Question 1

A development team asks a database specialist to create a copy of a production Amazon RDS for MySQL DB instance every morning. The development team will use the copied DB instance as a testing environment for development. The original DB instance and the copy will be hosted in different VPCs of the same AWS account. The development team wants the copy to be available by 6 AM each day and wants to use the same endpoint address each day.

Which combination of steps should the database specialist take to meet these requirements MOST cost-effectively? (Choose three.)

Options:

A- Create a snapshot of the production database each day before the 6 AM deadline.

B- Create an RDS for MySQL DB instance from the snapshot. Select the desired DB instance size.

C- Update a defined Amazon Route 53 CNAME record to point to the copied DB instance.

D- Set up an AWS Database Migration Service (AWS DMS) migration task to copy the snapshot to the copied DB instance.

E- Use the CopySnapshot action on the production DB instance to create a snapshot before 6 AM.

F- Update a defined Amazon Route 53 alias record to point to the copied DB instance.

Answer:

A, B, C

Question 2

A company requires near-real-time notifications when changes are made to Amazon RDS DB security groups.

Which solution will meet this requirement with the LEAST operational overhead?

Options:

A- Configure an RDS event notification subscription for DB security group events.

B- Create an AWS Lambda function that monitors DB security group changes. Create an Amazon Simple Notification Service (Amazon SNS) topic for notification.

C- Turn on AWS CloudTrail. Configure notifications for the detection of changes to DB security groups.

D- Configure an Amazon CloudWatch alarm for RDS metrics about changes to DB security groups.

Answer:

A

Explanation:

Question 3

Question Type: **MultipleChoice**

A company uses Amazon Aurora MySQL as the primary database engine for many of its applications. A database specialist must create a dashboard to provide the company with information about user connections to databases. According to compliance requirements, the company must retain all connection logs for at least 7 years.

Which solution will meet these requirements MOST cost-effectively?

Options:

A- Enable advanced auditing on the Aurora cluster to log CONNECT events. Export audit logs from Amazon CloudWatch to Amazon S3 by using an AWS Lambda function that is invoked by an Amazon EventBridge (Amazon CloudWatch Events) scheduled event. Build a dashboard by using Amazon QuickSight.

B- Capture connection attempts to the Aurora cluster with AWS Cloud Trail by using the DescribeEvents API operation. Create a CloudTrail trail to export connection logs to Amazon S3. Build a dashboard by using Amazon QuickSight.

C- Start a database activity stream for the Aurora cluster. Push the activity records to an Amazon Kinesis data stream. Build a dynamic dashboard by using AWS Lambda.

D- Publish the DatabaseConnections metric for the Aurora DB instances to Amazon CloudWatch. Build a dashboard by using CloudWatch dashboards.

Answer:

A

Explanation:

https://docs.aws.amazon.com/AmazonRDS/latest/AuroraUserGuide/AuroraMySQL.Auditing.html

Question 4

Question Type: MultipleChoice

A company is developing an application that performs intensive in-memory operations on advanced data structures such as sorted sets. The application requires sub-millisecond latency for reads and writes. The application occasionally must run a group of commands as an ACID-compliant operation. A database specialist is setting up the database for this application. The database specialist needs the ability to create a new database cluster from the latest backup of the production cluster.

Which type of cluster should the database specialist create to meet these requirements?

Options:

A- Amazon ElastiCache for Memcached

B- Amazon Neptune

C- Amazon ElastiCache for Redis

D- Amazon DynamoDB Accelerator (DAX)

Answer:

C

Explanation:

https://aws.amazon.com/elasticache/redis-vs-memcached/

https://docs.aws.amazon.com/AmazonElastiCache/latest/red-ug/elasticache-use-cases.html#elasticache-for-redis-use-cases-gaming

Question 5

A company is planning to use Amazon RDS for SQL Server for one of its critical applications. The company's security team requires that the users of the RDS for

SQL Server DB instance are authenticated with on-premises Microsoft Active Directory credentials.

Which combination of steps should a database specialist take to meet this requirement? (Choose three.)

Options:

A- Extend the on-premises Active Directory to AWS by using AD Connector.

B- Create an IAM user that uses the AmazonRDSDirectoryServiceAccess managed IAM policy.

C- Create a directory by using AWS Directory Service for Microsoft Active Directory.

D- Create an Active Directory domain controller on Amazon EC2.

E- Create an IAM role that uses the AmazonRDSDirectoryServiceAccess managed IAM policy.

F- Create a one-way forest trust from the AWS Directory Service for Microsoft Active Directory directory to the on-premises Active Directory.

Answer:

C, E, F

Question 6

A company uses Microsoft SQL Server on Amazon RDS in a Multi-AZ deployment as the database engine for its application. The company was recently acquired by another company. A database specialist must rename the database to follow a new naming standard.

Which combination of steps should the database specialist take to rename the database? (Choose two.)

Options:

A- Turn off automatic snapshots for the DB instance. Rename the database with the rdsadmin.dbo.rds_modify_db_name stored procedure. Turn on the automatic snapshots.

B- Turn off Multi-AZ for the DB instance. Rename the database with the rdsadmin.dbo.rds_modify_db_name stored procedure. Turn on Multi-AZ Mirroring.

C- Delete all existing snapshots for the DB instance. Use the rdsadmin.dbo.rds_modify_db_name stored procedure.

D- Update the application with the new database connection string.

E- Update the DNS record for the DB instance.

Answer:

B, D

Explanation:

https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Appendix.SQLServer.CommonDBATasks.RenamingDB.html