premises data center for the past 15 years. The company must migrate the database to AWS. The company needs to reduce operational overhead without having to modify the application's code. Which solution meets these requirements?

- A. Use AWS Database Migration Service (AWS DMS) to migrate the database servers to Amazon RDS.
- B. Use Amazon EC2 instances to migrate and operate the database servers.
- C. Use AWS Database Migration Service (AWS DMS) to migrate the database servers to Amazon DynamoDB.
- Use an AWS Snowball Edge Storage Optimized device to migrate the data from Oracle to Amazon Aurora.

Correct Answer: A Explanation:

DMS can be used for database migration(supports cross database migration too). RDS supports MySQL, PostgreSQL, Microsoft SQL Server, Oracle.

QUESTION 27

A company has two VPCs that are located in the us-west-2 Region within the same AWS account. The company needs to allow network traffic between these VPCs. Approximately 500 GB of data transfer will occur between the VPCs each month. What is the MOST cost-effective solution to connect these VPCs?

- A. Implement AWS Transit Gateway to connect the VPCs. Update the route tables of each VPC to use the transit gateway for inter-VPC communication.
- B. Implement an AWS Site-to-Stte VPN tunnel between the VPCs. Update the route tables of each VPC to use the VPN tunnel for inter-VPC communication.
- C. Set up a VPC peering connection between the VPCs. Update the route tables of each VPC to use the VPC peering connection for inter-VPC communication.
- D. Set up a 1 GB AWS Direct Connect connection between the VPCs. Update the route tables of each VPC to use the Direct Connect connection for inter-VPC communication.

Correct Answer: C

QUESTION 28

A social media company allows users to upload images to its website. The website runs on Amazon EC2 instances. During upload requests, the website resizes the images to a standard size and stores the resized images in Amazon S3. Users are experiencing slow upload requests to the website. The company needs to reduce coupling within the application and improve website performance A solutions architect must design the most operationally efficient process for image uploads. Which combination of actions should the solutions architect take to meet these requirements? (Select TWO.)

- A. Configure the application to upload images to S3 Glacier.
- B. Configure the web server to upload the original images to Amazon S3.
- C. Configure the application to upload images directly from each user's browser to Amazon S3 through the use of a presigned URL.
- D. Configure S3 Event Notifications to invoke an AWS Lambda function when an image is uploaded. Use the function to resize the image.
- E. Create an Amazon EventBridge (Amazon CloudWatch Events) rule that invokes an AWS Lambda function on a schedule to resize uploaded images.

Correct Answer: DE

QUESTION 29

An ecommerce company is creating an application that requires a connection to a third-party payment service to process payments. The payment service needs to explicitly allow the public IP address of the server that is making the payment request. However, the company's security policies do not allow any server to be exposed directly to the public internet. Which solution will meet these requirements?

- A. Provision an Elastic IP address. Host the application servers on Amazon EC2 instances in a private subnet. Assign the public IP address to the application servers.
- B. Create a NAT gateway in a public subnet. Host the application servers on Amazon EC2 instances in a private subnet. Route payment requests through the NAT gateway.
- C. Deploy an Application Load Balancer (ALB). Host the application servers on Amazon EC2 instances in a private subnet. Route the payment requests through the ALB.
- D. Set up an AWS Client VPN connection to the payment service. Host the application servers on Amazon EC2 instances in a private subnet. Route the payment requests through the VPN.

Correct Answer: C

QUESTION 30

A company's legacy application is currently relying on a single-instance Amazon RDS MySQL database without encryption. Due to new compliance requirements all existing and new data in this database must be encrypted. How should this be accomplished?

- A. Create an Amazon S3 bucket with server-side encryption enabled. Move all the data to Amazon S3. Delete the RDS instance.
- B. Enable RDS Multi-AZ mode with encryption at rest enabled. Perform a failover to the standby instance to delete the original instance.
- C. Take a snapshot of the RDS instance. Create an encrypted copy of the snapshot. Restore the RDS instance from the encrypted snapshot.
- D. Create an RDS read replica with encryption at rest enabled. Promote the read replica to master and switch the application over to the new master. Delete the old RDS instance.

Correct Answer: C

QUESTION 31

A company is developing a new online gaming application. The application will run on Amazon EC2 instances in multiple AWS Regions and will have a high number of globally distributed users A solutions architect must design the application to optimize network latency for the users. Which actions should the solutions architect take to meet these requirements? (Select TWO.)

- A. Configure AWS Global Accelerator. Create Regional endpoint groups in each Region where an EC2 fleet is hosted.
- B. Create a content delivery network (CDN) by using Amazon CloudFront. Enable caching for static and dynamic content, and specify a high expiration period.
- C. Integrate AWS Client VPN into the application. Instruct users to select which Region is closest to them after they launch the application. Establish a VPN connection to that Region.
- D. Create an Amazon Route 53 weighted routing policy. Configure the routing policy to give the highest weight to the EC2 instances in the Region that has the largest number of users.
- E. Configure an Amazon API Gateway endpoint in each Region where an EC2 fleet is hosted Instruct users to select which Region is closest to them after they launch the application. Use the API Gateway endpoint that is closest to them.

Correct Answer: AB

QUESTION 32

A company has a customer relationship management (CRM) application that stores data in an Amazon RDS DB instance that runs Microsoft SQL Server. The company's IT staff has administrative access to the database. The database contains sensitive data. The company wants to ensure that the data is not accessible to the IT staff and that only authorized personnel can view the data. What should a solutions architect do to secure the data?

- A. Use client-side encryption with an Amazon RDS managed key.
- B. Use client-side encryption with an AWS Key Management Service (AWS KMS) customer managed key.
- C. Use Amazon RDS encryption with an AWS Key Management Service (AWS KMS) default encryption key.
- Use Amazon RDS encryption with an AWS Key Management Service (AWS KMS) customer managed key.

Correct Answer: D

QUESTION 33

An application runs on Amazon EC2 instances across multiple Availability Zones. The instances run in an Amazon EC2 Auto Scaling group behind an Application Load Balancer The application performs best when the CPU utilization of the EC2 instances is at or near 40%. What should a solutions architect do to maintain the desired performance across all instances in the group?

- A. Use a simple scaling policy to dynam
- B. Amazon DynamoDB global tables
- C. Amazon RDS for MySQL with Multi-AZ enabled
- D. Amazon RDS for MySQL with a cross-Region snapshot copy

Correct Answer: A

QUESTION 34

A solutions architect must design a database solution for a high-traffic ecommerce web application. The database stores customer profiles and shopping cart information. The database must support a peak load of several million requests each second and deliver responses in milliseconds. The operational overhead for managing and scaling the database must be minimized. Which database solution should the solutions architect recommend?

- A. Amazon Aurora
- B. Amazon DvnamoDB
- C. Amazon RDS
- D. Amazon Redshift

Correct Answer: B

QUESTION 35

A company has an ecommerce application that stores data in an on-premises SQL database. The company has decided to migrate this database to AWS. However, as part of the migration, the company wants to find a way to attain sub-millisecond responses to common read requests. A

solutions architect knows that the increase in speed is paramount and that a small percentage of stale data returned in the database reads is acceptable. What should the solutions architect recommend'?

- A. Build Amazon RDS read replicas.
- B. Build the database as a larger instance type.
- C. Build a database cache using Amazon ElastiCache
- D. Build a database cache using Amazon Elasticsearch Service (Amazon ES).

Correct Answer: C

QUESTION 36

A company is automating an order management application. The company's development team has decided to use SFTP to transfer and store the business-critical information files The files must be encrypted and must be highly available. The files also must be automatically deleted a month after they are created. Which solution meets these requirements with the LEAST operational overhead?

- A. Configure an Amazon S3 bucket with encryption enabled. Use AWS transfer for SFTP to securely transfer the files to the S3 bucket. Apply an AWS Transfer for SFTP file retention policy to delete the files after a month.
- B. Install an SFTP service on an Amazon EC2 instance. Mount an Amazon Elastic File System (Amazon EFS) file share on the EC2 instance. Enable cron to delete the files after a month.
- C. Configure an Amazon Elastic File System (Amazon EFS) file system with encryption enabled. Use AWS Transfer for SFTP to securely transfer the files to the EFS file system. Apply an EFS lifecycle policy to automatically delete the files after a month.
- D. Configure an Amazon S3 bucket with encryption enabled. Use AWS Transfer for SFTP to securely transfer the files to the S3 bucket. Apply S3 Lifecycle rules to automatically delete the files after a month.

Correct Answer: D

QUESTION 37

An application running on AWS uses an Amazon Aurora Multi-AZ deployment for its database. When evaluating performance metrics, a solutions architect discovered that the database reads are causing high I/O and adding latency to the write requests against the database. What should the solutions architect do to separate the read requests from the write requests?

- A. Enable read-through caching on the Amazon Aurora database.
- B. Update the application to read from the Multi-AZ standby instance.
- C. Create a read replica and modify the application to use the appropriate endpoint.
- D. Create a second Amazon Aurora database and link it to the primary database as a read replica.

Correct Answer: C

QUESTION 38

A company is running a web application on Amazon EC2 instances in an Auto Scaling group. The application uses a database that runs on an Amazon RDS for PostgreSQL DB instance. The application performs slowly as traffic increases, and the database experiences a heavy read load during periods of high traffic. Which actions should a solutions architect take to resolve these performance issues? (Select TWO.)

- A. Enable auto scaling for the DB instance.
- B. Create a read replica for the DB instance. Configure the application to send read traffic to the read replica.
- C. Enable Multi-AZ for the DB instance. Configure the application to send read traffic to the standby DB instance.
- D. Create an Amazon ElastiCache cluster. Configure the application to cache query results in the ElastiCache cluster.
- E. Configure the Auto Scaling group subnets to ensure that the EC2 instances are provisioned in the same Availability Zone as the DB instance.

Correct Answer: BD

QUESTION 39

A company is running a multi-tier web application on premises. The web application is containerized and runs on a number of Linux hosts connected to a PostgreSQL database that contains user records. The operational overhead of maintaining the infrastructure and capacity planning is limiting the company's growth. A solutions architect must improve the application's infrastructure. Which combination of actions should the solutions architect take to accomplish this? (Select TWO.)

- A. Migrate the PostgreSQL database to Amazon Aurora
- B. Migrate the web application to be hosted on Amazon EC2 instances.
- C. Set up an Amazon CloudFront distribution for the web application content.
- D. Set up Amazon ElastiCache between the web application and the PostgreSQL database.
- E. Migrate the web application to be hosted on AWS Fargate with Amazon Elastic Container Service (Amazon ECS).

Correct Answer: CD

QUESTION 40

A solutions architect needs to design a managed storage solution for a company's application that includes high-performance machine learning. This application runs on AWS Fargate, and the connected storage needs to have concurrent access to files and deliver high performance. Which storage option should the solutions architect recommend?

- A. Create an Amazon S3 bucket for the application and establish an IAM role for Fargate to communicate with Amazon S3.
- B. Create an Amazon FSx for Lustre file share and establish an IAM role that allows Fargate to communicate with FSx for Lustre.
- C. Create an Amazon Elastic File System (Amazon EFS) file share and establish an IAM role that allows Fargate to communicate with Amazon EFS.
- D. Create an Amazon Elastic Block Store (Amazon EBS) volume for the application and establish an IAM role that allows Fargate to communicate with Amazon EBS.

Correct Answer: B

QUESTION 41

A company's website provides users with downloadable historical performance reports. The website needs a solution that will scale to meet the company's website demands globally. The solution should be cost-effective, limit the provisioning of infrastructure resources, and provide the fastest possible response time. Which combination should a solutions architect recommend to meet these requirements?