# Practice questions for AWS Certified Solution Architect Associate – Feb 2018

\*\*\*There are total 325 questions in this document and we have tried our best to find the most accurate answers, please do your own research in AWS documentations/FAQ pages in case you find that our answer does not match with yours. All the best\*\*\*

Question 1 - A Solutions Architect is developing a document sharing application and needs a storage layer. The storage should provide automatic support for versioning so that users can easily roll back to a previous version or recover a deleted account.

Which AWS service will meet the above requirements?

## Please select:

- A. Amazon S3
- B. Amazon EBS
- C. Amazon EFS
- D. Amazon Storage Gateway VTL

### Answer – A

Question 2 - You have an application running in us-west-2 requiring 6 EC2 Instances running at all times. With 3 Availability Zones in the region viz. us-west-2a, us-west-2b, and us-west-2c, which of the following deployments provides fault tolerance if an Availability Zone in us-west-2 becomes unavailable?

Choose 2 answers from the options given below.

### Please select:

- A. 2 EC2 Instances in us-west-2a, 2 EC2 Instances in us-west-2b, and 2 EC2 Instances in us-west-2c
- B. 3 EC2 Instances in us-west-2a, 3 EC2 Instances in us-west-2b, and no EC2 Instances in us-west-2c
- C. 4 EC2 Instances in us-west-2a, 2 EC2 Instances in us-west-2b, and 2 EC2 Instances in us-west-2c
- D. 6 EC2 Instances in us-west-2a, 6 EC2 Instances in us-west-2b, and no EC2 Instances in us-west-2c
- E. 3 EC2 Instances in us-west-2a, 3 EC2 Instances in us-west-2b, and 3 EC2 Instances in us-west-2c

### Answer - D and E

Question 3 - An application allows a manufacturing site to upload files. Each uploaded 3 GB file is processed to extract metadata, and this process takes a few seconds per file. The frequency at which the uploads happen is unpredictable. For instance, there may be no updates for hours, followed by several files being uploaded concurrently.

What architecture addresses this workload in the most cost-efficient manner? Please select:

A. Use a Kinesis Data Delivery Stream to store the file. Use Lambda for processing.

B. Use an SQS queue to store the file, to be accessed by a fleet of EC2 Instances.

C. Store the file in an EBS volume, which can then be accessed by another EC2 Instance for processing. D. Store the file in an S3 bucket. Use Amazon S3 event notification to invoke a Lambda function for file processing.

## Answer - D

Question 4 - A company is migrating an on-premise 10TB MySQL database to AWS. With a business requirement that the replica lag be under 100 milliseconds, the company expects this database to quadruple in size.

Which Amazon RDS engine meets the above requirements?

Please select:

- A. MySQL
- B. Microsoft SQL Server
- C. Oracle
- D. Amazon Aurora

## Answer - D

Question 5 - For which of the following workloads should a Solutions Architect consider using Elastic Beanstalk?

Choose 2 answers from the options given below.

Please select:

- A. A Web application using Amazon RDS
- B. An Enterprise Data Warehouse
- C. A long running worker process
- D. A static website
- E. A management task run once on nightly basis

### Answer – A and C

AWS Documentation clearly mentions that the Elastic Beanstalk component can be used to create Web Server environments and Worker environments.

Question 6 - An application with a 150 GB relational database runs on an EC2 Instance. While the application is used infrequently with small peaks in the morning and evening, what is the MOST cost effective storage type among the options below?

- A. Amazon EBS provisioned IOPS SSD
- B. Amazon EBS Throughput Optimized HDD
- C. Amazon EBS General Purpose SSD
- D. Amazon EFS

### Answer – C

Question 7 - An administrator runs a highly available application in AWS. A file storage layer is needed that can share between instances and scale the platform more easily.

Which AWS service can perform this action?

Please select:

- A. Amazon EBS
- B. Amazon EFS
- C. Amazon S3
- D. Amazon EC2 Instance store

### Answer – B

Question 8 - A company is to run a service on AWS to provide offsite backups for images on laptops and phones.

The solution must support millions of customers with thousands of images per customer. Though the images will be retrieved infrequently, they must be available for retrieval immediately.

Which is the MOST cost efficient storage option that meets these requirements?

Please select:

- A. Amazon Glacier with Expedited retrievals
- B. Amazon S3 Standard Infrequent Access
- C. Amazon EFS
- D. Amazon S3 Standard

## Answer – B

Question 9 - A Solutions Architect designing a solution to store and archive corporate documents, has determined Amazon Glacier as the right choice of solution.

An important requirement is that the data must be delivered within 10 minutes of a retrieval request. Which feature in Amazon Glacier can help meet this requirement?

Please select:

- A. Vault Lock
- B. Expedited retrieval
- C. Bulk retrieval
- D. Standard retrieval

# Answer – B

Question 10 - A data processing application in AWS must pull data from an Internet service. A Solutions Architect is to design a highly available solution to access this data without placing bandwidth constraints on the application traffic.

Which solution meets these requirements?

Please select:

- A. Launch a NAT gateway and add routes for 0.0.0.0/0
- B. Attach a VPC endpoint and add routes for 0.0.0.0/0
- C. Attach an Internet gateway and add routes for 0.0.0.0/0
- D. Deploy NAT instances in a public subnet and add routes for 0.0.0.0/0

## Answer – C

Question 11 - While 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 costs while preserving elasticity? Choose 2 answers from the options given below.

Please select:

- A. Modify the Auto Scaling group termination policy to terminate the older instance first.
- B. Modify the Auto Scaling group termination policy to terminate the newest instance first.
- C. Modify the Auto Scaling group cool down timers.
- D. Modify the Auto Scaling group to use Scheduled Scaling actions.
- E. Modify the CloudWatch alarm period that triggers your Auto Scaling scale down policy

### Answer – C and E

Question 12 - A company hosts a popular web application that connects to an Amazon RDS MySQL DB instance running in a private VPC subnet created with default ACL settings. The web servers must be accessible only to customers on an SSL connection and the database must only be accessible to web servers in a public subnet. Which solution meets these requirements without impacting other running applications?

Select 2 answers from the options given below.

- A. Create a network ACL on the Web Server's subnets, allow HTTPS port 443 inbound and specify the source as 0.0.0.0/0
- B. Create a Web Server security group that allows HTTPS port 443 inbound traffic from anywhere (0.0.0.0/0) and apply it to the Web Servers.
- C. Create a DB Server security group that allows MySQL port 3306 inbound and specify the source as the Web Server security group.
- D. Create a network ACL on the DB subnet, allow MySQL port 3306 inbound for Web Servers and deny all outbound traffic.
- E. Create a DB Server security groups that allows HTTPS port 443 inbound and specify the source as a Web Server security group.

#### Answer – B and C

Question 13 - An application reads and writes objects to an S3 bucket. When the application is fully deployed, the read/write traffic is very high. How should the architect maximize the Amazon S3 performance?

# Please select:

- A. Prefix each object name with a random string.
- B. Use the STANDARD\_IA storage class.
- C. Prefix each object name with the current data.
- D. Enable versioning on the S3 bucket.

### Answer – A

Question 14 - You are deploying an application on Amazon EC2, which must call AWS APIs. What method should you use to securely pass credentials to the application?

### Please select:

- A. Pass API credentials to the instance using Instance userdata.
- B. Store API credentials as an object in Amazon S3.
- C. Embed the API credentials into your application.
- D. Assign IAM roles to the EC2 Instances.

### Answer - D

Question 15 - A website runs on EC2 Instances behind an ELB Application Load Balancer. The instances run in an Auto Scaling Group across multiple Availability Zones and deliver several large files that are stored on a shared Amazon EFS file system. The company needs to avoid serving the files from EC2 Instances every time a user requests these digital assets.

What should the company do to improve the user experience of the web site? Please select:

- A. Move the digital assets to Amazon Glacier.
- B. Cache static content using CloudFront.
- C. Resize the images so that they are smaller.
- D. Use reserved EC2 Instances.

# Answer - B

Question 16 - A Solutions Architect is designing a highly scalable system to track records. These records must remain available for immediate download for up to three months and then must be deleted. What is the most appropriate decision for this use case?

Please select:

- A. Store the files in Amazon EBS and create a Lifecycle Policy to remove files after 3 months.
- B. Store the files in Amazon S3 and create a Lifecycle Policy to remove files after 3 months.
- C. Store the files in Amazon Glacier and create a Lifecycle Policy to remove files after 3 months.
- D. Store the files in Amazon EFS and create a Lifecycle Policy to remove files after 3 months.

#### Answer - B

Question 17 - A consulting firm repeatedly builds large architectures for their customers using AWS resources from several AWS services including IAM, Amazon EC2, Amazon RDS, DynamoDB and Amazon VPC. The consultants have architecture diagrams for each of their architectures, and are frustrated that they cannot use them to automatically create their resources.

Which service should provide immediate benefits to the organization?

Please select:

- A. AWS Beanstalk
- B. AWS CloudFormation
- C. AWS CodeBuild
- D. AWS CodeDeploy

### Answer - B

Question 18 - The security policy of an organization requires an application to encrypt data before writing to the disk. Which solution should the organization use to meet this requirement? Please select:

- A. AWS KMS API
- B. AWS Certificate Manager
- C. API Gateway with STS
- D. IAM Access Key

# Answer – A

Question 19 - An application currently stores all its data on Amazon EBS Volumes. All EBS volumes must be backed up durably across multiple Availability Zones. What is the MOST resilient way to backup the volumes?

- A. Take regular EBS snapshots.
- B. Enable EBS volume encryption.
- C. Create a script to copy data to an EC2 Instance store.
- D. Mirror data across 2 EBS volumes.

# Answer – A

Question 20 - A retailer exports data daily from its transactional databases into an S3 bucket in the Sydney region. The retailer's Data Warehousing team wants to import this data into an existing Amazon Redshift cluster in their VPC at Sydney. Corporate security policy mandates that data can only be transported within a VPC.

What combination of the following steps will satisfy the security policy?

Choose 2 answers from the options given below.

Please select:

- A. Enable Amazon Redshift Enhanced VPC Routing.
- B. Create a Cluster Security Group to allow the Amazon Redshift cluster to access Amazon S3.
- C. Create a NAT gateway in a public subnet to allow the Amazon Redshift cluster to access Amazon S3.
- D. Create and configure an Amazon S3 VPC endpoint.

### Answer – A and D

Question 21 - A team is building an application that must persist and index JSON files in a highly available data store. Latency of data access must remain consistent despite very high application traffic. What service should the team choose for the above requirement?

Please select:

- A. Amazon EFS
- B. Amazon Redshift
- C. DynamoDB
- D. AWS CloudFormation

### Answer - C

Question 22 - An organization hosts a multi-language website on AWS, which is served using CloudFront. Language is specified in the HTTP request as shown below:

http://d11111f8.cloudfront.net/main.html?language=de

http://d11111f8.cloudfront.net/main.html?language=en

http://d11111f8.cloudfront.net/main.html?language=es

How should AWS CloudFront be configured to delivered cache data in the correct language?

- A. Forward cookies to the origin
- B. Based on query string parameters
- C. Cache objects at the origin
- D. Serve dynamic content

### Answer – B

Question 23 - A Solutions Architect is designing a web page for event registrations. He needs a managed service to send a text message to users every time someone signs up for an event.

Which AWS Service should the Architect use to achieve this?

Please select:

- A. Amazon STS
- B. Amazon SQS
- C. AWS Lambda
- D. Amazon SNS

#### Answer - D

Question 24 - A Solutions Architect is designing a shared service for hosting containers from several customers on Amazon ECS. These containers will use several AWS services. A container from one customer should not be able access data from another customer.

Which of the below solutions should the architect use to meet these requirements? Please select:

- A. IAM roles for tasks
- B. IAM roles for EC2 Instances
- C. IAM Instance profile for EC2 Instances
- D. Security Group rules

### Answer - A

Question 25 - A company is generating large datasets with millions of rows to be summarized columnwise. Existing business intelligence tools will be used to build daily reports from these datasets. Which storage service meets these requirements?

Please select:

- A. Amazon Redshift
- B. Amazon RDS
- C. ElastiCache
- D. DynamoDB

### Answer – A

Question 26 - A company is developing a web application to be hosted in AWS. This application needs a data store for session data.

As an AWS Solution Architect, which of the following would you recommend as an ideal option to store session data? Choose 2 answers from the options given below.

- A. CloudWatch
- B. DynamoDB
- C. Elastic Load Balancing
- D. ElastiCache
- E. Storage Gateway

Answer - B and D

Question 27 - A company needs to store images that are uploaded by users via a mobile application.

There is also a need to ensure that a security measure is in place to avoid the data loss.

What step should be taken for protection against unintended user actions?

Please select:

- A. Store data in an EBS volume and create snapshots once a week.
- B. Store data in an S3 bucket and enable versioning.
- C. Store data in two S3 buckets in different AWS regions.
- D. Store data on EC2 instance storage.

### Answer - B

Question 28 - An application needs to have a Data store hosted in AWS. The following requirements are in place for the Data store:

- a) An initial storage capacity of 8 TB
- b) The ability to accommodate a database growth of 8GB per day
- c) The ability to have 4 Read Replicas

Which of the following Data stores would you choose for this requirement?

Please select:

- A. DynamoDB
- B. Amazon S3
- C. Amazon Aurora
- D. SQL Server

## Answer – C

Question 29 - There is a requirement to host a database on an EC2 Instance. It is also required that the EBS volume should support 12,000 IOPS.

Which Amazon EBS volume type meets the performance requirements of this database? Please select:

A. EBS Provisioned IOPS SSD

- B. EBS Throughput Optimized HDD
- C. EBS General Purpose SSD

### D. EBS Cold HDD

## Answer – A

Question 30 - Development teams in your organization use S3 buckets to store log files for various applications hosted in AWS development environments. The developers intend to keep the logs for a month for troubleshooting purposes, and subsequently purge the logs.

What feature will enable this requirement?

Please select:

- A. Adding a bucket policy on the S3 bucket.
- B. Configuring lifecycle configuration rules on the S3 bucket.
- C. Creating an IAM policy for the S3 bucket.
- D. Enabling CORS on the S3 bucket.

### Answer – B

Question 31 - A legacy application needs a proprietary file system. Which of the following can be used to store data accessible by an EC2 instance?

Please select:

- A. AWS CloudFront
- B. AWS S3
- C. AWS Glacier
- D. AWS EFS

# Answer – D

Question 32 - What options can be used to host an application that uses NGINX and is scalable at any point in time?

Choose 2 correct answers.

Please select:

- A. AWS EC2
- B. AWS Elastic Beanstalk
- C. AWS SQS
- D. AWS ELB

# Answer - A, B

Question 33 - A million images are required to be uploaded to S3. What option ensures optimal performance in this case?

- A. Use a sequential ID for the prefix.
- B. Use a hexadecimal hash for the prefix.
- C. Use a hexadecimal hash for the suffix.
- D. Use a sequential ID for the suffix.

# Answer – B

Question 34 - There is a requirement to get the IP addresses for resources accessed in a private subnet. Which of the following can be used to fulfill this purpose?

Please select:

- A. Trusted Advisor
- B. VPC Flow Logs
- C. Use CloudWatch metrics
- D. Use CloudTrail

## Answer – B

Question 35 - There is a requirement for 500 messages to be sent and processed in order. Which service can be used in this regard?

Please select:

- A. AWS SQS FIFO
- **B. AWS SNS**
- C. AWS Config
- D. AWS ELB

### Answer – A

Question 36 - A database is required for a Two-Tier application. The data would go through multiple schema changes. The database needs to be durable, and changes to the database should not result in database downtime. Which of the following is the best option for data storage?

Please select:

- A. AWS S3
- B. AWS Redshift
- C. AWS DynamoDB
- D. AWS Aurora

### Answer - D

Question 37 - A Redshift cluster currently contains 60TB of data. There is a requirement that a disaster recovery site is put in place in a region located 600km away. Which of the following solutions would help ensure that this requirement is fulfilled?

## Please select:

- A. Take a copy of the underlying EBS volumes to S3, and then do Cross-Region Replication.
- B. Enable Cross-Region snapshots for the Redshift Cluster.
- C. Create a CloudFormation template to restore the Cluster in another region.
- D. Enable Cross Availability Zone snapshots for the Redshift Cluster.

## Answer – B

Question 38 - A company is using a Redshift cluster to store their data warehouse. There is a requirement from the Internal IT Security team to encrypt data for the Redshift database. How can this be achieved?

Please select:

- A. Encrypt the EBS volumes of the underlying EC2 Instances.
- B. Use AWS KMS Customer Default master key.
- C. Use SSL/TLS for encrypting the data.
- D. Use S3 Encryption.

## Answer - B

Question 39 - There is a requirement for Block-level storage to store 500GB of data. Data Encryption is also required. Which of the following can be used in such a case?

# Please select:

- A. AWS EBS Volumes
- B. AWS S3
- C. AWS Glacier
- D. AWS EFS

# Answer - A

Question 40 - An application requires an EC2 Instance for continuous batch processing activities requiring a maximum data throughput of 500MiB/s. Which of the following is the best storage option for this?

- A. EBS IOPS
- B. EBS SSD
- C. EBS Throughput Optimized

## D. EBS Cold Storage

## Answer - C

Question 41 - An application needs to access data in another AWS account in the same region. Which of the following can be used to ensure that the data can be accessed as required?

## Please select:

- A. Establish a NAT instance between both accounts.
- B. Use a VPN between both accounts.
- C. Use a NAT Gateway between both accounts.
- D. Use VPC Peering between both accounts.

## Answer - D

Question 42 - An application currently using a NAT Instance is required to use a NAT Gateway. Which of the following can be used to accomplish this?

#### Please select:

- A. Use NAT Instances along with the NAT Gateway.
- B. Host the NAT Instance in the private subnet.
- C. Migrate NAT Instance to NAT Gateway and host the NAT Gateway in the public subnet.
- D. Convert the NAT Instance to a NAT Gateway.

## Answer – C

Question 43 - An application consists of the following architecture:

- a. EC2 Instances in multiple AZ's behind an ELB
- b. The EC2 Instances are launched via an Auto Scaling Group.
- c. There is a NAT instance which is used so that instances can download updates from the Internet. Which of the following is a bottleneck in the architecture?

### Please select:

- A. The EC2 Instances
- B. The ELB
- C. The NAT Instance
- D. The Auto Scaling Group

# Answer - C

Question 44 - A company owns an API hosted on a t2.xlarge instance, which currently gets 1000 requests per second. The company wants to host this using AWS. Which of the following is the best cost-effective solution for this?

Please select:

- A. Use API Gateway with the backend services as it is.
- B. Use the API Gateway along with AWS Lambda
- C. Use CloudFront along with the API backend service as it is.
- D. Use ElastiCache along with the API backend service as it is.

### Answer – B

Question 45 - There is a requirement to host a database application having a lot of resource-intensive reads and writes. Which of the following is the best storage option to ensure that the data is persistent?

### Please select:

- A. EBS Provisioned IOPS
- B. EBS SSD
- C. EBS Throughput Optimized
- D. EBS Cold Storage

# Answer – A

Question 46 - An application sends images to S3. The metadata for these images needs to be saved in persistent storage and is required to be indexed. Which of the following can be used for the underlying metadata storage?

Please select:

- A. AWS Aurora
- B. AWS S3
- C. AWS DynamoDB
- D. AWS RDS

### Answer – C

Question 47 - An application hosted on EC2 Instances has its promotional campaign due to start in 2 weeks. There is a mandate from the management to ensure that no performance problems are encountered due to traffic growth during this time. Which of the following must be done to the Auto Scaling Group to ensure this requirement can be fulfilled?

- A. Configure Step scaling for the Auto Scaling Group.
- B. Configure Dynamic Scaling and use Target tracking scaling Policy

- C. Configure Scheduled scaling for the Auto Scaling Group
- D. Configure Static scaling for the Auto Scaling Group

### Answer – B

Question 48 - Currently a company makes use of EBS snapshots to back up their EBS Volumes. As a part of the business continuity requirement, these snapshots need to be made available in another region. How can this be achieved?

### Please select:

- A. Directly create the snapshot in the other region.
- B. Create Snapshot and copy the snapshot to new region.
- C. Copy the snapshot to an S3 bucket and then enable Cross-Region Replication for the bucket.
- D. Copy the EBS Snapshot to an EC2 instance in another region.

### Answer - B

Question 49 - A company has an application hosted in AWS. This application consists of EC2 Instances which sit behind an ELB with EC2 Instances. The following are requirements from an administrative perspective:

- a) Ensure notifications are sent when the read requests go beyond 1000 requests per minute
- b) Ensure notifications are sent when the latency goes beyond 10 seconds
- c) Any API activity which calls for sensitive data should be monitored Which of the following can be used to satisfy these requirements? Choose 2 answers from the options given below.

### Please select:

- A. Use CloudTrail to monitor the API Activity.
- B. Use CloudWatch logs to monitor the API Activity.
- C. Use CloudWatch metrics for the metrics that needs to be monitored as per the requirement and set up an alarm activity to send out notifications when the metric reaches the set threshold limit.
- D. Use a custom log software to monitor the latency and read requests to the ELB.

## Answer – A and C

Question 50 - A company has resources hosted in their AWS Account. There is a requirement to monitor API activity for all regions and the audit needs to be applied for future regions as well. Which of the following can be used to fulfill this requirement?

- A. Ensure CloudTrail for each region, then enable for each future region.
- B. Ensure one CloudTrail trail is enabled for all regions.
- C. Create a CloudTrail for each region. Use CloudFormation to enable the trail for all future regions.

D. Create a CloudTrail for each region. Use AWS Config to enable the trail for all future regions.

## Answer – B

Question 51 - There is a requirement for an iSCSI device and the legacy application needs local storage. Which of the following can be used to meet the demands of the application?

## Please select:

- A. Configure the Simple Storage Service.
- B. Configure Storage Gateway Cached volume.
- C. Configure Storage Gateway Stored volume.
- D. Configure Amazon Glacier.

## Answer - C

Question 52 - There is a requirement for EC2 Instances in a private subnet to access an S3 bucket. It is required that the traffic does not traverse to the Internet. Which of the following can be used to fulfill this requirement?

### Please select:

- A. VPC Endpoint
- **B. NAT Instance**
- C. NAT Gateway
- D. Internet Gateway

## Answer - A

Question 53 - There is an application which consists of EC2 Instances behind a classic ELB. An EC2 proxy is used for content management to backend instances. The application might not be able to scale properly.

Which of the following can be used to scale the proxy and backend instances appropriately? Choose 2 answers from the options given below.

- A. Use Auto Scaling for the proxy servers.
- B. Use Auto Scaling for the backend instances.
- C. Replace the Classic ELB with Application ELB.
- D. Use Application ELB for both the front end and backend instances.

Question 54 - There is an e-commerce marketing website hosted in AWS that might get a lot of traffic over the next couple of weeks. If the application faces the disaster, which of the following can be used to reduce potential disruption to users in case of issues?

### Please select:

- A. Use an ELB to divert traffic to an Infrastructure hosted in another region.
- B. Use an ELB to divert traffic to an Infrastructure hosted in another AZ.
- C. Use CloudFormation to create backup resources in another AZ.
- D. Use Route53 to route to static web site.

### Answer - D

Question 55 - You have a requirement to host a static website for a domain called mycompany.com in AWS. It is required to ensure that the traffic is scaled properly. How can this be achieved? Choose 2 answers from the options given below.

### Please select:

- A. Host the static site on an EC2 Instance.
- B. Use Route53 with static web site in S3.
- C. Enter the NS records from Route53 in the domain registrar.
- D. Place the EC2 instance behind the ELB.

### Answer - B and C

Question 56 - A database hosted using the AWS RDS service is getting a lot of database queries and has now become a bottleneck for the associating application. What action will ensure that the database is not a performance bottleneck?

### Please select:

- A. Setup a CloudFront distribution in front of the database.
- B. Setup an ELB in front of the database.
- C. Setup ElastiCache in front of the database.
- D. Setup SNS in front of the database.

# Answer – C

Question 57 - A database is being hosted using the AWS RDS service. This database is to be made into a production database and is required to have high availability. Which of the following can be used to achieve this requirement?

## Please select:

A. Use Multi-AZ for the RDS instance to ensure that a secondary database is created in another region.

- B. Use the Read Replica feature to create another instance of the DB in another region.
- C. Use Multi-AZ for the RDS instance to ensure that a secondary database is created in another Availability Zone.
- D. Use the Read Replica feature to create another instance of the DB in another Availability Zone.

### Answer - C

Question 58 - A company wants to host a web application and a database layer in AWS. This will be done with the use of subnets in a VPC.

Which of the following is a proper architectural design for supporting the required tiers of the application?

## Please select:

- A. Use a public subnet for the web tier and a public subnet for the database layer.
- B. Use a public subnet for the web tier and a private subnet for the database layer.
- C. Use a private subnet for the web tier and a private subnet for the database layer.
- D. Use a private subnet for the web tier and a public subnet for the database layer.

### Answer – B

Question 59 - You require the ability to analyze a customer's clickstream data on a website so they can do behavioral analysis. Your customer needs to know what sequence of pages and ads their customer clicked on. This data will be used in real time to modify the page layouts as customers click through the site to increase stickiness and advertising click-through. Which option meets the requirements for captioning and analyzing this data?

# Please select:

- A. Log clicks in weblogs by URL store to Amazon S3, and then analyze with Elastic MapReduce.
- B. Push web clicks by session to Amazon Kinesis and analyze behavior using Kinesis workers.
- C. Write click events directly to Amazon Redshift and then analyze with SQL.
- D. Publish web clicks by session to an Amazon SQS queue. Then send the events to AWS RDs for further processing.

## Answer – B

Question 60 - A company has an infrastructure that consists of machines which keep sending log information every 5 minutes. The number of these machines can run into thousands and it is required to ensure that the data can be analyzed at a later stage. Which of the following would help in fulfilling this requirement?

- A. Use Kinesis Firehose with S3 to take the logs and store them in S3 for further processing.
- B. Launch an Elastic Beanstalk application to take the processing job of the logs.
- C. Launch an EC2 instance with enough EBS volumes to consume the logs which can be used for further processing.
- D. Use CloudTrail to store all the logs which can be analyzed at a later stage.

#### Answer – A

Question 61 - An application hosted in AWS allows users to upload videos to an S3 bucket. A user is required to be given access to upload some videos for a week based on the profile. How can be this be accomplished in the best way possible?

### Please select:

- A. Create an IAM bucket policy to provide access for a week's duration.
- B. Create a pre-signed URL for each profile which will last for a week's duration.
- C. Create an S3 bucket policy to provide access for a week's duration.
- D. Create an IAM role to provide access for a week's duration.

## Answer – B

Question 62 - A company is planning to use Docker containers and necessary container orchestration tools for their batch processing requirements. There is a requirement for batch processing for both critical and non-critical data. Which of the following is the best implementation step for this requirement, to ensure that cost is effectively managed?

## Please select:

- A. Use Kubernetes for container orchestration and Reserved instances for all underlying instances.
- B. Use ECS orchestration and Reserved Instances for all underlying instances.
- C. Use Docker for container orchestration and a combination of Spot and Reserved Instances for the underlying instances.
- D. Use ECS for container orchestration and a combination of Spot and Reserved Instances for the underlying instances.

# Answer - D

Question 63 - A company has a requirement for archival of 6TB of data. There is an agreement with the stakeholders for an 8-hour agreed retrieval time. Which of the following can be used as the MOST cost-effective storage option?

- A. AWS S3 Standard
- B. AWS S3 Infrequent Access
- C. AWS Glacier
- D. AWS EBS Volumes

### Answer - C

Question 64 - A company hosts 5 web servers in AWS. They want to ensure that Route53 can be used to route user traffic to random web servers when they request for the underlying web application. Which routing policy should be used to fulfill this requirement?

# Please select:

- A. Simple
- B. Weighted
- C. Multivalue Answer
- D. Latency

### Answer - C

Question 65 - A company has a requirement for a managed database in AWS. It is also required that joins need to be performed on the underlying queries. Which of the following can be used as the underlying database?

# Please select:

- A. AWS Aurora
- B. AWS DynamoDB
- C. AWS S3
- D. AWS Redshift

### Answer – A

Question 1 - A customer wants to create a stream of EBS Volumes in AWS. The data on the volume is required to be encrypted at rest. How can this be achieved?

# Please select:

- A. Create an SSL Certificate and attach it to the EBS Volume.
- B. Use KMS to generate encryption keys which can be used to encrypt the volume.
- C. Use CloudFront in front of the EBS Volume to encrypt all requests.
- D. Use EBS Snapshots to encrypt the requests.

### Answer – B

Question 2 - A company has a requirement to store 100TB of data to AWS. This data will be exported using AWS Snowball and needs to then reside in a database layer. The database should have the facility to be queried from a business intelligence application. Each item is roughly 500KB in size. Which of the following is an ideal storage mechanism for the underlying data layer?

- A. AWS DynamoDB
- B. AWS Aurora
- C. AWS RDS

### D. AWS Redshift

#### Answer-D

Question 3 - A company is planning on testing a large set of IoT enabled devices. These devices will be streaming data every second. A proper service needs to be chosen in AWS which could be used to collect and analyze these streams in real time. Which of the following could be used for this purpose?

## Please select:

- A. Use AWS EMR to store and process the streams.
- B. Use AWS Kinesis streams to process and analyze the data.
- C. Use AWS SQS to store the data.
- D. Use SNS to store the data.

### Answer - B

Question 4 - Your company currently has a set of EC2 Instances hosted in AWS. The states of these instances need to be monitored and each state change needs to be recorded. Which of the following can help fulfill this requirement? Choose 2 answers from the options given below.

## Please select:

- A. Use CloudWatch logs to store the state change of the instances.
- B. Use CloudWatch Events to monitor the state change of the events.
- C. Use SQS to trigger a record to be added to a DynamoDB table.
- D. Use AWS Lambda to store a change record in a DynamoDB table.

### Answer – B and D

Question 5 - You have instances hosted in a private subnet in a VPC. There is a need for the instances to download updates from the Internet. As an architect, what change would you suggest to the IT Operations team which would also be the most efficient and secure?

## Please select:

- A. Create a new public subnet and move the instance to that subnet.
- B. Create a new EC2 Instance to download the updates separately and then push them to the required instance.
- C. Use a NAT Gateway to allow the instances in the private subnet to download the updates.
- D. Create a VPC link to the Internet to allow the instances in the private subnet to download the updates.

## Answer - C

Question 6 - A company has opted to store their cold data on EBS Volumes. Ensuring optimal cost, which of the following would be the ideal EBS Volume type to host this type of data?

### Please select:

- A. General Purpose SSD
- **B. Provisioned IOPS SSD**
- C. Throughput Optimized HDD
- D. Cold HDD

### Answer - D

Question 7 - A company plans to have their application hosted in AWS. This application has users uploading files and then using a public URL for downloading them at a later stage. Which of the following designs would help fulfill this requirement?

#### Please select:

- A. Have EBS Volumes hosted on EC2 Instances to store the files.
- B. Use Amazon S3 to host the files.
- C. Use Amazon Glacier to host the files since this would be the cheapest storage option.
- D. Use EBS Snapshots attached to EC2 Instances to store the files.

#### Answer – B

Question 8 - You plan on hosting a web application on AWS. You create an EC2 Instance in a public subnet which needs to connect to an EC2 Instance that will host an Oracle database. Which of the following steps should be taken to ensure that a secure setup is in place? Choose 2 answers from the choices below.

### Please select:

- A. Place the EC2 Instance with the Oracle database in the same public subnet as the Web server for faster communication.
- B. Place the EC2 Instance with the Oracle database in a separate private subnet.
- C. Create a database security group and ensure that the web security group allows incoming access.
- D. Ensure that the database security group allows incoming traffic from 0.0.0.0/0

# Answer - B and C

Question 9 - An EC2 Instance hosts a Java based application that accesses a DynamoDB table. This EC2 Instance is currently serving production users. Which of the following is a secure way for the EC2 Instance to access the DynamoDB table?

- A. Use IAM Roles with permissions to interact with DynamoDB and assign it to the EC2 Instance.
- B. Use KMS Keys with the right permissions to interact with DynamoDB and assign it to the EC2 Instance.
- C. Use IAM Access Keys with the right permissions to interact with DynamoDB and assign it to the EC2 Instance.

D. Use IAM Access Groups with the right permissions to interact with DynamoDB and assign it to the EC2 Instance.

### Answer - A

Question 10 - A company planning on building and deploying a web application on AWS, needs to have a data store to store session data. Which of the below services can be used to meet this requirement?

## Please select:

- A. AWS RDS
- B. AWS SQS
- C. AWS ELB
- D. AWS ElastiCache

### Answer – D

Question 11 - A company has setup an application in AWS that interacts with DynamoDB. It is required that when an item is modified in a DynamoDB table, an immediate entry is made to the associating application. How can this be accomplished? Choose 2 answers from the choices below.

### Please select:

- A. Setup CloudWatch to monitor the DynamoDB table for changes. Then trigger a Lambda function to send the changes to the application.
- B. Setup CloudWatch logs to monitor the DynamoDB table for changes. Then trigger AWS SQS to send the changes to the application.
- C. Use DynamoDB streams to monitor the changes to the DynamoDB table.
- D. Trigger a lambda function to make an associated entry in the application as soon as the DynamoDB streams are modified

### Answer – C and D

Question 12 - A company currently has an application hosted on their On-premise environment. The application has a combination of web Instances with worker Instances and Rabbit-MQ for messaging purposes. This infrastructure is now required to be moved to the AWS Cloud. What is the best way to start using messaging on the AWS Cloud?

## Please select:

- A. Continue using Rabbit-MQ. Host is on a separate EC2 Instance.
- B. Make use of AWS SQS to manage the messages.
- C. Make use of DynamoDB to store the messages.
- D. Make use of AWS RDS to store the messages.

### Answer - B

Question 13 - An application currently uses AWS RDS MySQL as its data layer. Due to recent performance issues on the database, it has been decided to separate the querying part of the application by setting up a separate reporting layer. Which of the following additional steps could also potentially assist in improving the performance of the underlying database?

#### Please select:

- A. Make use of Multi-AZ to setup a secondary database in another Availability Zone.
- B. Make use of Multi-AZ to setup a secondary database in another region.
- C. Make use of Read Replicas to setup a secondary read-only database.
- D. Make use of Read Replicas to setup a secondary read and write database.

#### Answer - C

Question 14 - A company is asking its developers to store application logs in an S3 bucket. These logs are only required for a temporary period after which, they can be deleted. Which of the following steps can be used to effectively manage this?

### Please select:

- A. Create a cron job to detect the stale logs and delete them accordingly.
- B. Use a bucket policy to manage the deletion.
- C. Use an IAM Policy to manage the deletion.
- D. Use S3 Lifecycle Policies to manage the deletion.

## Answer - D

Question 15 - An application running on EC2 Instances processes sensitive information stored on Amazon S3. This information is accessed over the Internet. The security team is concerned that the Internet connectivity to Amazon S3 could be a security risk. Which solution will resolve the security concern?

### Please select:

- A. Access the data through an Internet Gateway.
- B. Access the data through a VPN connection.
- C. Access the data through a NAT Gateway.
- D. Access the data through a VPC endpoint for Amazon S3.

## Answer - D

Question 16 - You have set up a Redshift cluster in AWS and are trying to access it, but are unable to do so. What should be done so that you can access the Redshift Cluster?

- A. Ensure the Cluster is created in the right Availability Zone.
- B. Ensure the Cluster is created in the right region.
- C. Change the security groups for the cluster.

D. Change the encryption key associated with the cluster.

#### Answer - C

Question 17 - You have a web application hosted on an EC2 Instance in AWS which is being accessed by users across the globe. The Operations team has been receiving support requests about extreme slowness from users in some regions. What can be done to the architecture to improve the response time for these users?

## Please select:

- A. Add more EC2 Instances to support the load.
- B. Change the Instance type to a higher instance type.
- C. Add Route 53 health checks to improve the performance.
- D. Place the EC2 Instance behind CloudFront.

## Answer - D

Question 18 - Currently, you have a NAT Gateway defined for your private instances. You need to make this NAT Gateway highly available. How can this be accomplished?

### Please select:

- A. Create another NAT Gateway and place is behind an ELB.
- B. Create a NAT Gateway in another Availability Zone.
- C. Create a NAT Gateway in another region.
- D. Use Auto Scaling groups to scale the NAT Gateway.

### Answer - B

Question 19 - A company wants to have a fully managed data store in AWS. It should be a compatible MySQL database, which is an application requirement. Which of the following databases can be used for this purpose?

## Please select:

- A. AWS RDS
- B. AWS Aurora
- C. AWS DynamoDB
- D. AWS Redshift

# Answer - B

Question 20 - A Solutions Architect is designing an online shopping application running in a VPC on EC2 Instances behind an ELB Application Load Balancer. The instances run in an Auto Scaling group across multiple Availability Zones. The application tier must read and write data to a customer managed

database cluster. There should be no access to the database from the Internet, but the cluster must be able to obtain software patches from the Internet. Which VPC design meets these requirements?

#### Please select:

- A. Public subnets for both the application tier and the database cluster
- B. Public subnets for the application tier, and private subnets for the database cluster
- C. Public subnets for the application tier and NAT Gateway, and private subnets for the database cluster
- D. Public subnets for the application tier, and private subnets for the database cluster and NAT Gateway

## Answer - C

Question 21 - A mobile based application requires uploading images to S3. As an architect, you do not want to make use of the existing web server to upload the images due to the load that it would incur. How can this be handled?

## Please select:

- A. Create a secondary S3 bucket. Then, use an AWS Lambda to sync the contents to the primary bucket.
- B. Use Pre-Signed URLs instead to upload the images.
- C. Use ECS Containers to upload the images.
- D. Upload the images to SQS and then push them to the S3 bucket.

### Answer – B

Question 22 - A company is required to use the AWS RDS service to host a MySQL database. This database is going to be used for production purposes and is expected to experience a high number of read/write activities. Which of the below underlying EBS Volume types would be ideal for this database?

### Please select:

- A. General Purpose SSD
- **B. Provisioned IOPS SSD**
- C. Throughput Optimized HDD
- D. Cold HDD

# Answer - B

Question 23 - You have a set of On-premise virtual machines used to serve a web based application. These are placed behind an On-premise load balanced solution. You need to ensure that a virtual machine if unhealthy is taken out of rotation. Which of the following would quickly help fulfill this requirement?

- A. Use Route 53 health checks to monitor the endpoints.
- B. Move the solution to AWS and use a Classic Load Balancer.
- C. Move the solution to AWS and use an Application Load Balancer.
- D. Move the solution to AWS and use a Network Load Balancer.

### Answer - A

Question 24 - A company has a set of web servers. It is required to ensure that all the logs from these web servers can be analyzed in real time for any sort of threat detection. Which of the following would assist in this regard?

## Please select:

- A. Upload all the logs to the SQS Service and then use EC2 Instances to scan the logs.
- B. Upload the logs to Amazon Kinesis and then analyze the logs accordingly.
- C. Upload the logs to CloudTrail and then analyze the logs accordingly.
- D. Upload the logs to Glacier and then analyze the logs accordingly.

### Answer - B

Question 25 - You currently have the following architecture in AWS:

- a. A couple of EC2 Instances located in us-west-2a
- b. The EC2 Instances are launched via an Auto Scaling group.
- c. The EC2 Instances sit behind a Classic ELB.

Which of the following additional steps should be taken to ensure the above architecture conforms to a well-architected framework?

### Please select:

- A. Convert the Classic ELB to an Application ELB.
- B. Add an additional Auto Scaling Group.
- C. Add additional EC2 Instances to us-west-2a.
- D. Add or spread existing instances across multiple Availability Zones.

# Answer - D

Question 26 - Your company manages an application that currently allows users to upload images to an S3 bucket. These images are picked up by EC2 Instances for processing and then placed in another S3 bucket. You need an area where the metadata for these images can be stored. Which of the following would be an ideal data store for this?

# Please select:

- A. AWS Redshift
- B. AWS Glacier
- C. AWS DynamoDB
- D. AWS SQS

### Answer - C

Question 27 - An application team needs to quickly provision a development environment consisting of a web and database layer. Which of the following would be the quickest and most ideal way to get this setup in place?

### Please select:

- A. Create Spot Instances and install the Web and database components.
- B. Create Reserved Instances and install the Web and database components.
- C. Use AWS Lambda to create the web components and AWS RDS for the database layer.
- D. Use Elastic Beanstalk to quickly provision the environment.

## Answer - D

Question 28 - A company requires a file system which can be used across a set of instances. Which of the following storage options would be ideal for this requirement?

## Please select:

- A. AWS S3
- **B. AWS EBS Volumes**
- C. AWS EFS
- D. AWS EBS Snapshots

## Answer - C

Question 29 - A company has an application that stores images and thumbnails for images on S3. While the thumbnail images need to be available for download immediately, the images themselves are not accessed that frequently.

Which is the most cost-efficient storage option that meets these requirements? Please select:

- A. Amazon Glacier with Expedited Retrievals.
- B. Amazon S3 Standard Infrequent Access
- C. Amazon EFS
- D. Amazon S3 Standard

### Answer – B

Question 30 - You have an EC2 Instance placed inside a subnet. You have created the VPC from scratch and added the EC2 Instance to the subnet. It is required to ensure that this EC2 Instance has complete access to the Internet, since it will be used by users on the Internet.

Which of the following options would help accomplish this? Please select:

- A. Launch a NAT Gateway and add routes for 0.0.0.0/0
- B. Attach a VPC Endpoint and add routes for 0.0.0.0/0
- C. Attach an Internet Gateway and add routes for 0.0.0.0/0
- D. Deploy NAT Instances in a public subnet and add routes for 0.0.0.0/0

### Answer - C

Question 31 - You have an application hosted on AWS consisting of EC2 Instances launched via an Auto Scaling Group. You notice that the EC2 Instances are not scaling up on demand. What checks can be done to ensure that the scaling occurs as expected?

## Please select:

- A. Ensure that the right metrics are being used to trigger the scale out.
- B. Ensure that ELB health checks are being used.
- C. Ensure that the instances are placed across multiple Availability Zones.
- D. Ensure that the instances are placed across multiple regions.

## Answer – A

Question 32 - A company hosts a popular web application that connects to an Amazon RDS MySQL DB instance running in a private VPC subnet created with default ACL settings. The web servers must be accessible only to customers on an SSL connection and the database should only be accessible to web servers in a public subnet. As an architect, which of the following would you not recommend for such an architecture?

#### Please select:

- A. Create a separate web server and database server security group.
- B. Ensure the web server security group allows HTTPS port 443 inbound traffic from anywhere (0.0.0.0/0) and apply it to the web servers.
- C. Ensure the web server security group allows MySQL port 3306 inbound traffic from anywhere (0.0.0.0/0) and apply it to the web servers.
- D. Ensure the DB server security group allows MySQL port 3306 inbound and specify the source as the web server security group.

## Answer - C

Question 33 - You have an application hosted on AWS that writes images to an S3 bucket. The concurrent number of users on the application is expected to reach around 10,000 with approximately 500 reads and writes expected per second. How should the architect maximize Amazon S3 performance?

### Please select:

- A. Prefix each object name with a random string.
- B. Use the STANDARD\_IA storage class.
- C. Prefix each object name with the current data.
- D. Enable versioning on the S3 bucket.

### Answer – A

Question 34 - A company has an entire infrastructure hosted on AWS. It wants to create code templates used to provision the same set of resources in another region in case of a disaster in the primary region. Which of the following services can help in this regard?

## Please select:

- A. AWS Beanstalk
- B. AWS CloudFormation
- C. AWS CodeBuild
- D. AWS CodeDeploy

#### Answer - B

Question 35 - A company has a set of EBS Volumes that need to be catered to in case of a disaster. How can one achieve this in an efficient manner using the existing AWS services? Please select:

- A. Create a script to copy the EBS Volume to another Availability Zone.
- B. Create a script to copy the EBS Volume to another region.
- C. Use EBS Snapshots to create the volumes in another region.
- D. Use EBS Snapshots to create the volumes in another Availability Zone.

### Answer - C

Question 36 - Your company currently has a web distribution hosted using the AWS CloudFront service. The IT Security department has confirmed that the application using this web distribution now falls under the scope of PCI compliance. Which of the following steps need to be carried out to ensure that the compliance objectives are met? Choose two answers from the choices below.

### Please select:

- A. Enable CloudFront access logs.
- B. Enable Cache in CloudFront.
- C. Capture requests that are sent to the CloudFront API.
- D. Enable VPC Flow Logs

# Answer - A and C

Question 37 - You are required to host a subscription service in AWS. Users can subscribe to the same and get notifications on new updates to this service. Which of the following services can be used to fulfill this requirement?

- A. Use the SQS Service to send the notification.
- B. Host an EC2 Instance and use the Rabbit-MQ Service to send the notification.
- C. Use the SNS Service to send the notification.
- D. Use the AWS DynamoDB streams to send the notification.

### Answer - C

Question 38 - Your company has a set of EC2 Instances hosted in AWS. There is a mandate to prepare for disasters and come up with the necessary disaster recovery procedures. Which of the following would help in mitigating the effects of a disaster for the EC2 Instances?

### Please select:

- A. Place an ELB in front of the EC2 Instances.
- B. Use Auto Scaling to ensure the minimum number of instances are always running.
- C. Use CloudFront in front of the EC2 Instances.
- D. Use AMIs to recreate the EC2 Instances in another region.

#### Answer - D

Question 39 - A company currently hosts a Redshift cluster in AWS. For security reasons, it should be ensured that all traffic from and to the Redshift cluster does not go through the Internet. Which of the following features can be used to fulfill this requirement in an efficient manner?

# Please select:

- A. Enable Amazon Redshift Enhanced VPC Routing.
- B. Create a NAT Gateway to route the traffic.
- C. Create a NAT Instance to route the traffic.
- D. Create a VPN Connection to ensure traffic does not flow through the Internet.

# Answer-A

Question 40 - A company has a set of Hyper-V machines and VMware virtual machines. They are now planning on migrating these instances to the AWS Cloud. Which of the following can be used to move these resources to the AWS Cloud?

# Please select:

- A. DB Migration utility
- B. Use the VM import Tools.
- C. Use AWS Migration Tools.
- D. Use AWS Config Tools.

## Answer - B

Question 41 - A company has a set of Linux based instances on their On-premise infrastructure. They want to have an equivalent block storage device on AWS which can be used to store the same datasets as on the Linux based instances. As an architect, which of the following storage devices would you recommend?

- A. AWS EBS
- B. AWS S3
- C. AWS EFS
- D. AWS DynamoDB

## Answer - A

Question 42 - A company with a set of Admin jobs currently setup in the C# programming language, is moving their infrastructure to AWS. Which of the following would be an efficient means of hosting the Admin related jobs in AWS?

### Please select:

- A. Use AWS DynamoDB to store the jobs and then run them on demand.
- B. Use AWS Lambda functions with C# for the Admin jobs.
- C. Use AWS S3 to store the jobs and then run them on demand.
- D. Use AWS Config functions with C# for the Admin jobs.

### Answer - B

Question 43 - Your company has a set of resources hosted on the AWS Cloud. As a part of the new governing model, there is a requirement that all activity on AWS resources should be monitored. What is the most efficient way to have this implemented?

# Please select:

- A. Use VPC Flow Logs to monitor all activity in your VPC.
- B. Use AWS Trusted Advisor to monitor all of your AWS resources.
- C. Use AWS Inspector to inspect all of the resources in your account.
- D. Use AWS CloudTrail to monitor all API activity.

## Answer - D

Question 44 - Below are the requirements for a data store in AWS:

- a) Ability to perform SQL queries
- b) Integration with existing business intelligence tools
- c) High concurrency workload that generally involves reading and writing all columns of a small number of records at a time

Which of the following would be an ideal data store for the above requirements? Choose 2 answers from the options below.

Please select:

- A. AWS Redshift
- B. AWS RDS
- C. AWS Aurora
- D. AWS S3

Answer - B and C

Question 45 - A company currently uses Redshift in AWS. The Redshift cluster is required to be used in a cost-effective manner. As an architect, which of the following would you consider to ensure cost-effectiveness?

## Please select:

- A. Use Spot Instances for the underlying nodes in the cluster.
- B. Ensure that unnecessary manual snapshots of the cluster are deleted.
- C. Ensure VPC Enhanced Routing is enabled.
- D. Ensure that CloudWatch metrics are disabled.

### Answer -B

Question 46 - A company has a set of resources hosted in an AWS VPC. Having acquired another company with its own set of resources hosted in AWS, it is required to ensure that resources in the VPC of the parent company can access the resources in the VPC of the child company. How can this be accomplished?

## Please select:

- A. Establish a NAT Instance to establish communication across VPCs.
- B. Establish a NAT Gateway to establish communication across VPCs.
- C. Use a VPN Connection to peer both VPCs.
- D. Use VPC Peering to peer both VPCs.

## Answer - D

Question 47 - An application consists of the following architecture:

- a. EC2 Instances in a single AZ behind an ELB
- b. A NAT Instance which is used to ensure that instances can download updates from the Internet Which of the following can be used to ensure better fault tolerance in this setup? Choose 2 answers from the options given below.

# Please select:

- A. Add more instances in the existing Availability Zone.
- B. Add an Auto Scaling Group to the setup.
- C. Add more instances in another Availability Zone.
- D. Add another ELB for more fault tolerance.

## Answer - B and C

Question 48 - A company has a lot of data hosted on their On-premise infrastructure. Running out of storage space, the company wants a quick win solution using AWS. Which of the following would allow easy extension of their data infrastructure to AWS?

### Please select:

A. The company could start using Gateway Cached Volumes.

- B. The company could start using Gateway Stored Volumes.
- C. The company could start using the Simple Storage Service.
- D. The company could start using Amazon Glacier.

### Answer - A

Question 49 - A company has a sales team and each member of this team uploads their sales figures daily. A Solutions Architect needs a durable storage solution for these documents and also a way to prevent users from accidentally deleting important documents. What among the following choices would deliver protection against unintended user actions?

## Please select:

- A. Store data in an EBS Volume and create snapshots once a week.
- B. Store data in an S3 bucket and enable versioning.
- C. Store data in two S3 buckets in different AWS regions.
- D. Store data on EC2 Instance storage.

### Answer - B

Question 50 - An application requires a highly available relational database with an initial storage capacity of 8TB. This database will grow by 8GB every day. To support the expected traffic, at least eight read replicas will be required to handle the database reads. Which of the below options meets these requirements?

## Please select:

- A. DynamoDB
- B. Amazon S3
- C. Amazon Aurora
- D. Amazon Redshift

## Answer – C

Question 51 - A company has an application that delivers objects from S3 to users. Of late, some users spread across the globe have been complaining of slow response times. Which of the following additional steps would help in building a cost-effective solution and also help ensure that the users get an optimal response to objects from S3?

## Please select:

- A. Use S3 Replication to replicate the objects to regions closest to the users.
- B. Ensure S3 Transfer Acceleration is enabled to ensure all users get the desired response times.
- C. Place an ELB in front of S3 to distribute the load across S3.
- D. Place the S3 bucket behind a CloudFront distribution.

## Answer - D

Question 52 - An application needs to have a messaging system in AWS. It is of the utmost importance that the order of messages is preserved and duplicate messages are not sent. Which of the following services can help fulfill this requirement?

### Please select:

- A. AWS SQS FIFO
- B. AWS SNS
- C. AWS Config
- D. AWS ELB

#### Answer – A

Question 53 - A company is planning on building an application using the services available on AWS. This application will be stateless in nature, and the service must have the ability to scale according to the demand. Which of the following would be an ideal compute service to use in this scenario?

## Please select:

- A. AWS DynamoDB
- B. AWS Lambda
- C. AWS S3
- D. AWS SQS

## Answer - B

Question 54 - A company has a set of EC2 Instances hosted on the AWS Cloud. These instances form a web server farm which services a web application accessed by users on the Internet. Which of the following would help make this architecture more fault tolerant? Choose 2 answers from the options given below.

### Please select:

- A. Ensure the instances are placed in separate Availability Zones.
- B. Ensure the instances are placed in separate regions.
- C. Use an AWS Load Balancer to distribute the traffic.
- D. Use Auto Scaling to distribute the traffic.

## Answer – A and C

Question 55 - You plan on hosting an application on EC2 Instances which will be used to process logs. The application is not very critical and can resume operation even after an interruption. Which of the following steps can help provide a cost-effective solution?

- A. Use Reserved Instances for the underlying EC2 Instances.
- B. Use Provisioned IOPS for the underlying EBS Volumes.

- C. Use Spot Instances for the underlying EC2 Instances.
- D. Use S3 as the underlying data layer.

## Answer - C

Question 56 - A company stores its log data in an S3 bucket. There is a current need to have search capabilities available for the data in S3. How can this be achieved in an efficient and ongoing manner? Choose 2 answers from the options below. Each answer forms a part of the solution.

### Please select:

- A. Use an AWS Lambda function which gets triggered whenever data is added to the S3 bucket.
- B. Create a Lifecycle Policy for the S3 bucket.
- C. Load the data into Amazon Elasticsearch.
- D. Load the data into Glacier.

## Answer - A and C

Question 57 - A company plans on deploying a batch processing application in AWS. Which of the following is an ideal way to host this application? Choose 2 answers from the options below. Each answer forms a part of the solution.

### Please select:

- A. Copy the batch processing application to an ECS Container.
- B. Create a docker image of your batch processing application.
- C. Deploy the image as an Amazon ECS task.
- D. Deploy the container behind the ELB.

# Answer - B and C

Question 58 - An architecture consists of the following:

- a) A primary and secondary infrastructure hosted in AWS
- b) Both infrastructures comprise ELB, Auto Scaling and EC2 resources

How should Route 53 be configured to ensure proper failover in case the primary infrastructure were to go down?

### Please select:

- A. Configure a primary routing policy.
- B. Configure a weighted routing policy.
- C. Configure a Multi-Answer routing policy.
- D. Configure a failover routing policy.

## Answer - D

Question 59 - A company requires to provision test environments in a short duration. Also required is an ability to tear them down easily for cost optimization. How can this be achieved?

# Please select:

- A. Use CloudFormation templates to provision the resources accordingly.
- B. Use a custom script to create and tear down the resources.
- C. Use IAM Policies for provisioning the resources and tearing them down accordingly.
- D. Use Auto Scaling groups to provision the resources on demand.

# Answer - A

Question 60 - A company wants to self-manage a database environment. Which of the following should be adopted to fulfill this requirement?

Please select:

- A. Use the DynamoDB service.
- B. Provision the database using the AWS RDS service.
- C. Provision the database using the AWS Aurora service.
- D. Create an EC2 Instance and install the database service accordingly.

Answer – D

Question 61 - A company is migrating an on-premise 5TB MySQL database to AWS and expects its database size to increase steadily. Which Amazon RDS engine meets these requirements? Please select:

- A. MySQL
- B. Microsoft SQL Server
- C. Oracle
- D. Amazon Aurora

# Answer - D

Question 62 - A company wants to have a 50 Mbps dedicated connection to its AWS resources. Which of the below services can help fulfill this requirement?

# Please select:

- A. Virtual Private Gateway
- **B. Virtual Private Connection**
- C. Direct Connect
- D. Internet Gateway

#### Answer - C

Question 63 - You work for a company that stores records for a minimum of 10 years. Most of these records will never be accessed but must be made available upon request (within a few hours). What is

the most cost-effective storage option in this scenario? Choose the correct answer from the options below.

Please select:

A. Simple Storage Service

**B. EBS Volumes** 

C. Glacier

D. AWS Import/Export

#### Answer - C

Question 64 - A company is building a Two-Tier web application to serve dynamic transaction-based content. The Data Tier uses an Online Transactional Processing (OLTP) database. What services should you leverage to enable an elastic and scalable Web Tier?

#### Please select:

- A. Elastic Load Balancing, Amazon EC2, and Auto Scaling
- B. Elastic Load Balancing, Amazon RDS with Multi-AZ, and Amazon S3
- C. Amazon RDS with Multi-AZ and Auto Scaling
- D. Amazon EC2, Amazon Dynamo DB, and Amazon S3

#### Answer – A

Question 65 - An instance is launched into a VPC subnet with the network ACL configured to allow all inbound traffic and deny all outbound traffic. The instance's security group is configured to allow SSH from any IP address and deny all outbound traffic. What changes need to be made to allow SSH access to the instance?

# Please select:

- A. The Outbound Security Group needs to be modified to allow outbound traffic.
- B. The Outbound Network ACL needs to be modified to allow outbound traffic.
- C. Nothing, it can be accessed from any IP address using SSH.
- D. Both the Outbound Security Group and Outbound Network ACL need to be modified to allow outbound

traffic.

# Answer - B

Question 1 - A customer planning on hosting an AWS RDS instance, needs to ensure that the underlying data is encrypted. How can this be achieved? Choose 2 answers from the options given below. Please select:

- A. Ensure that the right instance class is chosen for the underlying instance.
- B. Choose only General Purpose SSD since only this volume type supports encryption of data.
- C. Encrypt the database during creation.
- D. Enable encryption of the underlying EBS Volume.

#### Answer – A and C

Question 2 - You are developing a new mobile application which is expected to be used by thousands of customers. You are considering storing user preferences in AWS, and need a data store to save the same. Each data item is expected to be 20KB in size. The solution needs to be cost-effective, highly available, scalable and secure. How would you design the data layer?

#### Please select:

- A. Create a new AWS MySQL RDS instance and store the user data there.
- B. Create a DynamoDB table with the required Read and Write capacity and use it as the data layer.
- C. Use Amazon Glacier to store the user data.
- D. Use an Amazon Redshift Cluster for managing the user preferences.

#### Answer – B

Question 3 - Your Operations department is using an incident based application hosted on a set of EC2 Instances. These instances are placed behind an Auto Scaling Group to ensure the right number of instances are in place to support the application. The Operations department has expressed dissatisfaction about poor application performance at 9:00 AM each day. However, it is also noted that the system performance returns to optimal at 9:45 AM.

What can be done to ensure that this issue gets fixed?

# Please select:

- A. Create another Dynamic Scaling Policy to ensure that the scaling happens at 9:00 AM.
- B. Add another Auto Scaling group to support the current one.
- C. Change the Cool Down Timers for the existing Auto Scaling Group.
- D. Add a Scheduled Scaling Policy at 8:30 AM.

# Answer - D

Question 4 - A database hosted in AWS is currently encountering an extended number of write operations and is not able to handle the load. What can be done to the architecture to ensure that the write operations are not lost under any circumstance?

# Please select:

- A. Add more IOPS to the existing EBS Volume used by the database.
- B. Consider using DynamoDB instead of AWS RDS.
- C. Use SQS Queues to queue the database writes.
- D. Use SNS to send notification on missed database writes and then add them manually at a later stage.

## Answer - C

Question 5 - You have created an AWS Lambda function that will write data to a DynamoDB table. Which of the following must be in place to ensure that the Lambda function can interact with the DynamoDB table?

# Please select:

- A. Ensure an IAM Role is attached to the Lambda function which has the required DynamoDB privileges.
- B. Ensure an IAM User is attached to the Lambda function which has the required DynamoDB privileges.
- C. Ensure the Access keys are embedded in the AWS Lambda function.
- D. Ensure the IAM user password is embedded in the AWS Lambda function.

#### Answer – A

Question 6 - Your company currently has data hosted in an Amazon Aurora MySQL DB. Since this data is critical, there is a need to ensure that it can be made available in another region in case of a disaster. How can this be achieved?

# Please select:

- A. Make a copy of the underlying EBS Volumes in the Amazon Cluster in another region.
- B. Enable Multi-AZ for the Aurora database.
- C. Create a Read Replica for the database.
- D. Create an EBS Snapshot of the underlying EBS Volumes in the Amazon Cluster and then copy them to another region.

## Answer - C

Question 7 - Your company has a requirement to host a static web site in AWS. Which of the following steps would help implement a quick and cost-effective solution for this requirement? Choose 2 answers from the options given below. Each answer forms a part of the solution.

# Please select:

- A. Upload the static content to an S3 bucket.
- B. Create an EC2 Instance and install a web server.
- C. Enable web site hosting for the S3 bucket.
- D. Upload the code to the web server on the EC2 Instance.

# Answer – A and C

Question 8 - A company currently storing a set of documents in the AWS Simple Storage Service, is worried about the potential loss if these documents are ever deleted. Which of the following can be used to ensure protection from loss of the underlying documents in S3?

- A. Enable Versioning for the underlying S3 bucket.
- B. Copy the bucket data to an EBS Volume as a backup.
- C. Create a Snapshot of the S3 bucket.

D. Enable an IAM Policy which does not allow deletion of any document from the S3 bucket.

#### Answer - A

Question 9 - An application with a 150 GB relational database runs on an EC2 Instance. This application will be used frequently with a lot of database reads and writes. What is the most cost-effective storage type among the options below?

# Please select:

- A. Amazon EBS Provisioned IOPS SSD
- B. Amazon EBS Throughput Optimized HDD
- C. Amazon EBS General Purpose SSD
- D. Amazon EFS

#### Answer – A

Question 10 - A company has a set of EC2 Linux based instances hosted in AWS. There is a need to have a standard file interface for files to be used across all Linux based instances. Which of the following can be used for this purpose?

# Please select:

- A. Consider using the Simple Storage Service.
- B. Consider using Amazon Glacier.
- C. Consider using AWS RDS.
- D. Consider using AWS EFS.

#### Answer - D

Question 11 - Your company is planning on using Route 53 as the DNS provider. There is a need to ensure that the company's domain name points to an existing CloudFront distribution. How can this be achieved?

## Please select:

- A. Create an Alias record which points to the CloudFront distribution.
- B. Create a host record which points to the CloudFront distribution.
- C. Create a CNAME record which points to the CloudFront distribution.
- D. Create a Non-Alias Record which points to the CloudFront distribution.

## Answer - A

Question 12 - A company needs to extend their storage infrastructure to the AWS Cloud. The storage needs to be available as iSCSI devices for on-premises application servers. Which of the following would be able to fulfill this requirement?

#### Please select:

- A. Create a Glacier vault. Use a Glacier Connector and mount it as an iSCSI device.
- B. Create an S3 bucket. Use an S3 Connector and mount it as an iSCSI device.
- C. Use the EFS file service and mount the different file systems to the on-premise servers.
- D. Use the AWS Storage Gateway-cached volumes service.

#### Answer - D

Question 13 - Your infrastructure in AWS currently consists of a private and public subnet. The private subnet consists of database servers and the public subnet has a NAT Instance which helps the instances in the private subnet to communicate with the Internet. The NAT Instance is now becoming a bottleneck. Which of the following changes to the current architecture can help prevent this issue from occurring in the future?

# Please select:

- A. Use a NAT Gateway instead of the NAT Instance.
- B. Use another Internet Gateway for better bandwidth.
- C. Use a VPC connection for better bandwidth.
- D. Consider changing the instance type for the underlying NAT Instance.

#### Answer - A

Question 14 - Your current setup in AWS consists of the following architecture: 2 public subnets, one subnet which has web servers accessed by users across the Internet and another subnet for the database server. Which of the following changes to the architecture adds a better security boundary to the resources hosted in this setup?

#### Please select:

- A. Consider moving the web server to a private subnet.
- B. Consider moving the database server to a private subnet.
- C. Consider moving both the web and database servers to a private subnet.
- D. Consider creating a private subnet and adding a NAT Instance to that subnet.

# Answer - B

Question 15 - Your company has a set of applications that make use of Docker containers used by the Development team. There is a need to move these containers to AWS. Which of the following methods could be used to set up these Docker containers in a separate environment in AWS?

- A. Create EC2 Instances, install Docker and then upload the containers.
- B. Create EC2 Container registries, install Docker and then upload the containers.
- C. Create an Elastic Beanstalk environment with the necessary Docker containers.
- D. Create EBS Optimized EC2 Instances, install Docker and then upload the containers.

#### Answer - C

Question 16 - Instances in your private subnet hosted in AWS, need access to important documents in S3. Due to the confidential nature of these documents, you have to ensure that this traffic does not traverse through the internet. As an architect, how would you you implement this solution?

### Please select:

- A. Consider using a VPC Endpoint.
- B. Consider using an EC2 Endpoint.
- C. Move the instances to a public subnet.
- D. Create a VPN connection and access the S3 resources from the EC2 Instance.

#### Answer - A

Question 17 - You have a video transcoding application running on Amazon EC2. Each instance polls a queue to find out which video should be transcoded, and then runs a transcoding process. If this process is interrupted, the video gets transcoded by another instance based on the queuing system. You have a large backlog of videos that need to be transcoded and you would like to reduce this backlog by adding more instances. These instances will only be needed until the backlog is reduced. What Amazon EC2 Instance type should you use to reduce the backlog in the most cost-efficient way?

#### Please select:

- A. Reserved Instances
- **B.** Spot Instances
- C. Dedicated Instances
- D. On-Demand Instances

# Answer – B

Question 18 - A company has a workflow that sends video files from their On-premise system to AWS for transcoding. They use EC2 worker instances to pull transcoding jobs from SQS. Why is SQS an appropriate service for this scenario?

# Please select:

- A. SQS guarantees the order of the messages.
- B. SQS synchronously provides transcoding output.
- C. SQS checks the health of the worker instances.
- D. SQS helps to facilitate horizontal scaling of encoding tasks.

#### Answer - D

Question 19 - You run an ad-supported photo sharing website using S3 to serve photos to visitors of your site. At some point, you find out that other sites have been linking to the photos on your site, causing loss to your business. What is an effective method to mitigate this?

#### Please select:

- A. Remove public read access and use signed URLs with expiry dates.
- B. Use CloudFront distributions for static content.
- C. Block the IPs of the offending websites in Security Groups.
- D. Store photos on an EBS Volume of the web server.

# Answer – A

Question 20 - A company wants to create standard templates for deployment of their Infrastructure. These would also be used to provision resources in another region during disaster recovery scenarios. Which AWS service can be used in this regard?

## Please select:

- A. Amazon Simple Workflow Service
- B. AWS Elastic Beanstalk
- C. AWS CloudFormation
- D. AWS OpsWorks

## Answer – C

Question 21 - A company currently hosts their architecture in the US region. They now need to duplicate this architecture to the Europe region and extend the application hosted on this architecture to the new region. In order to ensure that users across the globe get the same seamless experience from either setups, what among the following needs to be done?

#### Please select:

- A. Create a Classic Elastic Load Balancer setup to route traffic to both locations.
- B. Create a weighted Route 53 policy to route the policy based on the weightage for each location.
- C. Create an Application Elastic Load Balancer setup to route traffic to both locations.
- D. Create a Geolocation Route 53 Policy to route the policy based on the location.

## Answer - D

Question 22 - You have a set of EC2 Instances that support an application. They are currently hosted in the US Region. In the event of a disaster, you need a way to ensure that you can quickly provision the resources in another region. How could this be accomplished? Choose 2 answers from the options given below.

- A. Copy the underlying EBS Volumes to the destination region.
- B. Create EBS Snapshots and then copy them to the destination region.
- C. Create AMIs for the underlying instances.
- D. Copy the metadata for the EC2 Instances to S3.

#### Answer - B and C

Question 23 - A company wants to have a NoSQL database hosted on the AWS Cloud, but do not have the necessary staff to manage the underlying infrastructure. Which of the following choices would be ideal for this requirement?

### Please select:

- A. AWS Aurora
- B. AWS RDS
- C. AWS DynamoDB
- D. AWS Redshift

#### Answer – C

Question 24 - You are building an automated transcription service in which Amazon EC2 worker instances process an uploaded audio file and generate a text file. You must store both files in the same durable storage until the text file is retrieved. You do not know what the storage capacity requirements are. Which storage option is both cost-efficient and scalable?

#### Please select:

- A. Multiple Amazon EBS Volume with snapshots
- B. A single Amazon Glacier Vault
- C. A single Amazon S3 bucket
- D. Multiple instance stores

#### Answer - C

Question 25 - A customer has an instance hosted in the AWS Public Cloud. The VPC and subnet used to host the instance have been created with the default settings for the Network Access Control Lists. An IT Administrator needs to be provided secure access to the underlying instance. How can this be accomplished?

## Please select:

- A. Ensure the Network Access Control Lists allow Inbound SSH traffic from the IT Administrator's Workstation.
- B. Ensure the Network Access Control Lists allow Outbound SSH traffic from the IT Administrator's Workstation.
- C. Ensure that the security group allows Inbound SSH traffic from the IT Administrator's Workstation.
- D. Ensure that the security group allows Outbound SSH traffic from the IT Administrator's Workstation.

## Answer - C

Question 26 - A company has an On-premise infrastructure which they want to extend to the AWS Cloud. There is a need to ensure that communication across both environments is possible over the Internet. What would you create in this case to fulfill this requirement?

#### Please select:

- A. Create a VPC peering connection between the On-premise and the AWS Environment.
- B. Create an AWS Direct connection between the On-premise and the AWS Environment.
- C. Create a VPN connection between the On-premise and the AWS Environment.
- D. Create a Virtual private gateway connection between the On-premise and the AWS Environment.

# Answer - C

Question 27 - A company wants to build a brand new application on the AWS Cloud. They want to ensure that this application follows the Microservices architecture. Which of the following services can be used to build this sort of architecture? Choose 3 answers from the options given below.

# Please select:

- A. AWS Lambda
- B. AWS ECS
- C. AWS API Gateway
- D. AWS Config

# Answer – A, B and C

Question 28 - You are deploying an application to track the GPS coordinates of delivery trucks in the United States. Coordinates are transmitted from each delivery truck once every three seconds. You need to design an architecture that will enable real-time processing of these coordinates from multiple consumers. Which service should you use to implement data ingestion?

# Please select:

- A. Amazon Kinesis
- B. AWS Data Pipeline
- C. Amazon AppStream
- D. Amazon Simple Queue Service

#### Answer - A

Question 29 - A company is planning on hosting a set of EC2 Instances on the AWS Cloud. They also need to ensure that data can be stored on the EC2 Instances. Which block level storage device could make this possible?

- A. Amazon S3
- B. Amazon Glacier
- C. Amazon Storage Gateway
- D. Amazon EBS Volumes

#### Answer - D

Question 30 - A company is planning on using the AWS Redshift service. The Redshift service and data on it would be used continuously for the next 3 years as per the current business plan. Which of the following would be the most cost-effective solution in this scenario?

# Please select:

- A. Consider using On-demand instances for the Redshift Cluster.
- B. Enable Automated backup.
- C. Consider using Reserved Instances for the Redshift Cluster.
- D. Consider not using a cluster for the Redshift nodes.

## Answer - C

Question 31 - A company is planning to run a number of Admin related scripts using the AWS Lambda service. There is a need to detect errors that occur while the scripts run. How can this be accomplished in the most effective manner?

#### Please select:

- A. Use CloudWatch metrics and logs to watch for errors.
- B. Use CloudTrail to monitor for errors.
- C. Use the AWS Config service to monitor for errors.
- D. Use the AWS Inspector service to monitor for errors.

#### Answer - A

Question 32 - A CloudFront distribution is being used to distribute content from an S3 bucket. It is required that only a particular set of users get access to certain content. How can this be accomplished?

# Please select:

- A. Create IAM Users for each user and then provide access to the S3 bucket content.
- B. Create IAM Groups for each set of users and then provide access to the S3 bucket content.
- C. Create CloudFront signed URLs and then distribute these URLs to the users.
- D. Use IAM Polices for the underlying S3 buckets to restrict content.

## Answer - C

Question 33 - You plan on creating a VPC from scratch and launching EC2 Instances in the subnet. What should be done to ensure that the EC2 Instances are accessible from the Internet?

- A. Attach an Internet Gateway to the VPC and add a route for 0.0.0.0/0 to the Route table.
- B. Attach an NAT Gateway to the VPC and add a route for 0.0.0.0/0 to the Route table.

- C. Attach an NAT Gateway to the VPC and add a route for 0.0.0.0/32 to the Route table.
- D. Attach an Internet Gateway to the VPC and add a route for 0.0.0.0/32 to the Route table.

#### Answer - A

Question 34 - Your company currently has an entire data warehouse of assets that needs to be migrated to the AWS Cloud. Which of the following services should this be migrated to?

## Please select:

- A. AWS DynamoDB
- B. AWS S3
- C. AWS RDS
- D. AWS Redshift

#### Answer – D

Question 35 - Your company has confidential documents stored in the Simple Storage Service. Due to compliance requirements, there is a need for the data in the S3 bucket to be available in a different geographical location. As an architect, what change would you make to comply with this requirement?

#### Please select:

- A. Apply Multi-AZ for the underlying S3 bucket.
- B. Copy the data to an EBS Volume in another region.
- C. Create a snapshot of the S3 bucket and copy it to another region.
- D. Enable Cross-Region Replication for the S3 bucket.

#### Answer - D

Question 36 - A company's requirement is to have a Stack-based model for its resources in AWS. There is a need to have different stacks for the Development and Production environments. Which of the following can be used to fulfill this required methodology?

## Please select:

- A. Use EC2 tags to define different stack layers for your resources.
- B. Define the metadata for the different layers in DynamoDB.
- C. Use AWS OpsWorks to define the different layers for your application.
- D. Use AWS Config to define the different layers for your application.

# Answer - C

Question 37 - You are designing a web application that stores static assets in an Amazon Simple Storage Service (S3) bucket. You expect this bucket to receive over 150 PUT requests per second. What should you do to ensure optimal performance?

## Please select:

- A. Use Multipart upload.
- B. Add a random prefix to the key names.
- C. Amazon S3 will automatically manage performance at this scale.
- D. Use a predictable naming scheme, such as sequential numbers or date time sequences in the key names.

## Answer – B

Question 38 - An infrastructure is being hosted in AWS using the following resources:

- a) A couple of EC2 Instances serving a Web-Based application
- b) An Elastic Balancer in front of the EC2 Instances
- c) An AWS RDS which has Multi-AZ enabled

Which of the following can be added to the setup to ensure scalability?

# Please select:

- A. Add another ELB to the setup.
- B. Add more EC2 Instances to the setup.
- C. Enable Read Replicas for the AWS RDS.
- D. Add an Auto Scaling Group to the setup.

#### Answer - D

Question 39 - A company wants to store their documents in AWS. Initially, these documents will be used frequently, and after a duration of 6 months, they will need to be archived. How would you architect this requirement?

#### Please select:

- A. Store the files in Amazon EBS and create a Lifecycle Policy to remove the files after 6 months.
- B. Store the files in Amazon S3 and create a Lifecycle Policy to archive the files after 6 months.
- C. Store the files in Amazon Glacier and create a Lifecycle Policy to remove the files after 6 months.
- D. Store the files in Amazon EFS and create a Lifecycle Policy to remove the files after 6 months.

## Answer - B

Question 40 - When managing permissions for the API Gateway, what can be used to ensure that the right level of permissions are given to Developers, IT Admins and users? These permissions should be easily managed.

- A. Use the secure token service to manage the permissions for different users.
- B. Use IAM Policies to create different policies for different types of users.
- C. Use the AWS Config tool to manage the permissions for different users.
- D. Use IAM Access Keys to create sets of keys for different types of users.

#### Answer - B

Question 41 - Your Development team wants to start making use of EC2 Instances to host their Application and Web servers. In the space of automation, they want the Instances to always download the latest version of the Web and Application servers when they are launched. As an architect, what would you recommend for this scenario?

### Please select:

- A. Ask the Development team to create scripts which can be added to the User Data section when the instance is launched.
- B. Ask the Development team to create scripts which can be added to the Meta Data section when the instance is launched.
- C. Use Auto Scaling Groups to install the Web and Application servers when the instances are launched.
- D. Use EC2 Config to install the Web and Application servers when the instances are launched.

### Answer - A

Question 42 - Your company has an application that takes care of uploading, processing and publishing videos posted by users. The current architecture for this application includes the following:

- a) A set of EC2 Instances to transfer user uploaded videos to S3 buckets
- b) A set of EC2 worker processes to process and publish the videos
- c) An Auto Scaling Group for the EC2 worker processes

Which of the following can be added to the architecture to make it more reliable? Please select:

- A. Amazon SOS
- B. Amazon SNS
- C. Amazon CloudFront
- D. Amazon SES

#### Answer - A

Question 43 - There is an urgent requirement to monitor some database metrics for a database hosted on AWS and send notifications. Which AWS services can accomplish this? Choose 2 answers from the options given below.

#### Please select:

- A. Amazon Simple Email Service
- B. Amazon CloudWatch
- C. Amazon Simple Queue Service
- D. Amazon Route 53
- E. Amazon Simple Notification Service

Answer – B and E

Question 44 - You have a business-critical two-tier web application currently deployed in 2 Availability Zones in a single region, using Elastic Load Balancing and Auto Scaling. The app depends on synchronous replication at the database layer. The application needs to remain fully available even if one application AZ goes offline and if Auto Scaling cannot launch new instances in the remaining AZ. How can the current architecture be enhanced to ensure this?

# Please select:

- A. Deploy in 2 regions using Weighted Round Robin with Auto Scaling minimums set at 50% peak load per region.
- B. Deploy in 3 AZ with Auto Scaling minimum set to handle 33 per cent peak load per zone.
- C. Deploy in 3 AZ with Auto Scaling minimum set to handle 50 per cent peak load per zone.
- D. Deploy in 2 regions using Weighted Round Robin with Auto Scaling minimums set at 100% peak load per region.

## Answer – C

Question 45 - You have been tasked with creating a VPC network topology for your company. The VPC network must support both internet-facing applications and internal-facing applications accessed only over VPN. Both Internet-facing and internal-facing applications must be able to leverage at least 3 AZs for high availability. At a minimum, how many subnets must you create within your VPC to accommodate these requirements?

#### Please select:

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

# Answer - D

Question 46 - You have the following architecture deployed in AWS:

- a) A set of EC2 Instances which sit behind an ELB
- b) A database hosted in AWS RDS

Of late, the performance on the database has been slacking due to a high number of read requests. Which of the following can be added to the architecture to alleviate the performance issue? Please select:

- A. Enable Multi-AZ to add a secondary read-only DB in another AZ.
- B. Use ElastiCache in front of the database.
- C. Use AWS CloudFront in front of the database.
- D. Use DynamoDB to offload all the reads. Populate the common read items in a separate table.

## Answer - B

Question 47 - An application is currently hosted on an EC2 Instance which has attached EBS Volumes. The data on these volumes is frequently accessed. But after a duration of a week, the documents need

to be moved to infrequent access storage. Which of the following would be the ideal EBS Volume type to use?

#### Please select:

- A. EBS Provisioned IOPS SSD
- B. EBS Throughput Optimized HDD
- C. EBS General Purpose SSD
- D. EBS Cold HDD

#### Answer - D

Question 48 - A customer wants to import their existing virtual machines to the cloud. Which service can they use for this? Choose one answer from the options given below.

# Please select:

- A. VM Import/Export
- B. AWS Import/Export
- C. AWS Storage Gateway
- D. DB Migration Service

# Answer - A

Question 49 - A company website is set to launch in the upcoming weeks. There is a probability that the traffic will be quite high during the initial weeks. In the event of a load failure, how can you set up DNS failover to a static website? Choose the correct answer from the options given below.

#### Please select:

- A. Duplicate the exact application architecture in another region and configure DNS Weight-based routing.
- B. Enable failover to an on-premise data center to the application hosted there.
- C. Use Route 53 with the failover option to failover to a static S3 website bucket or CloudFront distribution.
- D. Add more servers in case the application fails.

#### Answer – C

Question 50 - A company is running three production web server reserved EC2 Instances with EBS-backed root volumes. These instances have a consistent CPU load of 80%. Traffic is being distributed to these instances by an Elastic Load Balancer. They also have production and development Multi-AZ RDS MySQL databases. What recommendation would you make to reduce cost in this environment without affecting availability of mission-critical systems? Choose the correct answer from the options given below.

#### Please select:

A. Consider using On-demand instances instead of Reserved EC2 instances.

- B. Consider not using a Multi-AZ RDS deployment for the development database.
- C. Consider using Spot instances instead of Reserved EC2 instances.
- D. Consider removing the Elastic Load Balancer.

### Answer – B

Question 51 - An application consists of a couple of EC2 Instances. One EC2 Instance hosts a web application and the other Instance hosts the database server. Which of the following changes can be made to ensure high availability of the database layer?

#### Please select:

- A. Enable Read Replicas for the database.
- B. Enable Multi-AZ for the database.
- C. Have another EC2 Instance in the same Availability Zone with replication configured.
- D. Have another EC2 Instance in the another Availability Zone with replication configured.

#### Answer - D

Question 52 - You are designing an architecture on AWS with disaster recovery in mind. Currently the architecture consists of an ELB and underlying EC2 Instances in a primary and secondary region. How can you establish a switchover in case of failure in the primary region?

# Please select:

- A. Use Route 53 Health Checks and then do a failover.
- B. Use CloudWatch metrics to detect the failure and then do a failover.
- C. Use scripts to scan CloudWatch logs to detect the failure and then do a failover.
- D. Use CloudTrail to detect the failure and then do a failover.

#### Answer - A

Question 53 - A company has assigned two web servers instances to an Elastic Load Balancer. However, the instances and the ELB are not reachable via URL to the elastic load balancer serving the web app data from the EC2 instances. How might you resolve the issue so that your instances are serving the web app data to the public Internet? Choose the correct answer from the options given below

# Please select:

- A. Attach an Internet Gateway to the VPC and route it to the subnet.
- B. Add an Elastic IP address to the instance.
- C. Use Amazon Elastic Load Balancer to serve requests to your instances located in the internal subnet.
- D. None of the above

# Answer - A

Question 54 - Your company currently has an infrastructure hosted On-premise. You have been requested to devise an architecture on AWS for migrating some of the On-premise components. A current concern is the data storage layer. Minimum administrative overheads are also required for the underlying infrastructure in AWS. Which of the following would be included in your proposed architecture? Choose 2 answers from the options given below.

# Please select:

- A. Use DynamoDB to store data in tables.
- B. Use EC2 to host the data on EBS Volumes.
- C. Use the Simple Storage Service to store data.
- D. Use AWS RDS to store the data.

#### Answer – A and C

Question 55 - Currently, you're helping design and architect a highly available application. After building the initial environment, you discover that a part of your application does not work correctly until port 443 is added to the security group. After adding port 443 to the appropriate security group, how much time will it take before the changes are applied and the application begins working correctly? Choose the correct answer from the options below.

#### Please select:

- A. Generally, it takes 2-5 minutes in order for the rules to propagate.
- B. Immediately after a reboot of the EC2 Instances belong to that security group.
- C. Changes apply instantly to the security group, and the application should be able to respond to 443 requests.
- D. It will take 60 seconds for the rules to apply to all Availability Zones within the region.

#### Answer - C

Question 56 - A company hosts data in S3. There is now a mandate that going forward, all data in the S3 bucket needs to be encrypted at rest. How can this be achieved?

### Please select:

- A. Use AWS Access Keys to encrypt the data.
- B. Use SSL Certificates to encrypt the data.
- C. Enable Server-side encryption on the S3 bucket.
- D. Enable MFA on the S3 bucket.

#### Answer – C

Question 57 - A company hosts data in S3. There is a requirement to control access to the S3 buckets. Which are the 2 ways in which this can be achieved?

#### Please select:

A. Use Bucket Policies.

- B. Use the Secure Token Service.
- C. Use IAM user policies.
- D. Use AWS Access Keys.

### Answer - A and C

Question 58 - Your application provides data transformation services. Files containing data to be transformed are first uploaded to Amazon S3 and then transformed by a fleet of Spot EC2 Instances. Files submitted by your premium customers must be transformed with the highest priority. How would you implement such a system?

# Please select:

A. Use a DynamoDB table with an attribute defining the priority level.

Transformation instances will scan the table for tasks, sorting the results by priority level.

B. Use Route 53 latency-based routing to send high priority tasks to the closest transformation instances.

C. Use two SQS queues, one for high priority messages, the other for default priority. Transformation instances first poll the high priority queue; if there is no message, they poll the default priority queue.

D. Use a single SQS queue.

Each message contains the priority level.

Transformation instances poll high-priority messages first.

## Answer - C

Question 59 - A VPC has been setup with a public subnet and an internet gateway. The EC2 instance is set up with a public IP but you are still not able to connect to it via the Internet. The right security groups are also in place. What should you do to connect to the EC2 Instance from the Internet?

# Please select:

- A. Set an Elastic IP Address to the EC2 Instance.
- B. Set a Secondary Private IP Address to the EC2 Instance.
- C. Ensure the right route entry is there in the Route table.
- D. There must be some issue in the EC2 Instance. Check the system logs.

#### Answer – C

Question 60 - A customer has a single 3-TB volume on-premises that is used to hold a large repository of images and print layout files. This repository is growing at 500GB a year and must be presented as a single logical volume. The customer is becoming increasingly constrained with their local storage capacity and wants an offsite backup of this data, while maintaining low-latency access to their frequently accessed data. Which AWS Storage Gateway configuration meets the customer requirements?

- A. Gateway-Cached Volumes with snapshots scheduled to Amazon S3
- B. Gateway-Stored Volumes with snapshots scheduled to Amazon S3
- C. Gateway-Virtual Tape Library with snapshots to Amazon S3
- D. Gateway-Virtual Tape Library with snapshots to Amazon Glacier

#### Answer - A

Question 61 - A company is planning to use the AWS ECS service to work with containers. There is a need for the least amount of administrative overhead while launching containers. How can this be achieved?

# Please select:

- A. Use the Fargate launch type in AWS ECS.
- B. Use the EC2 launch type in AWS ECS.
- C. Use the Auto Scaling launch type in AWS ECS.
- D. Use the ELB launch type in AWS ECS.

#### Answer - A

Question 62 - You currently manage a set of web servers hosted on EC2 Servers with public IP addresses. These IP addresses are mapped to domain names. There was an urgent maintenance activity that had to be carried out on the servers and the servers had to be restarted. Now the web application hosted on these EC2 Instances is not accessible via the domain names configured earlier. Which of the following could be a reason for this?

# Please select:

- A. The Route 53 hosted zone needs to be restarted.
- B. The network interfaces need to initialized again.
- C. The public IP addresses need to associated to the ENI again.
- D. The public IP addresses have changed after the instance was stopped and started.

### Answer – D

Question 63 - You are responsible for deploying a critical application to AWS. It is required to ensure that the controls set for this application meet PCI compliance. Also, there is a need to monitor web application logs to identify any malicious activity. Which of the following services can be used to fulfill this requirement? Choose 2 answers from the options given below.

- A. Amazon CloudWatch Logs
- B. Amazon VPC Flow Logs
- C. Amazon AWS Config
- D. Amazon CloudTrail

#### Answer – A and D

Question 64 - There is a requirement to host a database server. This server should not be able to connect to the Internet except while downloading required database patches. Which of the following solutions would best satisfy all the above requirements? Choose the correct answer from the options below.

#### Please select:

- A. Set up the database in a private subnet with a security group which only allows outbound traffic.
- B. Set up the database in a public subnet with a security group which only allows inbound traffic.
- C. Set up the database in a local data center and use a private gateway to connect the application to the database
- D. Set up the database in a private subnet which connects to the Internet via a NAT Instance.

## Answer - D

Question 65 - You have both production and development based instances running on your VPC. It is required to ensure that people responsible for the development instances do not have access to work on production instances for better security. Which of the following would be the best way to accomplish this using policies? Choose the correct answer from the options given below.

# Please select:

- A. Launch the test and production instances in separate VPCs and use VPC Peering.
- B. Create an IAM Policy with a condition that allows access to only those instances which are used for production or development.
- C. Launch the test and production instances in different Availability Zones and use Multi-Factor Authentication.
- D. Define the tags on the test and production servers and add a condition to the IAM Policy which allows access to specific tags.

#### Answer – D

Question 1 - A company is planning on building a 2-tier architecture which consists of a web server and a database server. This will be hosted on EC2 Instances accordingly. The database server will experience a lot of read/write operations whereas the web server will have a standard workload. Which of the following underlying EBS volumes are optimum to use for the underlying EC2 Instances? Choose 2 answers from the options given below.

# Please select:

- A. General Purpose SSD for the web server
- B. Provisioned IOPS for the web server
- C. General Purpose SSD for the database server
- D. Provisioned IOPS for the database server

#### Answer – A and D

Question 2 - You are hosting a web server on an EC2 Instance. With the number of requests consuming a large part of the CPU, the response performance for the application is getting degraded. Which of the following would help alleviate the problem and provide a better response time?

# Please select:

- A. Place the EC2 Instance behind a Classic Load Balancer.
- B. Place the EC2 Instance behind an Application Load Balancer.
- C. Place the EC2 Instance in an Auto Scaling Group with the max size as 1.
- D. Place a CloudFront distribution in front of the EC2 Instance.

#### Answer - D

Question 3 - A company is hosting a MySQL database in AWS using the AWS RDS service. To offload the reads, a Read Replica has been created and reports are run off the Read Replica database. But at certain times, the reports show stale data. Why may this be the case?

# Please select:

- A. The Read Replica has not been created properly.
- B. The backup of the original database has not been set properly.
- C. This is due to the replication lag.
- D. The Multi-AZ feature is not enabled.

# Answer – C

Question 4 - One plans on using SQS queues and AWS Lambda to leverage the serverless aspects of the AWS Cloud. Each invocation to AWS Lambda will send a message to an SQS queue. In order for messages to be sent, which of the following must be in place?

# Please select:

- A. The queue must be a FIFO queue.
- B. An IAM Role with the required permissions.
- C. The code for Lambda must be written in C#.
- D. An IAM Group with the required permissions.

#### Answer - B

Question 5 - You have enabled CloudTrail logs for your company's AWS account. In addition, the IT Security department has mentioned that the logs need to be encrypted. How can this be achieved?

- A. Enable SSL certificates for the CloudTrail logs.
- B. There is no need to do anything since the logs will already be encrypted.
- C. Enable Server-Side Encryption for the trail.
- D. Enable Server-Side Encryption for the destination S3 bucket.

#### Answer – B

Question 6 - A company has set up their data layer in the Simple Storage Service. There are a number of requests which include read/write and updates to objects in an S3 bucket. Users sometimes complain that updates to an object are not being reflected. Which of the following could be a reason for this?

### Please select:

- A. Versioning is not enabled for the bucket, so the newer version does not reflect the right data.
- B. Updates are being made to the same key for the object.
- C. Encryption is enabled for the bucket, hence it is taking time for the update to occur.
- D. The metadata for the S3 bucket is incorrectly configured.

#### Answer – B

Question 7 - A company needs to have a fully managed NoSQL database on the AWS Cloud. This database must have an ability for backups and high availability.

Which Amazon database meets these requirements?

Please select:

- A. MySQL
- B. Microsoft SQL Server
- C. DynamoDB
- D. Amazon Aurora

# Answer - C

Question 8 - A company planning to move to the AWS Cloud, wants to leverage its existing Chef recipes for configuration management of its infrastructure. Which AWS service would be ideal for this requirement?

#### Please select:

- A. AWS Elastic Load Balancer
- B. AWS Elastic Beanstalk
- C. AWS OpsWorks
- D. AWS Inspector

# Answer – C

Question 9 - An application consists of a web server and database server hosted on separate EC2 Instances. There are lot of read requests on the database which is degrading the performance of the application. Which of the following can help improve the performance of the database under this heavy load?

#### Please select:

A. Enable Multi-AZ for the database.

- B. Put an ElastiCache in front of the database.
- C. Place another web server in the architecture to take the load.
- D. Place a CloudFront distribution in front of the database.

#### Answer - B

Question 10 - You need to have the ability to archive documents in AWS. This needs to be a cost-effective solution. Which of the following would you use to meet this requirement?

# Please select:

- A. Amazon Glacier
- B. Amazon S3 Standard Infrequent Access
- C. Amazon EFS
- D. Amazon S3 Standard

#### Answer - A

Question 11 - You plan on hosting a web application consisting of a web server and a database server. These servers are going to be hosted on different EC2 Instances in different subnets in a VPC. Which of the following can be used to ensure that the database server only allows traffic from the web server?

#### Please select:

- A. Make use of Security Groups.
- B. Make use of VPC Flow Logs.
- C. Make use of Network Access Control Lists.
- D. Make use of IAM Roles.

# Answer – A

Question 12 - Your IT Supervisor is worried about users accidentally deleting objects in an S3 bucket. Which of the following can help prevent accidental deletion of objects in an S3 bucket? Choose 2 answers from the options given below.

# Please select:

- A. Enable encryption for the S3 bucket.
- B. Enable MFA Delete on the S3 bucket.
- C. Enable Versioning on the S3 bucket.
- D. Enable IAM Roles on the S3 bucket.

#### Answer – B and C

Question 13 - A company has an application that uses the S3 bucket as its data layer. As per the monitoring on the S3 bucket, it can be seen that the number of GET requests is 400 requests per second. The IT Operations team receives service requests about users getting HTTP 500 or 503 errors while

accessing the application. What can be done to resolve these errors? Choose 2 answers from the options given below.

#### Please select:

- A. Add a CloudFront distribution in front of the bucket.
- B. Add randomness to the key names.
- C. Add an ELB in front of the S3 bucket.
- D. Enable Versioning for the S3 bucket.

#### Answer - A and B

Question 14 - A company has a Redshift Cluster defined in AWS. The IT Operations team have ensured that both automated and manual snapshots are in place. Since the cluster is going to be run for a long duration of a couple of years, Reserved Instances have been purchased. There has been a recent concern on the cost being incurred by the cluster. Which of the following steps can be carried out to minimize the costs being incurred by the cluster?

#### Please select:

- A. Delete the manual snapshots.
- B. Set the retention period of the automated snapshots to 35 days.
- C. Choose to use Spot Instances instead of Reserved Instances.
- D. Choose to use Instance store volumes to store the cluster data.

## Answer - A

Question 15 - A company has a collection of EC2 Instances that are backed by EBS Volumes. The IT policy of the company states that all data must be backed up in an efficient manner. What is the MOST resilient way to backup the volumes?

# Please select:

- A. Take regular EBS Snapshots.
- B. Enable EBS Volume Encryption.
- C. Create a script to copy data to an EC2 Instance store.
- D. Mirror data across 2 EBS Volumes.

#### Answer – A

Question 16 - A company currently hosts a lot of data on their On-premise location. They want to start storing backups of this data on AWS. How can this be achieved in the most efficient way possible?

- A. Create EBS Volumes and store the data.
- B. Create EBS Snapshots and store the data.
- C. Make use of Storage Gateway Stored volumes.
- D. Make use of Amazon Glacier.

#### Answer - C

Question 17 - A company is planning on moving their PostgreSQL database to AWS. They want to have the ability to have Replicas for the database and automated backup. Which of the following databases would be ideal for this scenario?

### Please select:

- A. AWS Aurora
- B. AWS PostgreSQL
- C. AWS DynamoDB
- D. AWS Redshift

# Answer - A

Question 18 - You currently have a set of Lambda functions which have business logic embedded in them. You want customers to have the ability to call these functions via HTTPS. How can this be achieved?

#### Please select:

- A. Use the API Gateway and provide integration with the AWS Lambda functions.
- B. Enable HTTP access on the AWS Lambda functions.
- C. Add EC2 Instances with an API server installed. Integrate the server with AWS Lambda functions.
- D. Use S3 websites to make calls to the Lambda functions

#### Answer - A

Question 19 - Users within a company need a place to store their documents. Each user must have his/her own location for placing the set of documents and should not be able to view another person's documents. Also, users should be able to retrieve their documents easily. Which AWS service would be ideal for this requirement?

## Please select:

- A. AWS Simple Storage Service
- B. AWS Glacier
- C. AWS Redshift
- D. AWS RDS MySQL

## Answer – A

Question 20 - A Solutions Architect is designing a solution to store and archive corporate documents and has determined that Amazon Glacier is the right solution. Data has be retrieved within 3-5 hrs as directed by the management.

Which feature in Amazon Glacier can help meet this requirement and ensure cost-effectiveness?

#### Please select:

- A. Vault Lock
- B. Expedited retrieval
- C. Bulk retrieval
- D. Standard retrieval

#### Answer - D

Question 21 - You currently have an EC2 instance hosting a web application. The number of users is expected to increase in the coming months and hence, you need to add more elasticity to your setup. Which of the following methods can help add elasticity to your existing setup? Choose 2 answers from the options given below.

#### Please select:

- A. Set up your web app on more EC2 instances and set them behind an Elastic Load Balancer.
- B. Set up an ElastiCache in front of the EC2 instance.
- C. Set up your web app on more EC2 instances and use Route 53 to route requests accordingly.
- D. Set up DynamoDB behind your EC2 Instances.

#### Answer – A and C

Question 22 - A company is hosting EC2 instances which focus on work-loads for non-production and non-priority batch loads. Also, these processes can be interrupted at any time. What is the best pricing model that can be used for EC2 instances in this case?

# Please select:

- A. Reserved instances
- B. On-Demand instances
- C. Spot instances
- D. Regular instances

### Answer - C

Question 23 - A company wants to deploy docker containers to the AWS Cloud. They also want a highly scalable service which can help manage the orchestration of these containers. Which of the following would be ideal for such a requirement?

## Please select:

- A. Use the Amazon Elastic Container Service for Kubernetes.
- B. Install a custom orchestration tool on EC2 Instances.
- C. Use SQS to orchestrate the messages between docker containers.
- D. Use AWS Lambda functions to embed the logic for container orchestration.

# Answer - A

Question 24 - Which of the following AWS services should be implemented in multiple Availability Zones for high availability solutions? Choose 2 answers from the options below.

# Please select:

- A. Amazon DynamoDB
- B. Amazon Elastic Compute Cloud (EC2)
- C. Amazon Elastic Load Balancing
- D. Amazon Simple Storage Service (S3)

#### Answer - B and C

Question 25 - You have created your own VPC and subnet in AWS and launched an instance in that subnet. On attaching an Internet Gateway to the VPC, you see that the instance has a public IP. The route table is shown below:

The instance still cannot be reached from the Internet. Which of the below changes need to be made to the route table to ensure that the issue is resolved?

#### Please select:

- A. Add the following entry to the route table 0.0.0.0/0->Internet Gateway
- B. Modify the above route table -10.0.0.0/16 ->Internet Gateway
- C. Add the following entry to the route table 10.0.0.0/16 ->Internet Gateway
- D. Add the following entry to the route table 0.0.0.0/16->Internet Gateway

## Answer – A

Question 26 - Your company's management team has asked you to devise a disaster recovery strategy for the current resources hosted in AWS. They want to minimize costs, but be able to spin up the infrastructure when needed in another region. How could you accomplish this with the LEAST costs in mind?

# Please select:

- A. Create a duplicate of the entire infrastructure in another region.
- B. Create a Pilot Light infrastructure in another region.
- C. Use Elastic Beanstalk to create another copy of the infrastructure in another region if a disaster occurs in the primary region.
- D. Use CloudFormation to spin up resources in another region if a disaster occurs in the primary region.

### Answer – D

Question 27 - You create an Auto Scaling Group which is used to spin up instances On Demand. As an architect, you need to ensure that the instances are pre-installed with a software when they are launched. What are the ways in which you can achieve this? Choose 2 answers from the options given below.

#### Please select:

- A. Add the software installation to the configuration for the Auto Scaling Group.
- B. Add the scripts for the installation in the User data section.
- C. Create a golden image and then create a launch configuration.
- D. Ask the IT operations team to install the software as soon as the instance is launched.

#### Answer - B and C

Question 28 - You are building a stateless architecture for an application which will consist of web servers and an Auto Scaling Group. Which of the following would be an ideal storage mechanism for Session data?

# Please select:

- A. AWS DynamoDB
- B. AWS Redshift
- C. AWS EBS Volumes
- D. AWS S3

#### Answer – A

Question 29 - You have a set of IIS Servers running on EC2 Instances. You want to collect and process the log files generated from these IIS Servers. Which of the below services is ideal to run in this scenario?

# Please select:

- A. Amazon S3 for storing the log files and Amazon EMR for processing the log files.
- B. Amazon S3 for storing the log files and EC2 Instances for processing the log files.
- C. Amazon EC2 for storing and processing the log files.
- D. Amazon DynamoDB to store the logs and EC2 for running custom log analysis scripts.

#### Answer – A

Question 30 - You need to ensure that objects in an S3 bucket are available in another region. This is because of the criticality of the data that is hosted in the S3 bucket. How can you achieve this in the easiest way possible?

#### Please select:

- A. Enable Cross-Region Replication for the bucket.
- B. Write a script to copy the objects to another bucket in the destination region.
- C. Create an S3 snapshot in the destination region.
- D. Enable versioning which will copy the objects to the destination region.

# Answer - A

Question 31 - You want to build and deploy code functions in the AWS Cloud, but do not want to manage the infrastructure. Which of the following services can help meet this requirement?

## Please select:

- A. AWS EC2
- B. AWS API Gateway
- C. AWS Lambda
- D. AWS DynamoDB

#### Answer - C

Question 32 - A storage solution is required in AWS to store videos uploaded by the user. After a period of a month, these videos can be deleted. How should this be implemented in an cost-effective manner?

# Please select:

- A. Use EBS Volumes to store the videos. Create a script to delete the videos after a month.
- B. Use transition rule in S3 to move the files to Glacier and use expiration rule to delete it after 30 days.
- C. Store the videos in Amazon Glacier and then use Lifecycle Policies.
- D. Store the videos using Stored Volumes. Create a script to delete the videos after a month.

#### Answer – B

Question 33 - You want to keep a check on the Active EBS Volumes, Active Snapshots and Elastic IP Addresses you use, to ensure you don't go beyond the service limit. Which of the below services can help in this regard?

#### Please select:

- A. AWS CloudWatch
- B. AWS EC2
- C. AWS Trusted Advisor
- D. AWS SNS

## Answer - C

Question 34 - You have an EC2 Instance in a particular region. This EC2 Instance has a preconfigured software running on it. You have been requested to create a disaster recovery solution in case the instance in the region fails. Which of the following is the best solution?

- A. Create a duplicate EC2 Instance in another AZ. Keep it in the shutdown state. When required, bring it back up.
- B. Backup the EBS data volume. If the instance fails, bring up a new EC2 instance and attach the volume.
- C. Store the EC2 data on S3. If the instance fails, bring up a new EC2 instance and restore the data from S3.
- D. Create an AMI of the EC2 Instance and copy it to another region.

#### Answer - D

Question 35 - You work in the media industry and have created a web application where users will be able to upload photos they create to your website. This web application must be able to call the S3 API in order to be able to function. Where should you store your API credentials whilst maintaining the maximum level of security?

## Please select:

- A. Save the API credentials to your PHP files.
- B. Don't save your API credentials. Instead create a role in IAM and assign this role to an EC2 instance when you first create it.
- C. Save your API credentials in a public Github repository.
- D. Pass API credentials to the instance using instance user data.

# Answer – B

Question 36 - You need to ensure that data stored in S3 is encrypted but do not want to manage the encryption keys. Which of the following encryption mechanisms can be used in this case?

# Please select:

A. SSE-S3

B. SSE-C

C. SSE-KMS

D. SSE-SSL

#### Answer - A

Question 37 - An organization is managing a Redshift Cluster in AWS. They need to monitor the performance of this Redshift cluster to ensure that it is performing as efficiently as possible. Which of the following services can be used for achieving this requirement?

## Please select:

- A. CloudTrail
- B. VPC Flow Logs
- C. CloudWatch
- D. AWS Trusted Advisor

# Answer - C

Question 38 - Your company currently has an S3 bucket in AWS. The objects in S3 are accessed quite frequently. Which of the following is an implementation step that can be considered to reduce the cost of accessing contents from the S3 bucket?

#### Please select:

- A. Place the S3 bucket behind a CloudFront distribution.
- B. Enable Versioning on the S3 bucket.
- C. Enable Encryption on the S3 bucket.
- D. Place the S3 bucket behind an API Gateway.

#### Answer - A

Question 39 - You have an application in which users subscribe to a service using their email ID. They should be able to receive messages published by the service and this needs to be done using AWS Components. Which of the below would be a probable service included in this architecture?

## Please select:

- A. AWS SNS
- B. AWS Config
- C. AWS S3
- D. AWS Glacier

#### Answer - A

Question 40 - IOT sensors monitor the number of bags that are handled at an airport. The data gets sent back to a Kinesis stream with default settings. Every alternate day, the data from the stream is sent to S3 for processing. But it is noticed that S3 is not receiving all of the data that is being sent to the Kinesis stream. What could be the reason for this?

# Please select:

- A. The sensors probably stopped working on some days, hence data is not sent to the stream.
- B. S3 can only store data for a day.
- C. Data records are only accessible for a default of 24 hours from the time they are added to a stream.
- D. Kinesis streams are not meant to handle IoT related data.

# Answer - C

Question 41 - A company needs to have a columnar structured database storage suitable to perform complex analytic queries against petabytes of structured data, Which of the following options can meet this requirement?

## Please select:

- A. Amazon Redshift
- B. Amazon RDS
- C. ElastiCache
- D. DynamoDB

# Answer - A

Question 42 - There is a requirement to host a database on an EC2 Instance. The EBS Volume is required to support a high rate of IOPS since a large number of read and write requests are expected on the database.

Which Amazon EBS Volume type can meet the performance requirements of this database? Please select:

A. EBS Provisioned IOPS SSD

B. EBS Throughput Optimized HDD

C. EBS General Purpose SSD

D. EBS Cold HDD

#### Answer – A

Question 43 - You have a requirement for deploying an existing Java based application to AWS. There is a need for automatic scaling for the underlying environment. Which of the following can be used to deploy this environment in the quickest way possible?

#### Please select:

- A. Deploy to an S3 bucket and enable web site hosting.
- B. Use the Elastic Beanstalk service to provision the environment.
- C. Use EC2 with Auto Scaling for the environment.
- D. Use AMIs to build EC2 instances for deployment.

#### Answer - B

Question 44 - There is a requirement to upload a million files to S3. Which of the following can be used to ensure optimal performance?

# Please select:

- A. Use a date for the prefix.
- B. Use a hexadecimal hash for the prefix.
- C. Use a date for the suffix.
- D. Use a sequential ID for the suffix.

#### Answer – B

Question 45 - You want to build a decoupled, highly available and fault tolerant architecture for your application in AWS. You decide to use EC2, the Classic Load Balancer, Auto Scaling and Route 53. Which one of the following additional services should you involve in this architecture?

- A. AWS SNS
- B. AWS SQS
- C. AWS API Gateway

# D. AWS Config

#### Answer - B

Question 46 - You have been tasked with architecting an application in AWS. The architecture would consist of EC2, the Classic Load Balancer, Auto Scaling and Route 53. There is a directive to ensure that Blue-Green deployments are possible in this architecture. Which routing policy could you ideally use in Route 53 for achieving Blue-Green deployments?

#### Please select:

- A. Simple
- B. Multi-answer
- C. Latency
- D. Weighted

# Answer - D

Question 47 - A company is planning to deploy an application in AWS. This application requires an EC2 Instance to continuously perform log processing activities requiring at least 500MiB/s of data throughput. Which of the following is the best storage option for this requirement?

# Please select:

- A. EBS IOPS
- B. EBS SSD
- C. EBS Throughput Optimized
- D. EBS Cold Storage

# Answer – C

Question 48 - You are required to connect 2 VPCs in different accounts. How can this be achieved?

# Please select:

- A. Use Security Groups to map both VPCs.
- B. Use the VPC Route Tables to map both VPCs.
- C. Use Consolidating billing to connect both accounts.
- D. Use VPC Peering to connect both VPCs.

### Answer – D

Question 49 - You need to ensure that instances in a private subnet can access the Internet. The solution should be highly available and ensure less maintenance overhead. Which of the following would ideally fit this requirement?

- A. Host the NAT Instance in the private subnet.
- B. Host the NAT Instance in the public subnet.
- C. Use the NAT Gateway in the private subnet.
- D. Use the NAT Gateway in the public subnet.

# Answer - D

Question 50 - You need to have a Data storage layer in AWS. Following are the key requirements:

- a) Storage of JSON documents
- b) Availability of Indexes
- c) Automatic scaling

Which of the following would be an ideal storage layer for the above requirements?

Please select:

- A. AWS DynamoDB
- **B. AWS EBS Volumes**
- C. AWS S3
- D. AWS Glacier

# Answer – A

Question 51 - You have a set of Docker images that you use for building containers. You want to start using the Elastic Container Service and utilize the Docker images. You need a place to store these Docker images. Which of the following can be used for this purpose?

# Please select:

- A. Use AWS DynamoDB to store the Docker images.
- B. Use AWS RDS to store the Docker images.
- C. Use EC2 Instances with EBS Volumes to store the Docker images.
- D. Use the ECR Service to store the Docker images.

# Answer - D

Question 52 - You need to start using resources in AWS to build a big data processing system. Which one of the following services would you ideally use for this requirement?

# Please select:

- A. AWS DynamoDB
- B. AWS EMR
- C. AWS ECS
- D. AWS ECR

# Answer - B

Question 53 - You are working on creating a mobile application for your company. This application is being built to work with DynamoDB as the back end and JavaScript as the front end. During application usage, you notice that there are spikes in the application, especially in the DynamoDB area. Which one of the below options provides the most cost-effective and scalable architecture for this application?

#### Please select:

- A. Auto scale DynamoDB to meet the requirements.
- B. Increase write capacity of DynamoDB tables to meet the peak loads.
- C. Create a service that pulls SQS messages and writes these to DynamoDB to handle sudden spikes in DynamoDB.
- D. Launch DynamoDB in Multi-AZ configuration with a global index to balance writes.

#### Answer - C

Question 54 - You are building a large-scale confidential documentation web server on AWS and all of its documentation will be stored on S3. One of the requirements is that it should not be publicly accessible from S3 directly, and CloudFront would be needed to accomplish this. Which of the methods listed below would satisfy the outlined requirements? Choose an answer from the options below.

# Please select:

- A. Create an Identity and Access Management (IAM) user for CloudFront and grant access to the objects in your S3 bucket to that IAM User.
- B. Create an Origin Access Identity (OAI) for CloudFront and grant access to the objects in your S3 bucket to that OAI.
- C. Create individual policies for each bucket the documents are stored in, and grant access only to CloudFront in these policies.
- D. Create an S3 bucket policy that lists the CloudFront distribution ID as the Principal and the target bucket as the Amazon Resource Name (ARN).

#### Answer – B

Question 55 - Your company is planning on hosting their development, test and production applications on EC2 Instances in AWS. They are worried about how access control would be given to relevant IT Admins for each of the above environments. As an architect, what would you suggest for managing the relevant accesses?

# Please select:

- A. Add tags to the instances marking each environment and then segregate access using IAM Policies.
- B. Add Userdata to the underlying instances to mark each environment.
- C. Add Metadata to the underlying instances to mark each environment.
- D. Add each environment to a separate Auto Scaling Group.

### Answer - A

Question 56 - You want to set up a public website on AWS. Your requirements are as follows:

You want the database and the application server running on AWS VPC.

You want the database to be able to connect to the Internet, specifically for patch upgrades.

You do not want to receive any incoming requests from the Internet to the database.

Which of the following solutions would best satisfy all the above requirements for this planned public AWS website? Choose the correct answer from the options below.

# Please select:

- A. Set up the database in a private subnet with a security group which only allows outbound traffic.
- B. Set up the database in a public subnet with a security group which only allows inbound traffic.
- C. Set up the database in a local data center and use a private gateway to connect the application to the database.
- D. Set up the public website on a public subnet and set up the database in a private subnet which connects to the Internet via a NAT Instance.

## Answer - D

Question 57 - A company has a Redshift cluster for petabyte-scale data warehousing. The data within the cluster is easily reproducible from additional data stored on Amazon S3. The company wants to reduce the overall total cost of running this Redshift cluster. Which scenario would best meet the needs of the running cluster, while still reducing total overall ownership of the cluster? Choose the correct answer from the options below.

#### Please select:

A. Instead of implementing automatic daily backups, write a CLI script that creates manual snapshots every few days. Copy the manual snapshot to a secondary AWS region for disaster recovery situations.

- B. Enable automated snapshots but set the retention period to a lower number to reduce storage costs.
- C. Implement daily backups, but do not enable multi-region copy to save data transfer costs.
- D. Disable automated and manual snapshots on the cluster.

## Answer - D

Question 58 - You have an application to be setup in AWS, and the following points are to be considered:

- a) A Web tier hosted on EC2 Instances
- b) Session data to be written to DynamoDB
- c) Log files to be written to Microsoft SQL Server

How will you ensure that the application writes data to a DynamoDB table?

- Please select:

  A. Add an IAM user to a running EC2 instance.
- B. Add an IAM user that allows write access to the DynamoDB table.
- C. Create an IAM role that allows read access to the DynamoDB table.
- D. Create an IAM role that allows write access to the DynamoDB table.

#### Answer - D

Question 59 - You are performing a Load Testing exercise on your application hosted on AWS. While testing your Amazon RDS MySQL DB Instance, you notice that your application becomes non responsive when you reach 100% CPU utilization. Your application is read-heavy. What methods will help scale your data-tier to meet the application's needs? Choose three answers from the options given below.

## Please select:

- A. Add Amazon RDS DB Read Replicas, and have your application direct read queries to them.
- B. Add your Amazon RDS DB Instance to an Auto Scaling group and configure your CloudWatch metric based on CPU utilization.
- C. Use an Amazon SQS queue to throttle data going to the Amazon RDS DB Instance.
- D. Use ElastiCache in front of your Amazon RDS DB to cache common queries.
- E. Shard your data set among multiple Amazon RDS DB Instances.
- F. Enable Multi-AZ for your Amazon RDS DB Instance.

# Answer – A, D and E

Question 60 - You work for a large company having multiple applications which are very different from each other. These are built using different programming languages. How can you deploy these applications as quickly as possible?

# Please select:

- A. Develop each app in one Docker container and deploy using Elastic Beanstalk.
- B. Create a Lambda function deployment package consisting of code and any dependencies.
- C. Develop each app in a separate Docker container and deploy using Elastic Beanstalk.
- D. Develop each app in separate Docker containers and deploy using CloudFormation.

# Answer – C

Question 61 - You are designing a system which needs at minimum, 8 m4.large instances operating to service traffic. While designing a system for high availability in the us-east-1 region having 6 Availability Zones, your company needs to be able to handle the death of a full availability zone. How should you distribute the servers to save as much cost as possible, assuming all of the EC2 nodes are properly linked to an ELB? Your VPC account can utilize us-east-1's AZs a through f, inclusive.

## Please select:

- A. 3 servers in each of AZs a through d, inclusive.
- B. 8 servers in each of AZs a and b.
- C. 2 servers in each of AZs a through e, inclusive.
- D. 4 servers in each of AZs a through c, inclusive.

# Answer - C

Question 62 - You have been given a business requirement to retain log files for your application for 10 years. You need to regularly retrieve the most recent logs for troubleshooting. Your logging system must be cost-effective, given the large volume of logs. What technique should you use to meet these requirements?

# Please select:

- A. Store your log in Amazon CloudWatch Logs.
- B. Store your logs in Amazon Glacier.
- C. Store your logs in Amazon S3, and use Lifecycle Policies to archive to Amazon Glacier.
- D. Store your logs on Amazon EBS, and use Amazon EBS Snapshots to archive them.

# Answer - C

Question 63 - An application in AWS is currently running in the Singapore region. You have been asked to implement disaster recovery for the same. So, if the application goes down in the Singapore region, it has to be started in the Asia region. Your application relies on pre-built AMIs. As a part of your disaster recovery strategy, which of the below points would you consider?

## Please select:

- A. Nothing, because all AMIs by default are available in any region as long as they are created within the same account.
- B. Copy the AMI from the Singapore region to the Asia region. Modify the Auto Scaling groups in the backup region to use the new AMI ID in the backup region.
- C. Modify the image permissions and share the AMI to the Asia region.
- D. Modify the image permissions to share the AMI with another account, then set the default region to the backup region.

## Answer - B

Question 64 - You are an AWS Solutions Architect and are architecting an application environment on AWS. Which service or service feature would you enable to take advantage of monitoring to ensure that auditing the environment for compliance is easy and follows strict security compliance requirements?

# Please select:

- A. CloudTrail for security logs
- B. SSL Logging
- C. Encrypted data storage
- D. Multi Factor Authentication

# Answer – A

Question 65 - As a part of your application architecture requirements, the company you are working for has requested the ability to run analytics against all the combined log files from the Elastic Load Balancer. Which services are used together to collect logs and process log file analysis in an AWS environment? Choose the correct option.

- A. Amazon DynamoDB to store the logs and EC2 for running custom log analysis scripts
- B. Amazon EC2 for storing and processing the log files

- C. Amazon S3 for storing the ELB log files and EC2 for processing the log files in analysis
- D. Amazon S3 for storing ELB log files and Amazon EMR for processing the log files in analysis

## Answer - D

Question 1 - There is a requirement to store documents in AWS and the documents need to be version controlled. Which of the following storage options would be an ideal choice for this scenario? Please select:

- A. Amazon S3
- B. Amazon EBS
- C. Amazon EFS
- D. Amazon Glacier

# Answer - A

Question 2 - An application currently consists of an EC2 Instance hosting a Web application. The Web application connects to an AWS RDS database. Which of the following can be used to ensure that the database layer is highly available?

#### Please select:

- A. Create another EC2 Instance in another Availability Zone and host a replica of the database.
- B. Create another EC2 Instance in another Availability Zone and host a replica of the Web server.
- C. Enable Read Replica for the AWS RDS database.
- D. Enable Multi-AZ for the AWS RDS database.

## Answer - D

Question 3 - An application currently accepts users to upload files to an S3 bucket. You want to ensure that the file name for each uploaded file is stored in a DynamoDB table. How can this be achieved? Choose 2 answers from the options given below. Each answer forms part of the solution.

# Please select:

- A. Create an AWS Lambda function to insert the required entry for each uploaded file.
- B. Use AWS CloudWatch to probe for any S3 event.
- C. Add an event with notification send to Lambda.
- D. Add the CloudWatch event to the DynamoDB table streams section.

## Answer - A and C

Question 4 - A company is migrating an on-premise MySQL database to AWS. Following are the key requirements:

- a) Ability to support an initial size of 5TB
- b) Ability to allow the database to double in size
- c) Replication Lag to be kept under 100 milliseconds

Which Amazon RDS engine meets these requirements?

Please select:

- A. MySQL
- B. Microsoft SQL Server
- C. Oracle
- D. Amazon Aurora

# Answer - D

Question 5 - A company is required to host a static web site in AWS. Which of the following would be an easy and cost-effective way to set this up?

## Please select:

- A. Use CloudFormation templates to have the web site setup.
- B. Create an EC2 Instance, install the web server and then have the site setup.
- C. Use S3 web site hosting to host the web site.
- D. Use Elastic Beanstalk to host the web site.

# Answer - C

Question 6 - An application needs to have a database hosted in AWS. The database will be hosted on an EC2 Instance. The application itself does not have a high usage ratio, hence the reads and writes on the database would be limited to a bare minimum. What is the MOST cost effective storage type that could be used by the underlying EC2 instance hosting the database?

# Please select:

- A. Amazon EBS provisioned IOPS SSD
- B. Amazon EBS Throughput Optimized HDD
- C. Amazon EBS General Purpose SSD
- D. Amazon EFS

## Answer - C

Question 7 - An application needs to have files stored in AWS. The file system needs to have the ability to be mounted on various Linux EC2 Instances. Which of the following would be an ideal storage service for this requirement?

# Please select:

- A. Amazon EBS
- B. Amazon EFS
- C. Amazon S3
- D. Amazon EC2 Instance store

# Answer - B

Question 8 - An application allows users to upload images to an S3 bucket. Initially these images will be downloaded quite frequently, but after some time, the images might only be accessed once a week and the retrieval time should be as minimal as possible.

What could be done to ensure a COST effective solution? Choose 2 answers from the options below. Each answer forms part of the solution.

# Please select:

- A. Store the objects in Amazon Glacier.
- B. Store the objects in S3 Standard storage.
- C. Create a Lifecycle Policy to transfer the objects to S3 Standard storage after a certain duration of time
- D. Create a Lifecycle Policy to transfer the objects to S3 Infrequent Access storage after a certain duration of time.

Answer - B and D

Question 9 - A company needs a solution to store and archive corporate documents and has determined that Amazon Glacier is the right solution. It is required that data is delivered within 5 minutes of a retrieval request.

Which feature in Amazon Glacier can help meet this requirement? Please select:

- A. Defining a Vault Lock
- B. Using Expedited retrieval
- C. Using Bulk retrieval
- D. Using Standard retrieval

Answer – B

Question 10 - A company wants to use Kubernetes as an orchestration tool for their application containers. They need to have a fully managed solution for this. Which one of the following services would help fulfill this requirement?

Please select:

- A. AWS EKS
- B. AWS Lambda
- C. AWS API Gateway
- D. AWS ELB

Answer - A

Question 11 - You plan to use Auto Scaling groups to maintain the performance of your web application. How can you ensure that the scaling activity has sufficient time to stabilize without executing another scaling action?

# Please select:

- A. Modify the Instance User Data property with a timeout interval.
- B. Increase the Auto Scaling Cooldown timer value.
- C. Enable the Auto Scaling cross zone balancing feature.
- D. Disable CloudWatch alarms till the application stabilizes.

#### Answer - B

Question 12 - A company hosts a popular web application that connects to an Amazon RDS MySQL DB instance running in a private VPC subnet created with default ACL settings. The IT Security department has identified a DDoS attack from a suspecting IP. How can you protect the subnets from this attack?

# Please select:

- A. Change the Inbound Security Groups to deny access from the suspecting IP.
- B. Change the Outbound Security Groups to deny access from the suspecting IP.
- C. Change the Inbound NACL to deny access from the suspecting IP.
- D. Change the Outbound NACL to deny access from the suspecting IP.

# Answer – C

Question 13 - A company is planning on allowing their users to upload and read objects from an S3 bucket. Due to the numerous amount of users, the read/write traffic will be very high. How should the architect maximize Amazon S3 performance?

# Please select:

- A. Prefix each object name with a random string.
- B. Use the STANDARD\_IA storage class.
- C. Prefix each object name with the current data.
- D. Enable versioning on the S3 bucket.

## Answer - A

Question 14 - An EC2 Instance setup in AWS will host an application which will make API calls to the Simple Storage Service. What is an ideal way for the application to access the Simple Storage Service?

- A. Pass API credentials to the instance using instance user data.
- B. Store API credentials as an object in a separate Amazon S3 bucket.
- C. Embed the API credentials into your application.
- D. Create and Assign an IAM role to the EC2 Instance.

## Answer - D

Question 15 - Videos are uploaded to an S3 bucket, and you need to provide access to users to view the same. What is the best way to do so, while maintaining a good user experience for all users regardless of the region in which they are located?

#### Please select:

- A. Enable Cross-Region Replication for the S3 bucket to all regions.
- B. Use CloudFront with the S3 bucket as the source.
- C. Use API Gateway with S3 bucket as the source.
- D. Use AWS Lambda functions to deliver the content to users.

#### Answer – B

Question 16 - An organization has a requirement to store 10TB worth of scanned files. They are required to have a search application in place to search through the scanned files.

Which of the below mentioned options is ideal for implementing the search facility? Please select:

A. Use S3 with reduced redundancy to store and serve the scanned files. Install a commercial search application on EC2 Instances and configure with Auto-Scaling and an Elastic Load Balancer.

- B. Model the environment using CloudFormation. Use an EC2 instance running Apache webserver and an open source search application, stripe multiple standard EBS volumes together to store the scanned files with a search index.
- C. Use S3 with standard redundancy to store and serve the scanned files. Use CloudSearch for query processing, and use Elastic Beanstalk to host the website across multiple Availability Zones.
- D. Use a single-AZ RDS MySQL instance to store the search index for the scanned files and use an EC2 instance with a custom application to search based on the index.

## Answer - C

Question 17 - You work as an AWS Architect for a company which has an on-premise data center. They want to connect their on-premise infra to the AWS Cloud. How can this be achieved?

Note that this connection must have the maximum throughput and be dedicated for the company.

# Please select:

A. Use AWS Express Route

B. Use AWS Direct Connect

C. Use AWS VPC Peering

D. Use AWS VPN

# Answer - B

Question 18 - A concern raised in your company is that developers could potentially delete production-based EC2 resources. As a Cloud Admin, which of the below options would you choose to help alleviate this concern? Choose 2 options.

## Please select:

- A. Tag the production instances with a production-identifying tag and add resource-level permissions to the developers with an explicit deny on the terminate API call to instances with the production tag.
- B. Create a separate AWS account and add the developers to that account.
- C. Modify the IAM policy on the developers to require MFA before deleting EC2 instances, and disable MFA access to the employee.
- D. Modify the IAM policy on the developers to require MFA before deleting EC2 instances.

## Answer - A and B

Question 19 - A company needs to monitor the read and write IOPS metrics for their AWS MySQL RDS instance and send real-time alerts to their Operations team. Which AWS services can accomplish this? Choose 2 answers from the options given below.

# Please select:

- A. Amazon Simple Email Service
- B. Amazon CloudWatch
- C. Amazon Simple Queue Service
- D. Amazon Route 53
- E. Amazon Simple Notification Service

# Answer – B and E

Question 20 - You run an ad-supported photo-sharing website using S3 to serve photos to visitors of your site. At some point you find out that other sites have been linking to photos on your site, causing loss to your business. What is an effective method to mitigate this? Choose the correct answer from the options below:

## Please select:

- A. Use CloudFront distributions for static content.
- B. Store photos on an EBS volume of the web server.
- C. Remove public read access and use signed URLs with expiry dates.
- D. Block the IPs of the offending websites in Security Groups.

## Answer - C

Question 21 - A company wants to setup a template for deploying resources to AWS. They want this to be dynamic in nature so that the template can pick up parameters and then spin up resources based on those parameters. Which of the following AWS services would be ideal for this requirement?

- A. AWS Beanstalk
- B. AWS CloudFormation
- C. AWS CodeBuild
- D. AWS CodeDeploy

# Answer - B

Question 22 - Your IT Security department has mandated that all data on EBS volumes created for underlying EC2 Instances needs to be encrypted. Which of the following can help achieve this?

# Please select:

- A. AWS KMS
- B. AWS Certificate Manager
- C. API Gateway with STS
- D. IAM Access Key

## Answer – A

Question 23 - A company's business continuity department is worried about the EBS Volumes hosted in AWS and wants to ensure that redundancy is achieved for the same. What must be done to achieve this in a cost-effective manner?

# Please select:

- A. Nothing, since by default, EBS Volumes are replicated within their Availability Zones.
- B. Copy the data to S3 bucket for data redundancy.
- C. Create EBS Snapshots in another Availability Zone for data redundancy.
- D. Copy the data to a DynamoDB table for data redundancy.

# Answer – A

Question 24 - A mobile application hosted on AWS needs to access a Data Store in AWS. With each item measuring around 10KB in size, the latency of data access must remain consistent despite very high application traffic. Which of the following would be an ideal Data Store for the application?

## Please select:

- A. AWS DynamoDB
- **B. AWS EBS Volumes**
- C. AWS Glacier
- D. AWS Redshift

## Answer - A

Question 25 - A company is planning to design a Microservices architectured application that will be hosted in AWS. This entire architecture needs to be decoupled whenever possible. Which of the following services can help achieve this?

# Please select:

- A. AWS SNS
- B. AWS ELB
- C. AWS Auto Scaling
- D. AWS SQS

## Answer - D

Question 26 - You are developing a mobile application that needs to issue temporary security credentials to users. This is essential due to security concerns. Which of the below services can help achieve this?

# Please select:

- A. AWS STS
- B. AWS Config
- C. AWS Trusted Advisor
- D. AWS Inspector

# Answer - A

Question 27 - Your architecture for an application currently consists of EC2 Instances sitting behind a classic ELB. The EC2 Instances are used to serve an application and are accessible through the internet. What can be done to improve this architecture in the event that the number of users accessing the application increases?

# Please select:

- A. Add another ELB to the architecture.
- B. Use Auto Scaling Groups.
- C. Use an Application Load Balancer instead.
- D. Use the Elastic Container Service.

## Answer – B

Question 28 - You are an architect for a gaming application which is in the design phase. Which of the following services can be used to ensure optimal performance and least latency for gaming users?

- A. AWS Auto Scaling
- B. AWS ELB
- C. AWS ElastiCache
- D. AWS VPC

## Answer - C

Question 29 - You are the architect for a business intelligence application which reads data from a MySQL database hosted on an EC2 Instance. The application experiences a high number of read and write requests.

Which Amazon EBS Volume type can meet the performance requirements of this database? Please select:

A. EBS Provisioned IOPS SSD

B. EBS Throughput Optimized HDD

C. EBS General Purpose SSD

D. EBS Cold HDD

# Answer – A

Question 30 - An organization planning to use AWS for their production roll out, wants to implement automation for deployment such that it will automatically create a LAMP stack, download the latest PHP installable from S3 and setup the ELB. Which of the below mentioned AWS services meets the requirement for making an orderly deployment of the software?

# Please select:

A. AWS Elastic Beanstalk

B. AWS CloudFront

C. AWS CloudFormation

D. AWS DevOps

## Answer - A

Question 31 - Your company is planning on using the API Gateway service to manage APIs for developers and users. There is a need to segregate the access rights for both developers and users. How can this be accomplished?

# Please select:

A. Use IAM permissions to control the access.

B. Use AWS Access keys to manage the access.

C. Use AWS KMS service to manage the access.

D. Use AWS Config Service to control the access.

#### Answer - A

Question 32 - You currently have 2 development environments hosted in 2 different VPCs in an AWS account in the same region. There is now a need for resources from one VPC to access another. How can this be accomplished?

## Please select:

- A. Establish a Direct Connect connection.
- B. Establish a VPN connection.
- C. Establish VPC Peering.
- D. Establish Subnet Peering.

## Answer - C

Question 33 - Your company is planning on using the EMR service available in AWS for running their big data framework and wants to minimize the cost for running the EMR service. Which of the following could help achieve this?

#### Please select:

- A. Running the EMR cluster in a dedicated VPC
- B. Choosing Spot Instances for the underlying nodes
- C. Choosing On-Demand Instances for the underlying nodes
- D. Disable automated backups

## Answer - B

Question 34 - You have an S3 bucket hosted in AWS which is used to store promotional videos you upload. You need to provide access to users for a limited duration of time. How can this be achieved?

# Please select:

- A. Use versioning and enable a timestamp for each version.
- B. Use Pre-Signed URLs.
- C. Use IAM Roles with a timestamp to limit the access.
- D. Use IAM policies with a timestamp to limit the access.

## Answer - B

Question 35 - An application currently writes a large number of records to a DynamoDB table in one region. There is a requirement for a secondary application to retrieve new records written to the DynamoDB table every 2 hours and process the updates accordingly. Which of the following is an ideal way to ensure that the secondary application gets the relevant changes from the DynamoDB table?

## Please select:

A. Insert a timestamp for each record and then scan the entire table for the timestamp as per the last 2 hours.

- B. Create another DynamoDB table with the records modified in the last 2 hours.
- C. Use DynamoDB Streams to monitor the changes in the DynamoDB table.
- D. Transfer records to S3 which were modified in the last 2 hours.

#### Answer - C

Question 36 - Your company has recently started using AWS services for their daily operations. As a cloud administrator, which of the following services would you recommend using to have an insight on securing the infrastructure and for cost optimization?

# Please select:

- A. AWS Inspector
- **B. AWS Trusted Advisor**
- C. AWS WAF
- D. AWS Config

## Answer - B

Question 37 - Your IT Security department has mandated that all traffic flowing in and out of EC2 instances needs to be monitored. Which of the below services can help achieve this?

## Please select:

- A. Trusted Advisor
- B. VPC Flow Logs
- C. Use CloudWatch metrics
- D. Use CloudTrail

## Answer - B

Question 38 - A company is currently utilizing Redshift cluster as their production warehouse. As a cloud architect, you are tasked to ensure that the disaster recovery is in place. Which of the following options is best in addressing this issue?

# Please select:

- A. Take a copy of the underlying EBS volumes to S3 and then do Cross-Region Replication.
- B. Enable Cross-Region Snapshots for the Redshift Cluster.
- C. Create a CloudFormation template to restore the Cluster in another region.
- D. Enable Cross Availability Zone Snapshots for the Redshift Cluster.

## Answer - B

Question 39 - You have an AWS RDS PostgreSQL database hosted in the Singapore region. You need to ensure that a backup database is in place and the data is asynchronously copied. Which of the following would help fulfill this requirement?

- A. Enable Multi-AZ for the database
- B. Enable Read Replicas for the database
- C. Enable Asynchronous replication for the database
- D. Enable manual backups for the database

## Answer – B

Question 40 - Your current log analysis application takes more than four hours to generate a report of the top 10 users of your web application. You have been asked to implement a system that can report this information in real time, ensure that the report is always up to date, and handle increases in the number of requests to your web application. Choose the option that is cost-effective and can fulfill the requirements.

## Please select:

- A. Publish your data to CloudWatch Logs, and configure your application to Auto Scale to handle the load on demand.
- B. Publish your log data to an Amazon S3 bucket. Use AWS CloudFormation to create an Auto Scaling group to scale your post-processing application which is configured to pull down your log files stored in Amazon S3.
- C. Post your log data to an Amazon Kinesis data stream and subscribe your log-processing application so that is configured to process your logging data.
- D. Configure an Auto Scaling group to increase the size of your Amazon EMR cluster.

# Answer - C

Question 41 - Your company wants to automate the deployment of new EC2 Instances. There is a need to have pre-baked Images so that the deployment of instances can be done in a faster manner. Which of the following options can help achieve this?

# Please select:

- A. Create an Elastic Beanstalk image.
- B. Create an OpsWorks image.
- C. Create an Amazon Machine image.
- D. Create an EC2 image.

## Answer – C

Question 42 - There is a requirement to load a lot of data from your on-premise network on to AWS Redshift. Which of the below options can be used for this data transfer? Choose 2 answers from the options given below.

# Please select:

- A. Data Pipeline
- **B.** Direct Connect
- C. Snowball
- D. AWS VPN

#### Answer - B and C

Question 43 - Having created a Redshift cluster in AWS, you are trying to use SQL Client tools from an EC2 Instance, but aren't able to connect to the Redshift Cluster. What must you do to ensure that you are able to connect to the Redshift Cluster from the EC2 Instance?

# Please select:

- A. Install Redshift client tools on the EC2 Instance first.
- B. Modify the VPC Security Groups.
- C. Use the AWS CLI instead of the Redshift client tools.
- D. Modify the NACL on the subnet.

## Answer – B

Question 44 - You currently work for a company that is specialized in baggage management. GPS devices installed on all the baggage, deliver the coordinates of the unit every 10 seconds. You need to process these coordinates in real-time from multiple sources. Which tool should you use to process the data?

# Please select:

- A. Amazon EMR
- B. Amazon SQS
- C. AWS Data Pipeline
- D. Amazon Kinesis

# Answer - D

Question 45 - You are planning on hosting a web and database application in an AWS VPC. The database should only be accessible by the web server. Which of the following would you change to fulfill this requirement?

# Please select:

- A. Network Access Control Lists
- **B. AWS RDS Parameter Groups**
- C. Route Tables
- D. Security groups

## Answer - D

Question 46 - A company has a requirement for block level storage which would be able to store 800GB of data. Also, encryption of the data is required. Which of the following can be used in this case?

- A. AWS EBS Volumes
- B. AWS S3
- C. AWS Glacier
- D. AWS EFS

## Answer - A

Question 47 - An application requires storage for an EC2 Instance for storing infrequently accessed data. Which of the following is a cost-effective, ideal storage option here?

# Please select:

A. EBS IOPS

B. EBS SSD

C. EBS Throughput Optimized

D. EBS Cold HDD

## Answer - D

Question 48 - As the cloud administrator of your company, you notice that one of EC2 instances is restarting frequently. There is a need to troubleshoot and analyse the system logs. What can be used in AWS to store and analyze the log files from the EC2 Instance? Choose one answer from the options below.

# Please select:

A. AWS SQS

B. AWS S3

C. AWS CloudTrail

D. AWS CloudWatch Logs

# Answer – D

Question 49 - Your company has migrated their production environment into AWS VPC 6 months ago. As a cloud architect, you are required to revise the infrastructure and ensure that it is cost-effective in the long term. There are more than 50 EC2 instances that are up and running all the time to support the business operation. What can you do to lower the cost?

# Please select:

A. Reserved instances

B. On-demand instances

C. Spot instances

D. Regular instances

## Answer – A

Please select:

Question 50 - As a Solutions architect, it is your job to design a highly available and fault tolerant infrastructure. Your company is utilizing Amazon S3 to store large amounts of file data. What steps would you take to ensure that if an Availability Zone was lost due to a natural disaster, your files would still be in place and accessible?

- A. Copy the S3 bucket to an EBS optimized backed EC2 instance.
- B. Amazon S3 is highly available and fault tolerant by design and requires no additional configuration.
- C. Enable AWS Storage Gateway using Gateway-Stored setup.
- D. Enable Cross-Region Replication for the S3 bucket.

## Answer - B

Question 51 - Your company needs to keep all system logs for audit purposes, and may rarely need to retrieve these logs for audit purposes and present them upon request within a week. The logs are 10TB in size. Which option would be the most cost-effective one for storing all these system logs?

#### Please select:

- A. Amazon Glacier
- B. S3-Reduced Redundancy Storage
- C. EBS backed storage connected to EC2
- D. AWS CloudFront

## Answer – A

Question 52 - A company is building a service using Amazon EC2 as a worker instance that will process an uploaded audio file and generate a text file. You must store both of these files in the same durable storage until the text file is retrieved. You do not know what the storage capacity requirements are. Which storage option is both cost-efficient and scalable?

## Please select:

- A. Multiple Amazon EBS Volume with snapshots
- B. A single Amazon Glacier vault
- C. A single Amazon S3 bucket
- D. Multiple instance stores

## Answer - C

Question 53 - You have configured an Auto-scaling group for which the minimum running instance is 2 and maximum running instance is 10. For the past 30 minutes, all five instances have been running at 100 CPU Utilization; however, the Auto Scaling group has not added any more instances to the group. What is the most likely cause for this? Choose 2 answers from the options given below.

## Please select:

- A. You already have 20 on-demand instances running.
- B. The Auto Scaling group's MAX size is set at five.
- C. The Auto Scaling group's scale down policy is too high.
- D. The Auto Scaling group's scale up policy has not yet been reached.

# Answer - A and D

Question 54 - Your company is utilizing CloudFront to distribute its media content to multiple regions. The content is frequently accessed by users. As a cloud architect, which of the following options would help you improve the performance of the system?

## Please select:

- A. Change the origin location from an S3 bucket to an ELB.
- B. Use a faster Internet connection.
- C. Increase the cache expiration time.
- D. Create an "invalidation" for all your objects, and recache them.

#### Answer – C

Question 55 - You have been instructed by your supervisor to devise a disaster recovery model for the resources in their AWS account. The key requirement while devising the solution is to ensure that the cost is at a minimum. Which of the following disaster recovery mechanisms would you employ in such a scenario?

# Please select:

- A. Backup and Restore
- B. Pilot Light
- C. Warm standby
- D. Multi-Site

# Answer - A

Question 56 - An application consists of the following architecture:

- a. EC2 Instances are in multiple AZ's behind an ELB.
- b. The EC2 Instances are launched via an Auto Scaling Group.
- c. There is a NAT instance used so that instances can download updates from the internet.

Due to the high bandwidth being consumed by the NAT instance, it has been decided to use a NAT Gateway. How should this be implemented?

## Please select:

- A. Use NAT Instances along with the NAT Gateway.
- B. Host the NAT instance in the private subnet.
- C. Migrate the NAT Instance to NAT Gateway and host the NAT Gateway in the public subnet.
- D. Convert the NAT instance to a NAT Gateway.

# Answer – C

Question 57 - A company has an application hosted in AWS. This application consists of EC2 Instances that sit behind an ELB with EC2 Instances. The following are requirements from an administrative perspective:

- a) Must be able to collect and analyse logs with regard to ELB's performance.
- b) Ensure that notifications are sent when the latency goes beyond 10 seconds.

Which of the following can be used to achieve this requirement? Choose 2 answers from the options given below.

# Please select:

- A. Use CloudWatch for monitoring.
- B. Enable CloudWatch logs and then investigate the logs whenever there is an issue.
- C. Enable the logs on the ELB and then investigate the logs whenever there is an issue.
- D. Use CloudTrail to monitor whatever metrics need to be monitored.

## Answer - A and C

Question 58 - Your company would like to leverage the AWS storage option and integrate it with the current on-premise infrastructure. Besides, due to business requirements, low latency access to all the data is a must. Which of the following options would be best suited for this scenario?

# Please select:

- A. Configure the Simple Storage Service.
- B. Configure Storage Gateway Cached Volume.
- C. Configure Storage Gateway Stored Volume.
- D. Configure Amazon Glacier.

# Answer – C

Question 59 - An IT company has a set of EC2 Instances hosted in a VPC. They are hosted in a private subnet. These instances now need to access resources stored in an S3 bucket. The traffic should not traverse the internet. The addition of which of the following would help fulfill this requirement?

# Please select:

- A. VPC Endpoint
- B. NAT Instance
- C. NAT Gateway
- D. Internet Gateway

## Answer - A

Question 60 - You need to host a set of web servers and database servers in an AWS VPC. Which of the following is a best practice in designing a multi-tier infrastructure?

- A. Use a public subnet for the web tier and a public subnet for the database layer.
- B. Use a public subnet for the web tier and a private subnet for the database layer.
- C. Use a private subnet for the web tier and a private subnet for the database layer.
- D. Use a private subnet for the web tier and a public subnet for the database layer.

## Answer – B

Question 61 - An IT company would like to secure their resources in their AWS Account. Which of the following options can secure data at rest and in transit in AWS? Choose 3 answers from the options given below.

## Please select:

- A. Encrypt all EBS volumes attached to EC2 Instances.
- B. Use Server-Side Encryption for S3.
- C. Use SSL/HTTPS when using the Elastic Load Balancer.
- D. Use IOPS Volumes when working with EBS Volumes on EC2 Instances.

# Answer – A, B and C

Question 62 - Your company currently has a set of EC2 Instances running a web application which sits behind an Elastic Load Balancer. You also have an Amazon RDS instance which is accessible from the web application. You have been asked to ensure that this architecture is self-healing in nature and cost-effective. Which of the following would fulfill this requirement? Choose 2 answers from the options given below.

## Please select:

- A. Use CloudWatch metrics to check the utilization of the web layer. Use Auto Scaling Group to scale the web instances accordingly based on the CloudWatch metrics.
- B. Use CloudWatch metrics to check the utilization of the databases servers. Use Auto Scaling Group to scale the database instances accordingly based on the CloudWatch metrics.
- C. Utilize the Read Replica feature for the Amazon RDS layer.
- D. Utilize the Multi-AZ feature for the Amazon RDS layer.

## Answer - A and D

Question 63 - Your company has a set of EC2 Instances that access data objects stored in an S3 bucket. Your IT Security department is concerned about the security of this architecture and wants you to implement the following:

- 1) Ensure that the EC2 Instance securely accesses the data objects stored in the S3 bucket
- 2) Prevent accidental deletion of objects

Which of the following would help fulfill the requirements of the IT Security department? Choose 2 answers from the options given below.

- A. Create an IAM user and ensure the EC2 Instances use the IAM user credentials to access the data in the bucket.
- B. Create an IAM Role and ensure the EC2 Instances use the IAM Role to access the data in the bucket.
- C. Use S3 Cross-Region Replication to replicate the objects so that the integrity of data is maintained.
- D. Use an S3 bucket policy that ensures that MFA Delete is set on the objects in the bucket.

## Answer - B and D

Question 64 - You have a requirement to get a snapshot of the current configuration of resources in your AWS Account. Which of the following services can be used for this purpose?

# Please select:

A. AWS CodeDeploy

B. AWS Trusted Advisor

C. AWS Config

D. AWS IAM

## Answer - C

Question 65 - Your company is hosting an application in AWS. The application is read intensive and consists of a set of web servers and AWS RDS. It has been noticed that the response time of the application decreases due to the load on the AWS RDS instance. Which of the following measures can be taken to scale the data tier? Choose 2 answers from the options given below.

# Please select:

A. Create Amazon DB Read Replicas. Configure the application layer to query the Read Replicas for query needs.

B. Use Auto Scaling to scale out and scale in the database tier.

C. Use SQS to cache the database queries.

D. Use ElastiCache in front of your Amazon RDS DB to cache common queries.

Answer - A and D