The image below is an example of a Web Application. Which Amazon Service/component will help the application respond to heavy traffic and remove instances when traffic slows?

|  |  |
| --- | --- |
|  | Auto Scaling Group |

When attempting to design a cloud architecture for elasticity which property is most important?

|  |  |
| --- | --- |
| Correct Answer | Scalable |

Common best practice when designing a cloud architecture is to be optimistic about failures. This helps to avoid over-designing the architecture by introducing redundant and loosely coupled components.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Correct Answer |  | False |

The act of increasing the specifications of an individual resource refers to?

|  |  |
| --- | --- |
|  |  |
| Correct Answer | Vertical Scaling |

Select the concepts that are crucial for a good cloud architecture.

|  |  |
| --- | --- |
| Correct Answer | High Availability |
| Correct Answer | Redundancy |
|  | Single Point of Failures |
| Correct Answer | Elasticity |
| Correct Answer | Vertical + Horizontal Scaling |
| Correct Answer | Loose Coupling of Components |

What AWS Service provides a comprehensive view of all security alerts, reports, and compliance statuses of AWS accounts?

|  |  |
| --- | --- |
|  | GuardDuty |
| Correct Answer | Security Hub |

What are two of the best security features AWS provides when compared to GCP and Azure? (Choose two answers)

|  |  |
| --- | --- |
| Correct Answer | Security Groups |
|  | Activity Logs |
| Correct Answer | IAM |

What model does AWS use for security?

|  |  |
| --- | --- |
|  | Traditional Model |
|  | Multilevel Security |
| Correct Answer | Shared Responsibility Model |

What type of encryption does AWS typically use?

|  |  |
| --- | --- |
|  | DES |
| Correct Answer | AES-256 |

AWS IAM users are required to meet strong password policy criteria by default.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Can application session state be stored in cache?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Can you manage a cache cluster yourself on EC2?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Can Redis support read replicas?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Which engine uses key/value data stores?

|  |  |
| --- | --- |
| Correct Answer | Memcached |

Which engine stores data as blobs that can be retrieved with a unique key?

|  |  |
| --- | --- |
| Correct Answer | Memcached |

What type of storage services does the AWS storage gateway service offer?

|  |  |
| --- | --- |
|  | File-based |
|  | Volume-based |
|  | Tape based |
| Correct Answer | All the Above |

which service uses AWS edge locations

|  |  |
| --- | --- |
| Correct Answer | Amazon Cloud Front |

In the context of AWS, Which type of record is commonly used to route traffic to an IPv6 address?

|  |  |
| --- | --- |
|  | An A record |
|  | A CNAME |
| Correct Answer | AN AAAA record |

Where do you register a domain name?

|  |  |
| --- | --- |
| Correct Answer | With a domain registrar |
|  | Feedback:  Domain names are registered with a domain registrar, which then registers the name to InterNIC. |

The start of a zone in AWS is defined by the SOA; therefore all zones must have an SPF record by default

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |
|  | | Feedback:  The start of a zone is defined by the SOA; therefore all zones must have an SOA record by default |

Latency-Based routing allows you to route your traffic based on the lowest network latency for your end user.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

**(AWS)** You are rolling out A and B test versions of a web application to see which version results in the most sales. You need 10 percent of your traffic to go to version A, 10 percent to go to version B, and the rest to go to your current production version. Which routing policy should you choose to achieve this?

|  |  |
| --- | --- |
|  | Failover Routing |
|  | Geolocation Routing |
| Correct Answer | Weighted Routing |
|  | Feedback:   Weighted routing best achieve this objective because it allows you to specify which percentage of traffic is directed to each endpoint. |

Which of the following is not a supported Amazon Simple Notification Service (Amazon SNS) protocol?

|  |  |
| --- | --- |
|  |  |
|  |  |
| Correct Answer | Amazon DynamoDB |

When you create a new Amazon Simple Notification Service topic, which of the following is created automatically?

|  |  |
| --- | --- |
| Correct Answer | An Amazon Resource Name (ARN) |

Which of the following options are valid properties of an Amazon Simple Queue Service message? (Choose 2 answers)

|  |  |
| --- | --- |
| Correct Answer | Body |
| Correct Answer | Message ID |

Amazon SQS Access Control allows you to assign policies to queues that grant specific interactions to other accounts, but that account must assume IAM roles from your account.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

AWS-SWF: Actors can be workflow starters, deciders, or activity workers.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Amazon SWF gives you full control over implementing and coordinating tasks without worrying about underlying complexities such as tracking their progress and maintaining their state.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

The best suited AWS Services for Non Relational Databases is\_\_\_\_\_\_\_\_\_?

|  |  |
| --- | --- |
|  | AmazonRDS |
| Correct Answer | DynamoDB |

We need to specify the port number and protocol when we add a group to a RDS Security Group.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

What kind of database system is used for Data Warehousing?

|  |  |
| --- | --- |
|  | Online Transaction Processing (OLTP) database system |
| Correct Answer | Online Analytical Processing (OLAP) database system |

Which AWS Services can be used for building a social networking application?

|  |  |
| --- | --- |
| Correct Answer | Amazon Neptune |

Replication of the data from the master database or primary instance to the slave database automatically is called Synchronous Replication.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Which of the following command can be used to export data out of Amazon RedShift?

|  |  |
| --- | --- |
|  | VACCUM |
| Correct Answer | UNLOAD |

Database engines supported by Amazon RDS are ---------.(select the best choice)

|  |  |
| --- | --- |
|  | MySQL and Oracle. |
| Correct Answer | MySQL, Postgres, MariaDB, Oracle and Microsoft SQL Server |

Amazon RDS DB snapshots and automated backups are stored in ---------.

|  |  |
| --- | --- |
|  | Amazon RDS |
| Correct Answer | Amazon S3 |

You are deploying an application on Amazon EC2, which must call AWS APIs. Which method would be the best choice to securely pass credentials to the application?

|  |  |
| --- | --- |
|  | Store API credentials as an object in Amazon S3. |
|  | Embed the API credentials into your application code. |
| Correct Answer | Assign appropriate IAM roles to the EC2 Instances. |

Your company has a set of EC2 Instances that access data objects stored in an S3 bucket. Your IT Security department is concerned about the security of this architecture and wants you to:  
1) Ensure that the EC2 Instance securely accesses the data objects stored in the S3 bucket  
2) Prevent accidental deletion of objects.

Which of the following would help fulfill the requirements of the IT Security department?

Choose 2 answers from the options given below.

|  |  |
| --- | --- |
| Correct Answer | Create an appropriate IAM Role and ensure that EC2 Instances use the IAM Role to access the data in the bucket. |
| Correct Answer | Use an S3 bucket policy that ensures that MFA Delete is set on the objects in the bucket. |

Which of the following are managed using IAM

(choose 2)

|  |  |
| --- | --- |
| Correct Answer | Role |
|  | Bucket Policies |
|  | Security Groups |
| Correct Answer | MFA |

Which of the following is NOT required as a part of AWS suggested best practices for new accounts?

|  |  |
| --- | --- |
|  | Apply an IAM password policy |
| Correct Answer | Delete the root account |

Is deployment and access controlled through IAM?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

What are the 7 elements of JSON?

|  |
| --- |
| **(Version, Statement, Effect, Principal, Action NotAction, Resource, Condition Element)** |

What is the default level of access for a newly created IAM?

|  |  |
| --- | --- |
|  | Multiple Access |
| Correct Answer | No Access |

What level of access does the "root" account have?

|  |  |
| --- | --- |
| Correct Answer | Full Access |
|  | Default access as an administrative account would have |
|  | EC2, S3, IAM |
|  | EC2, S3 |
| Correct Answer(90 %) | Administrator Access |

What are the main permission levels provided with AWS IAM?

|  |  |
| --- | --- |
|  | Groups |
|  | Roles |
|  | Users |
|  | Policies |
| Correct Answer | All of the specified choices |

Elastic Load Balancer is used to distribute traffic among EC2 instances?

Every elastic load balancer requires "listeners" to accept traffic?

AutoScaling can be done across multiple availability regions?

Using Amazon CloudWatch, we can monitor AWS resources like CPU utilization?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Cross-Zone load balancing is a feature of Amazon CloudWatch?

False

What is the largest IP address space a Virtual Private Cloud can have?

|  |  |
| --- | --- |
| Correct Answer | 255.255.0.0 or /16 |

When did VPC get added to the AWS features?

|  |  |
| --- | --- |
| Correct Answer | 2013 |

What computer science discipline does VPC most relate to?

|  |  |
| --- | --- |
| Correct Answer | Network Systems |

What does DHCP provide to an instance?

|  |  |
| --- | --- |
| Correct Answer | DNS, NTP and NetBIOS info |

What is the difference between ACL and security groups?

|  |  |
| --- | --- |
|  | One is a ligament in your knee |
| Correct Answer | Stateful vs stateless |

Instance Stores data persists until the instance is terminated.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Buckets can be used to

|  |  |
| --- | --- |
| Correct Answer | host a static website |

Low cost storage service

|  |  |
| --- | --- |
| Correct Answer | Amazon Glacier |

Multiple availability zones can give these attributes to data storage

|  |  |
| --- | --- |
|  | Coherence |
|  | Tenancy |
| Correct Answer | Availability |
| Correct Answer | Durability |

You can detach instance stores

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Select the best answer: Adding EBS volume to an instance will.

|  |  |
| --- | --- |
|  | add main memory to EC2 instance |
|  | save all data from instance store |
| Correct Answer | add persistent storage volume |

Match the tenancy options

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | Correct Answer | \_\_1\_\_ |  | Customers share hosted machines to run their instances | | Correct Answer | \_\_3\_\_ |  | Customers have exclusive use, visibility and control of host machine for their instances. | | Correct Answer | \_\_2\_\_ |  | Customers instances run on isolated hardware | |  | |  |  | | --- | --- | | **1**. | Shared Tenancy | | **2**. | Dedicated Instances | | **3**. | Dedicated Host | |

What is the keyword for the phrase of a query that lists the table(s) used?

|  |  |
| --- | --- |
|  | SELECT |
|  | USE |
| Correct Answer | FROM |

What is the keyword for the phrase of query that lists any filter(s) used?

|  |  |
| --- | --- |
|  | HAVING |
| Correct Answer | WHERE |

What is the prefix to force BigQuery to use Standard SQL?

|  |  |
| --- | --- |
| Correct Answer | #standardSQL |

Legacy SQL is recommended over Standard SQL?

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Which government agengy oversees air travel consumers reporting?

|  |  |
| --- | --- |
|  | EPA |
| Correct Answer | DOT |

Which sports association was the data for the lab on game statistics from?

|  |  |
| --- | --- |
| Correct Answer | NCAA |

What is the term for a query within a query?

|  |  |
| --- | --- |
| Correct Answer | SUBQUERY |

Which relational database management systems did the lab on flight data use?

|  |  |
| --- | --- |
| Correct Answer | MYSQL |

When 2 or more tables are used in a query what is the keyword for bringing them together?

|  |  |
| --- | --- |
|  | ALIGN |
| Correct Answer | JOIN |

In the Introduction (and the Conclusion) the presenter listed the items DATA, ANALYSIS, and...?

|  |  |
| --- | --- |
|  | RESULTS |
| Correct Answer | DECISIONS |

**Name three languages that google environment supports natively?**

|  |
| --- |
| **(Python, Java, Go, PHP, node)** |

**What is the purpose of routes in a flask app?**

- No text entered -

|  |  |
| --- | --- |
| Answer Key |  |
| Something along the lines of, when a request is made the routes directs the project of what to do. | |

**For a flask app what folder do we store html files in?**

|  |
| --- |
| **(templates, template)** |

What were the three API's we used in the code lab.

|  |
| --- |
| **(vision, storage, datastore)** |

GAE Stands for Google App Engine

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Google Cloud Datastore is a

|  |  |
| --- | --- |
|  | A Text Based Database |
| Correct Answer | A NOSQL Database |

Google App Engine is a

|  |  |
| --- | --- |
| Correct Answer | Platform as a Service (PaaS) |

An Enity in GAE uniquely identifies the rows in the datastore

False

In Google App Engine, do we have to manage all the virtual instances and server configurations ?

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Using Amazon RDS requires an internet connection

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Amazon RDS means?

|  |  |
| --- | --- |
| Correct Answer | Amazon relational Database Service |

Is not a concern when using Amazon RDS

|  |  |
| --- | --- |
|  | Security |
|  | Vendor lock-in |
| Correct Answer | Scaling |

There is a minimum fee for using Amazon RDS

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

All organizations can use Amazon RDS

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

The following are benefits of Amazon RDS except

|  |  |
| --- | --- |
| Correct Answer | Supplier lock-in |

You are required to create at least one (1) EC2 instance to connect to an Amazon RDS

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Select all correct statements regarding AWS Lambda

|  |  |
| --- | --- |
| Correct Answer | AWS Lambda lets developers to focus on their code functionality and leave administration and management issues to AWS Lambda |
| Correct Answer | AWS Lambda is a compute service |
|  |  |
| Correct Answer | AWS Lambda is a compute service that runs your code in response to events and automatically manages the compute resources for you. |

AWS Lambda has two scenario: AWS Lambda functions respond to specific events published from an event source and AWS lambda functions invoked over https.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Pull event model in AWS Lambda, works with streaming data.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

In Push event model in AWS Lambda, external system asynchronously triggers lambda to do something.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

AWS Lambda supports two invocation types:

1. Event invocation type.

2. Request-Response invocation type.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Virtualization is a large umbrella of technologies meant to provide an abstract environment?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Besides applications, we can have virtual storage, memory, and networking?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Which is not one of the three major virtualization characteristic components?

|  |  |
| --- | --- |
| Correct Answer | Quality-of-Service (QoS) |

Virtual machines provide ability to control the execution of a guest in a completely transparent and controlled execution environment?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

A Hypervisor is also known as a Virtual Machine Manager (VMM)?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Amazon Cognito is part of the AWS free tier

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Which platforms does Amazon Cognito support?

|  |  |
| --- | --- |
|  | Android, iOS |
|  | Xamarin, JavaScript |
|  | Unity, .NET |
| Correct Answer | All the platforms specified above. |

What is the maximum number of Cognito identity pools that every AWS account can have?

|  |  |
| --- | --- |
|  | 20 |
|  | 1024 |
| Correct Answer | **60** |

By default, Amazon Cognito creates a new role with limited permissions, end users only have access to

|  |  |
| --- | --- |
| Correct Answer | Cognito Sync and Mobile Analytics. |

AWS Cognito: Unauthenticated users are users who do not authenticate with your own identity system or with one of the supported Identity Providers (Amazon, Facebook, Twitter, Digits, or Google).

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

AWS Lambda Functions can integrate with other AWS services

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

AWS Lambda Functions cannot respond to HTTPS events from custom applications

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | False |

Select all of the correct event models that AWS Lambda Functions supports (according to Amazon)

|  |  |
| --- | --- |
| Correct Answer | Push |
| Correct Answer | Pull |

S3 buckets are cloud storage which can store an unlimited amount of items

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

Which of the following AWS Cloud services is a fully managed NOSQL database service?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | Amazon DynamoDB | |

Which of the following describes a physical location around the world where AWS clusters data centers?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | Fleet | |
|  | |  |  | | --- | --- | | B) | Collection | |
| Correct Answer | |  |  | | --- | --- | | C) | Region | |

what is the deployment term for an environment that extends an existing on-premises infrastructure into the cloud to connect cloud resources to internal systems?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | Hybrid deployment | |

What AWS Cloud service provides a logically isolated section of the AWS Cloud where organizations can launch AWS resources in a virtual network that they define?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | Amazon Virtual Private Cloud(Amazon VPC) | |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | Data is automatically replicated within a region | |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | Enable server access logs on the bucket | |
|  |  |

Which AWS Cloud service allows organizations to gain system-wide visibility into resource utilization, application performance, and operational health?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | AWS Identity and Access Management(IAM) | |
| Correct Answer | |  |  | | --- | --- | | B) | Amazon CloudWatch | |

Which features can be used to restrict access to Amazon Simple Storage Service(Amazon S3) data?(Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer(30 %) | |  |  | | --- | --- | | A) | Use an Amazon S3 bucket policy | |
| Correct Answer(30 %) | |  |  | | --- | --- | | B) | Use an Amazon S3 Access Control List(ACL) on a bucket or object | |
| Correct Answer(40 %) | |  |  | | --- | --- | | C) | Create a pre-signed URL for an object | |

Based on the following Amazon Simple Storage Service(Amazon S3) URL, which one of the following statements is correct?

https://bucket1.abc.com.s3.amazonaws.com/folderx/myfile.doc

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | The Object "folderx/myfile.doc" is stored in the bucket "bucket1.abc.com." | |

Amazon Simple Storage Service (Amazon S3)can have up to how many buckets per account by default?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | 65 | |
| Correct Answer | |  |  | | --- | --- | | B) | 100 | |

In Mapreduce, the idea of distributing the work among the processes and aggregating the results depends on the Fork/Join idea.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

In MapReduce 1.0, we can find YARN which represents an abstraction layer Mapreduce and HDFS.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Which of the following can be considered a limit of MapReduce 1.0? Select all the correct choices.

|  |  |
| --- | --- |
| Correct Answer | Complex to code |
| Correct Answer | Only batch processing |
| Correct Answer | Not all senarios can be fitted with it |

We can export a Java program (e.g.Word Count using mapreduce libraries) developed using Eclipse to a Hadoop system as

|  |  |
| --- | --- |
| Correct Answer | JAR |

In mapreduce, shuffle phase can be performed after the Reduce phase to produce the desired output in a specific order.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

There are three major components in a virtualized environment, namely guest, host, and virtualization layer. True or False?

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

From a virtualizatipon perspective, what is the interface between hardware and software?

|  |  |
| --- | --- |
| Correct Answer | Instruction Set Architecture (ISA) |

Full virtualization poses some limits on performance, because we need to first modify our program and then run it.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | False |

Application-level virtualization is a technique allowing applications to be run in runtime environments that do not natively support all the features required by such applications.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

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?

|  |  |
| --- | --- |
|  | 2 |
|  | 3 |
| Correct Answer | 4 |

**An instance is launched into the public subnet of a VPC. Which of the following must be done in order for it to be accessible FROM the Internet?**

|  |  |
| --- | --- |
| Correct Answer | Attach an Elastic IP to the instance |
|  | Feedback:  You just have to attach an EIP for that instance,which gives a fixed IP for that instance which you have created |

You have requirement to build a database subnet which just needs less than 6 Ip addresses.Which of the following will likely be the most appropriate choice for this subnet?

|  |  |
| --- | --- |
|  | A /28 Public subnet |
|  | A /29 Private Subnet |
| Correct Answer | A /28 Private Subnet |

You have just launched a Windows 2012 Standard Edition in to a custom VPC you have made, but you cannot connect to it via the internet. Which of the below COULD NOT be the cause of the problem?

|  |  |
| --- | --- |
|  | You are trying to connect via your corporate network proxy server which is masking your laptops IP address |
| Correct Answer | The security group for your EC2 instance does not allow ingress traffic over port 22 |

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

|  |  |
| --- | --- |
| Correct Answer | 1 |

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)

|  |  |
| --- | --- |
|  | The EIP will be dissociated from the instance. |
| Correct Answer | All data on instance-store devices will be lost. |
| Correct Answer | The underlying host for the instance is changed. |

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?

|  |  |
| --- | --- |
|  | Security group |
| Correct Answer | Network ACL |

What properties of an Amazon VPC must be specified at the time of creation?

|  |  |
| --- | --- |
| Correct Answer | The CIDR block representing the IP address range |
| Correct Answer | The region for the Amazon VPC |
|  |  |

If you launch five Amazon Elastic Compute Cloud (Amazon EC2) instances in an  
Amazon Virtual Private Cloud (Amazon VPC) without specifying a security group, the  
instances will be launched into a default security group that provides which of the  
following? (Choose 3 answers)

|  |  |
| --- | --- |
| Correct Answer | The five Amazon EC2 instances can communicate with each other. |
| Correct Answer | No inbound traffic will be allowed to the five Amazon EC2 instances |
| Correct Answer | All outbound traffic will be allowed from the five Amazon EC2 instances |

AWS Glacier is much cheaper than S3, but much slower than S3.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

You can create up to\_\_\_\_\_\_\_\_**(1000)**vaults per account per region.

The price for Amazon Glacier is $0.03 per GB per month.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

What does SNS abbreviation implies in the AWS space?

|  |
| --- |
| **(Simple Notification Service)** |

In 2015 AWS Glacier, individual archives are limited to a maximum size of

|  |  |
| --- | --- |
|  | 30TB |
|  | 10TB |
| Correct Answer | 40TB |

AWS Data Pipeline helps you easily create complex data processing workloads that are fault tolerant, repeatable, and highly available.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

With AWS data pipeline's design, processing a million files is as easy as processing a single file.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

AWS data pipeline makes it easy to dispatch work to:

|  |  |
| --- | --- |
| Correct Answer | machines in series |
| Correct Answer | machines in parallel |
| Correct Answer | one machine |
| Correct Answer | many machines |

One cannot try AWS data pipeline for free under the AWS free usage Tier.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

AWS data pipeline allows you to move and process data that was previously locked up in on-premise data silos.

|  |  |  |
| --- | --- | --- |
| Correct Answer |  | True |

You can clone a AWS pipeline using:

|  |  |
| --- | --- |
|  | Command line interface |
| Correct Answer | AWS data pipeline console |

In an AWS data pipeline, one can add, delete, or modify reference fields in an existing object.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |

Which of the following must be specified with launching a new Amazon Elastic Compute Cloud (Amazon EC2) Windows instance?

|  |  |
| --- | --- |
| Correct Answer | Amazon Machine Image (AMI) |
| Correct Answer | Amazon EC2 instance type |

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?

|  |  |
| --- | --- |
| Correct Answer | Use an instance type with 10Gbps network performance. |
| Correct Answer | Put the instances in a placement group |
| Correct Answer | Enable enhanced networking on the instances. |

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

|  |  |
| --- | --- |
| Correct Answer | Using the private half of the instance's key pair. |

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

|  |  |
| --- | --- |
| Correct Answer | Using the private half of the instance's key pair. |

You have a workload that requires 1TB of durable block storage at 1,500 IOPS during normal use. Every night there is an Extract, Transform and Load (ELT) task that requires 3,000 IOPS for 15 minutes. What is the appropriate volume type for this workload?

|  |  |
| --- | --- |
| Correct Answer | Use a general-purpose SSD volume. |

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

|  |  |
| --- | --- |
| Correct Answer | Public DNS Name. |
| Correct Answer | Elastic IP Address. |

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?

|  |  |
| --- | --- |
| Correct Answer | RDP traffic over port 3389 from 72.14.0.0/16 and HTTP traffic over port 80 from 0.0.0.0/0. |

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

|  |  |
| --- | --- |
| Correct Answer | The volume will be available immediately. |
|  |  |

Your order-processing application process 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 e-mails faster. What is a cost efficient way to drain the queue for orders?

|  |  |
| --- | --- |
| Correct Answer | Deploy Spot Instances to assist in processing the orders. |
|  | Feedback:  This is the most cost effective choice. By setting your bid you will get low cost compute capability that is on hand and not being utilized. |

Which of the following can be accomplished through bootstrapping?

|  |  |
| --- | --- |
| Correct Answer(33 %) | Install the most current security updates. |
| Correct Answer(33 %) | Install the current version of the application. |
| Correct Answer(33 %) | Configure Operating System (OS) services. |
| Correct Answer | All of the above. |

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

|  |  |
| --- | --- |
| Correct Answer | Amazon EBS volumes can be encrypted transparently to workloads on the attached instance. |
| Correct Answer | Data stored on Amazon EBS is automatically replicated within an Availability Zone. |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Minimum size | |
| Correct Answer | |  |  | | --- | --- | | 2) | Launch configuration | |

You have created an Elastic Load Balancing load balancer listening on port 80, and you registered it with a single Amazon Elastic Computer 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?

|  |  |
| --- | --- |
|  | 1 |
|  | Feedback:  The balancer cannot maintain only one connection, as it must connect to both the client and EC2 instance simultaneously. |
| Correct Answer | 2 |

How long does Amazon CloudWatch keep metric data?

|  |  |
| --- | --- |
|  | 1 day |
|  | 2 days |
|  | 1 week |
| Correct Answer | 2 weeks |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Launch configuration name, Amazon Machine Image (AMI), and instance type | |

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?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | 1) | An internal Elastic Load Balancing load balancer | |
|  | Feedback:  Use of a load balancer is not required for logging. |
| Correct Answer | |  |  | | --- | --- | | 2) | Amazon CloudWatch Logs Agent | |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | A listener | |

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 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?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | You have not raised your default Amazon EC2 capacity (20) for the new region. | |

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 note presented with a warning when they connect?

|  |  |
| --- | --- |
| Correct Answer | Create one SSL certificate with a Subject Alternative Name (SAN) value for each website name. |

You web application front end consists of multiple Amazon Computer 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 path health checks, which statement will be true?

|  |  |
| --- | --- |
| Correct Answer | The load balancer stops sending traffic to the instance that failed its health check. |
|  |  |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 3) | Hypervisor visible metric such as CPU utilization | |

A cell phone company is running dynamic-content television commercials for a contest. They want their website to handle traffic spikes that come after a commercial airs. The website is interactive, offering personalized content to each visitor based on location, purchase history, and the current commercial airing. Which architecture will configure Auto Scaling to scale out to respond to spikes of demand, while minimizing costs during quiet periods?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 2) | Configure Auto Scaling to scale out as traffic increases. Configure the launch configuration to start new instances from a preconfigured Amazon Machine Image (AMI). | |

For an application running in the ap-northeast-1 region with three Availability Zones (ap-northeast-1a, ap-northeast-1b, and ap-northeast-1c), which instance deployment provides high availability for the application that normally requires nine running Amazon Elastic Compute Cloud (Amazon EC2) instances but can run on a minimum of 65 percent capacity while Auto Scaling launches replacement instances in the remaining Availability Zones?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 3) | Deploy the application on three servers in ap-northeast-1a, three servers in ap-northeast-1b, and three servers in ap-northeast-1c. | |
|  |  |

Which of the following are characteristics of the Auto Scaling service of AWS? (Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Launches instances from a specified Amazon Machine Image (AMI) | |
| Correct Answer | |  |  | | --- | --- | | 5) | Enforces a minimum number of running Amazon EC2 instances | |
| Correct Answer | |  |  | | --- | --- | | 6) | Responds to changing conditions by adding or terminating Amazon Elastic Computer Cloud (Amazon EC2) instances | |

Why is the launch configuration referenced by the Auto Scaling group instead of being part of the Auto Scaling group?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | 1) | It allows you to change the Amazon Elastic Compute Cloud (Amazon EC2) instance type and Amazon Machine Image (AMI) without disrupting the Auto Scaling group. | |
|  | Feedback:  This is true, but so are the other options. |
|  | |  |  | | --- | --- | | 2) | It facilitates rolling out a patch to an existing set of instances managed by an Auto Scaling group. | |
|  | Feedback:  This is true, but so are the other options. |
|  | |  |  | | --- | --- | | 3) | It allows you to change security groups associated with the instances launched without having to make changes to the Auto Scaling group. | |
|  | Feedback:  This is true, but so are the other options. |
| Correct Answer | |  |  | | --- | --- | | 4) | All of the above. | |

An Auto Scaling group may use: (Choose 2 answers)

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | 1) | On-premises instances | |
|  | Feedback:  All instances in the Auto Scaling group must exist in AWS. |
| Correct Answer | |  |  | | --- | --- | | 2) | Spot Instances | |
| Correct Answer | |  |  | | --- | --- | | 3) | On-Demand Instances | |

Amazon CloudWatch supports which types of monitoring plans? (Choose 2 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Basic monitoring, which is free | |
| Correct Answer | |  |  | | --- | --- | | 6) | Detailed monitoring, which has an additional cost | |

Elastic Load Balancing health checks may be: (Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | 1) | A key pair verification | |
|  | |  |  | | --- | --- | | 2) | An Amazon Elastic Compute Cloud (Amazon EC2) instance status check | |
| Correct Answer | |  |  | | --- | --- | | 3) | A ping | |
| Correct Answer | |  |  | | --- | --- | | 4) | A page request | |
| Correct Answer | |  |  | | --- | --- | | 5) | A connection attempt | |

When an Amazon Elastic Compute Cloud (Amazon EC2) instance registered with an Elastic Load Balancing load balancer using connection draining is deregistered or unhealthy, which of the following will happen? (Choose 2 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 2) | Keep the connections open to that instance, and attempt to complete in-flight requests. | |
|  |  |
| Correct Answer | |  |  | | --- | --- | | 4) | Forcibly close all connections to that instance after a timeout period. | |

Elastic Load Balancing supports which of the following types of load balancers? (Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Internal | |
| Correct Answer | |  |  | | --- | --- | | 2) | Hypertext Transfer Protocol Secure (HTTPS) using Secure Sockets Layer (SSL) | |
| Correct Answer | |  |  | | --- | --- | | 6) | Internet-facing | |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | 1) | Manual | |
| Correct Answer | |  |  | | --- | --- | | 2) | Scheduled | |
|  | |  |  | | --- | --- | | 3) | Optimistic | |
|  | |  |  | | --- | --- | | 4) | Preemptive | |
| Correct Answer | |  |  | | --- | --- | | 5) | Dynamic | |

n Amazon Simple Workflow Service (Amazon SWF), which of the following are actors? (Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | Deciders | |
| Correct Answer | |  |  | | --- | --- | | B) | Workflow starters | |
|  | |  |  | | --- | --- | | C) | Activity tasks | |
|  | Feedback:  Tasks are not considered actors since they are the lowest level within a workflow service. |
| Correct Answer | |  |  | | --- | --- | | D) | Activity workers | |

You are designing a new application, and you need to ensure that the components of your application are not tightly coupled. You are trying to decide between different AWS Cloud services to use to achieve this goal. Your requirements are that messages between your application components may not be delivered more than once, tasks must be completed either in a synchronous or asynchronous fashion, and there must be some form of application logic that decides what to do when tasks have been completed. What application service should you use?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | C) | Amazon Simple Workflow Service(SWF) | |

How does Amazon Simple Queue Service(SQS) deliver messages?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | Amazon SQS doesn't guarantee delivery of your messages in any particular order. | |

Which of the following are features of Amazon Simple Notification Service(SNS)? (Choose 3 answers)

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | Subscribers | |
| Correct Answer | |  |  | | --- | --- | | B) | Publishers | |
| Correct Answer | |  |  | | --- | --- | | C) | Topic | |

What is the default time for an Amazon Simple Queue Service(SQS) visibility timeout?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | 30 seconds | |

Your application polls an Amazon Simple Queue Service(SQS) queue frequently and returns immediately, often with empty ReceiveMessageResponses. What is one thing that can be done to reduce Amazon SQS costs?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | D) | Use long polling by supplying a WaitTimeSeconds of greater than 0 seconds when calling ReceiveMessage. | |

In Amazon Simple Workflow Service(SWF), a decider is responsible for what?

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | Executing each step of the work. | |
|  | Feedback:  This is covered by activity workers. |
| Correct Answer | |  |  | | --- | --- | | B) | Defining work coordination logic by specifying work sequencing, timing, and failure conditions. | |

Can an Amazon Simple Notification Service(SNS) message be deleted after being published to a topic?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | A) | No. After a message has been successfully published to a topic, it cannot be recalled. | |

Amazon Simple Notification Service(SNS) is a push notification service that lets you send individual or multiple messages to large numbers of recipients. What types of clients are supported?

|  |  |  |  |
| --- | --- | --- | --- |
| Correct Answer | |  |  | | --- | --- | | D) | Publisher and subscriber client types. | |

Which of the following options are valid properties of an Amazon Simple Queue Service(SQS) message? (Choose 2 answers)

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | Type | |
| Correct Answer | |  |  | | --- | --- | | B) | Body | |
| Correct Answer | |  |  | | --- | --- | | C) | Message ID | |

Which AWS database service is best suited for traditional Online Transaction Processing (OLTP)?

|  |  |
| --- | --- |
|  | Amazon Redshift |
| Correct Answer | Amazon Relational Database Service (RDS) |

Which AWS database service is best suited for non-relational databases?

|  |  |
| --- | --- |
| Correct Answer | Amazon DynamoDB |

Which AWS Cloud service is best suited for Online Analytics Processing (OLAP)?

|  |  |
| --- | --- |
|  | Amazon DynamoDB |
|  | Amazon RDS |
| Correct Answer | Amazon Redshift |

You have been using Amazon RDS for the last year to run an important application with automated backups enabled. One of your team members is performing routine maintenance and accidentally drops an important table, causing an outage. How can you recover the missing data while minimizing the duration of the outage?

|  |  |
| --- | --- |
|  | Perform an undo operation and recover the table |
| Correct Answer | Restore the database from a recent automated snapshot |

You can access the EC2 instance that is hosting your RDS.

|  |  |  |
| --- | --- | --- |
|  |  | True |
| Correct Answer |  | False |