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Whizlabs Learning Center

Started on	Wednesday, 5 July 2017, 3:32 AM
State	Finished
Completed on	Wednesday, 5 July 2017, 3:32 AM
Time taken	11 secs
Grade	**0.00** out of 60.00 (**0%**)
Result	FAIL

Question 1

Not answered

☐ ⚑

A company wants to store data that is not frequently accessed. What is the best and cost efficient solution that should be considered?

Please select :

○ A. Amazon Storage Gateway

○ B. Amazon Glacier

○ C. Amazon EBS

○ D. Amazon S3

Your answer is incorrect.

Answer: B – Since the data is not required to be accessed frequently, the data can be stored on Amazon glacier for cheaper storage. Remember that the recovery time for getting data from Glacier is from 3-5 hours.

You can look at the FAQ section of aws glacier - https://aws.amazon.com/glacier/faqs/

Amazon Glacier is an extremely low-cost storage service that provides secure, durable, and flexible storage for data backup and archival. With Amazon Glacier, customers can reliably store their data for as little as $0.007 per gigabyte per month. Amazon Glacier enables customers to offload the administrative burdens of operating and scaling storage to AWS, so that they don't have to worry about capacity planning, hardware provisioning, data replication, hardware failure detection and repair, or time-consuming hardware migrations.

The correct answer is: Amazon Glacier

Question 2

Not answered

You have an EC2 instance that is transferring data from S3 in the same region. The project sponsor is worried about the cost of the infrastructure. What can you do to convince him that you have a cost effective solution.

Please select :

○ A. You are going to be hosting only 4 instances, so you are minimizing on cost.

○ B. There is no cost for transferring data from EC2 to S3 if they are in the same region.

○ C. AWS provides a discount if you transfer data from EC2 to S3 if they are in the same region.

○ D. Both EC2 and S3 are in the same availability zone, so you can save via consolidated billing.

Your answer is incorrect.

Answer – B – Please note that there is no cost when data is transferred from EC2 to S3 if they are in the same region. This is very important for an AWS Solution Architect to know.

The correct answer is: There is no cost for transferring data from EC2 to S3 if they are in the same region.

Question 3

Not answered

Which services allow the customer to retain full administrative privileges of the underlying EC2 instances? Please choose 2 answers from the options below

Please select :

☐ A. Amazon Relational Database Service

☐ B. Amazon Elastic Map Reduce

☐ C. Amazon ElastiCache

☐ D. Amazon DynamoDB

☐ E. AWS Elastic Beanstalk

Your answer is incorrect.

Answer – B and E. Remember that RDS, Elasticache and DynamoDB are hosted services by aws, and they do not allow you to work with the underlying EC2 instances.

The correct answer is: Amazon Elastic Map Reduce, AWS Elastic Beanstalk

Bucket names must be unique across all S3.

Please select :

○ A. True

○ B. False

Your answer is incorrect.

Answer – A – Bucket names have to be unique across all regions. Let's say you have created a bucket names devtoolslogging in the Singapore region.

Create a Bucket - Select a Bucket Name and Region   Cancel ✕

A bucket is a container for objects stored in Amazon S3. When creating a bucket, you can choose a Region to optimize for latency, minimize costs, or address regulatory requirements. For more information regarding bucket naming conventions, please visit the Amazon S3 documentation.

Bucket Name: devtoolslogging

Region: Singapore ▼

Set Up Logging >   **Create**   Cancel

Now if you want to create a bucket of the same name in the Oregon region, you will get an error that the bucket already exists.

Create a Bucket - Select a Bucket Name and Region   Cancel ✕

That bucket already exists, you own it!

A bucket is a container for objects stored in Amazon S3. When creating a bucket, you can choose a Region to optimize for latency, minimize costs, or address regulatory requirements. For more information regarding bucket naming conventions, please visit the Amazon S3 documentation.

⚠ **Bucket Name:**   devtoolslogging

Region: Oregon ▼

Set Up Logging >   **Create**   Cancel

The correct answer is: True

Question 5

Not answered

A customer has enabled website hosting on a bucket named "devtoolslogging" in the Singapore region. What website URL is assigned to your bucket?

Please select :

- A. devtoolslogging.s3-website-ap-southeast-1.amazonaws.com

- B. s3-website.devtoolslogging.amazonaws.com

- C. s3-website.devtoolslogging.website-ap-southeast-1.amazonaws.com

- D. devtoolslogging.ap-southeast-1.amazonaws.com

Your answer is incorrect.

Answer – A – You have the chance to enable static web site hosting for S3 buckets. This can be done via the properties option for the bucket. The end point of the bucket for static hosting will also be configured.

> ▸ Permissions

> ▾ Static Website Hosting

You can host your static website entirely on Amazon S3. Once you enable your bucket for static website hosting, all your content is accessible to web browsers via the Amazon S3 website endpoint for your bucket.

Endpoint: devtoolslogging.s3-website-ap-southeast-1.amazonaws.com

Each bucket serves a website namespace (e.g. "www.example.com"). Requests for your host name (e.g. "example.com" or "www.example.com") can be routed to the contents in your bucket. You can also redirect requests to another host name (e.g. redirect "example.com" to "www.example.com"). See our walkthrough for how to set up an Amazon S3 static website with your host name.

The correct answer is: devtoolslogging.s3-website-ap-southeast-1.amazonaws.com

Question 6

Not answered

As a solutions architect, it is your job to design for high availability and fault tolerance. Company-A 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

Please select :

- 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. None of the above

Your answer is incorrect.

Answer – B – AWS S3 is already highly available and fault tolerant. This is very clearly mentioned in its FAQ's - https://aws.amazon.com/s3/faqs/

Q: How durable is Amazon S3?

Amazon S3 Standard and Standard - IA are designed to provide 99.999999999% durability of objects over a given year. This durability level corresponds to an average annual expected loss of 0.000000001% of objects. For example, if you store 10,000 objects with Amazon S3, you can on average expect to incur a loss of a single object once every 10,000,000 years. In addition, Amazon S3 is designed to sustain the concurrent loss of data in two facilities.

As with any environments, the best practice is to have a backup and to put in place safeguards against malicious or accidental users errors. For S3 data, that best practice includes secure access permissions, Cross-Region Replication, versioning and a functioning, regularly tested backup.

Q: How is Amazon S3 designed to achieve 99.999999999% durability?

Amazon S3 Standard and Standard - IA redundantly stores your objects on multiple devices across multiple facilities in an Amazon S3 Region. The service is designed to sustain concurrent device failures by quickly detecting and repairing any lost redundancy. When processing a request to store data, the service will redundantly store your object across multiple facilities before returning SUCCESS. Amazon S3 also regularly verifies the integrity of your data using checksums.

The correct answer is: Amazon S3 is highly available and fault tolerant by design and requires no additional configuration

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Question 7

Not answered

Which of the following are characteristics of Amazon VPC subnets? Choose 2 answers from the options given below

Please select :

- A. Each subnet spans at least 2 Availability Zones to provide a high-availability environment.

- B. Each subnet maps to a single Availability Zone.

- C. CIDR block mask of/25 is the smallest range supported.

- D. By default, all subnets can route between each other, whether they are private or public.

- E. Instances in a private subnet can communicate with the Internet only if they have an Elastic IP.

Your answer is incorrect.

Answer – B, D. Please see the below for further justification.

A subnet can only map to one availability zone. So from options A and B, B is correct.

Create Subnet ✕

Use the CIDR format to specify your subnet's IP address block (e.g., 10.0.0.0/24). Note that block sizes must be between a /16 netmask and /28 netmask. Also, note that a subnet can be the same size as your VPC.

Name tag	172.31.1.0/24 ⓘ
VPC	vpc-6dcc550a (172.31.0.0/16) ▾ ⓘ
Availability Zone	us-east-1a ▾ ⓘ
CIDR block	172.31.1.0/24 ⓘ

Cancel **Yes, Create**

When you create a CIDR block, the least allowable is /28, so option C is wrong.

Create Subnet ✕

Use the CIDR format to specify your subnet's IP address block (e.g., 10.0.0.0/24). Note that block sizes must be between a /16 netmask and /28 netmask. Also, note that a subnet can be the same size as your VPC.

Name tag	ⓘ
VPC	vpc-6dcc550a ▾ ⓘ
Availability Zone	us-east-1c ▾ ⓘ
CIDR block	ⓘ

Cancel **Yes, Create**

Option E is wrong because EC2 instances in a private subnet will not be able to route anything on the internet even if they have an elastic IP.

The correct answer is: Each subnet maps to a single Availability Zone., By default, all subnets can route between each other, whether they are private or public.

What are the different options available when creating a VPC using the VPC wizard? Please choose all options that apply.

Please select :

☐ A. VPC with a Primary and Secondary subnet

☐ B. VPC with Public and Private Subnets

C. VPC with Public and Private Subnets and Hardware VPN Access

D. VPC with default settings

Your answer is incorrect.

Answer – B and C. When you launch the VPC wizard, you will get the below options in the VPC wizard.

Step 1: Select a VPC Configuration

The correct answer is: VPC with Public and Private Subnets, VPC with Public and Private Subnets and Hardware VPN Access

Question 9

Not answered

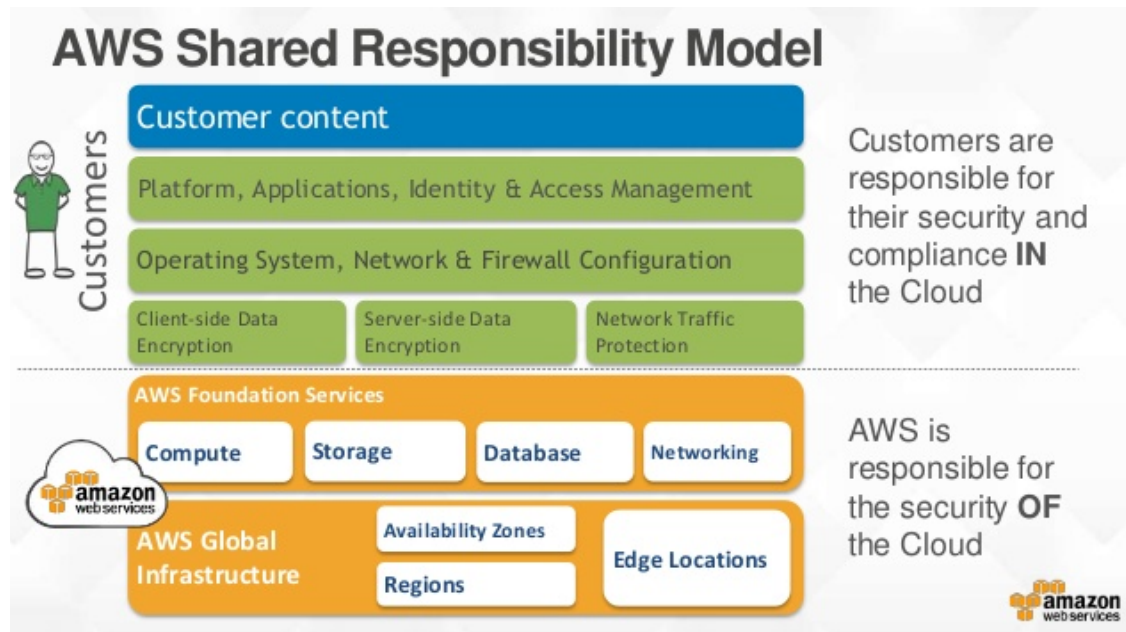In AWS, which security aspects are the customer's responsibility? Choose 4 answers

Please select :

A. Security Group and ACL (Access Control List) settings

B. Decommissioning storage devices

C. Patch management on the EC2 instance's operating system

D. Life-cycle management of IAM credentials

E. Controlling physical access to compute resources

F. Encryption of EBS (Elastic Block Storage) volumes

Your answer is incorrect.

Answer – A, C, D and F.

Please find the shared responsibility model as shared by AWS

AWS Shared Responsibility Model

Customer content

Customers

Platform, Applications, Identity & Access Management

Operating System, Network & Firewall Configuration

| Client-side Data Encryption | Server-side Data Encryption | Network Traffic Protection |

Customers are responsible for their security and compliance IN the Cloud

AWS Foundation Services

amazon webservices

| Compute | Storage | Database | Networking |

AWS Global Infrastructure

Availability Zones

Regions

Edge Locations

AWS is responsible for the security OF the Cloud

amazon webservices

The correct answer is: Security Group and ACL (Access Control List) settings, Patch management on the EC2 instance's operating system, Life-cycle management of IAM credentials, Encryption of EBS (Elastic Block Storage) volumes

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Question 10

Not answered

☐ 🏳

When an EC2 EBS-backed (EBS root) instance is stopped, what happens to the data on any ephemeral store volumes?

Please select :

○ A. Data is automatically saved in an EBS volume.

○ B. Data is unavailable until the instance is restarted.

○ C. Data will be deleted and will no longer be accessible.

○ D. Data is automatically saved as an EBS snapshot.

Your answer is incorrect.

Answer – C – ephemeral is temporary storage that is always deleted when an instance is restarted in aws.

Data on the EBS volume is LOST only if the Root Volume is EBS backed and the Delete On Termination flag is checked (Checked by default)

The correct answer is: Data will be deleted and will no longer be accessible.

Question 11

Not answered

SQS provides a timeout which is a period of time during which Amazon SQS prevents other consuming components from receiving and processing. What is this time period called?

Please select :

○ A. Component Timeout

○ B. Visibility Timeout

○ C. Processing Timeout

○ D. Receiving Timeout

Your answer is incorrect.

Answer - B

Please refer to the AWS SQS FAQ section - https://aws.amazon.com/sqs/faqs/

Q: What is a visibility timeout?

The visibility timeout is a period of time during which Amazon SQS prevents other consuming components from receiving and processing a message. For more information, see Visibility Timeout.

The correct answer is: Visibility Timeout

Question 12

Not answered

☐ ⚑

You are currently hosting an infrastructure and most of the EC2 instances are near 90 – 100% utilized. What is the type of EC2 instances you would utilize to ensure costs are minimized?

Please select :

○ A. Reserved instances

○ B. On-demand instances

○ C. Spot instances

○ D. Regular instances

Your answer is incorrect.

Answer: A – When you have instances that will be used continuously and throughout the year, the best option is to buy reserved instances. By buying reserved instances, you are actually allocated an instance for the entire year or the duration you specify with a reduced cost.

To understand more on reserved instances, please visit the link - https://aws.amazon.com/ec2/pricing/reserved-instances/

The correct answer is: Reserved instances

What is the ability provided by AWS to enable fast, easy, and secure transfers of files over long distances between your client and your Amazon S3 bucket.

Please select :

○ A. File Transfer

○ B. HTTP Transfer

○ C. Transfer Acceleration

○ D. S3 Acceleration

Your answer is incorrect.

Answer - C

Please refer to the AWS S3 FAQ section - https://aws.amazon.com/s3/faqs/

Q. What is Transfer Acceleration?

Amazon S3 Transfer Acceleration enables fast, easy, and secure transfers of files over long distances between your client and your Amazon S3 bucket. Transfer Acceleration leverages Amazon CloudFront's globally distributed AWS Edge Locations. As data arrives at an AWS Edge Location, data is routed to your Amazon S3 bucket over an optimized network path.

The correct answer is: Transfer Acceleration

What is one key difference between an Amazon EBS-backed and an instance-store backed instance?

Please select :

○ A. Amazon EBS-backed instances can be stopped and restarted.

○ B. Instance-store backed instances can be stopped and restarted.

○ C. Auto scaling requires using Amazon EBS-backed instances.

○ D. Virtual Private Cloud requires EBS backed instances.

Your answer is incorrect.

Answer A- Instance-store backed instances **cannot be restarted.**

Please see the url for the key differences between EBS and instance store volumes - http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ComponentsAMIs.html

The correct answer is: Amazon EBS-backed instances can be stopped and restarted.

Question 15

Not answered

How can the domain's zone apex, for example, "zoneapexdomain.com", be pointed towards an Elastic Load Balancer?

Please select :

- ○ A. By using an Amazon Route 53 Alias record
- ○ B. By using an AAAA record
- ○ C. By using an Amazon Route 53 CNAME record
- ○ D. By using an A record

Your answer is incorrect.

Answer — A. Aws recommends using the Alias record. Please see the Route53 FAQ's

https://aws.amazon.com/route53/faqs/

Q. Can I point my zone apex (example.com versus www.example.com) at my Elastic Load Balancer?

Yes. Amazon Route 53 offers a special type of record called an 'Alias' record that lets you map your zone apex (*example.com*) DNS name to your ELB DNS name (i.e. *elb1234.elb.amazonaws.com*). IP addresses associated with Amazon Elastic Load Balancers can change at any time due to scaling up, scaling down, or software updates. Route 53 responds to each request for an Alias record with one or more IP addresses for the load balancer. Queries to Alias records that are mapped to ELB load balancers are free. These queries are listed as "Intra-AWS-DNS-Queries" on the Amazon Route 53 usage report.

Q. Can I point my zone apex (example.com versus www.example.com) at my website hosted on Amazon S3?

Yes. Amazon Route 53 offers a special type of record called an 'Alias' record that lets you map your zone apex (*example.com*) DNS name to your Amazon S3 website bucket (i.e. *example.com.s3-website-us-west-2.amazonaws.com*). IP addresses associated with Amazon S3 website endpoints can change at any time due to scaling up, scaling down, or software updates. Route 53 responds to each request for an Alias record with one IP address for the bucket. Route 53 doesn't charge for queries to Alias records that are mapped to an S3 bucket that is configured as a website. These queries are listed as "Intra-AWS-DNS-Queries" on the Amazon Route 53 usage report.

The correct answer is: By using an Amazon Route 53 Alias record

Question 16

Not answered

A company wants to utilize aws storage. For them low storage cost is paramount, the data is rarely retrieved, and data retrieval times of several hours are acceptable for them. What is the best storage option to use?

Please select :

- ○ A. Glacier
- ○ B. Reduced Redundancy Storage
- ○ C. EBS backed storage connected to EC2
- ○ D. Cloud Front

Your answer is incorrect.

Answer – A.

With the above requirements, the best option is to opt for Amazon Glacier. Please refer to the Glacier FAQ's

https://aws.amazon.com/glacier/faqs/

Q: How should I choose between Amazon Glacier and Amazon Simple Storage Service (Amazon S3)?

Amazon S3 is a durable, secure, simple, and fast storage service designed to make web-scale computing easier for developers. Use Amazon S3 if you need low latency or frequent access to your data. Use Amazon Glacier if low storage cost is paramount, your data is rarely retrieved, and data retrieval times of several hours are acceptable.

The correct answer is: Glacier

Question 17

Not answered

☐ ⚑

A client application requires operating system privileges on a relational database server. What is an appropriate configuration for a highly available database architecture?

Please select :

○ A. Standalone Amazon EC2 instance

○ B. Amazon RDS in a Multi-AZ configuration

○ C. Amazon EC2 instances in a replication configuration utilizing a Single Availability Zone

○ D. Amazon EC2 instances in a replication configuration utilizing two different Availability Zones

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Your answer is incorrect.

Answer – D

Since the client wants privilege on the RDS, option B is not valid. Since there is a requirement for highly availability, you cannot have just one AZ and one EC2 instance. Hence D is the right answer.

For more information, please read the below link:

• http://docs.aws.amazon.com/dms/latest/userguide/CHAP_Introduction.ReplicationInstance.html

The correct answer is: Amazon EC2 instances in a replication configuration utilizing two different Availability Zones

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Question 18

Per the AWS Acceptable Use Policy, penetration testing of EC2 instances:

Please select :

○ A. May be performed by AWS, and will be performed by AWS upon customer request.

○ B. May be performed by AWS, and is periodically performed by AWS.

○ C. Are expressly prohibited under all circumstances.

○ D. May be performed by the customer on their own instances with prior authorization from AWS.

○ E. May be performed by the customer on their own instances, only if performed from EC2 instances.

Your answer is incorrect.

Answer – D. You need to take prior authorization from AWS before doing a penetration test on EC2 Instances. Please refer to the below url for more details.

https://aws.amazon.com/security/penetration-testing/

The correct answer is: May be performed by the customer on their own instances with prior authorization from AWS.

Question 19

Not answered

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

Please select :

○ A. Attach the volume to an instance using EC2's SSL interface.

○ B. Write the data randomly instead of sequentially.

○ C. Encrypt the volume using the S3 server-side encryption service.

○ D. Create an IAM policy that restricts read and write access to the volume.

○ E. Use an encrypted file system on top of the EBS volume.

Your answer is incorrect.

Answer – E. In order to secure data at rest on an EBS volume, you either have to encrypt the volume when it is being created or encrypt the data after the volume is created.

The correct answer is: Use an encrypted file system on top of the EBS volume.

Question 20

Not answered

Which aws service is used to monitor all API calls to AWS

Please select :

  ◯ A. Amazon SES

  ◯ B. Amazon Cloudtrail

  ◯ C. Amazon CloudFront

  ◯ D. Amazon S3

Your answer is incorrect.

Answer – B

Please refer to the product description for AWS Cloutrail at the URL -

https://aws.amazon.com/cloudtrail/

The correct answer is: Amazon Cloudtrail

Question 21

Not answered

If you want to launch Amazon Elastic Compute Cloud (EC2) instances and assign each instance a private IP address in a predetermined range, you should: (choose one of the correct answer below)

Please select :

  ◯ A. Launch the instance from a private Amazon Machine Image (AMI).

  ◯ B. Assign a group of sequential Elastic IP address to the instances.

  ◯ C. Launch the instances in the Amazon Virtual Private Cloud (VPC).

  ◯ D. Launch the instances in a Placement Group.

  ◯ E. Use standard EC2 instances since each instance gets a private Domain Name Service (DNS) already.

Your answer is incorrect.

Answer – C.

This is the default reason for a VPC to host your own subnet and have EC2 instances have a private IP when it is launched in a VPC. Below is an example of an EC2 instance having a Private IP.

Instance ID	i-794961f7
Instance state	running
Instance type	t2.micro
Private DNS	ip-10-0-0-68.ap-southeast-1.compute.internal
Private IPs	10.0.0.68
Secondary private IPs	
VPC ID	vpc-39ddd55c
Subnet ID	subnet-858373f3
Network interfaces	eth0
Source/dest. check	False

For more information on private IP addresses, please refer the below URL:

- http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-instance-addressing.html

The correct answer is: Launch the instances in the Amazon Virtual Private Cloud (VPC).

Question 22

Not answered

A company needs to deploy virtual desktops to its customers in a virtual private cloud, leveraging existing security controls. Which set of AWS services and features will meet the company's requirements?

Please select :

- ○ A. Virtual Private Network connection. AWS Directory Services, and ClassicLink

- ○ B. Virtual Private Network connection. AWS Directory Services, and Amazon Workspaces

- ○ C. AWS Directory Service, Amazon Workspaces, and AWS Identity and Access Management

- ○ D. Amazon Elastic Compute Cloud, and AWS Identity and Access Management

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Your answer is incorrect.

Answer – C

Since the question says that you need to deploy Virtual Desktops. This can be done via the Amazon Workspaces option. Since there is a need to leverage existing security controls, you need the AWS Directory service from AWS. Virtual Private Network connection is not an AWS service.

The correct answer is: AWS Directory Service, Amazon Workspaces, and AWS Identity and Access Management

Question 23

Not answered

Which of the following statements are true about Amazon Reduced Redundancy Storage (RRS)? Choose the correct 3 answers from the below options.

Please select :

- [ ] A. RRS has the ability to provide eleven nines availability.

- [ ] B. RRS has the ability to provide 99.99% availability.

- [ ] C. RRS has the ability to provide 99.99% durability.

- [ ] D. If there is a requirement to store data that is easily reproducible or durably stored elsewhere, then RRS is the ideal option.

Your answer is incorrect.

Answer: B,C and D. The Durability and availability are given in the aws site for RRS.

- Reduced Redundancy Storage (RRS) is an Amazon S3 storage option that enables customers to store noncritical, reproducible data at lower levels of redundancy than Amazon S3's standard storage.
- S3 is the most relaible and durable storage service from Amazon.Where as if you have data that is non-critical and can be easily reproducible if lost, then that can be stored in RRS to reduce the cost of your storage.
- The RRS option stores objects on multiple devices across multiple facilities, providing 400 times the durability of a typical disk drive, but does not replicate objects as many times as standard Amazon S3 storage.

You can read more about RRS in the below link:

- https://aws.amazon.com/s3/reduced-redundancy/

Here is the snapshot of durability and availability of RRS compared to other standard storage options:

The correct answer is: RRS has the ability to provide 99.99% availability., RRS has the ability to provide 99.99% durability., If there is a requirement to store data that is easily reproducible or durably stored elsewhere, then RRS is the ideal option.

Question 24

Not answered

After creating a new IAM user which of the following must be done before they can successfully make API calls?

Please select :

A. Add a password to the user.

B. Enable Multi-Factor Authentication for the user.

C. Assign a Password Policy to the user.

D. Create a set of Access Keys for the user.

Your answer is incorrect.

Answer – D

In IAM , when you create a user , you need to download the Access Key ID and Secret access key so that the user can access aws.

		User	Access key ID	Secret access key
▼	✓	demouser	AKIAJ6KYKT7WJUHHSHTQ	********* Show

✓ Created user demouser
✓ Created access key for user demouser

The correct answer is: Create a set of Access Keys for the user.

Question 25

Not answered

What is the AWS service provided which provides a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability.

Please select :

A. AWS RDS

B. DynamoDB

C. Oracle RDS

D. Elastic Map Reduce

Your answer is incorrect.

Answer: - B

DynamoDB is a fully managed NoSQL offering provided by AWS. It is now available in most regions for users to consume. The link provides the full details on the product

http://docs.aws.amazon.com/amazondynamodb/latest/developerguide/Introduction.html

The correct answer is: DynamoDB

Question 26

Not answered

A company's application is intending to use Auto Scaling and has the requirement to store user state information.

Which of the following AWS services provides a shared data store with durability and low latency?

Please select :

- A. AWS ElastiCache Memcached
- B. Amazon Simple Storage Service
- C. Amazon EC2 instance storage
- D. Amazon DynamoDB

Your answer is incorrect.

Answer – D

Amazon Dynamo DB is used for storing small amounts of data such as user state information. And this service offer's durability and low latency. Below is a snapshot of when to use S3 and DynamoDB from the DynamoDB FAQ's - https://aws.amazon.com/dynamodb/faqs/

The correct answer is: Amazon DynamoDB

Question 27

Not answered

Which of the following requires a custom CloudWatch metric to monitor?

Please select :

- A. Memory Utilization of an EC2 instance
- B. CPU Utilization of an EC2 instance
- C. Disk usage activity of an EC2 instance
- D. Data transfer of an EC2 instance

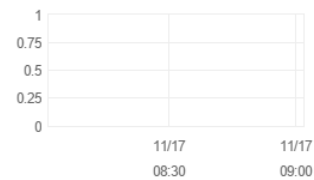Your answer is incorrect.

Answer – A

Memory Utilization is a metric not offered directly by Cloudwatch.

So when you view the Cloudwatch metrics for your EC2 instance, you can see CPU Utilization and Disk Read Operations metrics.
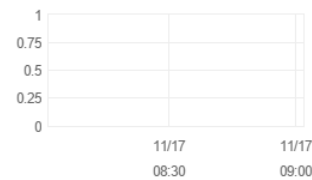
Below are your CloudWatch metrics for the selected resources (a maximum of 10). Click on a graph to see an expanded view. All times shown are
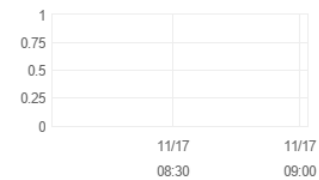
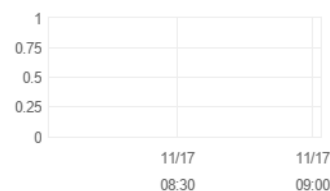› View all CloudWatch metrics

CPU Utilization (Percent)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```

Disk Reads (Bytes)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```

Disk Read Operations (Operations)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```
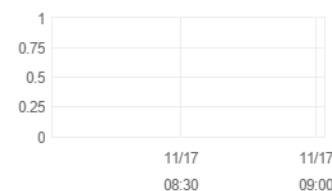
You can also see Network statistics for Data transfer, but u will not be able to see Memory Utilization. This will be a custom Cloudwatch metric.
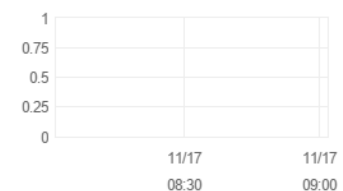
Network Out (Bytes)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```

Network Packets In (Count)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```

Network Packets Out (Count)

```
  1
0.75
 0.5
0.25
   0
      11/17        11/17
      08:30        09:00
```

The correct answer is: Memory Utilization of an EC2 instance

Question 28

Not answered

☐ 🏳

Which of the following notification endpoints or clients are supported by Amazon Simple Notification Service? Choose 2 answers from the options below.

Please select :

☐ A. Email

☐ B. CloudFront distribution

☐ C. File Transfer Protocol

☐ D. Short Message Service

☐ E. Simple Network Management Protocol

Your answer is incorrect.

Answer – A and D

When you create a subscription in SNS , below are the protocols available.

Create Subscription

Building a mobile app? Try AWS Mobile Hub.   ×

Topic ARN   Enter topic ARN

Protocol   HTTP

                     | HTTP |
Endpoint | HTTPS |
                     | Email |
                     | Email-JSON |
                     | Amazon SQS |
                     | Application |
                     | AWS Lambda |
                     | SMS |

The correct answer is: Email, Short Message Service

Which set of Amazon S3 features helps to prevent and recover from accidental data loss?

Please select :

- A. Object lifecycle and service access logging

- B. Object versioning and Multi-factor authentication

- C. Access controls and server-side encryption

- D. Website hosting and Amazon S3 policies

Your answer is incorrect.

Answer – B

The versioning ability in S3 helps to recover from Accidental deletion. Also there is a delete capability with MFA feature. You can refer to the FAQ's from S3 for further details:

- https://aws.amazon.com/s3/faqs/

The correct answer is: Object versioning and Multi-factor authentication

---

The Trusted Advisor service provides insight regarding which four categories of an AWS account?

Please select :

○ A. Security, fault tolerance, high availability, and connectivity

○ B. Security, access control, high availability, and performance

○ C. Performance, cost optimization, security, and fault tolerance

○ D. Performance, cost optimization, access control, and connectivity

Your answer is incorrect.

Answer – C

Below is the screenshot of what services the Trusted Advisor Dashboard offers.

The correct answer is: Performance, cost optimization, security, and fault tolerance

Question 31

Not answered

A company is deploying a two-tier, highly available web application to AWS. Which service provides durable storage for static content while utilizing lower Overall CPU resources for the web tier?

Please select :

○ A. Amazon EBS volume

○ B. Amazon S3

○ C. Amazon EC2 instance store

○ D. Amazon RDS instance

Your answer is incorrect.

Answer – B

Amazon S3 is the default storage service that should be considered for companies. If provides durable storage for all static content.

The correct answer is: Amazon S3

Question 32

Not answered

When will you incur costs with an Elastic IP address (EIP)?

Please select :

○ A. When an EIP is allocated.

○ B. When it is allocated and associated with a running instance.

○ C. When it is allocated and associated with a stopped instance.

○ D. Costs are incurred regardless of whether the EIP is associated with a running instance.

Your answer is incorrect.

Answer- C

The entire pricing for EC is given here. If an Elastic IP is allocated but not attached to any EC2 instance or if the EC2 instance is in a stopped state, then you will have a small charge.

http://aws.amazon.com/ec2/pricing/

The correct answer is: When it is allocated and associated with a stopped instance.

Question 33

Not answered

☐ ⚐

Which of the following instance types are available as Amazon EBS-backed only? Choose 2 answers from the options below

Please select :

☐ A. General purpose T2

☐ B. General purpose M3

☐ C. Compute-optimized C4

☐ D. Compute-optimized C3

☐ E. Storage-optimized 12

Your answer is incorrect.

Answer – A and C

For details for all instance types, please visit the url - https://aws.amazon.com/ec2/instance-types/

The below screenshots show the details for T2 and C4 instances which have a storage type of EBS.

ᴧ

The correct answer is: General purpose T2, Compute-optimized C4

Question 34

Not answered

How many availability zones are mapped to a subnet?

Please select :

- A. 1
- B. 2
- C. Depends on aws at the time of creating a subnet
- D. Depends on the number of instances you are going to host in the subnet.

Your answer is incorrect.

Answer: A – Remember that when a subnet is created, it is always mapped to one availability zone.

When you go the VPC dashboard, and go to the Subnet section, you can click on Create Subnet

When you create the subnet, you can only attach one AZ to the subnet.

The correct answer is: 1

Question 35

Not answered

A company is building a service in which Amazon EC2 worker instances 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

Your answer is incorrect.

Answer – C

For any sort of storage for file based system, it must be done in Amazon S3.

The correct answer is: A single Amazon S3 bucket

Question 36

Not answered

A custom script needs to be passed to a new Amazon Linux instances created in your Auto Scaling group. Which feature allows you to accomplish this?

Please select :

- A. User data

- B. EC2Config service

- C. IAM roles

- D. AWS Config

Your answer is incorrect.

Answer – A

When you configure an instance during creation, you can add custom scripts to the User data section.

So in Step 3 of creating an instance, in the Advanced Details section, we can enter custom scripts in the User Data section. The below script installs Perl during the instance creation of the EC2 instance.

The correct answer is: User data

Question 37

Not answered

A company is building software on AWS that requires access to various AWS services. Which configuration should be used to ensure mat AWS credentials (i.e., Access Key ID/Secret Access Key combination) are not compromised?

Please select :

- A. Enable Multi-Factor Authentication for your AWS root account.

- B. Assign an IAM role to the Amazon EC2 instance.

- C. Store the AWS Access Key ID/Secret Access Key combination in software comments.

- D. Assign an IAM user to the Amazon EC2 Instance.

Your answer is incorrect.

Answer – B

It is a best practise to always create roles which can be assigned to EC2 instances. This is done so as to not compromise the Access Key ID/Secret Access Key combination.

The correct answer is: Assign an IAM role to the Amazon EC2 instance.

Question 38

Not answered

What is the minimum time Interval for the data that Amazon CloudWatch receives and aggregates?

Please select :

- A. One second
- B. Five seconds
- C. One minute
- D. Three minutes
- E. Three minutes

Your answer is incorrect.

Answer – C

The minimum time interval is one minute. This is defined in the FAQ section for Cloudwatch in the link https://aws.amazon.com/cloudwatch/faqs/

The correct answer is: One minute

Question 39

Not answered

Resources that are created in AWS are identified by a unique identifier which is known as what option given below

Please select :

- A. Amazon Resource Number
- B. Amazon Resource Nametag
- C. Amazon Resource Name
- D. Amazon Resource Namespace

Your answer is incorrect.

Answer – C

Amazon Resource Names (ARNs) are used to uniquely identify AWS resources. For information on ARN's, refer to the link -

http://docs.aws.amazon.com/general/latest/gr/aws-arns-and-namespaces.html

The correct answer is: Amazon Resource Name

Question 40

Not answered

When you are using Route53 for a web site hosted in S3 , what are the one of the rules that must be adhered to? Choose the correct answer from the options below

Please select :

- A. The S3 bucket must be the same as the domain name
- B. The record set cannot use an alias
- C. The record set must be of type "MX"
- D. The S3 bucket must be in the same region as the hosted zone

Your answer is incorrect.

Answer – A

This is given in the aws documentation

For more information on using Route53 along with S3, please visit the link

http://docs.aws.amazon.com/Route53/latest/DeveloperGuide/RoutingToS3Bucket.html

The correct answer is: The S3 bucket must be the same as the domain name

Question 41

Not answered

What are some of the benefits of using the Cloudformation service? Choose 2 answers from the options given below

Please select :

- A. Can automatically increase instance capacity
- B. A storage location for your applications code
- C. Version control your infrastructure
- D. A great disaster recovery option

Your answer is incorrect.

Answer – C and D

The justification for Infrastructure as code is given in the aws documentation

For the justification on disaster recovery, please visit the below link

https://aws.amazon.com/blogs/aws/new-whitepaper-use-aws-for-disaster-recovery/

For more information on Cloudformation, please visit the link

https://aws.amazon.com/cloudformation/

The correct answer is: Version control your infrastructure, A great disaster recovery option

---

Question 42

Not answered

AWS thrives on the concept of high availability. Which of the below follows the concept of high availability. Choose the correct answer from the options below

Please select :

- A. Implementing security procedures
- B. Implementing multiple AWS services
- C. The ability of system to easily increase in size.
- D. A durable system that can operate for long periods of time without failure.

Your answer is incorrect.

Answer – D

High availability is a characteristic of a system, which aims to ensure an agreed level of operational performance, usually uptime, for a higher than normal period.

For more information on high availability, please refer to the following link

https://en.wikipedia.org/wiki/High_availability

The correct answer is: A durable system that can operate for long periods of time without failure.

Question 43

Not answered

What best describes the "Principal of Least Privilege"? Choose the correct answer from the options given below

Please select :

○ A. All users should have the same baseline permissions granted to them to use basic AWS services.

○ B. Users should be granted permission to access only resources they need to do their assigned job.

○ C. Users should submit all access request in written so that there is a paper trail of who needs access to different AWS resources.

○ D. Users should always have a little more access granted to them then they need, just in case they end up needed it in the future.

Your answer is incorrect.

Answer – B

The principle means giving a user account only those privileges which are essential to perform its intended function. For example, a user account for the sole purpose of creating backups does not need to install software: hence, it has rights only to run backup and backup-related applications.

For more information on principle of least privilege, please refer to the following link

https://en.wikipedia.org/wiki/Principle_of_least_privilege

The correct answer is: Users should be granted permission to access only resources they need to do their assigned job.

☐ ⚐

Which of the following best describes the purpose of an Elastic Load Balancer. Choose an answer from the options given below. Choose the correct answer from the options given below

Please select :

○ A. To scale more EC2 instances on demand

○ B. To evenly distribute traffic among multiple EC2 instances located in single or different Availability Zones.

○ C. To distribute traffic to a second instance once the first instance capacity has reached it's limit.

○ D. To evenly distribute traffic among multiple EC2 instances in the same Availability Zone.

Your answer is incorrect.

Answer – B

Elastic Load Balancing automatically distributes incoming application traffic across multiple Amazon EC2 instances. It enables you to achieve fault tolerance in your applications, seamlessly providing the required amount of load balancing capacity needed to route application traffic.

And the ELB is used to distribute traffic between instances in Multiple AZ's.

For more information on Elastic Load Balancer, please refer to the following link

- https://aws.amazon.com/elasticloadbalancing/

Some more key points about ELB:

- Elastic Load Balancer (ELB) is used for roting traffic to various EC2 instances located across the multiple Availability Zones(AZs).
- ELB can detect the healthy and unhealth EC2 instances. It will not route traffic to the unhealthy EC2 instances.
- If all the instances in the same AZ is not healthy, it will route the traffic to other AZ EC2 instances.
- Achieve higher levels of fault tolerance for your applications by using Elastic Load Balancing to automatically route traffic across multiple instances and multiple Availability Zones. Elastic Load Balancing ensures that only healthy Amazon EC2 instances receive traffic by detecting unhealthy instances and rerouting traffic across the remaining healthy instances. If all of your EC2 instances in one Availability Zone are unhealthy, and you have set up EC2 instances in multiple Availability Zones, Elastic Load Balancing will route traffic to your healthy EC2 instances in those other zones.

The correct answer is: To evenly distribute traffic among multiple EC2 instances located in single or different Availability Zones.

Question 45

Not answered

When you create a default VPC, what are the services you get by default in the VPC

Please select :

- A. An Elastic Load Balancer
- B. Default subnet in each Availability Zone
- C. An Internet Gateway attached to the default VPC
- D. A light weight rds such as SQL Server Express.

Your answer is incorrect.

Answer: B and C. For the list of default services given for a default VPC, follow the link

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/default-vpc.html

to get more information on what comes as part of a default VPC.

The correct answer is: Default subnet in each Availability Zone, An Internet Gateway attached to the default VPC

Question 46

Not answered

In an Autoscaling policy what best describes what the purpose of a scaling policy is. Choose an answer from the options below.

Please select :

- A. A set of CloudWatch metric thresholds that dictate when to add or remove instances from the Auto Scaling group.

- B. The IAM access policy granted to an Auto Scaling group.

- C. The percentage at which an ELB will send traffic to an instance before it sends traffic to a different instance.

- D. An SNS notification alert.

Your answer is incorrect.

Answer – A

You can create a scaling policy that uses CloudWatch alarms to determine when your Auto Scaling group should scale out or scale in. Each CloudWatch alarm watches a single metric and sends messages to Auto Scaling when the metric breaches a threshold that you specify in your policy. You can use alarms to monitor any of the metrics that the services in AWS that you're using send to CloudWatch, or you can create and monitor your own custom metrics.

For more information on Scaling policies, please refer to the following link

http://docs.aws.amazon.com/autoscaling/latest/userguide/policy_creating.html

The correct answer is: A set of CloudWatch metric thresholds that dictate when to add or remove instances from the Auto Scaling group.

Question 47

Not answered

A company has a solution hosted in AWS. This solution consists of a set of EC2 instances. They have been recently getting attacks as their IT security departments identified that attacks are from a set of IP addresses. Which of the following methods can be adopted to help in this situation.

Please select :

A. Place the EC2 instances into private subnets, and set up an NAT gateway so employees can access them.

B. Remove the IGW form the VPC so that no outside traffic can reach the EC2 instances.

C. Lock down of NACL for the set to IP address.

D. Place the EC2 instances into private subnets, and set up a bastion host so employees can access them.

Your answer is incorrect.

Answer – C

The NACL's can be modified to be most secure by only denying the traffic from the set of IP addresses.

For more information on NACL, please refer to the following link

- http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_ACLs.html

The correct answer is: Lock down of NACL for the set to IP address.

Question 48

Not answered

You have an ELB distributing traffic a fleet of EC2 instances inside your VPC, evenly spread across two Availability Zones. However, you realize that only half of our instances are actually receiving traffic. What is the most likely cause of this problem? Choose the correct answer from the options given below

Please select :

A. The ELBs listener is not set to port 80.

B. One or more security groups do not allow HTTP traffic.

C. Cross-zone load balancing has not been enabled.

D. The health check ping port is set to port 80, but should be set to port 22.

Your answer is incorrect.

Answer – C

By default, your Classic Load Balancer distributes incoming requests evenly across its enabled Availability Zones. For example, if you have ten instances in Availability Zone us-west-2a and two instances in us-west-2b, the requests are distributed evenly between the two Availability Zones. As a result, the two instances in us-west-2b serve the same amount of

traffic as the ten instances in us-west-2a. To ensure that your load balancer distributes incoming requests evenly across all instances in its enabled Availability Zones, enable cross-zone load balancing.

For more information on ELB Cross load balancer, please refer to the following link

http://docs.aws.amazon.com/elasticloadbalancing/latest/classic/enable-disable-crosszone-lb.html

The correct answer is: Cross-zone load balancing has not been enabled.

You have an application currently running on five EC2 instances as part of an Auto Scaling group. 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? Choose 2 likely 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.

Your answer is incorrect.

Answer – A and B

This is provided in the aws documentation

For more information on troubleshooting Autoscaling, please refer to the following link

http://docs.aws.amazon.com/autoscaling/latest/userguide/ts-as-capacity.html

The correct answer is: You already have 20 on-demand instances running., The Auto Scaling group's MAX size is set at five.

If need to upload a file to S3 that is 600MB in size, which of the following is the best option to use? Choose an answer from the options below. Choose the correct answer from the options below

Please select :

○ A. Single operation upload

○ B. Snowball

○ C. AWS Import/Export

○ D. Multi-part upload

Your answer is incorrect.

Answer – D

The Multipart upload API enables you to upload large objects in parts. You can use this API to upload new large objects or make a copy of an existing object (see Operations on Objects).

Multipart uploading is a three-step process: You initiate the upload, you upload the object parts, and after you have uploaded all the parts, you complete the multipart upload. Upon receiving the complete multipart upload request, Amazon S3 constructs the object from the uploaded parts, and you can then access the object just as you would any other object in your bucket.

For more information on Multi-part file upload, please refer to the following link

http://docs.aws.amazon.com/AmazonS3/latest/dev/mpuoverview.html

The correct answer is: Multi-part upload

A company has the requirement to store files in S3. After a period of a month, these files can be archived. The archived files might be required after a period of 3-4 months. Which of the following suits the requirements

Please select :

○ A. Use EC2 instances with EBS volumes, one for normal storage and the other for archived storage

○ B. Use S3 for normal file storage and use lifecycle policies for moving the files to glacier.

○ C. Use EC2 instances with EBS volumes and use lifecycle policies for moving the files to glacier.

○ D. Use glacier for normal file storage and use lifecycle policies for moving the files to S3.

Your answer is incorrect.

Answer – B

Lifecycle configuration enables you to specify the lifecycle management of objects in a bucket. The configuration is a set of one or more rules, where each rule defines an action for Amazon S3 to apply to a group of objects. These actions can be classified as follows:

- Transition actions – In which you define when objects transition to another storage class. For example, you may choose to transition objects to the STANDARD_IA (IA, for infrequent access) storage class 30 days after creation, or archive objects to the GLACIER storage class one year after creation.

For more information on Lifecycle policies, please refer to the following link

http://docs.aws.amazon.com/AmazonS3/latest/dev/object-lifecycle-mgmt.html

The correct answer is: Use S3 for normal file storage and use lifecycle policies for moving the files to glacier.

Question 52

Not answered

☐ ⚑

Your CloudFront distribution is performing well, but you are still getting too many request at the origin locations. What could be one way to increase CloudFront performance? Choose the correct answer from the options below

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

---

Your answer is incorrect.

Answer – C

You can control how long your objects stay in a CloudFront cache before CloudFront forwards another request to your origin. Reducing the duration allows you to serve dynamic content. Increasing the duration means your users get better performance because your objects are more likely to be served directly from the edge cache. A longer duration also reduces the load on your origin.

For more information on Cloudfront cache expiration, please refer to the following link

http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Expiration.html

The correct answer is: Increase the cache expiration time

Question 53

Not answered

What are the types of interfaces available when working with the a DirectConnect connetion? Choose 2 answers from the options given below.

Please select :

☐ A. Private

☐ B. Primary

☐ C. Secondary

☐ D. Public

Your answer is incorrect.

Answer – A and D

Public virtual interface - To connect to AWS public endpoints (for example, Amazon EC2 or Amazon S3) with dedicated network performance, use a public virtual interface.

Private virtual interface - To connect to private services such as an Amazon VPC with dedicated network performance, use a private virtual interface.

For more information on public and private interfaces, please refer to the following link

https://aws.amazon.com/premiumsupport/knowledge-center/public-private-interface-dx/

The correct answer is: Private, Public

Question 54

Not answered

If you wanted to extend your on-premise infrastructure with AWS, which of the below options would help. Choose 2 answers from the options given below

Please select :

☐ A. Virtual private connection

☐ B. Customer gateway

☐ C. DirectConnect

☐ D. Primary Connection

Your answer is incorrect.

Answer – A and C

You can either build a VPN or have a direct connect connection

For more information on VPC to on-premise networks, please refer to the following link

https://aws.amazon.com/blogs/apn/amazon-vpc-for-on-premises-network-engineers-part-one/

The correct answer is: Virtual private connection, DirectConnect

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Question 55

Not answered

Why does stopping and starting an instance help in fixing a System Status Check error? Choose an answer from the options given below

Please select :

- A. Stopping and starting an instance causes the instance to change the AMI.
- B. Stopping and starting an instance causes the instance to be provisioned on different AWS hardware.
- C. Stopping and starting an instance reboots the operating system.
- D. None of the above

Your answer is incorrect.

Answer – B

This is given in the aws documentation

For more information on starting and stopping instances, please refer to the following link

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Stop_Start.html

The correct answer is: Stopping and starting an instance causes the instance to be provisioned on different AWS hardware.

Question 56

Not answered

In consolidated billing what are the 2 different types of accounts.

Please select :

- A. Paying account and Linked account
- B. Parent account and Child account
- C. Main account and Sub account.
- D. Primary account and Secondary account.

Your answer is incorrect.

Answer: A – You can have a combination of Paying accounts and linked accounts. When you have consolidated billing you have the facility to reduce the costs for the paying account. This is one of the main advantages of consolidated billing.

The correct answer is: Paying account and Linked account

Question 57

Not answered

What is the term often used to describe a DR scenario in which a minimal version of an environment is always running in the cloud. Choose an answer from the options given below

Please select :

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

Your answer is incorrect.

Answer - B

This is given in a whitepaper published by AWS

For more information on disaster recovery, please refer to the below link

https://media.amazonwebservices.com/AWS_Disaster_Recovery.pdf

The correct answer is: Pilot Light

Question 58

Not answered

Which of the following features ensures even distribution of traffic to Amazon EC2 instances in multiple Availability Zones registered with a load balancer?

Please select :

- A. Elastic Load Balancing request routing
- B. An Amazon Route 53 weighted routing policy
- C. Elastic Load Balancing cross-zone load balancing
- D. An Amazon Route 53 latency routing policy

Your answer is incorrect.

Answer: C – To ensure that traffic is evenly distributed, you need to ensure the "Enable Cross-Zone Load balancing option" is chosen. This option comes up when you are creating a classic load balancer in Step 5 of Add EC2 instances.

The correct answer is: Elastic Load Balancing cross-zone load balancing

---

Currently you have a VPC with EC2 Security Group and several running EC2 instances. You change the Security Group rules to allow inbound traffic on a new port and protocol, and launch several new instances in the same Security Group. When will the Security Group changes be applied to the EC2 instances? Please choose the correct answer.

Please select :

- ○ A. Immediately to all instances in the security group.
- ○ B. Immediately to the new instances only.
- ○ C. Immediately to the new instances, but old instances must be stopped and restarted before the new rules apply.
- ○ D. To all instances, but it may take several minutes for old instances to see the changes.

Your answer is incorrect.

Answer: A – By default whatever changes you make to security rules will be applied in all instances which are part of that security group.

When you add or remove rules, they are automatically applied to all instances associated with the security group.

For more information, please refer the below URL:

- http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_SecurityGroups.html

The correct answer is: Immediately to all instances in the security group.

What is the minimum size of an object that can be uploaded to Amazon S3?

Please select :

- ○ A. 1Megabyte
- ○ B. 0Bytes

○ C. 1Byte

○ D. 5TB

Save the state of the flags

Finish review