Q1) How is data stored in Amazon Simple Storage Service (Amazon S3) for high durability?

⬤ Data is replicated only if versioning is enabled on the bucket.
✅ Data is automatically replicated within a region.
Explanation:-Data is automatically replicated within a region. Replication to other regions and versioning are optional. Amazon S3 data is not backed up to tape.
⬤ Data is automatically replicated to other regions.
⬤ Data is automatically backed up on tape and restored if needed.

Q2) To have a record of who accessed your Amazon Simple Storage Service (Amazon S3) data and from where, you should do what?

⬤ Create an AWS Identity and Access Management (IAM) bucket policy.
✅ Enable server access logs on the bucket.
Explanation:-Amazon S3 server access logs store a record of what requestor accessed the objects in your bucket, including the requesting IP address
⬤ Enable website hosting on the bucket.
⬤ Enable versioning on the bucket.
⬤ Enable Amazon CloudWatch logs.

Q3) What are some reasons to enable cross-region replication on an Amazon Simple Storage Service (Amazon S3) bucket? (Choose 2 answers)

✅ For compliance reasons, you need to store data in a location at least 300 miles away from the first region.
Explanation:-Cross-region replication can help lower latency and satisfy compliance requirements on distance. Amazon S3 is designed for eleven nines durability for objects in a single region, so a second region does not significantly increase durability. Cross- region replication does not protect against accidental deletion.
✅ You have a set of users or customers who can access the second bucket with lower latency.
Explanation:-Cross-region replication can help lower latency and satisfy compliance requirements on distance. Amazon S3 is designed for eleven nines durability for objects in a single region, so a second region does not significantly increase durability. Cross-region replication does not protect against accidental deletion.
⬤ You want a backup of your data in case of accidental deletion.
⬤ Your data needs at least five nines of durability.

Q4) Your company requires that all data sent to external storage be encrypted before being sent. Which Amazon Simple Storage Service (Amazon S3) encryption solution will meet this requirement?

⬤ Server-side encryption with AWS Key Management Service (AWS KMS) keys (SSEKMS)
✅ Client-side encryption with customer-managed keys
Explanation:-If data must be encrypted before being sent to Amazon S3, client-side encryption must be used.
⬤ SSE with customer-provided keys (SSE-C)
⬤ Server-Side Encryption (SSE) with AWS-managed keys (SSE-S3)

Q5)

You have a popular web application that accesses data stored in an Amazon Simple Storage Service (Amazon S3) bucket. You expect the access to be very read-intensive, with expected request rates of up to 500 GETs per second from many clients.

How can you increase the performance and scalability of Amazon S3 in this case?

⬤ Ensure that key names are sequential to enable pre-fetch.
⬤ Turn on server access logging.
✅ Ensure randomness in the namespace by including a hash prefix to key names.
Explanation:-Amazon S3 scales automatically, but for request rates over 100 GETS per second, it helps to make sure there is some randomness in the key space. Replication and logging will not affect performance or scalability. Using sequential key names could have a negative effect on performance or scalability.
⬤ Turn on cross-region replication to ensure that data is served from multiple locations.

Q6) What is needed before you can enable cross-region replication on an Amazon Simple Storage Service (Amazon S3) bucket? (Choose 2 answers)

⬤ Enable static website hosting.
✅ Create an AWS Identity and Access Management (IAM) policy to allow Amazon S3 to replicate objects on your behalf
Explanation:-You must enable versioning before you can enable cross-region replication, and Amazon S3 must have IAM permissions to perform the replication. Lifecycle rules migrate data from one storage class to another, not from one bucket to another. Static website hosting is not a prerequisite for replication.
⬤ Enable a lifecycle rule to migrate data to the second region.
✅ Enable versioning on the bucket.
Explanation:-You must enable versioning before you can enable cross-region replication, and Amazon S3 must have IAM permissions to perform the replication. Lifecycle rules migrate data from one storage class to another, not from one bucket to another. Static website hosting is not a prerequisite for replication.

Q7)

Your company has 100TB of financial records that need to be stored for seven years by law. Experience has shown that any record more than one-year old is unlikely to be accessed.

Which of the following storage plans meets these needs in the most cost efficient manner?

● Store the data in Amazon DynamoDB and run daily script to delete data older than seven years.

✅ Store the data on Amazon Simple Storage Service (Amazon S3) with lifecycle policies that change the storage class to Amazon Glacier after one year and delete the object after seven years.

Explanation:-Amazon S3 is the most cost effective storage on AWS, and lifecycle policies are a simple and effective feature to address the business requirements.

● Store the data on Amazon Elastic Block Store (Amazon EBS) volumes attached to t2.micro instances.

● Store the data in Amazon Elastic MapReduce (Amazon EMR).

Q8) Which statements about Amazon Glacier are true? (Choose 3 answers)

✅ Amazon Glacier can be used as a standalone service and as an Amazon S3 storage class.

Explanation:-Amazon Glacier stores data in archives, which are contained in vaults. Archives are identified by system-created archive IDs, not key names. Chapter 3: Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Elastic Block Store (Amazon EBS)

✅ Amazon Glacier vaults can be locked.

Explanation:-Amazon Glacier stores data in archives, which are contained in vaults. Archives are identified by system-created archive IDs, not key names. Chapter 3: Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Elastic Block Store (Amazon EBS)

● Amazon Glacier stores data in objects that live in archives.

● Amazon Glacier archives are identified by user-specified key names.

✅ Amazon Glacier archives take three to five hours to restore.

Explanation:-Amazon Glacier stores data in archives, which are contained in vaults. Archives are identified by system-created archive IDs, not key names. Chapter 3: Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Elastic Block Store (Amazon EBS)

Q9) Your web application needs four instances to support steady traffic nearly all of the time. On the last day of each month, the traffic triples. What is a cost-effective way to handle this traffic pattern?

● Run four On-Demand Instances constantly, then add eight Reserved Instances on the last day of each month

✅ Run four Reserved Instances constantly, then add eight On-Demand Instances on the last day of each month.

Explanation:-Reserved Instances provide cost savings when you can commit to running instances full time, such as to handle the base traffic. On-Demand Instances provide the flexibility to handle traffic spikes, such as on the last day of the month

● Run 12 Reserved Instances all of the time.

● Run four On-Demand Instances constantly, then add eight more On-Demand Instances on the last day of each month.

Q10)

Your order-processing application processes orders extracted from a queue with two Reserved Instances processing 10 orders/minute. If an order fails during processing, then it is returned to the queue without penalty. Due to a weekend sale, the queues have several hundred orders backed up. While the backup is not catastrophic, you would like to drain it so that customers get their confirmation emails faster.

What is a cost-effective way to drain the queue for orders?

● Deploy additional Reserved Instances to assist in processing the orders.

● Create more queues.

✅ Deploy additional Spot Instances to assist in processing the orders.

Explanation:-Spot Instances are a very cost-effective way to address temporary compute needs that are not urgent and are tolerant of interruption. That's exactly the workload described here. Reserved Instances are inappropriate for temporary workloads. On-Demand Instances are good for temporary workloads, but don't offer the cost savings of Spot Instances. Adding more queues is a non-responsive answer as it would not address the problem.

● Deploy additional On-Demand Instances to assist in processing the orders.

Q11) Which of the following must be specified when launching a new Amazon Elastic Compute Cloud (Amazon EC2) Windows instance? (Choose 2 answers)

✅ Amazon Machine Image (AMI)

Explanation:-The Amazon EC2 instance ID will be assigned by AWS as part of the launch process. The administrator password is assigned by AWS and encrypted via the public key. The instance type defines the virtual hardware and the AMI defines the initial software state. You must specify both upon launch.

● The Amazon EC2 instance ID

● Password for the administrator account

✅ Amazon EC2 instance type

Explanation:-The Amazon EC2 instance ID will be assigned by AWS as part of the launch process. The administrator password is assigned by AWS and encrypted via the public key. The instance type defines the virtual hardware and the AMI defines the initial software state. You must specify both upon launch.

Q12) You have purchased an m3.xlarge Linux Reserved instance in us-east-1a. In which ways can you modify this reservation? (Choose 2 answers)

✅ Move it to us-east-1b.

Explanation:-You can change the instance type only within the same instance type family, or you can change the Availability Zone. You cannot change the operating system nor the instance type family.

● Change it to a Windows instance.

✅ Change it into two m3.large instances.

Explanation:-You can change the instance type only within the same instance type family, or you can change the Availability Zone. You cannot

change the operating system nor the instance type family.
- Change it to an m4.xlarge.

Q13)

Your instance is associated with two security groups. The first allows Remote Desktop Protocol (RDP) access over port 3389 from Classless Inter-Domain Routing (CIDR) block 72.14.0.0/16. The second allows HTTP access over port 80 from CIDR block 0.0.0.0/0.

What traffic can reach your instance?

- RDP and HTTP traffic from 72.14.0.0/16
- ✅ RDP traffic over port 3389 from 72.14.0.0/16 and HTTP traffic over port 80 from 0.0.00/0
Explanation:-When there are multiple security groups associated with an instance, all the rules are aggregated.
- No traffic is allowed.
- RDP and HTTP access from CIDR block 0.0.0.0/0

Q14) Which of the following are features of enhanced networking? (Choose 3 answers)

- Border Gateway Protocol (BGP) routing
- Multiple network interfaces
- ✅ Lower latency
Explanation:-These are the benefits of enhanced networking.
- ✅ More Packets Per Second (PPS)
Explanation:-These are the benefits of enhanced networking.
- ✅ Less jitter
Explanation:-These are the benefits of enhanced networking.

Q15) You are creating a High-Performance Computing (HPC) cluster and need very low latency and high bandwidth between instances. What combination of the following will allow this? (Choose 3 answers)

- Use Dedicated Instances.
- ✅ Enable enhanced networking on the instances.
Explanation:-The other answers have nothing to do with networking.
- ✅ Put the instances in a placement group.
Explanation:-The other answers have nothing to do with networking.
- ✅ Use an instance type with 10 Gbps network performance.
Explanation:-The other answers have nothing to do with networking.
- Use Reserved Instances.

Q16) Which Amazon Elastic Compute Cloud (Amazon EC2) feature ensures that your instances will not share a physical host with instances from any other AWS customer?

- ✅ Dedicated Instances
Explanation:-Dedicated Instances will not share hosts with other accounts
- Placement groups
- Amazon Virtual Private Cloud (VPC)
- Reserved Instances

Q17) Which of the following are true of instance stores? (Choose 2 answers)

- ✅ Very high IOPS
Explanation:-Instance stores are low-durability, high-IOPS storage that is included for free with the hourly cost of an instance.
- ✅ Data is lost when the instance stops.
Explanation:-Instance stores are low-durability, high-IOPS storage that is included for free with the hourly cost of an instance.
- Automatic backups
- Charge is based on the total amount of storage provisioned.

Q18) Which of the following are features of Amazon Elastic Block Store (Amazon EBS)? (Choose 2 answers)

- Data on an Amazon EBS volume is lost when the attached instance is stopped.
- ✅ Amazon EBS volumes can be encrypted transparently to workloads on the attached instance.
Explanation:-There are no tapes in the AWS infrastructure. Amazon EBS volumes persist when the instance is stopped. The data is automatically replicated within an Availability Zone. Amazon EBS volumes can be encrypted upon creation and used by an instance in the same manner as if they were not encrypted.
- Amazon EBS data is automatically backed up to tape.
- ✅ Data stored on Amazon EBS is automatically replicated within an Availability Zone.
Explanation:-There are no tapes in the AWS infrastructure. Amazon EBS volumes persist when the instance is stopped. The data is automatically replicated within an Availability Zone. Amazon EBS volumes can be encrypted upon creation and used by an instance in the same manner as if they were not encrypted.

Q19) You need to take a snapshot of an Amazon Elastic Block Store (Amazon EBS) volume. How long will the volume be unavailable?

- It depends on the amount of data stored on the volume.
- ✅ The volume will be available immediately.

Explanation:-There is no delay in processing when commencing a snapshot.
- It depends on the provisioned size of the volume.
- It depends on whether the attached instance is an Amazon EBS-optimized instance.

Q20) You are restoring an Amazon Elastic Block Store (Amazon EBS) volume from a snapshot. How long will it be before the data is available?

- It depends on the amount of data stored on the volume.
- ✅ The data will be available immediately.

Explanation:-The volume is created immediately but the data is loaded lazily. This means that the volume can be accessed upon creation, and if the data being requested has not yet been restored, it will be restored upon first request.
- It depends on the provisioned size of the volume.
- It depends on whether the attached instance is an Amazon EBS-optimized instance.

Q21) You have a workload that requires 15,000 consistent IOPS for data that must be durable. What combination of the following steps do you need? (Choose 2 answers)

- Use an instance store.
- ✅ Use a Provisioned IOPS SSD volume.

Explanation:-The option is incorrect because an instance store will not be durable and a magnetic volume offers an average of 100 IOPS. Amazon EBS-optimized instances reserve network bandwidth on the instance for IO, and Provisioned IOPS SSD volumes provide the highest consistent IOPS.
- ✅ Use an Amazon Elastic Block Store (Amazon EBS)-optimized instance.

Explanation:-The option is incorrect because an instance store will not be durable and a magnetic volume offers an average of 100 IOPS. Amazon EBS-optimized instances reserve network bandwidth on the instance for IO, and Provisioned IOPS SSD volumes provide the highest consistent IOPS.
- Use a magnetic volume.

Q22) Which of the following can be accomplished through bootstrapping?

- Configure Operating System (OS) services.
- ✅ All of the above.

Explanation:-Bootstrapping runs the provided script, so anything you can accomplish in a script you can accomplish during bootstrapping.
- Install the current version of the application.
- Install the most current security updates.

Q23) How can you connect to a new Linux instance using SSH?

- Using Multi-Factor Authentication (MFA)
- ✅ Using the private half of the instance's key pair

Explanation:-The public half of the key pair is stored on the instance, and the private half can then be used to connect via SSH.
- Using a certificate
- Decrypt the root password.

Q24) VM Import/Export can import existing virtual machines as: (Choose 2 answers)

- ✅ Amazon Machine Images (AMIs)

Explanation:-These are the possible outputs of VM Import/Export.
- ✅ Amazon Elastic Compute Cloud (Amazon EC2) instances

Explanation:-These are the possible outputs of VM Import/Export.
- Amazon Elastic Block Store (Amazon EBS) volumes
- Security groups

Q25) Which of the following can be used to address an Amazon Elastic Compute Cloud (Amazon EC2) instance over the web? (Choose 2 answers)

- Amazon EC2 instance ID
- ✅ Elastic IP address

Explanation:-Neither the Windows machine name nor the Amazon EC2 instance ID can be resolved into an IP address to access the instance
- Windows machine name
- ✅ Public DNS name

Explanation:-Neither the Windows machine name nor the Amazon EC2 instance ID can be resolved into an IP address to access the instance

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Q26) Using the correctly decrypted Administrator password and RDP, you cannot log in to a Windows instance you just launched. Which of the following is a possible reason?

- The instance is not using enhanced networking.
- The instance is a Reserved Instance.
- ✅ There is no security group rule that allows RDP access over port 3389 from your IP address.

Explanation:-None of the other options will have any effect on the ability to connect.
- The instance is not an Amazon EBS-optimized instance.

Q27)

You have a workload that requires 1 TB of durable block storage at 1,500 IOPS during normal use. Every night there is an Extract, Transform, Load (ETL) task that requires 3,000 IOPS for 15 minutes.

What is the most appropriate volume type for this workload?

⚪ Use an instance store.
✅ Use a general-purpose SSD volume.
Explanation:-A short period of heavy traffic is exactly the use case for the bursting nature of general-purpose SSD volumes—the rest of the day is more than enough time to build up enough IOPS credits to handle the nightly task. Instance stores are not durable, magnetic volumes cannot provide enough IOPS, and to set up a Provisioned IOPS SSD volume to handle the peak would mean spending money for more IOPS than you need.
⚪ Use a Provisioned IOPS SSD volume at 3,000 IOPS.
⚪ Use a magnetic volume.

Q28) 20. How are you billed for elastic IP addresses?

⚪ Based on the data that flows through them
✅ Hourly when they are not associated with an instance
Explanation:-There is a very small hourly charge for allocated elastic IP addresses that are not associated with an instance
⚪ Hourly when they are associated with an instance
⚪ Based on the instance type to which they are attaché

Q29) 1. What is the minimum size subnet that you can have in an Amazon VPC?

⚪ /30
✅ /28
Explanation:-There is a very small hourly charge for allocated elastic IP addresses that are not associated with an instance
⚪ /26
⚪ /24

Q30)

You are a solutions architect working for a large travel company that is migrating its existing server estate to AWS. You have recommended that they use a custom Amazon VPC, and they have agreed to proceed. They will need a public subnet for their web servers and a private subnet in which to place their databases. They also require that the web servers and database servers be highly available and that there be a minimum of two web servers and two database servers each.

How many subnets should you have to maintain high availability?

✅ 4
Explanation:-You need two public subnets (one for each Availability Zone) and two private subnets (one for each Availability Zone). Therefore, you need four subnets.
⚪ 3
⚪ 2
⚪ 1

Q31) Which of the following is an optional security control that can be applied at the subnet layer of a VPC?

⚪ Firewall
⚪ Security Group
✅ Network ACL
Explanation:-Network ACLs are associated to a VPC subnet to control traffic flow.
⚪ Web application firewall

Q32) What is the maximum size IP address range that you can have in an Amazon VPC?

✅ /16
Explanation:-The maximum size subnet that you can have in a VPC is /16.
⚪ /24
⚪ /28
⚪ /30

Q33) You create a new subnet and then add a route to your route table that routes traffic out from that subnet to the Internet using an IGW. What type of subnet have you created?

✅ A public subnet
Explanation:-By creating a route out to the Internet using an IGW, you have made this subnet public.
⚪ An external subnet
⚪ A private subnet
⚪ An internal subnet

Q34) What happens when you create a new Amazon VPC?

⚪ Three subnets are created by default in one Availability Zone.
⚪ Three subnets are created by default—one for each Availability Zone.
✅ A main route table is created by default.
Explanation:-When you create an Amazon VPC, a route table is created by default. You must manually create subnets and an IGW.
⚪ An IGW is created by default.

Q35) You create a new VPC in US-East-1 and provision three subnets inside this Amazon VPC. Which of the following statements is true?

✅ All subnets will be able to communicate with each other by default.
Explanation:-When you provision an Amazon VPC, all subnets can communicate with each other by default.
⚪ All subnets are public by default.
⚪ By default, these subnets will not be able to communicate with each other; you will need to create routes.
⚪ Each subnet will have identical CIDR blocks.

Q36) How many IGWs can you attach to an Amazon VPC at any one time?

✅ 1
Explanation:-You may only have one IGW for each Amazon VPC.
⚪ 2
⚪ 3
⚪ 4

Q37) What aspect of an Amazon VPC is stateful?

⚪ Amazon DynamoDB
✅ Security groups
Explanation:-Security groups are stateful, whereas network ACLs are stateless
⚪ Network ACLs
⚪ Amazon S3

Q38)

You have created a custom Amazon VPC with both private and public subnets. You have created a NAT instance and deployed this instance to a public subnet. You have attached an EIP address and added your NAT to the route table. Unfortunately, instances in your private subnet still cannot access the Internet.

What may be the cause of this?

⚪ Your NAT has been deployed on a Windows instance, but your other instances are Linux. You should redeploy the NAT onto a Linux instance.
✅ You should disable source/destination checks on the NAT.
Explanation:-You should disable source/destination checks on the NAT.
⚪ Your NAT should be behind an Elastic Load Balancer.
⚪ Your NAT is in a public subnet, but it needs to be in a private subnet.

Q39) Which of the following will occur when an Amazon Elastic Block Store (Amazon EBS)- backed Amazon EC2 instance in an Amazon VPC with an associated EIP is stopped and started? (Choose 2 answers)

⚪ All data on Amazon EBS devices will be lost.
⚪ The ENI is detached.
✅ The underlying host for the instance is changed.
Explanation:-In the EC2-Classic network, the EIP will be disassociated with the instance; in the EC2-VPC network, the EIP remains associated with the instance. Regardless of the underlying network, a stop/start of an Amazon EBS-backed Amazon EC2 instance always changes the host computer.
⚪ The EIP will be dissociated from the instance.
✅ All data on instance-store devices will be lost.
Explanation:-In the EC2-Classic network, the EIP will be disassociated with the instance; in the EC2-VPC network, the EIP remains associated with the instance. Regardless of the underlying network, a stop/start of an Amazon EBS-backed Amazon EC2 instance always changes the host computer.

Q40) How many VPC Peering connections are required for four VPCs located within the same AWS region to be able to send traffic to each of the others?

✅ 6
Explanation:-Six VPC Peering connections are needed for each of the four VPCs to send traffic to the other.
⚪ 5
⚪ 4
⚪ 3

Q41) Which of the following AWS resources would you use in order for an EC2-VPC instance to resolve DNS names outside of AWS?

⚪ A routing rule
✅ A DHCP option set
Explanation:-A DHCP option set allows customers to define DNS servers for DNS name resolution, establish domain names for instances within an Amazon VPC, define NTP servers, and define the NetBIOS name servers
⚪ A VPC peering connection
⚪ An IGW

Q42) Which of the following is the Amazon side of an Amazon VPN connection?

⚪ An EIP

- A CGW
- An IGW
- ✅ A VPG

Explanation:-A CGW is the customer side of a VPN connection, and an IGW connects a network to the Internet. A VPG is the Amazon side of a VPN connection.

Q43) What is the default limit for the number of Amazon VPCs that a customer may have in a region?

- There is no default maximum number of VPCs within a region.
- 7
- 6
- ✅ 5

Explanation:-The default limit for the number of Amazon VPCs that a customer may have in a region is 5.

Q44)

You are responsible for your company's AWS resources, and you notice a significant amount of traffic from an IP address in a foreign country in which your company does not have customers. Further investigation of the traffic indicates the source of the traffic is scanning for open ports on your EC2-VPC instances.

Which one of the following resources can deny the traffic from reaching the instances?

- NAT instance
- ✅ Network ACL

Explanation:-Network ACL rules can deny traffic.

- Security group
- An Amazon VPC endpoint

Q45) Which of the following is the security protocol supported by Amazon VPC?

- Point-to-Point Tunneling Protocol (PPTP)
- SSH
- Advanced Encryption Standard (AES)
- ✅ IPsec

Explanation:-IPsec is the security protocol supported by Amazon VPC.

Q46) Which of the following Amazon VPC resources would you use in order for EC2-VPC instances to send traffic directly to Amazon S3?

- Amazon S3 gateway
- IGW
- CGW
- ✅ VPC endpoint

Explanation:-An Amazon VPC endpoint enables you to create a private connection between your Amazon VPC and another AWS service without requiring access over the Internet or through a NAT device, VPN connection, or AWS Direct Connect.

Q47) What properties of an Amazon VPC must be specified at the time of creation? (Choose 2 answers)

- ✅ The region for the Amazon VPC

Explanation:-The CIDR block is specified upon creation and cannot be changed. An Amazon VPC is associated with exactly one region which must be specified upon creation. You can add a subnet to an Amazon VPC any time after it has been created, provided its address range falls within the Amazon VPC CIDR block and does not overlap with the address range of any existing CIDR block. You can set up peering relationships between Amazon VPCs after they have been created.

- One or more subnets for the Amazon VPC
- ✅ The CIDR block representing the IP address range

Explanation:-The CIDR block is specified upon creation and cannot be changed. An Amazon VPC is associated with exactly one region which must be specified upon creation. You can add a subnet to an Amazon VPC any time after it has been created, provided its address range falls within the Amazon VPC CIDR block and does not overlap with the address range of any existing CIDR block. You can set up peering relationships between Amazon VPCs after they have been created.

- Amazon VPC Peering relationships

Q48) Which Amazon VPC feature allows you to create a dual-homed instance?

- Security groups
- ✅ ENI

Explanation:-Attaching an ENI associated with a different subnet to an instance can make the instance dual-homed.

- EIP address
- CGW

Q49) Which of the following are required elements of an Auto Scaling group? (Choose 2 answers)

- ✅ Launch configuration

Explanation:-An Auto Scaling group must have a minimum size and a launch configuration defined in order to be created. Health checks and a desired capacity are optional.

- Desired capacity
- Health checks

✅ Minimum size

Explanation:-An Auto Scaling group must have a minimum size and a launch configuration defined in order to be created. Health checks and a desired capacity are optional.

Q50)

You have created an Elastic Load Balancing load balancer listening on port 80, and you registered it with a single Amazon Elastic Compute Cloud (Amazon EC2) instance also listening on port 80. A client makes a request to the load balancer with the correct protocol and port for the load balancer.

In this scenario, how many connections does the balancer maintain?

○ 3

✅ 2

Explanation:-The load balancer maintains two separate connections: one connection with the client and one connection with the Amazon EC2 instance.

○ 1

○ 4

Q51) How long does Amazon CloudWatch keep metric data?

✅ 2 weeks

Explanation:-Amazon CloudWatch metric data is kept for 2 weeks.

○ 1 week

○ 2 days

○ 1 day

Q52) Which of the following are the minimum required elements to create an Auto Scaling launch configuration?

○ Launch configuration name, AMI, instance type, key pair, security group, and block device mapping

○ Launch configuration name, AMI, instance type, key pair, and security group

○ Launch configuration name, AMI, instance type, and key pair

✅ Launch configuration name, Amazon Machine Image (AMI), and instance type

Explanation:-Only the launch configuration name, AMI, and instance type are needed to create an Auto Scaling launch configuration. Identifying a key pair, security group, and a block device mapping are optional elements for an Auto Scaling launch configuration.

Q53) You are responsible for the application logging solution for your company's existing applications running on multiple Amazon EC2 instances. Which of the following is the best approach for aggregating the application logs within AWS?

○ An Elastic Load Balancing listener

✅ Amazon CloudWatch Logs Agent

Explanation:-You can use the Amazon CloudWatch Logs Agent installer on existing Amazon EC2 instances to install and configure the CloudWatch Logs Agent.

○ Amazon CloudWatch custom metrics

○ An internal Elastic Load Balancing load balancer

Q54) Which of the following must be configured on an Elastic Load Balancing load balancer to accept incoming traffic?

✅ A listener

Explanation:-You can use the Amazon CloudWatch Logs Agent installer on existing Amazon EC2 instances to install and configure the CloudWatch Logs Agent.

○ A network interface

○ A port

○ An instance

Q55)

You create an Auto Scaling group in a new region that is configured with a minimum size value of 10, a maximum size value of 100, and a desired capacity value of 50. However, you notice that 30 of the Amazon Elastic Compute Cloud (Amazon EC2) instances within the Auto Scaling group fail to launch.

Which of the following is the cause of this behavior?

✅ You have not raised your default Amazon EC2 capacity (20) for the new region.

Explanation:-The default Amazon EC2 instance limit for all regions is 20.

○ You did not attach an Elastic Load Balancing load balancer to the Auto Scaling group.

○ The Auto Scaling group maximum value cannot be more than 20.

○ You cannot define an Auto Scaling group larger than 20.

Q56)

You want to host multiple Hypertext Transfer Protocol Secure (HTTPS) websites on a fleet of Amazon EC2 instances behind an Elastic Load Balancing load balancer with a single X.509 certificate.

How must you configure the Secure Sockets Layer (SSL) certificate so that clients connecting to the load balancer are not presented with a warning when they connect?

○ Create SSL certificates for each Availability Zone with a SAN value for each website name.

- Create multiple SSL certificates with a SAN value for each website name.
- Create one SSL certificate with the Server Name Indication (SNI) value checked.
- ✅ Create one SSL certificate with a Subject Alternative Name (SAN) value for each website name.

Explanation:-An SSL certificate must specify the name of the website in either the subject name or listed as a value in the SAN extension of the certificate in order for connecting clients to not receive a warning.

Q57)

Your web application front end consists of multiple Amazon Compute Cloud (Amazon EC2) instances behind an Elastic Load Balancing load balancer. You have configured the load balancer to perform health checks on these Amazon EC2 instances.

If an instance fails to pass health checks, which statement will be true?

- The instance is quarantined by the load balancer for root cause analysis.
- ✅ The load balancer stops sending traffic to the instance that failed its health check.

Explanation:-When Amazon EC2 instances fail the requisite number of consecutive health checks, the load balancer stops sending traffic to the Amazon EC2 instance.

- The instance is terminated automatically by the load balancer.
- The instance is replaced automatically by the load balancer.

Q58) In the basic monitoring package for Amazon Elastic Compute Cloud (Amazon EC2), what Amazon CloudWatch metrics are available?

- ✅ Hypervisor visible metrics such as CPU utilization

Explanation:-Amazon CloudWatch metrics provide hypervisor visible metrics.

- Database visible metrics such as number of connections
- Operating system visible metrics such as memory utilization
- Web server visible metrics such as number of failed transaction requests

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Q59) Auto Scaling supports which of the following plans for Auto Scaling groups? (Choose 3 answers)

- ✅ Dynamic

Explanation:-Auto Scaling supports maintaining the current size of an Auto Scaling group using four plans: maintain current levels, manual scaling, scheduled scaling, and dynamic scaling.

- Preemptive
- ✅ Scheduled

Explanation:-Auto Scaling supports maintaining the current size of an Auto Scaling group using four plans: maintain current levels, manual scaling, scheduled scaling, and dynamic scaling.

- ✅ Manual

Explanation:-Auto Scaling supports maintaining the current size of an Auto Scaling group using four plans: maintain current levels, manual scaling, scheduled scaling, and dynamic scaling.

- Predictive
- End-user request driven