Answer Sheet

Q1)

You are tasked with setting up a Linux bastion host for access to Amazon EC2 instances running in your VPC. Only clients connecting from the corporate external public IP address 72.34.51.100 should have SSH access to the host.

Which option will meet the customer requirement?

- Network ACL Inbound Rule: Protocol - UDP, Port Range - 22, Source 72.34.51.100/32
- Security Group Inbound Rule: Protocol - UDP, Port Range - 22, Source 72.34.51.100/32
- ✓ Security Group Inbound Rule: Protocol - TCP. Port Range - 22, Source 72.34.51.100/32
- Network ACL Inbound Rule: Protocol - TCP, Port Range-22, Source 72.34.51.100/0

Q2) Is decreasing the storage size of a DB Instance permitted?

- Depends on the RDMS used
- Yes
- ✓ No

Q3) You have decided to change the instance type for instances running in your application tier that is using Auto Scaling. In which area below would you change the instance type definition?

- ✓ Auto Scaling launch configuration

Explanation:-A launch configuration is a template that an EC2 Auto Scaling group uses to launch EC2 instances. When you create a launch configuration, you specify information for the instances such as the ID of the Amazon Machine Image (AMI), the instance type, a key pair, one or more security groups, and a block device mapping. If you've launched an EC2 instance before, you specified the same information in order to launch the instance. When you create an EC2 Auto Scaling group, you must specify a launch configuration. You can specify your launch configuration with multiple EC2 Auto Scaling groups. However, you can only specify one launch configuration for an EC2 Auto Scaling group at a time, and you can't modify a launch configuration after you've created it. Therefore, if you want to change the launch configuration for your EC2 Auto Scaling group, you must create a launch configuration and then update your EC2 Auto Scaling group with the new launch configuration. When you change the launch configuration for your EC2 Auto Scaling group, any new instances are launched using the new configuration parameters, but existing instances are not affected. Refer: https://aws.amazon.com/ec2/autoscaling/faqs/

- Auto Scaling tags
- Auto Scaling group
- Auto Scaling policy

Q4) Fill in the blanks: "To ensure failover capabilities, consider using a _____ for incoming traffic on a network interface".

- secondary public IP
- ✓ secondary private IP
- primary public IP
- add on secondary IP

Q5) Which technique can be used to integrate AWS IAM (Identity and Access Management) with an on-premise LDAP (Lightweight Directory Access Protocol) directory service?

- Use the LDAP credentials to restrict a group of users from launching specific EC2 instance types.
- Use IAM roles to automatically rotate the IAM credentials when LDAP credentials are updated.
- Use AWS Security Token Service from an identity broker to issue short-lived AWS credentials.
- ✓ Use SAML (Security Assertion Markup Language) to enable single sign-on between AWS and LDAP
- Use an IAM policy that references the LDAP account identifiers and the AWS credentials.

Q6) What AWS services now support VPC endpoints feature for optimizing security? (Select three)

- ✓ DynamoDB
- ✓ S3
- DNS Route 53
- ✓ Kinesis
- RDS

Q7) What are three characteristics of an Amazon Virtual Private Cloud?

- Dedicated single tenant hardware only
- ✓ Multiple private IP addresses per network interface
- Broadcasts
- ✓ Public and private IP addressing

Explanation:-Amazon Virtual Private Cloud (Amazon VPC) lets you provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you define. You have complete control over your virtual networking environment, including selection of your own IP address range, creation of subnets, and configuration of route tables and network gateways. You can use both IPv4 and IPv6 in your VPC for secure and easy access to resources and applications. Refer: https://aws.amazon.com/vpc/

- ✓ Persistent public IP addresses
- HSRP

Q8) What is the difference between VPC main route table and custom route table?

- Main route table is created for public and private subnets
- Custom route table is created for private subnets
- ✓ Custom route table is created for public subnets

Explanation:-The following are the key concepts for route tables.

Main route table—The route table that automatically comes with your VPC. It controls the routing for all subnets that are not explicitly associated with any other route table.

Custom route table—A route table that you create for your VPC.

Refer: https://docs.aws.amazon.com/vpc/latest/userguide/VPC_Route_Tables.html

- Custom route table is the default
- VPC only creates a main route table when started

Q9) What is the purpose of the native VPC router?

- Route packets from instances to S3 storage volumes
- ✓ Route packets between subnets

Explanation:-Amazon Virtual Private Cloud (Amazon VPC) lets you provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you define. You have complete control over your virtual networking environment, including selection of your own IP address range, creation of subnets, and configuration of route tables and network gateways. You can use both IPv4 and IPv6 in your VPC for secure and easy access to resources and applications.

You can easily customize the network configuration of your Amazon VPC. For example, you can create a public-facing subnet for your web servers that have access to the internet. You can also place your backend systems, such as databases or application servers, in a private-facing subnet with no internet access. You can use multiple layers of security, including security groups and network access control lists, to help control access to Amazon EC2 instances in each subnet.

Refer: https://aws.amazon.com/vpc/

- Route packets between private cloud instances
- Route packets across the internet
- Route packets across VPN

Q10) How are private DNS servers assigned to an Amazon VPC?

- Select default VPC
- ✓ Select nondefault VPC

Explanation:-Refer: https://aws.amazon.com/about-aws/whats-new/2014/11/05/amazon-route-53-now-supports-private-dns-with-amazon-vpc/

- Not supported
- Select EC-2 classic

Q11) Which of the following are characteristics of a reserved instance? (Choose 3 answers)

- ✓ It is specific to an instance Type
- ✓ It can be applied to instances launched by Auto Scaling

Explanation:-Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-reserved-instances.html

- It is specific to an Amazon Machine Image (AMI)
- It can be migrated across Availability Zones
- ✓ It can be used to lower Total Cost of Ownership (TCO) of a system

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Q12) What is an isolated database environment running in the cloud (Amazon RDS) called?

- DB Unit
- ✓ DB Instance

Explanation:-A DB instance is an isolated database environment running in the cloud. It is the basic building block of Amazon RDS. A DB instance can contain multiple user-created databases, and can be accessed using the same client tools and applications you might use to access a standalone database instance. Refer:
https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.DBInstance.html#:~:text=A%20DB%20instance%20is%20an,access%20a%20standalone%20database%20instance.

- DB Server
- DB Volume

Q13) In regards to IAM you can edit user properties later, but you cannot use the console to change the _____.

- ✓ user name

Explanation:-To change a user's name or path, you must use the AWS CLI, Tools for Windows PowerShell, or AWS API. There is no option in the console to rename a user. Refer: https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users_manage.html

- password
- default group

Q14) Can I attach more than one policy to a particular entity?

- No
- Only if within GovCloud
- ✓ Yes always
- Only if within VPC

Q15) Can the string value of 'Key' be prefixed with laws?

- Yes
- Only for EC2 not S3
- ✓ No
- Only for S3 not EC

Q16) In AWS, which security aspects are the customer's responsibility? Choose 4 answers

- Decommissioning storage devices
- ✓ Patch management on the EC2 instance's operating system
- ✓ Life-cycle management of IAM credentials
- ✓ Security Group and ACL (Access Control List) settings

Explanation:-The customer assumes responsibility and management of the guest operating system (including updates and security patches), other associated application software as well as the configuration of the AWS provided security group firewall. Refer:
https://aws.amazon.com/compliance/shared-responsibility-model/#:~:text=The%20customer%20assumes%20responsibility%20and,AWS%20provided%20security%20group%20firewall.

- Controlling physical access to compute resources
- ✓ Encryption of EBS (Elastic Block Storage) volumes

Q17) Is the SQL Server Audit feature supported in the Amazon RDS SQL Server engine?

- Yes
- ✓ No

Q18) Which Amazon service can I use to define a virtual network that closely resembles a traditional data center?

- Amazon ServiceBus
- ✅ Amazon VPC

Explanation:-Amazon Virtual Private Cloud (Amazon VPC) enables you to launch AWS resources into a virtual network that you've defined. This virtual network closely resembles a traditional network that you'd operate in your own data center, with the benefits of using the scalable infrastructure of AWS. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/what-is-amazon-vpc.html#:~:text=Amazon%20Virtual%20Private%20Cloud%20(Amazon,the%20scalable%20infrastructure%20of%20AWS.

- Amazon EMR
- Amazon RDS

Q19) It is advised that you watch the Amazon CloudWatch "_____" metric (available via the AWS Management Console or Amazon Cloud Watch APIs) carefully and recreate the Read Replica should it fall behind due to replication errors.

- Single Replica

Explanation:-Search Results Featured snippet from the web Amazon RDS allows you to gain visibility into how far a read replica has fallen behind its source DB instance. The number of seconds that the read replica is behind the master is published as an Amazon CloudWatch metric ("Replica Lag") available via the AWS Management Console or Amazon CloudWatch APIs. Refer: https://acloud.guru/forums/aws-certified-sysops-administrator-associate/discussion/-KYSMGj7iTpg-gmqGLDE/what-is-replica-lag#:~:text=Amazon%20RDS%20allows%20you%20to,Console%20or%20Amazon%20CloudWatch%20APIs.

- ✅ Replica Lag
- Read Replica
- Write Lag

Q20) When using the following AWS services, which should be implemented in multiple Availability Zones for high availability solutions? (Choose 2 answers)

- ✅ Amazon Elastic Load Balancing

Explanation:-Elastic Load Balancing automatically distributes incoming application traffic across multiple targets, such as Amazon EC2 instances, containers, IP addresses, and Lambda functions. It can handle the varying load of your application traffic in a single Availability Zone or across multiple Availability Zones. Refer: https://aws.amazon.com/elasticloadbalancing/

- ✅ Amazon Elastic Compute Cloud (EC2)

Explanation:-Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale cloud computing easier for developers. Amazon EC2's simple web service interface allows you to obtain and configure capacity with minimal friction. Refer: https://aws.amazon.com/ec2/

- Amazon DynamoDB
- Amazon Simple Notification Service (SNS)
- Amazon Simple Storage Service (S3)

Q21) Your web application front end consists of multiple EC2 instances behind an Elastic Load Balancer. You configured ELB to perform health checks on these EC2 instances, if an instance fails to pass health checks, which statement will be true?

- The instance is replaced automatically by the ELB.
- The instance gets quarantined by the ELB for root cause analysis.
- The instance gets terminated automatically by the ELB.
- ✅ The ELB stops sending traffic to the instance that failed its health check.

Q22) What AWS service automatically publishes access logs every five minutes?

- CloudTrail
- ✅ Elastic Load Balancer

Explanation:-Elastic Load Balancing publishes a log file for each load balancer node every 5 minutes. Log delivery is eventually consistent. The load balancer can deliver multiple logs for the same period. Refer: https://docs.aws.amazon.com/elasticloadbalancing/latest/application/load-balancer-access-logs.html#:~:text=Elastic%20Load%20Balancing%20publishes%20a,logs%20for%20the%20same%20period.

- VPC Flow Logs
- DNS Route 53

Q23)

You have developed a web-based application for file sharing that will allow customers to access files. There are a variety of sizes that include larger .pdf and video files.

What two solution stacks could tenants use for an online file sharing service? (Select two)

- ✅ EC2, ELB, Auto-Scaling, S3
- Route 53, Auto-Scaling, DynamoDB
- EC2, Auto-Scaling, RDS
- ✅ AWS CloudFront

Explanation:-Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment. Refer: https://aws.amazon.com/cloudfront/

Q24) What infrastructure services are provided to EC2 instances? (Select three)

- ✅ Transport
- ✅ Compute
- ✅ Storage

Explanation:-When designing your Windows applications to run on Amazon EC2, you can plan for rapid deployment and rapid reduction of compute and storage resources, based on your changing needs. Refer: https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/EC2Win_Infrastructure.html

- VPN
- Security
- Support

Q25) What steps are required from AWS console to copy an EBS-backed AMI for a database instance cross-region?

- Create Snapshot of Instance-store AMI, select Copy AMI option, select destination region
- ✅ Create Snapshot of EBS-backed AMI, select Copy Snapshot option, select destination region

Explanation:-Search Results Featured snippet from the web Copying an AMI. You can copy an Amazon Machine Image (AMI) within or across AWS Regions using the AWS Management Console, the AWS Command Line Interface or SDKs, or the Amazon EC2 API, all of which support the CopyImage action. You can copy both Amazon EBS-backed AMIs and instance-store-backed AMIs. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html

- Select copy database volume and destination region
- Select Copy EBS-backed AMI option and destination region
- Create Snapshot of data volume, select Copy, select destination region

Q26) How is capacity (compute, storage and network speed) managed and assigned to EC2 instances?

- IOPS
- ✅ Instance type

Explanation:-Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instance types comprise varying combinations of CPU, memory, storage, and networking capacity and give you the flexibility to choose the appropriate mix of resources for your applications. Each instance type includes one or more instance sizes, allowing you to scale your resources to the requirements of your target workload. Refer: https://aws.amazon.com/ec2/instance-types/

- AMI
- Auto-Scaling

Q27) What storage type enable permanent attachment of volumes to EC2 instances?

- ✅ EBS

Explanation:-Amazon EBS offers data persistence, dynamic performance adjustments, and the ability to detach and reattach volumes, allowing you to resize clusters for big data analytics engines such as Hadoop and Spark. Refer: https://aws.amazon.com/ebs/?ebs-whats-new.sort-by=item.additionalFields.postDateTime&ebs-whats-new.sort-order=desc

- TDS
- RDS
- S3
- Instance store

Q28) What is the recommended method for migrating (copying) an EC2 instance to a different region?

- Stop instance and copy AMI to destination region
- ✅ Select AMI associated with EC2 instance and use Copy AMI option

Explanation:-Moving an EC2 Instance to a Different Availability Zone/Region
1. Shutdown / stop the instance.
2. Right-click the instance and select Create
3. Image to make an AMI from the instance.
4. Go to the AMI page, right-click on the new AMI and select Launch Instance.
5. In the new instance settings, choose a specific (different) availability zone.

Refer: https://d1.awsstatic.com/whitepapers/AWS_Migrate_Resources_To_New_Region.pdf

- Terminate instance, select region, copy instance to destination region
- Cross-region copy is not currently supported

Q29) What are two attributes that define an EC2 instance type?

- ✅ EBS volume storage
- License type
- ✅ vCPU

Explanation:-Refer: https://aws.amazon.com/ec2/instance-types/

- IP address
- Auto-Scaling

Q30) For which of the following use cases are Simple Workflow Service (SWF) and Amazon EC2 an appropriate solution? (Choose 2 answers)

- Using as an SNS (Simple Notification Service) endpoint to trigger execution of video transcoding jobs
- Orchestrating the execution of distributed and auditable business processes
- ✅ Managing a multi-step and multi-decision checkout process of an e-commerce website
- ✅ Using as an endpoint to collect thousands of data points per hour from a distributed fleet of sensors
- Using as a distributed session store for your web application

Q31) Security groups act like a firewall at the instance level, whereas _____ are an additional layer of security that act at the subnet level.

- DB Security Groups
- VPC Security Groups
- ✅ Network ACLs

Explanation:-A network access control list (ACL) is an optional layer of security for your VPC that acts as a firewall for controlling traffic in and out of one or more subnets. You might set up network ACLs with rules similar to your security groups in order to add an additional layer of security to your VPC. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/vpc-network-acls.html#:~:text=A%20network%20access%20control%20list,of%20security%20to%20your%20VPC.

Q32)

You launch an Amazon EC2 instance without an assigned AVVS identity and Access Management (IAM) role. Later, you decide that the instance should be running with an IAM role.

Which action must you take in order to have a running Amazon EC2 instance with an IAM role assigned to it?

- ✅ Create an image of the instance, and use this image to launch a new instance with the desired IAM role assigned.
- Create an image of the instance, add a new IAM role with the same permissions as the desired IAM role, and deregister the image with the new role assigned.
- Create a new IAM role with the same permissions as an existing IAM role, and assign it to the running instance.
- Create an image of the instance, and register the image with an IAM role assigned and an Amazon EBS volume mapping.

Q33) MySQL installations default to port _____.

- ✅ 3306

Explanation:-The default MySQL port number is 3306. Refer: https://aws.amazon.com/getting-started/hands-on/create-mysql-db/

- 443
- 80
- 1158

Q34) What feature requires tenants to disable source/destination check?

NAT

Explanation:-An internet gateway is a horizontally scaled, redundant, and highly available VPC component that allows communication between your VPC and the internet. An internet gateway serves two purposes: to provide a target in your VPC route tables for internet-routable traffic, and to perform network address translation (NAT) for instances that have been assigned public IPv4 addresses. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/VPC_Internet_Gateway.html

✅ VPC peering

Explanation:-Each EC2 instance performs source/destination checks by default. This means that the instance must be the source or destination of any traffic it sends or receives. However, a NAT instance must be able to send and receive traffic when the source or destination is not itself. Therefore, you must disable source/destination checks on the NAT instance.

You can disable the SrcDestCheck attribute for a NAT instance that's either running or stopped using the console or the command line.

To disable source/destination checking using the console

Open the Amazon EC2 console at https://console.aws.amazon.com/ec2/.

In the navigation pane, choose Instances.

Select the NAT instance, choose Actions, Networking, Change Source/Dest. Check.

For the NAT instance, verify that this attribute is disabled. Otherwise, choose Yes, Disable.

If the NAT instance has a secondary network interface, choose it from Network interfaces on the Description tab and choose the interface ID to go to the network interfaces page. Choose Actions, Change Source/Dest. Check, disable the setting, and choose Save.

Refer: https://docs.aws.amazon.com/vpc/latest/userguide/VPC_NAT_Instance.html

Data replication
Elastic IP (EIP)
Internet gateway

Q35) What's an ECU?

Extended Cluster User.
None of these.
Elastic Computer Usage.
✅ Elastic Compute Unit.

Explanation:-Amazon EC2 uses a variety of measures to provide each instance with a consistent and predictable amount of CPU capacity. In order to make it easy for developers to compare CPU capacity between different instance types, we have defined an Amazon EC2 Compute Unit. The amount of CPU that is allocated to a particular instance is expressed in terms of these EC2 Compute Units. We use several benchmarks and tests to manage the consistency and predictability of the performance from an EC2 Compute Unit. The EC2 Compute Unit (ECU) provides the relative measure of the integer processing power of an Amazon EC2 instance. Over time, we may add or substitute measures that go into the definition of an EC2 Compute Unit, if we find metrics that will give you a clearer picture of compute capacity. Refer: https://aws.amazon.com/ec2/faqs/

Q36) In order to optimize performance for a compute cluster that requires low inter-node latency, which of the following feature should you use?

AWS Direct Connect
EC2 Dedicated Instances
✅ Placement Groups

Explanation:-Cluster – packs instances close together inside an Availability Zone. This strategy enables workloads to achieve the low-latency network performance necessary for tightly-coupled node-to-node communication that is typical of HPC applications. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html

Multiple Availability Zones
VPC private subnets

Q37) What is the default maximum number of MFA devices in use per AWS account (at the root account level)?

✅ 1

Explanation:-You can enable only one MFA device per AWS account root user or IAM user. Refer: https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_mfa_enable.html#:~:text=You%20can%20enable%20only%20one,root%20user%20or%20IAM%20user.

5
15
10

Q38) Please select the Amazon EC2 resource which can be tagged.

✅ Placement groups

Explanation:-To help categorize and manage your existing placement groups, you can tag them with custom metadata. For more information about how tags work, see Tagging your Amazon EC2 resources. When you tag a placement group, the instances that are launched into the placement group are not automatically tagged. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/placement-groups.html#:~:text=To%20help%20categorize%20and%20manage,group%20are%20not%20automatically%20tagged.

Elastic IP addresses
Key pairs
Amazon EBS snapshots

Q39)

You are using an m1.small EC2 Instance with one 300 GB EBS volume to host a relational database. You determined that write throughput to the database needs to be increased.

Which of the following approaches can help achieve this? (Choose 2 answers)

✅ Increase the size of the EC2 Instance.
✅ Add an EBS volume and place into RAID 5.
Place the instance in an Auto Scaling Groups
Enable Multi-AZ mode.
Use an array of EBS volumes.
Put the database behind an Elastic Load Balancer.

Q40) What does Amazon Route53 provide?

✅ A scalable Domain Name System.

Explanation:-Amazon Route 53 is a highly available and scalable cloud Domain Name System (DNS) web service. It is designed to give developers and businesses an extremely reliable and cost effective way to route end users to Internet applications by translating names like www.example.com into the numeric IP addresses like 192.0. Refer:

https://aws.amazon.com/route53/#:~:text=Amazon%20Route%2053%20is%20a,numeric%20IP%20addresses%20like%20192.0.

- None of these.
- A global Content Delivery Network.
- An SSH endpoint for Amazon EC2.

Q41) What are the four levels of AWS Premium Support?

- Basic, Startup, Business, Enterprise
- ✅ Basic, Developer, Business, Enterprise

Explanation:-AWS Support offers four support plans: Basic, Developer, Business, and Enterprise. Refer: https://docs.aws.amazon.com/awssupport/latest/user/getting-started.html#:~:text=AWS%20Support%20offers%20four%20support,Developer%2C%20Business%2C%20and%20Enterprise.

- Free, Bronze, Silver, Gold
- All support is free

Q42) Your company has asked you to capture and forward a real-time data stream on a massive scale directly to RedShift for analysis with BI tools. What AWS tool is most appropriate that provides the feature set and cost effective?

- CloudFront
- SNS
- ✅ Kinesis Firehose
- Elastic Map Reduce
- SQS
- DynamoDB

Q43) What feature permits tenants to use a private domain name instead of the domain name that CloudFront assigns to a distribution?

- MX record
- ✅ CNAME record

Explanation:-In CloudFront, an alternate domain name, also known as a CNAME, lets you use your own domain name (for example, www.example.com) in your files' URLs instead of using the domain name that CloudFront assigns to your distribution. Refer: https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/CNAMEs.html#:~:text=In%20CloudFront%2C%20an%20alternate%20domain,CloudFront%20assigns%20to%20your%

- Route 53
- RTMP
- Signed URL

Q44) What Amazon AWS service is available to guarantee the consuming of a unique message only once?

- Beanstalk
- SQL
- Exchange
- ✅ SQS

Explanation:-Standard queues provide at-least-once delivery, which means that each message is delivered at least once. FIFO queues provide exactly-once processing, which means that each message is delivered once and remains available until a consumer processes it and deletes it. Refer: https://aws.amazon.com/sqs/faqs/#:~:text=Q%3A%20Does%20Amazon%20SQS%20guarantee,processes%20it%20and%20deletes%20it.

Q45) What is the fastest and easiest method for migrating an on-premises VMware virtual machine to the AWS cloud?

- AWS Storage Gateway
- ✅ AWS Server Migration Service

Explanation:- AWS Server Migration Service automates the migration of your on-premises VMware vSphere, Microsoft Hyper-V/SCVMM, and Azure virtual machines to the AWS Cloud. AWS SMS incrementally replicates your server VMs as cloud-hosted Amazon Machine Images (AMIs) ready for deployment on Amazon EC2. Refer: https://docs.aws.amazon.com/server-migration-service/latest/userguide/server-migration.html

- Amazon Marketplace
- EC2 Import/Export

Q46) Select the stateless protocol from the following?

- ✅ HTTP

Explanation:-HTTP is called as a stateless protocol because each command is request is executed independently, without any knowledge of the requests that were executed before it. It is the protocol used for the web.

- TCP
- FTP
- SSH

Q47) What are three valid endpoints for an API gateway?

- HTTP method
- ✅ Web server
- ✅ AWS service
- ✅ Lambda function
- RESTful API

Q48) How is a volume selected (identified) when making an EBS Snapshot?

- account id
- volume id
- tag
- ✅ ARN

Explanation:-An Amazon Resource Name (ARN) is a file naming convention used to identify a particular resource in the Amazon Web Services (AWS) public cloud. ARNs, which are specific to AWS, help an administrator track and use AWS items and policies across AWS products and API calls.

Q49) Does Route 53 support MX Records?

- It supports CNAME records, but not MX records.
- ✅ Yes.
- No
- Only Primary MX records. Secondary MX records are not supported.

Q50) If I want my instance to run on a single-tenant hardware, which value do I have to set the instance's tenancy attribute to?

✅ Dedicated
Explanation:-Dedicated Instances are Amazon EC2 instances that run in a virtual private cloud (VPC) on hardware that's dedicated to a single customer. Dedicated Instances that belong to different AWS accounts are physically isolated at a hardware level, even if those accounts are linked to a single payer account. However, Dedicated Instances may share hardware with other instances from the same AWS account that are not Dedicated Instances. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/dedicated-instance.html
- Isolated
- One
- Reserved

Q51) What is the charge for the data transfer incurred in replicating data between your primary and standby?

✅ Same as the standard data transfer charge
Explanation:-You are not charged for the data transfer incurred in replicating data between your primary and standby. Internet data transfer in and out of your DB instance is charged the same as with a standard deployment. Refer: https://aws.amazon.com/rds/faqs/
- Double the standard data transfer charge
- No charge. It is free.
- Half of the standard data transfer charge

Q52) What are characteristics of Amazon S3? (Choose 2 answers)

✅ S3 allows you to store unlimited amounts of data.
Explanation:-Amazon S3 has various features you can use to organize and manage your data in ways that support specific use cases, enable cost efficiencies, enforce security, and meet compliance requirements. Data is stored as objects within resources called “buckets”, and a single object can be up to 5 terabytes in size. Refer: https://aws.amazon.com/s3/features/#:~:text=Amazon%20S3%20has%20various%20features,to%205%20terabytes%20in%20size.
- S3 offers Provisioned IOPS.
- S3 allows you to store objects of virtually unlimited size.
- S3 should be used to host a relational database.
✅ Objects are directly accessible via a URL.

Q53) What is the name of licensing model in which I can use your existing Oracle Database licenses to run Oracle deployments on Amazon RDS?

- Role Bases License
✅ Bring Your Own License
Explanation:-Bring Your Own License (BYOL): In this licensing model, you can use your existing Oracle Database licenses to run Oracle deployments on Amazon RDS. To run a DB instance under the BYOL model, you must have the appropriate Oracle Database license (with Software Update License & Support) for the DB instance class and Oracle Database edition you wish to run. You must also follow Oracle's policies for licensing Oracle Database software in the cloud computing environment. DB instances reside in the Amazon EC2 environment, and Oracle's licensing policy for Amazon EC2 is located here. Refer: https://aws.amazon.com/rds/oracle/faqs/
- Enterprise License
- License Included

Q54) How can you secure data at rest on an EBS volume?

✅ Use an encrypted file system on top of the EBS volume.
Explanation:-Refer: https://cloudacademy.com/blog/how-to-encrypt-an-ebs-volume-the-new-amazon-ebs-encryption/
- Create an IAM policy that restricts read and write access to the volume.
- Encrypt the volume using the S3 server-side encryption service.
- Attach the volume to an instance using EC2's SSL interface.
- Write the data randomly instead of sequentially.

Q55) State whether the following statement holds Correct or Incorrect. "The new DB Instance that is created when you promote a Read Replica retains the backup window period."

- INCORRECT
✅ CORRECT

Q56) Are you able to integrate a multi-factor token service with the AWS Platform?

✅ Yes, using the AWS multi-factor token devices to authenticate users on the AWS platform.
- No, you cannot integrate multi-factor token devices with the AWS platform.
- Yes, you can integrate private multi-factor token devices to authenticate users to the AWS platform.

Q57) Which Amazon Elastic Compute Cloud feature can you query from within the instance to access instance properties?

✅ Instance metadata
Explanation:-Although you can only access instance metadata and user data from within the instance itself, the data is not protected by authentication or cryptographic methods. Anyone who has direct access to the instance, and potentially any software running on the instance, can view its metadata. Therefore, you should not store sensitive data, such as passwords or long-lived encryption keys, as user data. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-metadata.html
- Resource tags
- Instance user data
- Amazon Machine Image

Q58)

A photo-sharing service stores pictures in Amazon Simple Storage Service (S3) and allows application sign-in using an OpenID Connect-compatible identity provider.

Which AWS Security Token Service approach to temporary access should you use for the Amazon S3 operations?

- SAML-based Identity Federation
- Cross-Account Access
- AWS Identity and Access Management roles
✅ Web Identity Federation

Explanation:-AWS Identity and Access Management (IAM) supports identity federation, which enables external identities, such as users in your corporate directory, to sign in to the AWS Management Console via single sign-on (SSO). Refer: https://aws.amazon.com/blogs/security/tag/web-identity-federation/

Q59)

You have an application running on an Amazon Elastic Compute Cloud instance, that uploads 5 GB video objects to Amazon Simple Storage Service (S3). Video uploads are taking longer than expected, resulting in poor application performance.

Which method will help improve performance of your application?

- Leveraging Amazon CloudFront, use the HTTP POST method to reduce latency.
- Enable enhanced networking
- ✓ Use Amazon S3 multipart upload

Explanation:-Multipart Upload allows you to upload a single object as a set of parts. After all parts of your object are uploaded, Amazon S3 then presents the data as a single object. With this feature you can create parallel uploads, pause and resume an object upload, and begin uploads before you know the total object size. Refer: https://aws.amazon.com/about-aws/whats-new/2010/11/10/Amazon-S3-Introducing-Multipart-Upload/

- Use Amazon Elastic Block Store Provisioned IOPs and use an Amazon EBS-optimized instance

Q60)

You are deploying an application to collect votes for a very popular television show. Millions of users will submit votes using mobile devices. The votes must be collected into a durable, scalable, and highly available data store for real-time public tabulation.

Which service should you use?

- ✓ Amazon Kinesis

Explanation:-Amazon Kinesis Data Streams is a scalable and durable real-time data streaming service that can continuously capture gigabytes of data per second from hundreds of thousands of sources. Refer:
https://aws.amazon.com/kinesis/#:~:text=Amazon%20Kinesis%20Data%20Streams%20is,streams%20into%20AWS%20data%20stores

- Amazon Redshift
- Amazon DynamoDB
- Amazon Simple Queue Service