CloudFormation with Lambda Custom Resources without VPC for the web application, and an Amazon RDS for MySQL database.
5. AWS CloudFormation with Lambda Custom Resources running in a VPC for the web application, and an Amazon RDS for MySQL database.

Correct Answer: CE Section: (none) Explanation

QUESTION 183 ??? A, template for VPC is possible?

A Solutions Architect has designed a VPC that meets all necessary security requirements for their organization. Any applications deployed in the organization must use this VPC design.

How can project teams deploy, manage, and delete VPCs that meet this design with the LEAST administrative effort?

1. Deploy an AWS CloudFormation template that defines components of the VPC.
2. Run a script that uses the AWS Command Line Interface to deploy the VPC.
3. Clone the existing authorized VPC for each new project.
4. Use AWS Elastic Beanstalk to deploy both the VPC and the application.

Correct Answer: B Section: (none) Explanation

QUESTION 186 B is the only relevant option.

A Solutions Architect is designing an application that will encrypt all data in an Amazon Redshift cluster. Which action will encrypt the data at rest?

1. Place the Redshift cluster in a private subnet.
2. Use the AWS KMS Default Customer master key.
3. Encrypt the Amazon EBS volumes.
4. Encrypt the data using SSL/TLS.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/redshift/latest/mgmt/working-with-db-encryption.html

QUESTION 190 ???B

A company is launching an application that it expects to be very popular. The company needs a database that can scale with the rest of the application. The schema will change frequently. The application cannot afford any downtime for database changes.
Which AWS service allows the company to achieve these objectives?

1. Amazon Redshift
2. Amazon DynamoDB
3. Amazon RDS MySQL
4. Amazon Aurora

Correct Answer: D

Section: (none) Explanation

Explanation/Reference:

QUESTION 192 D, eventual consistency.

A customer has written an application that uses Amazon S3 exclusively as a data store. The application works well until the customer increases the rate at which the application is updating information. The customer now reports that outdated data occasionally appears when the application accesses objects in Amazon S3.

What could be the problem, given that the application logic is otherwise correct?

1. The application is reading parts of objects from Amazon S3 using a range header.
2. The application is reading objects from Amazon S3 using parallel object requests.
3. The application is updating records by writing new objects with unique keys.
4. The application is updating records by overwriting existing objects with the same keys.

Correct Answer: A Section: (none) Explanation

QUESTION 194 ???why not C

An application requires block storage for file updates. The data is 500 GB and must continuously sustain 100 MiB/s of aggregate read/write operations.
Which storage option is appropriate for this application?

1. Amazon S3
2. Amazon EFS
3. Amazon EBS
4. Amazon Glacier

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/efs/latest/ug/performance.html

QUESTION 195 ???B

A user is testing a new service that receives location updates from 3,600 rental cars every hour. Which service will collect data and automatically scale to accommodate production workload?

1. Amazon EC2
2. Amazon Kinesis Firehose
3. Amazon EBS
4. Amazon API Gateway

Correct Answer: D Section: (none) Explanation

QUESTION 199 ???B, use Route 53 only when domain name is required. Application Local Balancer support web socket.

A Solutions Architect is designing a microservices-based application using Amazon ECS. The application includes a WebSocket component, and the traffic needs to be distributed between microservices based on the URL.

Which service should the Architect choose to distribute the workload?

1. ELB Classic Load Balancer
2. Amazon Route 53 DNS
3. ELB Application Load Balancer
4. Amazon CloudFront

Correct Answer: C Section: (none) Explanation

Explanation/Reference: Explanation:

https://docs.aws.amazon.com/aws-technical-content/latest/microservices-on-aws/ microservices-on-aws.pdf?icmpid=link_from_whitepapers_page (13)

QUESTION 209 increase cool-down and alarm period to avoid launch new instance frequently.

In reviewing the Auto Scaling events for your application, you notice that your application is scaling up and down multiple times in the same hour.
What design choice could you make to optimize for cost while preserving elasticity? Choose 2 answers

1. Modify the Auto Scaling policy to use scheduled scaling actions
2. Modify the Auto Scaling group termination policy to terminate the oldest instance first.
3. Modify the Auto Scaling group cool-down timers.
4. Modify the Amazon CloudWatch alarm period that triggers your Auto Scaling scale down policy.
5. Modify the Auto Scaling group termination policy to terminate the newest instance first.

Correct Answer: CD Section: (none) Explanation

Explanation/Reference:

QUESTION 210

A VPC public subnet is one that:

1. Has at least one route in its associated routing table that uses an Internet Gateway (IGW).
2. Includes a route in its associated routing table via a Network Address Translation (NAT) instance.
3. Has a Network Access Control List (NACL) permitting outbound traffic to 0.0.0.0/0.
4. Has the Public Subnet option selected in its configuration.

Correct Answer: D Section: (none) Explanation

QUESTION 218 use role to avoid using keys

When it comes to API credentials, what is the best practice recommended by AWS?

1. Create a role which has the necessary and can be assumed by the EC2 instance.
2. Use the API credentials from an EC2 instance.
3. Use the API credentials from a bastion host.
4. Use the API credentials from a NAT Instance.

Correct Answer: A Section: (none) Explanation

QUESTION 221 , IO1 is designed to deliver a consistent baseline performance of up to 50 IOPS/GB

If a provisioned IOPS volume of 4iGB is created, what are the possible correct values for IOPS for the volume in order for it to be created?

A. 200
B. 300
C. 400
D. 500

Correct Answer: A Section: (none) Explanation

QUESTION 228 ???BD B is wrong.

A Lambda function must execute a query against an Amazon RDS database in a private subnet.
Which steps are required to allow the Lambda function to access the Amazon RDS database? (Select two.)

1. Create a VPC Endpoint for Amazon RDS.
2. Create the Lambda function within the Amazon RDS VPC.
3. Change the ingress rules of Lambda security group, allowing the Amazon RDS security group.
4. Change the ingress rules of the Amazon RDS security group, allowing the Lambda security group.
5. Add an Internet Gateway (IGW) to the VPC, route the private subnet to the IGW.

Correct Answer: AD Section: (none) Explanation

QUESTION 237 ???D

A Solutions Architect is designing a highly-available website that is served by multiple web servers hosted outside of AWS. If an instance becomes unresponsive, the Architect needs to remove it from the rotation.

What is the MOST efficient way to fulfill this requirement?

1. Use Amazon CloudWatch to monitor utilization.
2. Use Amazon API Gateway to monitor availability.
3. Use an Amazon Elastic Load Balancer.
4. Use Amazon Route 53 health checks.

Correct Answer: A Section: (none) Explanation

QUESTION 239 only Beanstalk is a solution, others are components, focus on managed and scalable, not gninx.

Which service should an organization use if it requires an easily managed and scalable platform to host its web application running on Nginx?

1. AWS Lambda
2. Auto Scaling
3. AWS Elastic Beanstalk
4. Elastic Load Balancing

Correct Answer: C Section: (none) Explanation

QUESTION 242 ???A, make prefix different, let s3 use partition.

A company's development team plans to create an Amazon S3 bucket that contains millions of images. The team wants to maximize the read performance of Amazon S3.

Which naming scheme should the company use?

1. Add a date as the prefix.
2. Add a sequential id as the suffix.
3. Add a hexadecimal hash as the suffix.
4. Add a hexadecimal hash as the prefix.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:
Explanation: https://aws.amazon.com/premiumsupport/knowledge-center/s3-bucket-performance-improve/

QUESTION 244 , C should be correct. The instance can format the EBS volume with a file system, such as ext3, and then install applications.

A company has a legacy application using a proprietary file system and plans to migrate the application to AW S.
Which storage service should the company use?

1. Amazon DynamoDB
2. Amazon S3
3. Amazon EBS
4. Amazon EFS

Correct Answer: D Section: (none) Explanation

Explanation/Reference:
https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSVolumes.html

QUESTION 246 , KMS is generic solution.

A company is evaluating Amazon S3 as a data storage solution for their daily analyst reports. The company has implemented stringent requirements concerning the security of the data at rest. Specifically, the CISO asked for the use of envelope encryption with separate permissions for the use of an envelope key, automated rotation of the encryption keys, and visibility into when an encryption key was used and by whom.

Which steps should a Solutions Architect take to satisfy the security requirements requested by the CISO?

1. Create an Amazon S3 bucket to store the reports and use Server-Side Encryption with Customer-Provided Keys (SSE-C).
2. Create an Amazon S3 bucket to store the reports and use Server-Side Encryption with Amazon S3-Managed Keys (SSE-S3).
3. Create an Amazon S3 bucket to store the reports and use Server-Side Encryption with AWS KMS-Managed Keys (SSE-KMS).
4. Create an Amazon S3 bucket to store the reports and use Amazon s3 versioning with Server-Side Encryption with Amazon S3-Managed Keys (SSE-S3).

Correct Answer: C Section: (none) Explanation

QUESTION 248 random + health check-> multivalue answer; random->simple

A Solutions Architect has five web servers serving requests for a domain.

Which of the following Amazon Route 53 routing policies can distribute traffic randomly among all healthy web servers?

A. Simple
B. Failover

C. Weighted
D. Multivalue Answer

Correct Answer: D Section: (none)

Explanation

Explanation/Reference:
Explanation: https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html

QUESTION 251

A company is moving to AWS. Management has identified a set of approved AWS services that meet all deployment requirements. The company would like to restrict access to all other unapproved services to which employees would have access.
Which solution meets these requirements with the LEAST amount of operational overhead?

1. Configure the AWS Trusted Advisor service utilization compliance report. Subscribe to Amazon SNS notifications from Trusted Advisor. Create a custom AWS Lambda function that can automatically remediate the use of unauthorized services.
2. Use AWS Config to evaluate the configuration settings of AWS resources. Subscribe to Amazon SNS notifications from AWS Config. Create a custom AWS Lambda function that can automatically remediate the use of unauthorized services.
3. Configure AWS Organizations. Create an organizational unit (OU) and place all AWS accounts into the OU. Apply a service control policy (SCP) to the OU that denies the use of certain services.
4. Create a custom AWS IAM policy. Deploy the policy to each account using AWS CloudFormation StackSets. Include deny statements in the policy to restrict the use of certain services. Attach the policies to all IAM users in each account.

Correct Answer: C Section: (none)

Explanation

QUESTION 252 ???D

A customer is running a critical payroll system in a production environment in one data center and a disaster recovery (DR) environment in another. The application includes load-balanced web servers and failover for the MySQL database. The customer's DR process is manual and error-prone. For this reason, management has asked IT to migrate the application to AWS and make it highly available so that IT no longer has to manually fail over the environment.

How should a Solutions Architect migrate the system to AWS?

1. Migrate the production and DR environments to different Availability Zones within the same region. Let AWS manage failover between the environments.
2. Migrate the production and DR environments to different regions. Let AWS manage failover between the environments.
3. Migrate the production environment to a single Availability Zone, and set up instance recovery for Amazon EC2. Decommission the DR environment because it is no longer needed.
4. Migrate the production environment to span multiple Availability Zones, using Elastic Load Balancing and Multi-AZ Amazon RDS. Decommission the DR environment because it is no longer needed.

Correct Answer: B Section: (none) Explanation

QUESTION 254 B???

A company is creating a web application that allows customers to view photos in their web browsers. The website is hosted in us-east-1 on Amazon EC2 instances behind an Application Load Balancer. Users will be located in many places around the world.

Which solution should provide all users with the fastest photo viewing experience?

1. Implement an AWS Auto Scaling group for the web server instances behind the Application Load Balancer.
2. Enable Amazon CloudFront for the website and specify the Application Load Balancer as the origin.
3. Move the photos into an Amazon S3 bucket and enable static website hosting.
4. Enable Amazon ElastiCache in the web server subnet.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

http://jayendrapatil.com/tag/elb/

QUESTION 256 ABC, Read replicas are available in Amazon RDS for MySQL, MariaDB, Oracle and PostgreSQL, as well as Amazon Aurora.(udemy, Test 3, Question 55)

A company is migrating on-premises databases to AWS. The company's backend application produces a large amount of database queries for reporting purposes, and the company wants to offload some of those reads to Read Replica, allowing the primary database to continue performing efficiently.

Which AWS database platforms will accomplish this? (Select TWO.)

1. Amazon RDS for Oracle
2. Amazon RDS for PostgreSQL
3. Amazon RDS for MariaDB
4. Amazon DynamoDB
5. Amazon RDS for Microsoft SQL Server

Correct Answer: BC Section: (none) Explanation

Explanation/Reference:

http://jayendrapatil.com/aws-rds-replication-multi-az-read-replica/

QUESTION 257 PrivateLink, VPC endpoint

An application launched on Amazon EC2 instances needs to publish personally identifiable information (PII) about customers using Amazon SNS. The application is launched in private subnets within an Amazon VPC. Which is the MOST secure way to allow the application to access service endpoints in the same region?

1. Use an internet gateway.
2. Use AWS PrivateLink.
3. Use a NAT gateway.
4. Use a proxy instance.

Correct Answer: B Section: (none) Explanation

QUESTION 261 I think C, B is correct. NAT gateway will enable internet access which is not desired.

A Security team reviewed their company's VPC Flow Logs and found that traffic is being directed to the internet. The application in the VPC uses Amazon EC2 instances for compute and Amazon S3 for storage. The company's goal is to eliminate internet access and allow the application to continue to function.

What change should be made in the VPC before updating the route table?

1. Create a NAT gateway for Amazon S3 access
2. Create a VPC endpoint for Amazon S3 access
3. Create a VPC endpoint for Amazon EC2 access
4. Create a NAT gateway for Amazon EC2 access

Correct Answer: D Section: (none) Explanation

QUESTION 263 ???B,Application Load Balancer for port routing.

A Solutions Architect is building a WordPress-based web application hosted on AWS using Amazon EC2. This application serves as a blog for an international internet security company. The application must be geographically redundant and scalable. It must separate the public Amazon EC2 web servers from the private Amazon RDS database, it must be highly available, and it must support dynamic port routing. Which combination of AWS services or capabilities will meet these requirements?

1. AWS Auto Scaling with a Classic Load Balancer, and AWS CloudTrail
2. Amazon Route 53, Auto Scaling with an Application Load Balancer, and Amazon CloudFront
3. A VPC, a NAT gateway and Auto Scaling with a Network Load Balancer
4. CloudFront, Route 53, and Auto Scaling with a Classic Load Balancer

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 271 ???D

A company processed 10 TB of raw data to generate quarterly reports. Although it is unlikely to be used again, the raw data needs to be preserved for compliance and auditing purposes.

What is the MOST cost-effective way to store the data in AWS?

1. Amazon EBS Cold HDD (sc1)
2. Amazon S3 One Zone-Infrequent Access (S3 One Zone-IA)
3. Amazon S3 Standard-Infrequent Access (S3 Standard-IA)
4. Amazon Glacier

Correct Answer: C Section: (none) Explanation

QUESTION 272 static content

A Solutions Architect needs to design a solution that will allow Website Developers to deploy static web content without managing server infrastructure. All web content must be accessed over HTTPS with a custom domain name. The solution should be scalable as the company continues to grow.

Which of the following will provide the MOST cost-effective solution?

1. Amazon EC2 instance with Amazon EBS
2. AWS Lambda function with Amazon API Gateway
3. Amazon CloudFront with an Amazon S3 bucket origin
4. Amazon S3 with a static website

Correct Answer: C Section: (none) Explanation

QUESTION 277

A Solutions Architect needs to deploy an HTTP/HTTPS service on Amazon EC2 instances with support for WebSockets using load balancers.

How can the Architect meet these requirements?

1. Configure a Network Load Balancer.
2. Configure an Application Load Balancer.
3. Configure a Classic Load Balancer.
4. Configure a Layer-4 Load Balancer.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:
Explanation:
The Application Load Balancer is designed to handle streaming, real-time, and WebSocket workloads in an optimized fashion. Instead of buffering requests and responses, it handles them in streaming fashion. This reduces latency and increases the perceived performance of your application.
Reference: https://aws.amazon.com/blogs/aws/new-aws-application-load-balancer/

QUESTION 278 CD, terminate?

A Solution Architect is designing a web application that runs on Amazon EC2 instances behind a load balancer. All data in transit must be encrypted.

Which solutions will meet the encryption requirement? (Select TWO.)

1. Use an Application Load Balancer (ALB) in passthrough mode, then terminate SSL on EC2 instances.
2. Use an Application Load Balancer (ALB) with a TCP listener, then terminate SSL on EC2 instances.
3. Use a Network Load Balancer (NLB) with a TCP listener, then terminate SSL on EC2 instances.
4. Use an Application Load Balancer (ALB) with an HTTPS listener, then install SSL certificates on the ALB and EC2 instances.
5. Use a Network Load Balancer (NLB) with an HTTPS listener, then install SSL certificates on the NLB and EC2 instances.

Correct Answer: CD

Section: (none) Explanation

Explanation/Reference:

QUESTION 279

A user is designing a new service that receives location updates from 3,600 rental cars every hour. The cars upload their location to an Amazon S3 bucket. Each location must be checked for distance from the original rental location.

Which services will process the updates and automatically scale?

1. Amazon EC2 and Amazon EBS
2. Amazon Kinesis Firehouse and Amazon S3
3. Amazon ECS and Amazon RDS
4. Amazon S3 events and AWS Lambda

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

QUESTION 280 B or D?

A company is writing a new service running on Amazon EC2 that must create thumbnail images of thousands of images in a large archive. The system will write scratch data to storage during the process.

Which storage service is best suited for this scenario?

1. EC2 instance store
2. Amazon EFS
3. Amazon CloudSearch
4. Amazon EBS Throughput Optimized HDD (st1)

Correct Answer: D Section: (none) Explanation

QUESTION 281 D is correct, we have to mysql cluster manualy.

A company's Amazon RDS MySQL DB instance may be rebooted for maintenance and to apply patches. This database is critical and potential user disruption must be minimized.

What should the Solution Architect do in this scenario?

1. Set up an RDS MySQL cluster
2. Create an RDS MySQL Read Replica.
3. Set RDS MySQL to Multi-AZ.
4. Create an Amazon EC2 instance MySQL cluster.

Correct Answer: D Section: (none) Explanation

QUESTION 285 C???

A Solutions Architect is designing an application that will run on Amazon ECS behind an Application Load

Balancer (ALB). For security reasons, the Amazon EC2 host instances for the ECS cluster are in a private subnet.
What should be done to ensure that the incoming traffic to the host instances is from the ALB only?

1. Create network ACL rules for the private subnet to allow incoming traffic on ports 32768 through 61000 from the IP address of the ALB only.
2. Update the EC2 cluster security group to allow incoming access from the IP address of the ALB only.
3. Modify the security group used by the EC2 cluster to allow incoming traffic from the security group used by the ALB only.
4. Enable AWS WAF on the ALB and enable the ECS rule.

Correct Answer: B Section: (none) Explanation

QUESTION 286 ???C-no ip of cloudfront, choose B, OAI+CloudFront

A company wants to improve latency by hosting images within a public Amazon S3 bucket fronted by an Amazon CloudFront distribution. The company wants to restrict access to the S3 bucket to include the CloudFront distribution only, while also allowing CloudFront to continue proper functionality.

What should be done after making the bucket private to restrict access with the LEAST operational overhead?

1. Create a CloudFront origin access identity and create a security group that allows access from CloudFront.
2. Create a CloudFront origin access identity and update the bucket policy to grant access to it.
3. Create a bucket policy restricting all access to the bucket to include CloudFront IPs only.
4. Enable the CloudFront option to restrict viewer access and update the bucket policy to allow the distribution.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

https://medium.com/tensult/creating-aws-cloudfront-distribution-with-s3-origin-ee47b8122727

QUESTION 288 , global tables

A company plans to deploy a new application in AWS that reads and writes information to a database. The company wants to deploy the application in two different AWS Regions in an active-active configuration. The databases need to replicate to keep information in sync.

What should be used to meet these requirements?

1. Amazon Athena with Amazon S3 cross-region replication
2. AWS Database Migration Service with change data capture
3. Amazon DynamoDB with global tables
4. Amazon RDS for PostgreSQL with a cross-region Read Replica

Correct Answer: C Section: (none) Explanation

Explanation/Reference: https://amazonaws-china.com/cn/blogs/aws/new-for-amazon-dynamodb-global-tables-and-on-demand- backup/
Global Tables –
You can now create tables that are automatically replicate

d across two or more AWS Regions, with full support for multi-master writes, with a couple of clicks. This gives you the ability to build fast,
massively scaled applications for a global user base without having to manage the replication process.

QUESTION 291 private, communication

A company wants to create an application that will transmit protected health information (PHI) to thousands of service consumers in different AWS accounts. The application servers will sit in private VPC subnets. The routing for the application must be fault tolerant.

What should be done to meet these requirements?

1. Create a VPC endpoint service and grant permissions to specific service consumers to create a connection.
2. Create a virtual private gateway connection between each pair of service provider VPCs and service consumer VPCs.
3. Create an internal Application Load Balancer in the service provider VPC and put application servers behind it.
4. Create a proxy server in the service provider VPC to route requests from service consumers to the application servers.

Correct Answer: A Section: (none) Explanation

QUESTION 292 Role+Identify = authentication.

A company hosts a website using Amazon API Gateway on the front end. Recently, there has been heavy traffic on the website and the company wants to control access by allowing authenticated traffic only.

How should the company limit access to authenticated users only? (Select TWO.)

1. Allow users that are authenticated through Amazon Cognito.
2. Limit traffic through API Gateway.
3. Allow X.509 certificates to authenticate traffic.
4. DeployAWSKMStoidentifyusers.
5. Assign permissions in AWS IAM to allow users.

Correct Answer: AE Section: (none) Explanation

QUESTION 294 ???A

A Solutions Architect is reviewing an application that writes data to an Amazon DynamoDB table on a daily basis Random table roads occur many times per second. The company needs to allow thousands of low latency roods and avoid any negative impact to the rest of the application.
What should the Solutions Architect do to meets the company's goals?

1. A Use DynamoDB Accelerator to cache reads
2. DynamoDB write capacity units

3. Add Amazon SQS to decouple requests
4. Implement Amazon Kinesis to decouple requests

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 296 ???KMS just manages keys, not B?

A Solutions Architect is considering possible options for improving the security of the data stored on an Amazon EBS volume attached to on Amazon EC2 instance. Which solution will improve the security of the data?

1. Use AWS KMS to encrypt the EBS volume
2. Create an IAM policy that restricts read and write access to the volume
3. Migrate the sensitive data to an instance store volume
4. Use Amazon single sign-on to control login access to the EC2 instance

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 300 , no special requirement, choose the standard s3.

A photo-sharing website running on AWS allows users to generate thumbnail images of photos stored in Amazon S3. An amazon DynamoDB Table maintains the locations of photos and thumbnails are easily re-created from the originals it they are accidentally How should the thumbnail images be stored to ensure the LOWEST cost?

1. Amazon S3 Standard-Infrequent Access (S3 Standard-IA) with cross-region replication
2. Amazon S3
3. Amazon Glacier
4. Amazon S3 with cross-region replication

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

QUESTION 313

A customer has an application that is used by enterprise customers outside of AWS. Some of these customers use legacy firewalls that cannot whitelist by DNS name but can whitelist based only on IP address. The application is currently deployed in two Availability Zones, with one EC2 instance in each that has Elastic IP addresses. The customer wants to whitelist only two IP addresses, but the two existing EC2 instances cannot sustain the amount of traffic. What can a Solutions Architect do to support the customer and allow for more capacity? (Select TWO)

1. Create a Network Load Balancer with an interface in each subnet, and assign a static IP address to each subnet.
2. Create additional EC2 instances and put them on standby Remap an Elastic IP address to a standby instance in the event of a failure

3. C. Use Amazon Route 53 with a weighted, round-robin routing policy across the Elastic IP addresses to resolve one at a time
4. Add additional EC2 instances with Elastic IP addresses, and register them with Amazon Route 53
5. Switch the two existing EC2 instances for an Auto Scaling group, and register them with the Network Load Balancer

Correct Answer: BE Section: (none) Explanation

Explanation/Reference:

QUESTION 314, multi domain-SNI.

A Solutions Architect plans to migrate a load balancer tier from a data center to AWS. Several websites have multiple domains that require secure load balancing. The Architect decides to use Elastic Load Balancing Application Load Balancers.
What is the MOST efficient method for achieving secure communication?

1. Create a wildcard certificate and upload it to the Application Load Balancer
2. Create an SNI certificate and upload it to the Application Load Balancer
3. Create a secondary proxy server to terminate SSL traffic before the traffic reaches the Application Load Balancer
4. Let a third-party Certificate Manager manage certificates required to all domains and upload them to the Application Load Balancer

Correct Answer: B Section: (none) Explanation

Explanation/Reference: