

AWS-CLF-C01-AWS Certified Cloud Practitioner

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QUESTION 1

Which statement is true about AWS Config and Regions?

- A. AWS Config can only be used in one Region at a time
- B. AWS Config is a Global service, once enabled it will work across all supported regions automatically
- C. AWS Config is not enabled at a Region level
- D. AWS Config is a Region specific service, meaning it has to be configured in every region you wish to use it

Correct Answer: D

Explanation

Explanation/Reference:

AWS Config is Region specific, meaning that if you have resources in multiple regions then you will have to configure AWS Config for each Region you want to record resource changes. When doing so, you are able to specify different options for each Region. For example, you could configure Config in one Region to record all supported resources across all services within that Region, and add a predefined AWS Managed Config rule that will check if EBS volumes are encrypted. In another Region you could select to only record a specific type of resource, such as Security Groups with no predefined rules allocated. Reference: <http://docs.aws.amazon.com/config/latest/developerguide/gs-console.html>

QUESTION 2

AWS uses the term _____ to describe the ability to scale computing resources up and down easily, with minimal friction.

- A. Scalable
- B. Flexible
- C. Elastic
- D. Large-scale

Correct Answer: C

Explanation

Explanation/Reference:

Amazon AWS is based on the concept of elasticity: it means that you can use instances and other AWS resources without any restrictions on scalability or limits on the amount of available resources. Reference: <http://aws.amazon.com/ec2/>

QUESTION 3

When does the billing process for an Amazon EC2 system begin?

- A. It starts when the Amazon EC2 transitions to the running state.
- B. It starts when the Status column for your distribution changes from Creating to Deployed.
- C. It starts when your instance reaches 720 instance hours.
- D. It starts as soon as you click the create instance option on the main EC2 console.

Correct Answer: A

Explanation

Explanation/Reference:

Billing commences when Amazon EC2 initiates the boot sequence of an AMI instance. Billing ends when the instance terminates, which could occur through a web services command, by running "shutdown -h", or through instance failure. When you stop an instance, Amazon shuts it down but doesn't charge per-second or per-hour usage for a stopped instance, or data transfer fees, but charges for the storage for any Amazon EBS volumes.

Reference: <http://aws.amazon.com/ec2/faqs>

QUESTION 4

Which other AWS service can you use to enable greater security of your CloudTrail log files?

- A. Key Management Service (KMS)
- B. Simple Notification Service (SNS)
- C. CloudWatch
- D. Simple Storage Service (S3)

Correct Answer: A

Explanation

Explanation/Reference:

The use of AWS KMS is an optional element of CloudTrail, but it allows additional encryption to be added to your Log files when stored on S3 Reference: <http://docs.aws.amazon.com/kms/latest/developerguide/services-cloudtrail.html>

QUESTION 5

Your customers are concerned about the security of their sensitive data and their inquiry asks about what happens to old storage devices on AWS. What would be the best answer to this question?

- A. AWS uses the techniques detailed in DoD 5220.22-M to destroy data as part of the decommissioning process.
- B. AWS uses a 3rd party security organisation to destroy data as part of the decommissioning process.
- C. AWS uses their own proprietary software to destroy data as part of the decommissioning process.
- D. AWS reformats the disks and uses them again.

Correct Answer: A

Explanation

Explanation/Reference:

When a storage device has reached the end of its useful life, AWS procedures include a decommissioning process that is designed to prevent customer data from being exposed to unauthorized individuals. AWS uses the techniques detailed in DoD 5220.22-M ("National Industrial Security Program Operating Manual ") or NIST 800-88 ("Guidelines for Media Sanitization") to destroy data as part of the decommissioning process.

All decommissioned magnetic storage devices are degaussed and physically destroyed in accordance with industry-standard practices.

Reference: <https://d0.awsstatic.com/whitepapers/aws-security-whitepaper.pdf>

QUESTION 6

You have been handed a new scope of work from your manager which involves migrating an on-premise application architecture to AWS. During your design process you have to give consideration to current on-premise security and determine which security attributes you are responsible for on AWS and which is the responsibility of AWS. Which of the following is the responsibility of AWS as part of the shared responsibility model? (Choose 3 answers)

- A. Virtualization infrastructure
- B. Edge Locations
- C. Data Center Hardware
- D. Client side Encryption

Correct Answer: ABC

Explanation

Explanation/Reference:

While AWS manages security of the cloud, security in the cloud is the responsibility of the customer.

Customers retain control of what security they choose to implement to protect their own content, platform, applications, systems and networks, no differently than they would for applications in an on-site datacenter.

Reference: <https://aws.amazon.com/compliance/shared-responsibility-model/>

QUESTION 7

_____ is the process in which a system you have authenticated to establishes what you can access and at what level

- A. Verification
- B. Authorisation
- C. Authentication
- D. Access Control

Correct Answer: B

Explanation

Explanation/Reference:

So here we are really looking at your access privileges and permissions. If for example you logged into an AWS account, you would have authenticated yourself by providing the correct identity and password, now AWS security features, and in this case AWS IAM, (Identity & Access Management service), defines the level of authorised access assigned to that identity within the AWS environment. Each identity can have a different level of authorisation properties associated to it. It's these properties that determine what that identity can then access.

QUESTION 8

In regards to AWS infrastructure, a(n) _____ is deployed in highly populated areas to cache data and reduce latency.

- A. availability zone
- B. edge location
- C. data center
- D. region

Correct Answer: B

Explanation

Explanation/Reference:

Edge Locations are AWS sites deployed in major cities and highly populated areas. Edge Locations are not used to deploy your main infrastructures. Instead they are used by AWS services such as AWS CloudFront to cache data and reduce latency for end user access. Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 9

Which of the following is not a pillar of the Well-Architected Framework developed by AWS?

- A. Security
- B. Performance Efficiency
- C. Profitability
- D. Operational excellence

Correct Answer: C

Explanation

Explanation/Reference:

To understand the elements of the well-architected framework you must be aware of the 5 pillars that the framework is based and built upon:

- . Operational excellence
- . Security
- . Reliability
- . Performance efficiency
- . Cost optimization

Reference:

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 10

Which of the following statements best describes Amazon Cognito?

- A. It is an AWS Storage & Content Delivery System
- B. It is a new AWS database
- C. It is a simple user-data synchronization and identity service that helps you securely manage and synchronize app data for your users across their mobile devices.
- D. It is an AWS Deployment & Management System

Correct Answer: C

Explanation

Explanation/Reference:

Amazon Cognito is a simple user-data synchronization and identity service that helps you securely manage and synchronize app data for your users across their mobile devices. You can create unique identifiers for your users through a number of public login providers (Amazon, Facebook, Google or any OpenID Connect compatible provider), or your own user identity system, and also support unauthenticated guests. You can save app data locally on the device allowing your apps to work even when the device is offline and then securely sync and save this data to the AWS cloud, and all of a user's devices.

Reference: <http://aws.amazon.com/cognito/faqs/>

QUESTION 11

A user has archived data from Amazon S3 to Amazon Glacier. How much data can be restored by the user for free every month?

- A. 5% of archived data
- B. The entire volume of data
- C. 20% of archived data
- D. 15% of archived data

Correct Answer: A

Explanation

Explanation/Reference:

When a user has archived an object from S3, the user can restore it only from the S3 console. Glacier charges the user only based on the peak billable rate. The user can restore up to 5% of the archived data free of cost. AWS first calculates the peak billable rate and then based on that calculates the cost of transfer. It never calculates the cost based on the age of the archive.

Reference:

http://aws.amazon.com/s3/faqs/#How_will_I_be_charged_when_restoring_large_amounts_of_data_from_Amazon_Glacier

QUESTION 12

How is Key Management Service (KMS) priced?

- A. KMS is priced per number of encryption/decryption requests received from all services per month.
- B. KMS is priced per data encryption keys; you are charged for the number of individual data keys maintained in KMS.
- C. KMS is priced per customer master key and the number of requests received per month.
- D. KMS is priced per customer master key; you are charged for the number of master keys maintained in KMS.

Correct Answer: C

Explanation

Explanation/Reference:

KMS is priced per two factors: the number of Customer Master Keys maintained in KMS and the number of requests received within a month.

QUESTION 13

What specific type of budgets does AWS budgets not allow you to create?

- A. Data transfer

- B. Usage
- C. Cost
- D. Reserved instance utilization

Correct Answer: A

Explanation

Explanation/Reference:

Three budget types are available - cost, usage, and reserved instance utilization. Data transfer is not a specific budget type, but the cost related to data transfers would be monitored under the cost budgets.

Reference:

<https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/budgets-managing-costs.html>

QUESTION 14

An Amazon Machine Image (AMI) can be best described as a ____.

- A. preconfigured template for your instances
- B. a virtual machine backup file on a local server hard drive
- C. a temporary virtual machine created during horizontal scaling
- D. VMware configuration file for any network deployment

Correct Answer: A

Explanation

Explanation/Reference:

Amazon EC2 provides Amazon Machine Images (AMIs), which are preconfigured templates for your instances.

Reference: <http://docs.aws.amazon.com/gettingstarted/latest/awsgsg-intro/awsgsg-intro.pdf>

QUESTION 15

How does AWS define cloud computing?

- A. The on-demand delivery of IT resources through a cloud services platform via the Internet with pay-as-you-go pricing.
- B. The term used to describe virtualized technology.
- C. A physical pool of compute, storage and network resources that can't be accessed over the internet.
- D. A pool of servers offering compute resources that are designed to be issued exclusively to individual tenants (users and organizations).

Correct Answer: A

Explanation

Explanation/Reference:

Cloud computing provides a simple way to access servers, storage, databases and a broad set of application services over the Internet. A cloud services platform such as Amazon Web Services owns and maintains the network-connected hardware required for these application services, while you provision and use what you need via a web application. Reference: <https://d0.awsstatic.com/whitepapers/aws-overview.pdf>

QUESTION 16

What does the phrase 'stop guessing capacity' mean?

- A. To set correct data storage lifecycles
- B. To use elastic IP addresses to increase high availability
- C. Use of auto scaling to prevent the need to predict and guess your capacity and demand requirement
- D. To implement self-healing processes

Correct Answer: C

Explanation

Explanation/Reference:

One of the best practices of the reliability pillar of the Well-Architected Framework is to 'stop guessing capacity.' This looks at the use of Auto Scaling to prevent the need to predict and guess your capacity and demand requirement which aids in a better end-user experience.

Reference:

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 17

The function of Key Pairs is to...

- A.encrypt data held on EBS volumes using AES-256 cryptography and then decrypt the data to be read again
- B. safely make programmatic API calls over an encrypted channel
- C.encrypt and decrypt passwords for AWS user accounts
- D. ...encrypt the login information for Linux and Windows EC2 instances, and then decrypt the same information allowing you to authenticate onto the instance.

Correct Answer: D

Explanation**Explanation/Reference:**

A Key pair as the name implies is made up of 2 components, a Public Key and a Private Key, these keys are 2048-bit SSH-2 RSA keys. The function of Key Pairs is to encrypt the login information for Linux and Windows EC2 instances, and then decrypt the same information allowing you to authenticate onto the instance.

The Public Key uses Public-Key cryptography to encrypt data such as the username and password. For Window instances the Private Key is used to decrypt this data allowing you to gain access to the login credentials including the password. For Linux instances the Private Key is used to SSH onto the instance. The Public Key is held and kept by AWS, the Private Key is your responsibility to keep and ensure that it is not lost.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/ec2-key-pairs.html>

QUESTION 18

Why does AWS recommend using stateless cloud applications, when possible?

- A. They are more always more cost effective than stateful applications.
- B. Decoupling layers enables more scalability and resilience
- C. They offer a higher degree of encryption for data in transit.
- D. They are more secure than stateful applications.

Correct Answer: B

Explanation**Explanation/Reference:**

A stateless application needs no knowledge of previous application actions, and stores no session data, and thus can be scaled horizontally with minimal friction. Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 19

What additional method of Access Control can be assigned to an AWS user that utilises a random 6 digit number that is only available for a very short time period before the number changes?

- A. Multi Factor Authentication
- B. Multi Access Authentication
- C. Multi Authorisation Authentication
- D. Varied Factor Authentication

Correct Answer: A

Explanation**Explanation/Reference:**

IAM allows for Multi-Factor authentication, MFA. This means that any user configured with MFA must use an additional level of authentication as well as a password to be authenticated giving an additional layer of security. This additional authentication utilises a random 6 digit number that is generated by an MFA device that is only available for a very short time period before the number changes again. There is no additional charge for this level of authentication, however you will need your own MFA device, which can be a physical token or a virtual device.

Reference: <https://aws.amazon.com/iam/details/mfa/>

QUESTION 20

What choice below accurately describes the 'pilot light' disaster recovery method?

- A. Storing critical systems as a template from which resources can be scaled out in the event of a disaster.
- B. Keeping data backed up to tape and sent offsite regularly, from which all data can be restored in the event of a disaster.
- C. A complete duplicate of your entire system, to which all traffic can be directed in the event of a disaster.
- D. A duplicate version of only your business critical systems that is always running, in case you need to divert your workloads there in the event of a disaster.

Correct Answer: A

Explanation

Explanation/Reference:

The pilot light method generally requires storing critical systems as a template within a database. In the event of a disaster, resources can be scaled out from around our 'pilot light'. Instances can be launched using Amazon machine images, and databases can be resized to handle production data as required

Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 21

In Amazon EC2, if you no longer wish to be charged for your instance, you must _____ the instance to avoid being billed for additional time.

- A. "delete"
- B. "stop" or "terminate"
- C. "avoid"
- D. "exit" or "quit"

Correct Answer: B

Explanation

Explanation/Reference:

EC2 instances are billed for any time your instances are in a "running" state. If you no longer wish to be charged for your instance, you must "stop" or "terminate" the instance to avoid being billed. Billing starts when an instance transitions into the running state. AWS recently changed its billing process from per-hour to per-second, with a minimum one-minute charge, for certain instance types and Linux operating systems.

Reference: <https://aws.amazon.com/ec2/faqs/>

QUESTION 22

Amazon RDS provides high availability and failover support for DB instances using _____.

- A. customized deployments
- B. Appstream customizations
- C. alog events
- D. Multi-AZ deployments

Correct Answer: D

Explanation

Explanation/Reference:

Amazon RDS provides high availability and failover support for DB instances using Multi-AZ deployments. Multi-AZ deployments for Oracle, PostgreSQL, MySQL, and MariaDB DB instances use Amazon technology, while SQL Server DB instances use SQL Server Mirroring.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Concepts.MultiAZ.html>

QUESTION 23

What is AWS Direct Connect?

- A. AWS Direct Connect is a flexible application management solution with automation tools that enable you to model and control your applications and their supporting infrastructure.
- B. AWS Direct Connect is a network service that provides an alternative to using the Internet to utilize AWS cloud services.
- C. AWS Direct Connect is a flexible, low-latency service that lets you stream resource intensive applications and games from the cloud.
- D. AWS Direct Connect is a highly available and scalable DNS service designed to give developers and businesses an extremely reliable and cost-effective way to route end users to Internet applications.

Correct Answer: B

Explanation

Explanation/Reference:

AWS Direct Connect is a network service that provides an alternative to using the Internet to utilize AWS cloud services. AWS Direct Connect links your internal network to an AWS Direct Connect location over a standard 1 gigabit or 10 gigabit Ethernet fiber-optic cable. One end of the cable is connected to your router, the other to an AWS Direct Connect router. With this connection in place, you can create virtual interfaces directly to the AWS cloud (for example, to Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Simple Storage Service (Amazon S3)) and to Amazon Virtual Private Cloud (Amazon VPC), bypassing Internet service providers in your network path.

Reference: <http://docs.aws.amazon.com/directconnect/latest/UserGuide/Welcome.html>

QUESTION 24

Which AWS service does AWS WAF primarily use to aid with automation?

- A. AWS Trusted Advisor
- B. AWS S3
- C. AWS Config
- D. AWS Lambda

Correct Answer: D

Explanation

Explanation/Reference:

With so many AWS services developing and becoming integrated with more automated components, the same can be said for AWS WAF. Using built in features and existing services of AWS, a solution can be created that can automatically modify your Web ACLs to improve both its security and efficiency benefits. This is primarily through the use of another AWS service, that being AWS Lambda

Reference:

<http://www.slideshare.net/AmazonWebServices/using-aws-waf-and-lambda-for-automatic-protection>

QUESTION 25

What is a "Rule" in the context of Amazon Inspector?

- A. A security goal or objective that you might have for your environment
- B. A security check that the AWS agent performs during an assessment run
- C. A set of conditions that when met in a specific target, this target will be considered for assessment
- D. A potential security issue discovered during the Amazon Inspector assessment run

Correct Answer: B

Explanation

Explanation/Reference:

In the context of Amazon Inspector, a security check that the agent performs during an assessment run.

Reference:

https://docs.aws.amazon.com/inspector/latest/userguide/inspector_concepts.html

QUESTION 26

You have started to use AWS Elastic Beanstalk to quickly deploy and manage applications in the AWS cloud. You start to wonder if you are being charged for this service. What is AWS's billing policy for AWS Elastic Beanstalk?

- A. You pay only for the underlying AWS resources that your application consumes.
- B. You pay a one time yearly fee to use it.
- C. You pay only for the underlying AWS resources that your application consumes but you need to apply to AWS to use it
- D. You pay only for the underlying AWS resources that your application consumes as long as they are all in the same availability zone.

Correct Answer: A

Explanation

Explanation/Reference:

With AWS Elastic Beanstalk, you can quickly deploy and manage applications in the AWS cloud without worrying about the infrastructure that runs those applications. AWS Elastic Beanstalk reduces management complexity without restricting choice or control. There is no additional charge for AWS Elastic Beanstalk; you pay only for the underlying AWS resources that your application consumes.

Reference: <http://docs.aws.amazon.com/elasticbeanstalk/latest/dg/Welcome.html>

QUESTION 27

What is the meaning of pay-as-you-go, when related to Amazon Web Services?

- A. You pay only when you leave the service.
- B. You pay the Cloud provider only when your product is profitable.
- C. You have no upfront costs, but rather pay on a monthly basis, based on usage.
- D. You pay only when your instance is doing very intense computation

Correct Answer: C

Explanation

Explanation/Reference:

The concept of pay-as-you-go means that you pay only for a specific amount of resources that you use in a specific amount of time used in a given month. For instance, you can use a Amazon EC2 Instance only for 30 minutes and you will be charged only for that time, without any upfront costs to launch or terminate the instance.

Reference: <http://aws.amazon.com/ec2/pricing/>

QUESTION 28

AWS Lambda monitors Lambda functions and reports metrics through which Amazon service?

- A. Amazon CloudWatch
- B. Amazon CloudTrail
- C. Amazon Kinesis
- D. Amazon Elastic Compute Cloud

Correct Answer: A

Explanation

Explanation/Reference:

AWS Lambda automatically monitors Lambda functions on your behalf, reporting metrics through Amazon CloudWatch.

Reference: <http://docs.aws.amazon.com/lambda/latest/dg/monitoring-functions.html>

QUESTION 29

Lambda function and ____ are the two core components of an AWS Lambda application.

- A. Virtual Private Cloud
- B. Dead Letter Queues
- C. Amazon CloudWatch
- D. Event Sources

Correct Answer: D

Explanation

Explanation/Reference:

When building applications on AWS Lambda, the core components are Lambda functions and event sources.

Reference: <http://docs.aws.amazon.com/lambda/latest/dg/building-lambda-apps.html>

QUESTION 30

One way to save on the cost of running instances in Amazon EC2 is to make use of ____ instances, which enable you to bid on unused EC2 instances, provided you are robust to your instances being interrupted.

- A. Echo
- B. Boost
- C. Spot
- D. Turbo

Correct Answer: C

Explanation

Explanation/Reference:

Spot instances enable you to bid on unused EC2 instances, which can lower your Amazon EC2 costs significantly. The price (per-second or per-hour) for a Spot instance (of each instance type in each Availability Zone) is set by Amazon EC2, and fluctuates depending on the supply of and demand for Spot instances. Your Spot instance runs whenever your bid exceeds the current market price. Spot instances are a cost-effective choice if you can be flexible about when your applications run and if your applications can be interrupted.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-spot-instances.html>

QUESTION 31

Which statement is true about AWS Direct Connect?

- A. AWS Direct Connect are a good solution if you have low to modest bandwidth requirements.
- B. AWS Direct Connect can be configured in minutes and are a good solution if you have an immediate need.
- C. AWS Direct Connect does not involve the Internet and uses dedicated, private network connections between your intranet and Amazon VPC.
- D. AWS Direct Connect establishes encrypted network connectivity between your intranet and Amazon VPC over the Internet.

Correct Answer: C

Explanation

Explanation/Reference:

AWS Direct Connect is different from IPSec VPN Connection. A VPC VPN Connection utilizes IPSec to establish encrypted network connectivity between your intranet and Amazon VPC over the Internet. VPN Connections can be configured in minutes and are a good solution if you have an immediate need, have low to modest bandwidth requirements, and can tolerate the inherent variability in Internet-based connectivity. AWS Direct Connect does not involve the Internet; instead, it uses dedicated, private network connections between your intranet and Amazon VPC.

Reference: <http://docs.aws.amazon.com/directconnect/latest/UserGuide/Welcome.html>

QUESTION 32

Identify a benefit of using Auto Scaling for your application.

- A. Your application receives latency requirements in every region.
- B. Your application gains better fault tolerance.
- C. You acquire clarity on prototypes in your application.
- D. Your application optimizes only logistics and operations.

Correct Answer: B

Explanation

Explanation/Reference:

When you use Auto Scaling, your applications gain better fault tolerance. Auto Scaling can detect when an instance is unhealthy, terminate it, and launch an instance to replace it. You can also configure Auto Scaling to use multiple Availability Zones. If one Availability Zone becomes unavailable, Auto Scaling can launch instances in another one to compensate.

Reference:

<http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/how-as-works.html>

QUESTION 33

Can an Elastic Load Balancing span across multiple regions?

- A. No, but ELBs can span across Availability Zones in the same region.
- B. No, ELBs can only be within a single Availability Zone.
- C. Yes, ELBs can span across regions globally but not across multiple Availability Zones.
- D. Yes, ELBs can span across regions globally.

Correct Answer: A

Explanation

Explanation/Reference:

A LoadBalancer is the destination to which all requests intended for your load balanced application should be directed. Each LoadBalancer can distribute requests to multiple EC2 instances. A LoadBalancer is represented by a DNS name and a set of ports. LoadBalancers can span multiple Availability Zones within an EC2 Region, but they cannot span multiple regions.

Reference:

https://s3-ap-southeast-1.amazonaws.com/awsmylabs/html/scale_the_application.html

QUESTION 34

Which service model gives you the most control over your environment?

- A. Infrastructure as a Service (IaaS)
- B. Platform as a Service (PaaS)
- C. Software as a Service (SaaS)
- D. 'Anything' as a Service (XaaS)

Correct Answer: A

Explanation

Explanation/Reference:

IaaS provides the greatest level of customization as you can configure the environment from the ground up, starting from which operating system to install and up. Other service models have fixed components which you are unable to change or manage.

QUESTION 35

Can Amazon RDS manage synchronous data replication across Availability Zones?

- A. Yes
- B. Yes, Amazon RDS can manage this but only for certain DB instance types.
- C. No
- D. No, Amazon RDS does so only for certain AZs.

Correct Answer: A

Explanation

Explanation/Reference:

Yes, in the Multi-AZ Deployment option, Amazon RDS manages synchronous data replication across Availability Zones and automatic failover.

Reference: <http://aws.amazon.com/rds/faqs/>

QUESTION 36

Which choice is a stated benefit of using AWS?

- A. reduced effort to meet compliance requirements
- B. data center servers specifically for your account
- C. security configuration is entirely managed by AWS
- D. system compliance is entirely managed by AWS

Correct Answer: A

Explanation

Explanation/Reference:

AWS services are designed to comply with common compliance regulations, such as PCI DSS level. You will have to configure services to meet your specific compliance needs, but segments of your IT system on AWS should comply with several standard compliance regulations immediately.

You can request dedicated instances, but you cannot select specific data centers for your account, and with the Shared Responsibility Model, AWS will not assist you in configurations to meet your security or compliance requirements.

Reference: <https://d0.awsstatic.com/whitepapers/aws-overview.pdf>

QUESTION 37

How does Amazon Inspector and AWS agent affect the performance of your EC2 instances?

- A. Inspector agent's impact on performance is determined based on network activity on the EC2 instance; for that reason it is better to reduce utilization of instances while assessment process is running.
- B. Inspector agent affects the performance of EC2 instances all the time as it keeps collecting behavioral and networking data as long as it is running.
- C. Inspector agent has minimal effect on the performance of EC2 instances only during assessment run process.
- D. Inspector agent has a large impact on the performance of EC2 instance and should be started only at off-peak hours.

Correct Answer: C

Explanation

Explanation/Reference:

Amazon Inspector and the Amazon Inspector agent have been designed for minimal performance impact during the assessment run process.

Reference: <https://aws.amazon.com/inspector/faqs/>

QUESTION 38

What principles does AWS recommend to remove single points of failure from your design? (Choose 2 answers.)

- A. Single data center resilience
- B. Detect failure
- C. Data replication
- D. Remove redundancy

Correct Answer: BC

Explanation

Explanation/Reference:

There are several types of data replication that can help reduce single points of failure: synchronous,

asynchronous, and quorum-based. In addition, AWS systems should be set up to detect and repair issues that could potentially cause failures automatically. The remaining choices could increase the single points of failure in a system's design. While redundancy requires additional resource costs, it helps maintain service in the event of outages. Multi-data center resilience (not single) is a recommended design approach in the event of larger failures, such as a natural disaster, that could affect multiple availability zones. Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 39

A user wants to build a self-resilient highly available application. Which of the following AWS services will help achieve these features?

- A. Amazon DynamoDB and Cloudwatch health check
- B. Auto Scaling and Elastic Load Balancing
- C. EC2 and Redshift
- D. Amazon Glacier and Cloudwatch health check

Correct Answer: B

Explanation

Explanation/Reference:

Amazon Elastic Compute Cloud (Amazon EC2) is a web service within Amazon Web Services that provides computing resources literally server instances that you use to build and host your software systems. Amazon EC2 is a natural entry point to Amazon Web Services for your application development. You can build a highly reliable and fault-tolerant system using multiple EC2 instances using the tools and ancillary services such as Auto Scaling and Elastic Load Balancing.

Reference:

http://media.amazonwebservices.com/AWS_Building_Fault_Tolerant_Applications.pdf

QUESTION 40

Which of the following services should be used if you need low latency or frequent access to your data?

- A. AWS CLI
- B. AWS Snowball
- C. Amazon Glacier
- D. Amazon S3

Correct Answer: D

Explanation

Explanation/Reference:

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.

Reference: <http://aws.amazon.com/glacier/faqs/>

QUESTION 41

What does the concept of "redundancy" mean in regards to designing AWS cloud systems?

- A. A design where multiple resources perform the same task
- B. A design where a single system performs multiple tasks synchronously
- C. A design where a single resource performs multiple tasks
- D. A design where one stateless resource performs one task

Correct Answer: A

Explanation

Explanation/Reference:

In regards to system design, redundancy is when multiple resources perform the same task, so in the event that one of the resources fails, there are other remaining resources to bear the workload in its absence until the resource can be replaced or repaired. Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 42

Which of the following statements specifies the relationship between Amazon Machine Images (AMIs) and EC2 instances?

- A. Only a single EC2 instance can be launched from an AMI.
- B. EC2 instances can be launched from a combination of several AMIs.
- C. Multiple EC2 instances can be launched from a single AMI.
- D. EC2 instances cannot be launched from a single AMI.

Correct Answer: C

Explanation

Explanation/Reference:

Multiple instances can be launched from a single AMI. After launch, an instance acts as a copy of the AMI that runs as a virtual server in the cloud.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instances-and-amis.html>

QUESTION 43

Generally, in VPCs with private and public subnets, database servers should ideally be launched into:

- A. Either of them
- B. The public subnet
- C. The private subnet
- D. None of them. They should ideally be launched outside VPC

Correct Answer: C

Explanation

Explanation/Reference:

In a VPC with a public and private subnets, launching your database instances within the private one will further enhance the security of your infrastructure by making them unreachable from the internet.

Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Scenario2.html

QUESTION 44

_____ gives developers and systems administrators an easy way to create and manage a collection of related AWS resources, provisioning and updating them in an orderly and predictable fashion.

- A. AWS CloudFormation
- B. Amazon AppStream
- C. Amazon Cognito Identity
- D. AWS Lambda

Correct Answer: A

Explanation

Explanation/Reference:

AWS CloudFormation gives developers and systems administrators an easy way to create and manage a collection of related AWS resources, provisioning and updating them in an orderly and predictable fashion.

Reference: <http://aws.amazon.com/cloudformation/>

QUESTION 45

Each Amazon region is designed to be completely isolated from the other Amazon regions so that _____.

- A. they provide low latency connections
- B. they provide better security
- C. they reduce the operational costs
- D. they achieve the greatest possible fault tolerance and stability

Correct Answer: D

Explanation

Explanation/Reference:

Each Amazon region is designed to be completely isolated from the other Amazon regions. This achieves the greatest possible fault tolerance and stability.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html>

QUESTION 46

Every API request that is captured by CloudTrail are recorded as _____ in a CloudTrail log file

- A. Trails
- B. Logs
- C. API Activity Filters
- D. Events

Correct Answer: D

Explanation

Explanation/Reference:

When an API request is initiated, AWS CloudTrail captures the request as an 'event' and records this event within a log file which is then stored on S3. Each API call represents a new event within the log file.

QUESTION 47

What does AWS design concept of "loose coupling" mean?

- A. To automate system recovery processes
- B. To provide an identity only enough access to complete its assigned tasks
- C. To design a system that minimizes interdependencies
- D. To break large data processing tasks into several small, separate tasks

Correct Answer: C

Explanation

Explanation/Reference:

Loose coupling means that complex applications should be broken down into small, loosely coupled components with as few interdependencies as possible. This way, a change in one component does not cause failures in a cascading manner through other system components.

Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 48

In regards to disaster recovery, what is a recovery point objective (RPO)?

- A. The acceptable amount of data loss measured in time.
- B. The time it takes to scale a functioning resource horizontally to adapt to increased demand.
- C. The time it takes after a disruption to restore a system back to its service level.
- D. The time it takes to scale a functioning resource vertically to adapt to increased demand.

Correct Answer: A

Explanation

Explanation/Reference:

The recovery point objective (RPO) is the amount of acceptable data loss measured in time. For example, a transactional business cannot afford a great deal of data loss, so its RPO is likely less than one hour, because an hour is a great expense in terms of data loss. However, for a more isolated website with minimal customer interaction, an RPO of a day may be acceptable because this represents a tolerable amount of data loss. Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 49

Which AWS disaster recovery method has the lowest RTO and RPO, but the highest cost required to maintain resources?

- A. Warm standby
- B. Multi-site
- C. Pilot light
- D. Backup and restore

Correct Answer: B

Explanation

Explanation/Reference:

Multi-site is the quickest disaster recovery method, with minimal time to recover and minimal data loss, but with the highest overall cost in comparison to backup and restore, pilot light or warm standby methods. This method is ideal for highly transactional online businesses, whose potential losses in terms of revenue and reputation far outweigh any costs required to maintain a duplicate production environment in a separate AWS region. Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 50

Network ACLs are _____.

- A. stateless
- B. stateful
- C. asynchronous
- D. synchronous

Correct Answer: A

Explanation

Explanation/Reference:

Network ACLs are stateless; responses to allowed inbound traffic are subject to the rules for outbound traffic (and vice versa).

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

QUESTION 51

Vital functions of your application are unavailable, you can't work around the problem, and your business is at risk.

You decide that you need some support from AWS. Which of the following severity levels do you think would be an appropriate choice for this issue?

- A. Production system down
- B. Business-critical system down
- C. Production system impaired
- D. System impaired

Correct Answer: B

Explanation

Explanation/Reference:

In the context of AWS support, if you have a problem which meets any of the following, then the severity level is 'business-critical system down.' You can't work around the problem, and your business is at risk.

Critical functions of your application are unavailable. (Enterprise) Reference:

<https://docs.aws.amazon.com/awssupport/latest/user/getting-started.html#case-management>

QUESTION 52

You can use a(n) _____ to launch an Amazon EC2 instance with a configuration that Amazon may not provide itself, but which another developer has created for a specific purpose.

- A. custom launcher
- B. shared AMI
- C. community manifest
- D. open source configuration

Correct Answer: B
Explanation

Explanation/Reference:

A shared Amazon Machine Image (AMI) is an AMI that a developer creates and makes available for other developers to use. One of the easiest ways to get started with Amazon EC2 is to use a shared AMI that has the components you need and then add custom content. You can also create your own AMIs and share them with others. You use a shared AMI at your own risk. Amazon can't vouch for the integrity or security of AMIs shared by other Amazon EC2 users.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/sharing-amis.html>

QUESTION 53

What does the AWS best practice "designing for failure" mean?

- A. To design systems to anticipate failure and recover automatically
- B. To develop cloud systems that never fail
- C. To back up your cloud environment with an on-premise environment
- D. To develop systems with single points of failure

Correct Answer: A
Explanation

Explanation/Reference:

Designing for failure essentially means adopting Murphy's Law into your design, that what can go wrong will go wrong. Design your infrastructure to respond to potential outages of multiple kinds with an automated recovery process in place. Reference: https://media.amazonwebservices.com/AWS_Cloud_Best_Practices.pdf

QUESTION 54

Which of the below mentioned Glacier resources is analogous to the S3 bucket?

- A. Group
- B. Container
- C. Archive
- D. Vault

Correct Answer: D
Explanation

Explanation/Reference:

The Amazon Glacier data model core concepts include vaults and archives. The vault is analogous to the S3 buckets as it also stores the archives like a bucket.

Reference:

<http://docs.aws.amazon.com/amazonglacier/latest/dev/amazon-glacier-data-model.html>

QUESTION 55

Where is an object stored in Amazon S3?

- A. in an Archive
- B. in a Collector
- C. in a Bucket
- D. in a Vault

Correct Answer: C
Explanation

Explanation/Reference:

Every object in Amazon S3 is stored in a bucket. Before you can store data in Amazon S3, you must create a bucket.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/gsg/CreatingABucket.html>

QUESTION 56

When scaling _____ you are altering the power of an instance, perhaps using one with greater CPU power to scale.

- A. Backward
- B. In and out
- C. Up and down
- D. Forward

Correct Answer: C

Explanation

Explanation/Reference:

To scale an instance or resource up or down, you are effectively changing the power of that resource, essentially making it more powerful or making it weaker.

QUESTION 57

When scaling Amazon EC2 _____, you are increasing or decreasing the number of instances in use.

- A. vertically
- B. forward
- C. horizontally
- D. backward

Correct Answer: C

Explanation

Explanation/Reference:

Scaling horizontally is an increase in the quantity of a service resource, an EC2 instance in this case. Scaling vertically would mean to upgrade the power or size of single resource, which would mean to increase an instance's size in the context of Amazon EC2. Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 58

Network ACLs in a VPC operate at the _____.

- A. TCP level
- B. subnet level
- C. instance level
- D. gateway level

Correct Answer: B

Explanation

Explanation/Reference:

Security Groups in VPC operate at the instance level, providing a way to control the incoming and outgoing instance traffic. In contrast, network ACLs operate at the subnet level, providing a way to control the traffic that flows through the subnets of your VPC. Reference: http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Security.html

QUESTION 59

For data requiring a higher level of durability, the recommended option is to _____.

- A. use Amazon Glacier
- B. to use file systems or build a degree of redundancy
- C. use Amazon EBS volumes or back up the data to Amazon S3
- D. use the local instance store

Correct Answer: C

Explanation

Explanation/Reference:

The recommended option for temporary data is to use the local instance store and for data requiring a higher level of durability is to use Amazon EBS volumes or back up the data to Amazon S3.

Reference: <https://aws.amazon.com/ec2/faqs/>

QUESTION 60

An AWS design best practice is to develop _____ applications because this allows different parts of the application to be scaled independently of the others depending on demand, throughput, response times, and so on.

- A. fault-proof
- B. stateful
- C. loosely-coupled
- D. interdependent

Correct Answer: C

Explanation

Explanation/Reference:

Loose coupling refers to the removal of the dependency on one subset of the application (Part A) from another (Part B). If there parts of the application that are very dependent on each other they can be classed as coupled, if one part changed it would ultimately affect the other part.

Reference: https://d0.awsstatic.com/whitepapers/AWS_Cloud_Best_Practices.pdf

QUESTION 61

You have a time sensitive development question and you decide that you need some support from AWS. Which of the following severity levels will be an appropriate choice for you to resolve the issue?

- A. System impaired
- B. Business-critical system down
- C. Production system impaired
- D. Guidance

Correct Answer: A

Explanation

Explanation/Reference:

In regards to AWS support, if you have a problem which meets any of the following, it is considered a system impaired priority.

. You can work around the problem

. Non-critical functions of your application are behaving abnormally. . You have a time-sensitive development question. (Developer, Business, and Enterprise) Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 62

In Amazon EC2, you are billed _____ and _____ assuming a Linux operating system that does not require instance-hour billing. (Choose 2 answers)

- A. by combining partial segments into full hours
- B. per second for On-Demand, Spot and Reserved instances
- C. per hour for Dedicated instances
- D. per minute used for On-Demand, Spot and Reserved Instances.

Correct Answer: BC

Explanation

Explanation/Reference:

After 11 years, AWS announced a change to its payment structure for EC2 and EBS services effective

October 2, 2017. Assuming a Linux operating system without separate hourly charges is in use, partial instance-hours are billed to the next hour for Dedicated instances only. With the same assumption in mind, Reserved, Spot and On-Demand instances are now billed on a per-second basis, with a one-minute minimum charge.

Reference:

<https://aws.amazon.com/blogs/aws/new-per-second-billing-for-ec2-instances-and-ebs-volumes/>

QUESTION 63

What is Amazon CloudFront?

- A. A development front-end to Amazon Web Services
- B. A web service to schedule regular data movement
- C. A global Content Delivery Network
- D. An encrypted endpoint to upload files to the Cloud

Correct Answer: C

Explanation

Explanation/Reference:

Amazon CloudFront is a global content delivery network (CDN) service that accelerates delivery of your websites, APIs, video content or other web assets through CDN caching. It integrates with other Amazon Web Services products to give developers and businesses an easy way to accelerate content to end users with no minimum usage commitments.

Reference: <https://aws.amazon.com/cloudfront/>

QUESTION 64

AWS ____ are predefined by AWS, and grant permissions for common use cases to eliminate the need to determine what permissions are needed.

- A. managed policies
- B. prepackaged policies
- C. recommended policies
- D. default policies

Correct Answer: A

Explanation

Explanation/Reference:

AWS managed policies are predefined by AWS, and grant permissions for common use cases so you can avoid having to determine what permissions are needed. For ElastiCache, AWS provides the following managed policies: AmazonElastiCacheReadOnlyAccess and AmazonElastiCacheFullAccess.

Reference:

<http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/IAM.IdentityBasedPolicies.html>

QUESTION 65

Which of the following is true of the time period required to retrieve data using Amazon Glacier?

- A. Amazon Glacier takes one hour to retrieve data.
- B. Amazon Glacier takes 5 minutes to retrieve data.
- C. Amazon Glacier takes several hours to retrieve data.
- D. Amazon Glacier takes 30 seconds to retrieve data.

Correct Answer: C

Explanation

Explanation/Reference:

Amazon Glacier is an extremely low-cost storage service that provides secure and durable storage for data archiving and backup. To keep costs low, Amazon Glacier is optimized for data that is infrequently accessed and for which retrieval times of several hours are suitable.

Reference: <http://aws.amazon.com/glacier/>

QUESTION 66

In AWS, who owns the controls for cloud-deployed infrastructure?

- A. AWS controls the physical components of the technology. A customer owns and controls everything else, including control over connection points and transmissions.
- B. A customer controls the physical components of the technology, connection points, and transmissions.
- C. AWS controls the physical components of the technology, connection points, and transmissions.
- D. A customer controls the physical components of the technology. A bucket owner owns and controls everything else, including control over connection points and transmissions.

Correct Answer: A

Explanation

Explanation/Reference:

For the portion deployed into AWS, AWS controls the physical components of that technology. The customer owns and controls everything else, including control over connection points and transmissions. To help customers better understand what controls are in place and how effectively they are operating, a SOC 1 Type II report is published with controls defined around EC2, S3 and VPC, as well as detailed physical security and environmental controls. These controls are defined at a high level of specificity that should meet most customer needs. AWS customers that have signed a non-disclosure agreement with AWS may request a copy of the SOC 1 Type II report.

Reference:

[http://d0.awsstatic.com/whitepapers/compliance/AWS_Risk_and_Compliance_Whitepaper.p df](http://d0.awsstatic.com/whitepapers/compliance/AWS_Risk_and_Compliance_Whitepaper.pdf)

QUESTION 67

When using the AWS Billing and Cost Management console dashboard, you can check various graphs that show different breakdowns of your AWS usage. Which of the following graphs can you check on your dashboard?

- A. Spend Summary
- B. All of these
- C. Month-to-Date Spend by Service
- D. Month-to-Date Top Services by Spend

Correct Answer: B

Explanation

Explanation/Reference:

On the Amazon Web Services (AWS) Billing and Cost Management console dashboard, you can view the following graphs:

- . Spend Summary
- . Month-to-Date Spend by Service
- . Month-to-Date Top Services by Spend

Reference:

<http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/view-billing-dashboard.html>

QUESTION 68

In regards to disaster recovery, what is the recovery time objective (RTO)?

- A. The acceptable amount of data loss measured in time.
- B. The time it takes to scale a functioning resource vertically to adapt to increased demand.
- C. The time it takes after a disruption to restore a system back to its desired service level.
- D. The time it takes to scale a functioning resource horizontally to adapt to increased demand.

Correct Answer: C

Explanation

Explanation/Reference:

The recovery time objective or RTO is the time it takes after a disruption to restore a system back to service level. Ideally, a business has established an official recovery procedure which ensures that the method of recovery allows the particular system to recover in a predetermined amount of time, and any

lapse in service will have little to no negative effect on the business. AWS recommends multiple established methods of disaster recovery that balance cost with the time needed to re-establish service. Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 69

Serverless computing falls under which category of cloud computing services?

- A. Platform as a Service
- B. Function as a Service
- C. Infrastructure as a Service
- D. Software as a Service

Correct Answer: B

Explanation

Explanation/Reference:

Serverless computing falls under the Function as a Service category. With Lambda, you create a Lambda function, give it permission to access specific AWS resources, and then connect the function to your AWS resources.

Reference: <https://aws.amazon.com/lambda/>

QUESTION 70

You have a general development question and you decide that you need some support from AWS. Which of the following severity levels do you think would be an appropriate choice for this issue?

- A. Guidance
- B. Production system impaired
- C. System impaired
- D. Production system down

Correct Answer: A

Explanation

Explanation/Reference:

In AWS Support, if you have a general development question or want to request a feature (Developer, Business, and Enterprise), it is considered as a Guidance severity level. Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 71

AWS Config can help you to...

- A. ..manage and maintain compliance, gain visibility of your resources and automatically delete non-compliant resources
- B. ...gain visibility of your resources, track changes of your resources and automatically delete non-compliant resources
- C. ..manage and maintain compliance, gain visibility of your resources and track changes of your resources
- D.track changes of your resources, launch instances quicker and automatically delete non-compliant resources

Correct Answer: C

Explanation

Explanation/Reference:

AWS Config can:

. Enforce rules that checks the compliancy of your resource against specific controls: Predefined and custom rules can be configured within AWS Config allowing you to check resources compliance against these rules

. Act as a resource inventory: AWS Config can discover supported resources running within your environment allowing you to see data about that resource type . Store configuration history for individual resources: The service will record and hold all existing changes that have happened against the resource,

providing a useful history record of changes

QUESTION 72

Which of the following best describes the relationship between regions and Availability Zones?

- A. Each region may be dependent on another region, and each Availability Zone is completely independent.
- B. Each region is completely independent and Availability Zones are never isolated, but the Availability Zones in a region are connected through low-latency links.
- C. Each region is completely independent and each Availability Zone is isolated, but the Availability Zones in a region are connected through low-latency links.
- D. Each region may be dependent on another region, each Availability Zone is isolated, and the Availability Zones in a region are not connected.

Correct Answer: C

Explanation

Explanation/Reference:

Each region is completely independent and each Availability Zone is isolated, but the Availability Zones in a region are connected through low-latency links.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html>

QUESTION 73

Amazon CloudFront is a _____.

- A. content delivery network service
- B. task coordination and state management service for cloud applications
- C. persistent block level storage volume
- D. fully managed desktop computing service in the cloud

Correct Answer: A

Explanation

Explanation/Reference:

Amazon CloudFront is a content delivery network (CDN) service. It integrates with other Amazon Web Services to give developers and businesses an easy way to distribute content to end users with low latency, high data transfer speeds, and no minimum usage commitments.

Reference: <http://aws.amazon.com/cloudfront/>

QUESTION 74

Dedicated EC2 instances are instances that _____.

- A. only you can access
- B. have no shared services installed on them
- C. run in a VPC on hardware that's dedicated to a single customer
- D. are deployed to run a dedicated function

Correct Answer: C

Explanation

Explanation/Reference:

Dedicated EC2 instances are instances that run on dedicated hardware. Reference: <https://aws.amazon.com/ec2/purchasing-options/dedicated-instances/>

QUESTION 75

There are many access control methods on AWS to build network segments. Which choice below defines an isolated network for each workload or organizational entity?

- A. Network Access Control Lists (NACLs)

- B. Host-based firewalls
- C. Security groups
- D. Amazon VPC

Correct Answer: D

Explanation

Explanation/Reference:

On AWS, you can build network segments using Amazon VPC to define an isolated network for each workload or organizational entity. For AWS accounts created after December 4, 2013, all instances are launched into the VPC environment. The previously available method is known as EC2-Classic, but is only available to AWS accounts created before this date. Reference: <https://d0.awsstatic.com/whitepapers/aws-security-best-practices.pdf>

QUESTION 76

How can AWS Snowball handle petabyte-scale data migration?

- A. Data is sent compressed via a high speed network connection.
- B. Data is sent via a shipping container, pulled by a semi-trailer truck.
- C. Data is sent encoded (forward error correction) via a high speed network connection.
- D. Data is sent via a physical appliance sent to you by AWS.

Correct Answer: D

Explanation

Explanation/Reference:

Snowball uses secure appliances to transfer large amounts of data into and out of the AWS cloud; this is fast and cheaper than high-speed Internet.

Reference: <https://aws.amazon.com/snowball/>

QUESTION 77

Which DB instance purchase options are available in RDS?

- A. Dedicated Host Instances
- B. Dedicated Instances
- C. Reserved Instances
- D. Spot Instances

Correct Answer: C

Explanation

Explanation/Reference:

Amazon RDS offers Reserved instances as a way to discount hourly instance charges by purchasing the instance for one or three years. EC2 offers spot instances, dedicated instances, and dedicated host instances, but these are not options in RDS.

Reference:

http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithReservedDBInstances.html

QUESTION 78

Key Management Service (KMS) is used to manage encryption keys in your AWS environment.

How can you audit the changes made on KMS?

- A. KMS provides history to each key changes; you can track the changes done on each key using key history.
- B. KMS has full audit and compliance integration with CloudTrail; this is where you can audit all changes performed on KMS.
- C. KMS provides full audit details as part of KMS console which can be accessed through web interface and APIs.
- D. KMS will log all changes in a special S3 bucket that is created the first time KMS service is being used.

Correct Answer: B
Explanation

Explanation/Reference:

KMS is fully integrated with CloudTrail which provides audit and compliance features on all actions performed in KMS.

QUESTION 79

Which disaster recovery method generally has the highest RTO and RPO, but requires the least cost, in terms of resources, to restore service?

- A. Pilot light
- B. Warm standby
- C. Backup and restore
- D. Multi-site

Correct Answer: C
Explanation

Explanation/Reference:

With the backup and restore method of recovery, data is backed up to an AWS storage service, such as Amazon S3. The data can be imported into AWS using a variety of options such as storage gateway, AWS Snowball (import/export), Direct Connect, VPN or the internet. In the event of a disaster, archives can be recovered from Amazon S3, and the data can then be restored directly to cloud resources. This method takes the longest time, but requires the least investment because it is essentially a system of archiving data consistently and retrieving it when needed. Aside from data transfer and storage, no complex applications or smaller version of your service needs to be kept running offsite. Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 80

Your manager complains about spiralling costs and wants you to use _____ to find the service that is used the most, the Availability Zone (AZ) with most of your traffic, and the linked account that uses AWS the most. Which of the following should you use to identify the cause for the spiralling costs?

- A. Cost Explorer
- B. Consolidated Billing Report
- C. Spends Report
- D. Monthly Billing Explorer

Correct Answer: A
Explanation

Explanation/Reference:

You can check the following using Cost Explorer:

- . see which service you use the most
- . see which Availability Zone (AZ) most of your traffic is in . see which linked account uses AWS the most

Reference:

<http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/cost-explorer-what-is.html>

QUESTION 81

Which of the following is NOT a true statement about Auto Scaling?

- A. Auto Scaling can launch instances in different Azs.
- B. Auto Scaling can launch instances in different regions.
- C. Auto Scaling can work with CloudWatch.
- D. Auto Scaling can launch an instance at a specific time.

Correct Answer: B
Explanation

Explanation/Reference:

Auto Scaling provides an option to scale up and scale down based on certain conditions or triggers from Cloudwatch. A user can configure such that Auto Scaling launches instances across Azs, but it cannot span across regions. Reference: <http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/as-dg.pdf>

QUESTION 82

Which of the following is AWS Glacier best used for?

- A. An alternative to Amazon S3
- B. An alternative to EBS
- C. None of the above
- D. A durable storage for data archives and backup

Correct Answer: D

Explanation**Explanation/Reference:**

The AWS Glacier service is a great and durable storage for data archives and backup. It is primarily used for backups and archives of files that do not require realtime retrieval.

Reference: <http://aws.amazon.com/glacier/>

QUESTION 83

Which statement is correct about AWS Key Management Service (KMS)?

- A. KMS is a managed service from AWS that enables you to easily manage and maintain encryption Keys.
- B. KMS is a managed service from AWS that can help you generate Key-Pairs to use for instance authentication.
- C. KMS is a managed service from AWS that provides Encryption-as-a-service to data at rest.
- D. KMS is an Identity and Access Management (IAM) service that helps you generate SSH keys for IAM users to use for Authentication instead of passwords.

Correct Answer: A

Explanation**Explanation/Reference:**

Key Management Service is a software as a service offering from Amazon. It is a managed service provided by Amazon that enables you to easily manage encryption keys. Administrators at Amazon do not have access to your keys. They cannot recover your keys and they do not help you with encryption of your keys. AWS simply administers the operating system and the underlying application it's up to us to administer our encryption keys and administer how those keys are used.

QUESTION 84

Which choice is a storage option supported by Amazon EC2?

- A. None of these
- B. Amazon SNS store
- C. Amazon AppStream store
- D. Amazon Instance Store

Correct Answer: D

Explanation**Explanation/Reference:**

Amazon EC2 supports the following storage options:

- . Amazon Elastic Block Store (Amazon EBS)
- . Amazon EC2 Instance Store
- . Amazon Simple Storage Service (Amazon S3)

Reference: <http://docs.amazonwebservices.com/AWSEC2/latest/UserGuide/Storage.html>

QUESTION 85

A user is planning to define his own information security management system (ISMS) for AWS. Which of the following security models should the user be familiar with to define the ISMS for AWS?

- A. AWS Shared Ownership Model
- B. AWS Shared Hosting Model
- C. AWS Shared Responsibility Model
- D. AWS Shared Security Model

Correct Answer: C

Explanation

Explanation/Reference:

With Amazon Web Services, to design an ISMS (Information Security Management System) in AWS, the user must first be familiar with the AWS shared responsibility model, which requires AWS and the customers to work together towards the security objectives. Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

QUESTION 86

Which statement is FALSE relating to IAM Users?

- A. IAM Users can be associated with MFA
- B. IAM Users must belong to at least one Group
- C. IAM Users can have inline policies attached
- D. IAM Users can be created using the AWS Management Console, the AWS CLI, Tools for Windows Powershell or using the IAM HTTP API

Correct Answer: B

Explanation

Explanation/Reference:

User objects are created to represent an identity, this could be a real person within your organisation who requires access to operate and maintain your AWS environment, or it could be an account to be used by an application that may require permissions to access your AWS resources programmatically. Users are simply objects representing an identity which are used in the authentication process to your AWS account. Users do not need to be a part of a Group, policies can be assigned directly to a User object if required although it's not best practise

Groups are normally created that relate to a specific requirement or job role Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/id_users.html

QUESTION 87

Which choice below is an advantage of using a Virtual Private Cloud (VPC)?

- A. You can configure routing and access control lists.
- B. You do not need IP addresses.
- C. You can block subnets.
- D. You do not require high-level understanding of public network security issues.

Correct Answer: A

Explanation

Explanation/Reference:

Amazon VPC lets you use the Amazon Virtual Private Cloud (VPC) service to create a virtual private cloud where you can launch a DB instance. When you use a virtual private cloud, you have control over your virtual networking environment: you can select your own IP address range, create subnets, and configure routing and access control lists.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/Overview.RDSVPC.html>

QUESTION 88

What statement about the On-Demand instances purchasing option provided by Amazon EC2 is correct?

- A. You pay only for the time you use instances, with no long-term commitments or up-front payments.
- B. You make an all-front payment for an instance, reserve it for a one- or three-year term.
- C. You specify the maximum per-minute price only that you are willing to pay to run a particular instance type.
- D. You make a low, one-time, up-front payment for an instance, reserve it for a one- or three-year term, and pay a significantly lower rate for these instances.

Correct Answer: A

Explanation

Explanation/Reference:

From 2006 until 2017, On-Demand instances allowed you to pay for the instances that you use by the hour, with no long-term commitments or up-front payments. In 2017, the payment policy was changed to include per-second billing, with a 1 minute minimum charge. The per-second billing option is only available for certain instance types and instance operating systems.

Reference:

<https://aws.amazon.com/blogs/aws/new-per-second-billing-for-ec2-instances-and-ebs-volumes/>

QUESTION 89

Which of the following is true of the security of your origin server in Amazon Cloudfront?

- A. You are responsible for ensuring the security of your origin server.
- B. The HTTP server is responsible for ensuring the security of your origin server.
- C. Amazon S3 bucket is responsible for ensuring the security of your origin server.
- D. The domain server is responsible for ensuring the security of your origin server.

Correct Answer: A

Explanation

Explanation/Reference:

In Amazon CloudFront, you are responsible for ensuring the security of your origin server. You must ensure that CloudFront has permission to access the server and that the security settings are appropriate to safeguard your content.

Reference:

<http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-creating.html>

QUESTION 90

When you launch an instance using Amazon EC2, you must specify a geographic region in which to launch the instance, and a corresponding ____, which is an isolated location in that region where the physical hardware on which the instance will be launched is located.

- A. sub-region
- B. sector
- C. availability zone
- D. vicinity

Correct Answer: C

Explanation

Explanation/Reference:

Amazon EC2 is hosted in multiple locations worldwide. These locations are composed of regions and Availability Zones. Each region is a separate geographic area. Each region has multiple, isolated locations known as Availability Zones. Each region is completely independent. Each Availability Zone is isolated, but the Availability Zones in a region are connected through low-latency links.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html>

QUESTION 91

Amazon ____ provides durable, block-level storage volumes you can attach to a running instance and which persist beyond the life of the instance.

- A. EC2 Instance Store
- B. Elastic Block Store
- C. Persistent Block Store
- D. Elastic File System

Correct Answer: B

Explanation

Explanation/Reference:

Amazon EBS provides durable, block-level storage volumes that you can attach to a running instance. You can use Amazon EBS as a primary storage device for data that requires frequent and granular updates. For example, Amazon EBS is the recommended storage option when you run a database on an instance. An EBS volume behaves like a raw, unformatted, external block device that you can attach to a single instance. The volume persists independently from the running life of an instance.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Storage.html>

QUESTION 92

Amazon EC2 provides virtual computing environments known as _____.

- A. servers
- B. instances
- C. microsystems
- D. volumes

Correct Answer: B

Explanation

Explanation/Reference:

Amazon EC2 provides virtual computing environments known as instances. When you launch an instance, the instance type that you specify determines the hardware of the host computer used for your instance. Each instance type offers different compute, memory, and storage capabilities and are grouped in instance families based on these capabilities. Select an instance type based on the requirements of the application or software that you plan to run on your instance.

Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html>

QUESTION 93

If data is transferred between instances in different availability zones, _____.

- A. you only pay for data that is encrypted
- B. you are only charged for the outgoing data from one instance
- C. you are only charged for the incoming data on one instance
- D. each instance is charged for its data in and data out

Correct Answer: D

Explanation

Explanation/Reference:

Both data transferred "in" to and "out" of Amazon EC2 coming from or going to another Availability Zone or peered VPC in the same AWS Region is charged at rate of \$0.01 per GB.

Reference: <https://aws.amazon.com/ec2/pricing/on-demand/>

QUESTION 94

Complete the 3 definitions:

_____: Process of defining an identity and the verification of that identity _____: Determines what an identity can access within a system once it's been authenticated to it
 _____: The method and process of how access is granted to a secure resource

- A. Authentication, Authorisation, Access Control
- B. Authorisation, Access Control, Authentication
- C. Access Control, Authentication, Authorisation

D. Authorisation, Authentication, Access Control

Correct Answer: A

Explanation

Explanation/Reference:

Authentication: Process of defining an identity and the verification of that identity Example - username and password

Authorisation: Determines what an identity can access within a system once it's been authenticated to it Example - An identities permissions to access specific AWS services Access Control: The method and process of how access is granted to a secure resource Example: Multi-Factor Authentication

QUESTION 95

Which service is used by default to store the CloudTrail log files?

- A. Simple Storage Service (S3)
- B. Glacier
- C. Elastic Block Store (EBS)
- D. Redshift

Correct Answer: A

Explanation

Explanation/Reference:

S3 is used by default to store the CloudTrail log files and a dedicated S3 bucket is required during the creation of a new Trail

Reference:

<http://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-working-with-log-files.html>

QUESTION 96

Which answer accurately describes reliability, one of the five pillars of the Well-Architected Framework?

- A. How to manage the security of what your data and systems in the cloud while AWS maintains the security of the cloud
- B. How to maintain stability of your environment, recover from failures, and automatically meet resource demands
- C. How to manage and secure your infrastructure by protecting your data by focusing on confidentiality, data integrity, and other security controls,
- D. Ensuring you can efficiently meet the demands by monitoring performance and adapting as requirements change

Correct Answer: B

Explanation

Explanation/Reference:

The pillar looks at how to maintain stability of your environment and recover from outages and failures in addition to automatically and dynamically meeting resourcing demands based put upon your infrastructure.

The Reliability best practices are:

- . Foundations
- . Change Management
- . Failure Management

Reference:

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 97

A user wants to increase the durability and availability of data stored on an EBS volume. Which action could accomplish this?

- A. Take regular snapshots.
- B. Create EBS with higher capacity.
- C. Access EBS regularly.

D. Create an AMI.

Correct Answer: A

Explanation

Explanation/Reference:

Amazon EBS volumes are designed for an annual failure rate (AFR) of between 0.1% - 0.2%, where failure refers to a complete or partial loss of the volume, depending on the size and performance of the volume. This makes EBS volumes 20 times more reliable than typical commodity disk drives, which fail with an AFR of around 4%. For example, if you have 1,000 EBS volumes running for 1 year, you should expect 1 to 2 will have a failure. EBS also supports a snapshot feature, which is a good way to take point-in-time backups of your data.

Reference: <https://aws.amazon.com/ebs/details/>

QUESTION 98

Security groups operate at the instance level, whereas _____ are an optional layer of security that operate at the subnet level.

- A. geo-redundant servers
- B. network ACLs
- C. network security groups
- D. security groups

Correct Answer: B

Explanation

Explanation/Reference:

Network ACLs operate at the subnet level (second layer of defense), whereas security groups operate at the instance level (first layer of defense).

Reference:

http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/VPC_Security.html#VPC_Security_Comparison

QUESTION 99

Which choice below accurately describes the 'warm standby' disaster recovery method?

- A. Keeping data backed up to tape and sent offsite regularly, from which all data can be restored in the event of a disaster.
- B. A complete duplicate of your entire system, to which all traffic can be directed in the event of a disaster.
- C. Storing critical systems as a template, from which resources can be scaled out in the event of a disaster.
- D. A duplicate version of only your business-critical systems that is always running, in case you need to divert your workloads to them in the event of a disaster.

Correct Answer: D

Explanation

Explanation/Reference:

Warm standby is essentially ready to go with all key services running in the most minimal possible way, essentially a smaller version of the production environment. In the event of a disaster, the standby environment will be scaled up for production load quickly and easily. DNS records will be changed to route all traffic to the AWS environment. Reference: <https://d1.awsstatic.com/whitepapers/aws-disaster-recovery.pdf>

QUESTION 100

What is the Personal Health Dashboard?

- A. An Trusted Advisor dashboard that shows all issues on your account related to best practice checks.
- B. An AWS webpage that shows the status of all services in all regions and availability zones.
- C. A CloudWatch dashboard that shows the status of all CloudWatch alerts you have configured.
- D. An AWS account dashboard that shows how AWS service issues may affect systems connected with

your AWS account.

Correct Answer: D

Explanation

Explanation/Reference:

AWS Personal Health Dashboard provides alerts and remediation guidance when AWS is experiencing events that may impact you. While the Service Health Dashboard displays the general status of AWS services, Personal Health Dashboard gives you a personalized view into the performance and availability of the AWS services underlying your AWS resources. Reference: <https://aws.amazon.com/premiumsupport/phd/>

QUESTION 101

What is AWS Budgets?

- A. A set of reports that provide detailed historic cost and usage data for your account.
- B. A collection of dynamic graphs that allow you to discover usage trends and provides estimated usage and cost forecasts.
- C. A service that allows you to set specific spending and usage limits for AWS services
- D. A dashboard that provides quick insights into your recent account cost and usage.

Correct Answer: C

Explanation

Explanation/Reference:

AWS Budgets is a service within the Billing and Cost Management console that allows you to set limits for service usage, cost, and reserved instance utilization. You can create alerts to receive notifications when you exceed or are forecasted to exceed your specific thresholds.

Reference: https://aws.amazon.com/aws-cost-management/aws-budgets/?nc2=h_m1

QUESTION 102

You can use AWS KMS customer master keys (CMKs) to encrypt ____ through AWS CloudTrail's server-side encryption, rather than using the default S3-managed keys.

- A. log files
- B. key pairs
- C. blob data
- D. passwords

Correct Answer: A

Explanation

Explanation/Reference:

You can use AWS CloudTrail to record AWS API calls and other activity for your AWS account and to save the recorded information to log files in an Amazon Simple Storage Service (Amazon S3) bucket that you choose. By default, the log files delivered by CloudTrail to your S3 bucket are encrypted using server-side encryption with Amazon S3-managed encryption keys (SSE-S3). But you can choose instead to use server-side encryption with AWS KMS-managed keys (SSE-KMS).

Reference: <http://docs.aws.amazon.com/kms/latest/developerguide/services-cloudtrail.html>

QUESTION 103

By using _____, you simply upload your application, and it automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

- A. AWS Elastic Beanstalk
- B. AWS OpsWorks
- C. AWS CloudFormation
- D. Amazon CloudFront

Correct Answer: A

Explanation

Explanation/Reference:

AWS Elastic Beanstalk is an easy way for you to quickly deploy and manage applications in the AWS cloud. You simply upload your application, and Elastic Beanstalk automatically handles the deployment details of capacity provisioning, load balancing, auto-scaling, and application health monitoring.

Reference: http://aws.amazon.com/elasticbeanstalk/?nc1=h_l2_dm

QUESTION 104

Which of the following is an AWS security best practice?

- A. Applying the principle of least privilege
- B. To democratize advanced technologies
- C. Applying the principle of mechanical sympathy
- D. To design for failure

Correct Answer: A

Explanation

Explanation/Reference:

Applying the 'principle of least privilege' is a security best practice that essentially focuses on only granting the level of access an identity requires to perform its role. This also looks at how to prevent and eliminate identities having long-term credentials.

Reference:

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 105

To ensure secure services, AWS offers shared responsibility models for each of the different type of services that they offer which you need to be aware of. Which of the following services are the responsibility of AWS? (Choose 3 answers)

- A. Physical security of hardware
- B. Virtualization infrastructure
- C. Network infrastructure
- D. Operating systems

Correct Answer: ABC

Explanation

Explanation/Reference:

AWS is responsible for what is known as Security `of' the Cloud. This covers their global infrastructure elements ?Regions, Availability Zones, and Edge Locations, and also the foundations of their services covering Compute, Storage, Database, and Network

QUESTION 106

AWS Lambda provides serverless ____ technology.

- A. backend computing
- B. automated configuration
- C. horizontal networking
- D. data security

Correct Answer: A

Explanation

Explanation/Reference:

You can build serverless backends using AWS Lambda to handle web, mobile, Internet of Things (IoT), and third-party API requests.

Reference: <https://aws.amazon.com/lambda/>

QUESTION 107

With _____ you can transfer your business critical data directly from your datacenter, office, or colocation environment to and from AWS bypassing your Internet Service Provider and removing network congestion.

- A. AWS Direct Connect
- B. Amazon AppStream
- C. AWS Storage Gateway
- D. Amazon Data Pipeline

Correct Answer: A

Explanation

Explanation/Reference:

With AWS Direct Connect, you can transfer your business critical data directly from your datacenter, office, or colocation environment to and from AWS, bypassing your Internet Service Provider and removing network congestion.

QUESTION 108

A user is uploading a backup of data to Glacier for the purpose of Disaster Recovery(DR). The data may be required to restore only when there is DR and the organization is planning RTO of 1 hour. What advise will you provide to the user?

- A. Use the Glacier console to upload data to Glacier
- B. Use the Glacier CLIs to upload data from EC2 to Glacier
- C. This is not the right case for Glacier; instead use S3
- D. Use the Glacier SDK to upload data directly from EC2 to Glacier

Correct Answer: C

Explanation

Explanation/Reference:

AWS Glacier is a long term cheaper archival service which is used for infrequent user storage. In this case since RTO is 1 hour, Glacier will not meet the requirement as it takes 3-5 hours to make the data available. In this case it is recommended to store content in S3/RRS. Reference: <http://docs.aws.amazon.com/amazonglacier/latest/dev/introduction.html>

QUESTION 109

You are viewing your AWS resources but can only see the resources tied to the region you've specified. What is the reason for this?

- A. Because this is probably an error as you should be able to view resources across all your regions at all times
- B. Because you can only view resources in the region closest to you
- C. Because you only have permissions set to view one region at a time
- D. Because regions are isolated from each other, and AWS does not replicate resources across regions automatically

Correct Answer: D

Explanation

Explanation/Reference:

When viewing your resources, you'll only see the resources tied to the region you've specified. The reason for this is because regions are isolated from each other, and AWS does not replicate resources across regions automatically.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html#using-regions-availability-zones-setup>

QUESTION 110

If your AWS data must meet specific regulations such as the EU Data protection laws, what must you do?

- A. Move your data somewhere else so you don't have to worry about extra security
- B. Keep that data on-premise and do not move it to the cloud under any circumstance
- C. Architect your environment to meet these security requirements
- D. Be aware that they exist and comply to them when and if you have time to do so

Correct Answer: C

Explanation

Explanation/Reference:

Some laws require specific security controls, retention requirements, etc, dependent on the data being stored. Other legislations exist where certain data may have to remain within a specific region and can not be transferred out of those boundaries. You need to architect your environment to meet these security requirement and mitigate the risk of data being stored in a geographic location that's restricted. Breaches to this legislation could have a legal impact and lead to additional risks against your organization, so it's fundamental that you are aware of your data privacy and storage location laws and regulations.

QUESTION 111

The billing process for Amazon EC2 instances was updated as of October 2, 2017. Which of the following statements is true regarding how you pay for Amazon EC2 instances? (Choose 2 answers)

- A. You can pay per hour or per second, depending on the instance type.
- B. You pay for compute capacity by the day; hours are billed in proportion.
- C. You can pay for compute capacity by the hour only.
- D. You can pay per hour or per second, depending on the instance AMI's operating system.

Correct Answer: AD

Explanation

Explanation/Reference:

Previously, if you launched an instance for 5 minutes, you would pay for 1 hour. If you launched an instance for 45 minutes, you would also pay for 1 hour. This means that partial hours cost as much as one full hour. Pricing is per instance-hour consumed for each instance, from the time an instance is launched until it is terminated or stopped. Each partial instance-hour consumed will be billed as a full hour. With EC2 services now billed per-second in some cases, as well as per-hour in others as of October 2, 2017, there is more to consider. Amazon AWS is still based on the concept of pay-as-you-go. You pay Amazon EC2 instances by the second for all instance types except Dedicated Host, which is still billed per instance-hour. You are billed per second when using Linux operating systems with no separate hourly charge, and billed per hour when using Windows operating systems.

Reference: <http://aws.amazon.com/ec2/pricing/>

QUESTION 112

The data that is stored on an Amazon EBS volume will persist _____.

- A. only as long as the instance is not terminated
- B. only as long as the instance is not stopped
- C. after an instance is terminated
- D. only as long as the instance is alive

Correct Answer: C

Explanation

Explanation/Reference:

The data stored on a local instance store will persist only as long as that instance is alive. However, data that is stored on an Amazon EBS volume will persist independently of the life of the instance.

Reference: <https://aws.amazon.com/ec2/faqs/>

QUESTION 113

Which of the four storage options involve data retrieval fees? (Choose 2 answers)

- A. Amazon S3 Standard Storage

- B. Amazon S3 Standard-Infrequent Access Storage
- C. Amazon Glacier Storage
- D. Amazon S3 Reduced Redundancy Storage

Correct Answer: BC

Explanation

Explanation/Reference:

Amazon Glacier and S3 Standard-IA are both designed for storing infrequently accessed data. This is why the data storage fees are roughly one-half to one-sixth the cost of Standard Storage. Retrieval fees will quickly add up if the data is retrieved too often, so planning or correctly setting your object lifecycle based on how often you or your company will need the data is important.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/storage-class-intro.html>

QUESTION 114

According to Amazon, what two types of use cases does AWS CloudTrail solve by logging API activity?

- A. hardware and software
- B. efficiency and performance
- C. operational and security
- D. intranet and extranet

Correct Answer: C

Explanation

Explanation/Reference:

In general, looking up API activity captured by CloudTrail is helpful in troubleshooting operational and security incidents in your AWS account.

Reference: <https://aws.amazon.com/cloudtrail/faqs/>

QUESTION 115

Are common points of failures like generators and cooling equipment shared across Availability Zones?

- A. Yes
- B. Availability zones share the same data center and so the same equipments
- C. It depends on the single region
- D. No

Correct Answer: D

Explanation

Explanation/Reference:

Each Availability Zone is engineered to be isolated from failures in other Availability Zones and to provide inexpensive, low-latency network connectivity to other zones in the same region. By launching instances in separate Availability Zones, you can protect your applications from the failure of a single location.

Reference:

<http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/RDSFAQ.MultiAZ.html>

QUESTION 116

Which of the following statements is incorrect according to the policies of AWS regions?

- A. Some EC2 resources might not be available in all AWS regions and Availability Zones.
- B. The number of available Availability Zones are the same for all AWS regions.
- C. Amazon EC2 provides you the ability to place resources, such as instances, and data in multiple locations.
- D. EC2 resources aren't replicated across AWS regions unless you do so specifically.

Correct Answer: B

Explanation

Explanation/Reference:

Amazon EC2 is hosted in multiple locations world-wide. These locations are composed of regions and Availability Zones. Each region is a separate geographic area. Each region has multiple, isolated locations known as Availability Zones. Amazon EC2 provides you the ability to place resources, such as instances, and data in multiple locations. Resources aren't replicated across regions unless you do so specifically.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html>

QUESTION 117

Unlike an IAM user, an IAM role ____.

- A. is tightly tied to your account's root credentials
- B. provides complete access to all your resources
- C. is not associated with a specific person
- D. provides a transient identity

Correct Answer: C

Explanation**Explanation/Reference:**

An IAM user is an identity within your AWS account that has specific custom permissions; e.g., permissions to create a cache cluster in ElastiCache. An IAM role is another IAM identity you can create in your account that has specific permissions. However, unlike an IAM user, an IAM role is not associated with a specific person. Reference: <http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/IAM.html>

QUESTION 118

AWS WAF requires which other AWS service to deploy a security solution?

- A. AWS CloudWatch
- B. AWS Lambda
- C. AWS CloudFront
- D. AWS SNS

Correct Answer: C

Explanation**Explanation/Reference:**

AWS WAF relies heavily on AWS CloudFront distributions, to the point that if you don't have a distribution configured then AWS WAF is essentially redundant. However, it's worth mentioning that this relationship is only one way, meaning that AWS CloudFront can operate and exist without AWS WAF being configured. Reference: <http://docs.aws.amazon.com/waf/latest/developerguide/cloudfront-features.html>

QUESTION 119

In order for Amazon Inspector to access your EC2 instances and collect the assessment data, _____.

- A. assessment data is pushed to Inspector by AWS agent, no roles needed
- B. Amazon Inspector always runs with admin permissions and has access to EC2 instances by default unless you revoke the permissions
- C. you have to create an IAM role and associate it with Amazon Inspector
- D. you have to select the KeyPair associated with your EC2 instance while configuring Amazon Inspector

Correct Answer: C

Explanation**Explanation/Reference:**

As a pre-requisite to Amazon Inspector, an IAM role has to be created and associated with Inspector. The role must allow Inspector to `ec2:describeInstances`. Reference:

https://docs.aws.amazon.com/inspector/latest/userguide/inspector_settingup.html

QUESTION 120

You have been asked to perform some penetration testing on your company's AWS infrastructure.

However you are not sure who is responsible for this, your company or AWS? Which statements correctly describe the AWS policy in relation to penetration testing? (Choose 2 answers)

- A. The information you share with AWS as part of this process is kept confidential within AWS.
- B. You need to employ a 3rd party specialist to do the testing.
- C. Permission is required from AWS for all penetration testing.
- D. You can do the testing with no prior AWS approval.

Correct Answer: AC

Explanation

Explanation/Reference:

There are several important things to note about penetration testing requests:

- . Permission is required for all penetration tests.
- . To request permission, you must be logged into the AWS portal using the root credentials associated with the instances you wish to test, otherwise the form will not pre-populate correctly.
- . The AWS policy only permits testing of EC2 and RDS instances that you own. Tests against any other AWS services or AWS-owned resources are prohibited . At this time, the AWS policy does not permit testing small or micro RDS instance types. Testing of m1.small, t1.micro or t2.nano EC2 instance types is not permitted. Reference: <http://aws.amazon.com/security/penetration-testing/>

QUESTION 121

Which of the following is not a benefit of AWS cloud computing?

- A. go global in minutes
- B. trade capital expense for variable expense
- C. no expense maintaining data centers
- D. increase workload consistency

Correct Answer: D

Explanation

Explanation/Reference:

The only choice listed that is not a direct benefit of AWS cloud computing is improved system workload/traffic consistency. In fact, the inconsistent nature of many online applications and business systems is a reason why cloud computing can be beneficial to many companies. The other choices listed are all established benefits listed by AWS. Reference: <https://d0.awsstatic.com/whitepapers/aws-overview.pdf>

QUESTION 122

Which of the following can help a business compare the costs of on-premises data centers and AWS?

- A. AWS Budgets
- B. AWS Trusted Advisor
- C. AWS Cost Explorer
- D. the Total Cost of Ownership (TCO) Calculator

Correct Answer: D

Explanation

Explanation/Reference:

While Cost Explorer, AWS Budgets and Trusted Advisor would be useful to any AWS customer, at any level of customer support, the Total Cost of Ownership (TCO) calculator is designed specifically for businesses comparing on-premise data center costs with the AWS cloud.

Reference: <https://aws.amazon.com/tco-calculator/>

QUESTION 123

Amazon Glacier is a secure, _____, and extremely low-cost cloud storage service for data archiving and long-term backup.

- A. fast

- B. durable
- C. scalable
- D. modular

Correct Answer: B

Explanation

Explanation/Reference:

Amazon Glacier is an extremely low-cost cloud storage service that provides secure, durable, and flexible storage for data backup and archival.

Reference: <http://aws.amazon.com/glacier/>

QUESTION 124

You are implementing Amazon CloudWatch for monitoring of your AWS infrastructure. What can you use within CloudWatch to take actions such as sending a notification to an SNS topic or an Auto Scaling policy?

- A. Event
- B. Action
- C. Dashboard
- D. Alarm

Correct Answer: D

Explanation

Explanation/Reference:

You can use an alarm to automatically initiate actions on your behalf. An alarm watches a single metric over a specified time period, and performs one or more specified actions, based on the value of the metric relative to a threshold over time. Alarms invoke actions for sustained state changes only. CloudWatch alarms will not invoke actions simply because they are in a particular state. The state must have changed and been maintained for a specified number of periods.

Reference:

http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/cloudwatch_concepts.html

QUESTION 125

Which of the following AWS services can be used to define a Virtual Network that closely resembles a traditional data center?

- A. Amazon ServiceBus
- B. Amazon VPC
- C. Amazon RDS
- D. Amazon EMR

Correct Answer: B

Explanation

Explanation/Reference:

Amazon VPC allows you to create, monitor, manage, and provision your own virtual network within AWS. For its characteristics this service is the one that most closely resembles a traditional data center, regarding the level of power, configurability, and flexibility that it offers.

Reference: <http://aws.amazon.com/vpc/faqs/#G1>

QUESTION 126

Which of the following statements is true of changing an instance's security groups in a VPC?

- A. You can change the security groups that an instance in a VPC is assigned to only before the instance is launched.
- B. You cannot change the security groups that an instance in a VPC is assigned to after the instance is launched.
- C. You can change the security groups that an instance in a VPC is assigned to after the instance is launched.

D. None of the statements are true.

Correct Answer: C

Explanation

Explanation/Reference:

In VPC, you are allowed to change the security groups an instance belongs to, even after it has been launched.

In contrast, once an instance is launched in EC2 Classic, you are not allowed to change the security groups it belongs to.

Reference:

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

QUESTION 127

Amazon CloudFront gets your web content from your _____ and serves it to viewers via a world-wide network.

- A. AWS Glacier archives
- B. origins
- C. AWS Glacier vaults
- D. Amazon DynamoDB

Correct Answer: B

Explanation

Explanation/Reference:

When you create or update a distribution in Amazon CloudFront, you provide information about one or more locations known as origins where you store the original versions of your web content. CloudFront gets your web content from your origins and serves it to viewers via a world-wide network of edge servers. Each origin is either an Amazon S3 bucket or an HTTP server, for example, a web server.

Reference:

<http://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-va-lues-specify.html>

QUESTION 128

What service is used to store the log files generated by CloudTrail?

- A. VPC
- B. S3
- C. EC2
- D. EBS

Correct Answer: B

Explanation

Explanation/Reference:

The AWS CloudTrail uses Amazon's Simple Storage Service (S3) to store log files. It also supports the use of S3 life cycle configuration rules to reduce storage costs.

Reference: <https://aws.amazon.com/cloudtrail/>

QUESTION 129

A recovery time objective (RTO) is related to _____, while a recovery point objective (RPO) is related to _____.

- A. the actual time for a system to restore; the estimated time for a system to restore
- B. the estimated time for a system to restore; the actual time for a system to restore
- C. data loss measured in time; time required for system restoration
- D. time required for system restoration; data loss measured in time

Correct Answer: D

Explanation

Explanation/Reference:

A recovery time objective (RTO) is the time it takes to restore system service after a disruption, while a recovery point objective (RPO) is an acceptable amount of data loss measured in time. The two concepts are interrelated. The amount of data loss a business can tolerate usually determines the desired recovery time objective. The desired RTO then generally determines the disaster recovery method.

Reference: https://en.wikipedia.org/wiki/Recovery_point_objective

QUESTION 130

Which choice accurately describes a reserved DB instance?

- A. Second generation R3 instances that provide memory optimization and more computing capacity
- B. T2 instances that provide baseline performance level with the ability to burst to full CPU usage
- C. DB instances used for at least one year to receive a significant discount on the hourly instance charges
- D. Third generation M4 instances which must be in a VPC

Correct Answer: C

Explanation

Explanation/Reference:

Reserved DB instances let you reserve a DB instance for a one- or three-year term and in turn receive a significant discount on the hourly charge for instances that are covered by the reservation. You can use the command line tools, the API, or the AWS Management Console to list and purchase available reserved DB instance offerings.

Reference:

http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithReservedDBInstances.html

QUESTION 131

What is NOT a feature of Amazon Inspector?

- A. built-in rules library
- B. ability to publish findings through SNS
- C. automate via API
- D. expandable rules library allowing for custom policy rules

Correct Answer: D

Explanation

Explanation/Reference:

Amazon Inspector has a fixed built-in library of best practices and rules. Currently it doesn't support any custom rules beyond this default set.

Reference:

https://docs.aws.amazon.com/inspector/latest/userguide/inspector_introduction.html

QUESTION 132

What AWS cloud characteristic makes a resource almost immediately available to allocate when and where you need it?

- A. economy of scale
- B. high availability
- C. elasticity
- D. on-demand resources

Correct Answer: D

Explanation

Explanation/Reference:

On-demand resourcing provides you with the ability to provision resources within seconds and minutes, instead of days or weeks that it may take within an on-premise environment, especially if you had to order

the additional hardware first. For example, if you had a server in AWS and its CPU utilization was steadily increasing with demand, you would be able to deploy a second server, which would be ready within minutes to take some of the load off of the first.

Reference: <https://d0.awsstatic.com/whitepapers/aws-overview.pdf>

QUESTION 133

Will I be charged when an Amazon RDS DB instance is idle?

- A. No, you'll not be charged for idle instances.
- B. Yes, you will be charged but only if the instance is running in GovCloud.
- C. Yes, you will be charged.
- D. Yes, you will be charged but only if the instance is running in VPC.

Correct Answer: C

Explanation

Explanation/Reference:

Unexpected charges on your account can be the result of a simple misunderstanding, or an indication of a resource configuration issue. Here are some things to check:

- . Idle instances Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Relational Database Service (Amazon RDS) instances accrue hourly charges as soon as you launch the instance, and continue accruing until you explicitly terminate the instance. If you launch an instance and then sign out of your account without terminating the instance, it will continue running and accruing charges. Using more than one region

- . The AWS Management Console displays only one region at a time. If you accrue charges but aren't able to see any running instances under the EC2 tab in the console, you may want to review the other regions by selecting each of them from the drop-down menu in the upper left corner of the console page.

Reference: <https://aws.amazon.com/billing/new-user-faqs/>

QUESTION 134

Your manager asks you to change your company's AWS Support level to include use-case guidance (what AWS products, features, and services to use to best support your specific needs) and third-party software support. Which support plan is most cost-effective option offering this service?

- A. Basic-level support plan
- B. Business-level support plan
- C. Enterprise-level support plan
- D. Developer-level support plan

Correct Answer: B

Explanation

Explanation/Reference:

Business and Enterprise-level Support customers have access to the following listed features:

- . Use-case guidance

- . AWS Identity and Access Management (IAM) for controlling individuals' access to AWS Support . AWS Trusted Advisor

- . An API for interacting with Support Center and Trusted Advisor . Third-party software support

Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 135

Which of the following activities is NOT performed by the Auto Scaling policy?

- A. Maintaining current instance levels
- B. Scaling down instance counts
- C. Changing instance types
- D. Scaling up instance counts

Correct Answer: C

Explanation

Explanation/Reference:

Auto Scaling policies can scale up or down based on the user-defined policies, health status checks or schedules. It also performs a health check on the instances, terminates unhealthy instances, and launches healthy instances to maintain the current instance level. Scaling provides you with options, outside of scaling policies, to override attributes from the instance and use the values that you need. For example, you can override the instance type using AWS CLI commands.

Reference:

<http://docs.aws.amazon.com/autoscaling/latest/userguide/create-lc-with-instanceID.html>

QUESTION 136

Amazon _____ provides you the ability to easily add user sign-up/sign-in to your apps along with permission management, in addition to enabling data storage on user devices.

- A. Identity and Access Management
- B. Cognito
- C. Organizations
- D. Directory Service

Correct Answer: B

Explanation

Explanation/Reference:

Amazon Cognito lets you easily add user sign-up and sign-in and manage permissions for your mobile and web apps. You can create your own user directory within Amazon Cognito, or you can authenticate users through social identity providers such as Facebook, Twitter, or Amazon; with SAML identity solutions; or by using your own identity system. In addition, Amazon Cognito enables you to save data locally on users' devices, allowing your applications to work even when the devices are offline.

Reference:

<http://docs.aws.amazon.com/cognito/latest/developerguide/what-is-amazon-cognito.html>

QUESTION 137

What AWS service could be used for assessment of security compliance and active auditing of EC2 instances on a regular basis?

- A. Amazon Inspector
- B. Virtual Private Cloud (VPC) Flow Logs
- C. AWS CloudWatch
- D. EC2 State Manager

Correct Answer: A

Explanation

Explanation/Reference:

Amazon Inspector enables you to assess EC2 instances against fixed set of pre-defined rules and analyze the behavior of EC2 instances on a regular basis. The rules evaluates EC2 system behavior against best practices and generates report of findings.

Reference:

https://docs.aws.amazon.com/inspector/latest/userguide/inspector_introduction.html

QUESTION 138

What choices below are benefits of using AWS managed services? (Choose 2 answers.)

- A. reduced time to market
- B. Increased control over the service operating system and custom installations
- C. lower cost and complexity
- D. service specialization

Correct Answer: AC

Explanation

Explanation/Reference:

The AWS managed services reduce the amount of development time required to design and implement a working service, and reduce the operational cost, time and technical knowledge required. As a trade-off, developers have less control over how the operating system and other components operate 'under the hood,' and managed services in general offer a standard set of options that are not customized for each user. Reference: <https://d0.awsstatic.com/whitepapers/aws-overview.pdf>

QUESTION 139

What two options does RDS offer to backup information stored on DB instances? (Choose 2 answers)

- A. DB versioning
- B. DB read replicas
- C. Automated backup
- D. DB snapshots

Correct Answer: CD

Explanation

Explanation/Reference:

The two methods for backing up information stored on RDS DB instances are automated backups and DB snapshots. Automated backup is a managed process where RDS creates standby instances of any and all instances selected for Multi-Availability Zone (AZ) deployment rather than Single AZ deployment.

DB snapshots are also copies of the DB instance, but snapshots are manual processes, and snapshots can be stored in availability zones or regions selected by the user. DB versioning is not a method of backing up RDS DB instances. Versioning is a method for backing up objects stored in S3.

DB read replicas are not a method of backing up RDS DB instances. Read replicas allow databases to manage a level of read requests for a database that extends beyond an individual DB instance's capability. Reference:

http://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_WorkingWithAutomated Backups.html

QUESTION 140

Which of the following is true of Amazon CloudWatch?

- A. Amazon CloudWatch runs code without provisioning or managing servers.
- B. Amazon CloudWatch monitors Amazon Web Services (AWS) resources and the applications that run on AWS in real-time.
- C. None of these are true.
- D. Amazon CloudWatch is a web service that gives businesses an easy and cost effective way to distribute content with low latency and high data transfer speeds.

Correct Answer: B

Explanation

Explanation/Reference:

Amazon CloudWatch monitors your Amazon Web Services (AWS) resources and the applications you run on AWS in real-time.

You can use CloudWatch to collect and track metrics, which are variables you can measure for your resources and applications. CloudWatch alarms send notifications or automatically make changes to the resources you are monitoring based on rules that you define. For example, you can monitor the CPU usage and disk reads and writes of your Amazon EC2 instances and then use this data to determine whether you should launch additional instances to handle increased load. You can also use this data to stop under-used instances to save money. In addition to monitoring the built-in metrics that come with AWS, you can monitor your own custom metrics. With CloudWatch, you gain system-wide visibility into resource utilization, application performance, and operational health.

Reference:

<http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/WhatIsCloudWatch.html>

QUESTION 141

Which of the following is true of CloudWatch alarms?

- A. They automatically make changes to the rules based on monitored resource.
- B. They automatically make changes to the resources monitored based on rules defined.

- C. They are only configured through CloudWatch APIs.
- D. They only monitor the timeout metric for numerous AWS services

Correct Answer: B

Explanation

Explanation/Reference:

CloudWatch alarms send notifications or automatically make changes to the resources you are monitoring based on rules that you define.

Reference:

<http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/WhatIsCloudWatch.html>

QUESTION 142

Amazon CloudWatch can also integrate with other AWS services that provide similar monitoring features. What other AWS offering can CloudWatch integrate with to provide monitoring of API calls as well as perform aggregation of CloudWatch log(s)?

- A. Amazon IAM
- B. AWS OpsWorks
- C. AWS CloudFormation
- D. AWS CloudTrail

Correct Answer: D

Explanation

Explanation/Reference:

AWS CloudTrail is a service that captures API calls made by or on behalf of your AWS account. This information is collected and written to log files that are stored in an Amazon S3 bucket that you specify. API calls are logged whenever you use the API, the console, or the AWS CLI. Using the information collected by CloudTrail, you can determine what request was made, the source IP address the request was made from, who made the request, when it was made, and so on.

Reference:

http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/logging_cw_api_calls.html

QUESTION 143

A user has developed an application that requires sending data to a NoSQL database. The user wants to decouple the process so that the application keeps processing and sending data, but does not wait for database acknowledgement. Which of the below mentioned applications helps in this scenario?

- A. AWS Simple Workflow
- B. AWS Simple Queue Service
- C. AWS Simple Notification Service
- D. AWS DataPipeline

Correct Answer: B

Explanation

Explanation/Reference:

SQS provides a simple and cost-effective way to decouple the components of an application. In this case, the user can use AWS SQS to send messages which are received from an application and sent to DB. The application can continue processing data without waiting for any acknowledgement from DB. The user can use SQS to transmit any volume of data without losing messages or requiring other services to always be available. While SNS is a messaging service, it does not offer the specific decoupling necessary in this case.

Reference: <http://aws.amazon.com/sqs/>

QUESTION 144

All AWS customers automatically have around-the-clock access to certain features. Which of the following is not one of those?

- A. Service health checks

- B. Customer Service
- C. Email response
- D. Support forums

Correct Answer: C

Explanation

Explanation/Reference:

All AWS customers automatically have around-the-clock access to the following:

- . Customer Service
- . Support forums
- . Service health checks
- . Documentation, whitepapers, and best-practice guides . Client-side diagnostic tools are for Developer-level Support customers. Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 145

Which of the following traditional disaster recovery methods runs your site in AWS as well as on your existing on-site infrastructure, in an active-active configuration?

- A. Active-passive solution
- B. AWS Production to an AWS DR Solution
- C. Multi-site solution
- D. Pilot Light

Correct Answer: C

Explanation

Explanation/Reference:

In AWS, a multi-site solution runs in AWS as well as on your existing on-site infrastructure, in an active-active configuration.

Reference: http://media.amazonwebservices.com/AWS_Disaster_Recovery.pdf

QUESTION 146

Which service below is not directly related to traceability?

- A. CloudTrail
- B. AWS Config
- C. CloudWatch
- D. IAM

Correct Answer: D

Explanation

Explanation/Reference:

Traceability is the ability to audit, monitor and log your environment, and is key to establish automated responses to events. AWS Config is directly related to auditing and compliance, CloudTrail to logging, and CloudWatch to monitoring. IAM is a key security service, but is directly related to access management.

Reference:

https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 147

In Amazon's CloudTrail, which component is used to publish a notification?

- A. Amazon Delivery Services
- B. Amazon Simple Notification Service
- C. Amazon Simple Message Delivery
- D. Amazon Message Transmission Service

Correct Answer: B

Explanation

Explanation/Reference:

CloudTrail uses Amazon's Simple Notification Service to publish the notification. It is possible to configure CloudTrail to publish notifications for each log file entry.

Reference: <https://aws.amazon.com/cloudtrail/>

QUESTION 148

The process of authentication can be categorised into two distinct parts of information, these being:

- A. Verification & Authorisation
- B. Authentication & Verification
- C. Identification & Verification
- D. Identification & Authentication

Correct Answer: C

Explanation

Explanation/Reference:

The first part of this process is to define who you are, effectively presenting your identity, an example of this would be your login username to your AWS account or environment. This identification is a unique value within the system that you are trying to authenticate to, and in this example, AWS would not allow 2 identical user accounts to be created within the same single AWS Account.

The second part of the authentication process is to verify that you are who you say you are in the first step.

This is achieved by providing additional information, which should be kept private and secret for security purposes, however this private information does not have to be a unique value within the system.

So in the example I just gave, whereby you provide your identity in the form of a username to your AWS Account, which will be a unique value, the next step would be to verify that identity by providing a password.

QUESTION 149

Your company wants you to ensure that AWS provides management business reviews as part of its support plan. Which of the following support levels should you choose to make sure that this is included?

- A. Business-level Support
- B. Enterprise-level Support
- C. Developer-level Support
- D. Customer-level Support

Correct Answer: B

Explanation

Explanation/Reference:

Enterprise-level Support customers have access to the following features:

- . White-glove case routing
- . Management business reviews
- . Application architecture guidance
- . Infrastructure event management
- . AWS Concierge
- . Technical account manager

Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 150

Which of the following statements is true of Amazon S3?

- A. The largest object that can be uploaded in a single PUT is 75 gigabytes.
- B. Each object can contain up to 5 TB of data.
- C. A user cannot upload unlimited objects to an S3 bucket.
- D. Each object can be a maximum of 5 TB, and S3 supports only 10 objects per bucket.

Correct Answer: B

Explanation

Explanation/Reference:

The maximum size of an object can be 5 TB, but Amazon S3 allows uploading an unlimited amount of objects to a single bucket. Thus, S3 allows unlimited total data storage over S3.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 151

Which best describes PaaS?

- A. Programs to orchestrate container deployment
- B. APIs to abstract different kinds of application deployments
- C. Software to build cloud infrastructure
- D. Software for deploying individual functions

Correct Answer: B

Explanation**Explanation/Reference:**

Infrastructure refers to Infrastructure as a Service. This is software to construct virtual infrastructure. Container deployment refers to a specific type of artifact (containers). Individual functions falls into the Serverless category. PaaS targets various types of application deployments for various platforms. The course covered GCP App Engine, AWS Elastic Beanstalk, and Azure App service.

QUESTION 152

Which statement is TRUE about AWS WAF Rules?

- A. Rules are added to conditions.
- B. Rules are executed in the order they appear in the Web ACL.
- C. All Rules that have an action of Block are listed first automatically.
- D. It is not possible to edit a Rule once it has been created.

Correct Answer: B

Explanation**Explanation/Reference:**

An important point to make about rules is that they are executed in the order that they are listed within WAF. So be careful to architect this order correctly for your rulebase, typically these are ordered as shown:

- . WhiteListed IP - Allow
- . BlackListed IP - Block
- . Bad Signatures - Block

Reference: <http://docs.aws.amazon.com/waf/latest/developerguide/getting-started.html>

QUESTION 153

Pricing is ____ consumed for EC2 instances.

- A. either per instance-minute or instance-hour
- B. per instance-hour only
- C. per instance-minute only
- D. either per instance-second or per instance-hour

Correct Answer: D

Explanation**Explanation/Reference:**

In AWS, you pay only for what you use.

EC2 pricing is per instance-second consumed, or per instance-hour consumed depending on the instance type and operating system for the AMI. For example, spot instances, reserved instances and on-demand instances are billed per-second, while Dedicated instances are billed per hour. Linux instances can be billed per second, but Microsoft Windows instances are billed per hour.

Reference:

<https://aws.amazon.com/blogs/aws/new-per-second-billing-for-ec2-instances-and-ebs-volumes/>

QUESTION 154

You want to copy an Amazon Machine Image (AMI) to a different region. What should you ensure prior to copying the AMI?

- A. You should ensure that the contents of the source AMI are not public.
- B. You should ensure that the contents of the source AMI are EBS store-backed.
- C. You should ensure that the contents of the source AMI are updated to support running in a different region.
- D. You should ensure that the contents of the source AMI can only set credentials received from an identity provider.

Correct Answer: C

Explanation

Explanation/Reference:

You must confirm that the contents of the source Amazon Machine Image (AMI) are updated to support running in a different region prior to copying an AMI. Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/CopyingAMIs.html>

QUESTION 155

Why does AWS recommend that you locate your ElastiCache clusters or nodes in different Availability Zones?

- A. To eliminate the chance that a single AZ failure will cause your entire system to fail
- B. To enable one Availability Zone to provide a lower latency than the other
- C. To improve the scalability of the system
- D. To be able to configure load balancing

Correct Answer: A

Explanation

Explanation/Reference:

AWS recommends that you locate your ElastiCache clusters or nodes in different Availability Zones to eliminate the chance that a failure will cause your entire system to fail. The tests that AWS has performed have shown that there is no significant latency difference between locating all nodes in one Availability Zone or spreading them across multiple Availability Zones.

Reference:

<http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/RegionsAndAZs.html>

QUESTION 156

The AWS Elastic Load Balancer is a ____.

- A. service providing fault tolerance by distributing incoming traffic across multiple EC2 instances
- B. free software application repository that is available to all AWS customers
- C. weight leveling system that keeps your physical network device stable in an equipment rack
- D. free network security software application available in a virtual machine format

Correct Answer: A

Explanation

Explanation/Reference:

The AWS Elastic Load Balancer is a network service that distributes application traffic across multiple EC2 instances and availability zones. It provides network fault tolerance by automatically scaling up or down based on network traffic requirements. Reference: <https://aws.amazon.com/elasticloadbalancing/>

QUESTION 157

What does an "endpoint" refer to in AWS?

- A. An endpoint is a URL that is the entry point for a web service.

- B. An endpoint is created only when the application needs to connect to the database.
- C. An endpoint is the access point that connects the data center to the outside world.
- D. An endpoint is an access point created to connect to an application deployed using Windows Azure.

Correct Answer: A

Explanation

Explanation/Reference:

An endpoint, in AWS, is a URL that is the entry point for a web service. Reference: <http://docs.amazonwebservices.com/general/latest/gr/rande.html>

QUESTION 158

You have recently purchased some reserved instances and are unsure if they are being used. Which of the following is a possible way to check this?

- A. Via the Reserved Instance utilization report
- B. Via the Consolidated Billing console
- C. Via the Cost Explorer
- D. Via the Blended rates manager

Correct Answer: A

Explanation

Explanation/Reference:

The following three tools are available to determine Reserved Instance utilization:

- . Detailed billing report.
- . Reserved Instance utilization report.
- . Billing and Cost Management console.

Reference: <https://aws.amazon.com/premiumsupport/faqs/>

QUESTION 159

Which of the following payment methods can be used when signing up with AWS?

- A. Credit card
- B. Sight draft
- C. Check
- D. Escrow account

Correct Answer: A

Explanation

Explanation/Reference:

Signing up with AWS requires some important details; one of them is how a customer can pay monthly usage of the AWS Services acquired. Currently AWS accepts only credit card for signing up. Reference: <http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/whatisbilling.html>

QUESTION 160

What is one function of an AWS Snowball?

- A. To transfer petabyte-scale data into and out of the AWS cloud
- B. To migrate thousands of on-premises workloads to AWS
- C. To transfer exabyte-scale data into and out of the AWS cloud
- D. To migrate databases into and out of AWS

Correct Answer: A

Explanation

Explanation/Reference:

AWS Snowball is a petabyte-scale data transport solution that can be used to securely transfer large amounts of data into and out of the AWS cloud.

Reference: <https://aws.amazon.com/snowball/>

QUESTION 161

In AWS, how does Developer-level tier technical offer support?

- A. Via email Monday through Friday 8 a.m. to 6 p.m. in the customer time zone
- B. Via SMS Monday through Saturday 8 a.m. to 10 p.m. in the customer time zone
- C. Via postal mail Monday through Saturday 8 a.m. to 6 p.m. in the customer time zone
- D. Via SNS notifications Monday through Friday 8 a.m. to 12 a.m. in the customer time zone

Correct Answer: A

Explanation

Explanation/Reference:

In AWS support, Developer-level tier offers support via email Monday through Friday 8 a.m. to 6 p.m. in the customer time zone.

Reference: <https://aws.amazon.com/premiumsupport/compare-plans/>

QUESTION 162

Which of the following statements best describes a key difference between Elastic Beanstalk and CloudFormation?

- A. Elastic Beanstalk is faster in deploying applications than CloudFormation.
- B. Elastic Beanstalk uses Elastic load balancing and CloudFormation doesn't.
- C. CloudFormation is faster in deploying applications than Elastic Beanstalk.
- D. CloudFormation offers more potential for customization than Elastic Beanstalk, because you can actually design and script yourself

Correct Answer: D

Explanation

Explanation/Reference:

These services are designed to complement each other. AWS Elastic Beanstalk provides an environment to easily develop and run applications in the cloud. It is integrated with developer tools and provides a one-stop experience for you to manage the lifecycle of your applications. AWS CloudFormation is a convenient deployment mechanism for a broad range of AWS resources. It supports the infrastructure needs of many different types of applications such as existing enterprise applications, legacy applications, applications built using a variety of AWS resources and container-based solutions (including those built using AWS Elastic Beanstalk). AWS CloudFormation introduces two new concepts: The template, a JSON-format, text-based file that describes all the AWS resources you need to deploy to run your application and the stack, the set of AWS resources that are created and managed as a single unit when AWS CloudFormation instantiates a template.

Reference: <http://aws.amazon.com/cloudformation/faqs/>

QUESTION 163

Which of the following best defines the AWS Key Management Service?

- A. A secure cryptographic key storage for customers
- B. A managed service that makes it easy for you to create and control the encryption keys used to encrypt your data
- C. A detailed view of the resources associated with your AWS account
- D. A web service that enables Amazon Web Services (AWS) customers to manage users and user permissions in AWS

Correct Answer: B

Explanation

Explanation/Reference:

The AWS Key Management Service (AWS KMS) is a managed service that makes it easy for you to create and control the encryption keys used to encrypt your data. Reference: <http://docs.aws.amazon.com/kms/latest/developerguide/overview.html>

QUESTION 164

How often does AWS CloudWatch report metrics for AWS WAF?

- A. 10 minutes
- B. 3 minutes
- C. 5 minutes
- D. 1 minute

Correct Answer: D

Explanation

Explanation/Reference:

WAF integrates well with AWS CloudWatch allowing you to monitor set metrics for the service. WAF CloudWatch metrics are reported in one minute intervals by default.

Reference:

<http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/waf-metricscollected.html>

QUESTION 165

A logical grouping of one or more ElastiCache Nodes or ElastiCache Shards (Redis) is called a ____.

- A. database
- B. namespace
- C. ring
- D. cluster

Correct Answer: D

Explanation

Explanation/Reference:

A logical grouping of one or more ElastiCache Nodes (Memcached or Redis) or ElastiCache Shards (Redis) is called a cluster.

Reference:

<http://docs.aws.amazon.com/AmazonElastiCache/latest/UserGuide/WhatIs.Components.html>

QUESTION 166

What does Amazon CloudFormation provide?

- A. Synchronous data replication across Availability Zones and automatic failover
- B. Autoscaling option for Amazon EC2 instances
- C. Sample templates to describe the AWS resources
- D. Guidelines for support of new database engine versions

Correct Answer: C

Explanation

Explanation/Reference:

You can use AWS CloudFormation's sample templates or create your own templates to describe the AWS resources, and any associated dependencies or runtime parameters, required to run your application.

Reference: <http://aws.amazon.com/cloudformation/>

QUESTION 167

An organization has been using AWS for a few months. The finance team wants to visualize the pattern of AWS spending. Which of the below AWS tools will help for this requirement?

- A. AWS Cost Explorer
- B. AWS Consolidated Billing
- C. AWS Cost Manager
- D. AWS CloudWatch

Correct Answer: A

Explanation

Explanation/Reference:

The AWS Billing and Cost Management console includes the Cost Explorer tool for viewing AWS cost data as a graph. It does not charge extra to user for this service. With Cost Explorer the user can filter graphs using resource tags or with services in AWS. If the organization is using Consolidated Billing it helps generate report based on linked accounts. This will help organization to identify areas that require further inquiry. The organization can view trends and use that to understand spend and to predict future costs.

Reference: <http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/costexplorer.html>

QUESTION 168

After you enable Cost Explorer in the Billing and Cost Management console, which of the following best describes the procedure that AWS uses to prepare the data about your costs?

- A. AWS prepares the data about your costs for the current month and the last four months, and then it calculates the forecast for the next three months.
- B. AWS calculates the forecast for the next six months based on AWS's data usage prediction wizard.
- C. AWS calculates data handling costs for the last three months, and then it calculates the forecast for the next three months.
- D. AWS calculates the forecast for the next three months based on the data usage for the current month.

Correct Answer: A

Explanation

Explanation/Reference:

After you enable Cost Explorer in the Billing and Cost Management console, AWS prepares the data about your costs for the current month and the last four months, and then calculates the forecast for the next three months. The current month's data is available for viewing in about 24 hours. The rest of your data takes a few days longer. Cost Explorer updates your cost data at least once every 24 hours.

Reference:

<http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/cost-explorer-signup.html>

QUESTION 169

What types of identities do Amazon Cognito identity pools support?

- A. They support both authenticated and unauthenticated identities.
- B. They support only authenticated identities.
- C. They support only unauthenticated identities.
- D. They support neither authenticated nor unauthenticated identities.

Correct Answer: A

Explanation

Explanation/Reference:

Amazon Cognito identity pools support both authenticated and unauthenticated identities.

Authenticated identities belong to users who are authenticated by a public login provider or your own backend authentication process. Unauthenticated identities typically belong to guest users. Reference:

<http://docs.aws.amazon.com/cognito/devguide/identity/identity-pools/>

QUESTION 170

With AWS Lambda, you pay for ____.

- A. storage capacity you use
- B. networking capacity by the hour
- C. number of compute resources you use
- D. compute time that you consume

Correct Answer: D

Explanation

Explanation/Reference:

You pay only for the compute time you consume ?there is no charge when your code is not running.
Reference: <http://docs.aws.amazon.com/lambda/latest/dg/welcome.html>

QUESTION 171

Enterprise-level Support customers have access to additional features that normal AWS customers do not. Which of the following is a feature available exclusively to them?

- A. Customer Service
- B. Service health checks
- C. Support forums
- D. White-glove case routing

Correct Answer: D

Explanation**Explanation/Reference:**

Enterprise-level Support customers have access to these additional features that normal AWS customers do not:

Application architecture guidance: consultative partnership supporting specific use cases and applications
Infrastructure event management: short-term engagement with AWS Support to partner with your technical and project resources to gain a deep understanding of your use case and provide architectural and scaling guidance for an event

- . AWS Concierge
- . Technical account manager
- . White-glove case routing
- . Management business reviews

Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 172

Amazon CloudWatch is one of several monitoring options you can use with AWS. What functionality within CloudWatch provides you a customizable home page that you can use to monitor your resources in a single view?

- A. View
- B. Dashboards
- C. Reports
- D. Console

Correct Answer: B

Explanation**Explanation/Reference:**

Amazon CloudWatch dashboards are customizable home pages in the CloudWatch console that you can use to monitor your resources in a single view, even those resources that are spread across different regions. You can use CloudWatch dashboards to create customized views of the metrics and alarms for your AWS resources.

Reference:

http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/CloudWatch_Dashboards.html

QUESTION 173

Which of the following statements is true of an Auto Scaling group?

- A. An Auto Scaling group delivers log files within 30 minutes of an API call.
- B. An Auto Scaling group cannot span multiple regions.
- C. An Auto Scaling group cannot be configured to scale automatically.
- D. Auto Scaling publishes new log files about every 15 minutes.

Correct Answer: B

Explanation

Explanation/Reference:

An Auto Scaling group can contain EC2 instances that come from one or more Availability Zones within the same region. However, an Auto Scaling group cannot span multiple regions.

Reference:

http://docs.aws.amazon.com/AutoScaling/latest/DeveloperGuide/US_AddAvailabilityZone.html

QUESTION 174

Which statement is FALSE relating to IAM Groups?

- A. IAM Groups are used for authentication
- B. IAM Groups contain Users
- C. IAM Groups have IAM Policies assigned to them
- D. IAM Groups are normally created that relate to a specific requirement or job role

Correct Answer: A

Explanation**Explanation/Reference:**

IAM Groups are objects much like user objects, however they are not used in any authentication process, but they are used to authorise access to AWS resources through the use of AWS Policies.

IAM Groups contain IAM Users, and these groups will have IAM policies associated that will allow or explicitly deny access to AWS resources. These policies are either AWS Managed policies that can be selected from within IAM, or customer managed policies that are created by you, the customer. More information on IAM Policies will be discussed in a lecture devoted to this element.

Groups are normally created that relate to a specific requirement or job role Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/id_groups.html

QUESTION 175

Amazon S3 Access Control Lists (ACLs) can be applied at the:

- A. Object level only
- B. Bucket and Object level
- C. Bucket level only
- D. Bucket, Object and storage class level

Correct Answer: B

Explanation**Explanation/Reference:**

S3 ACLs allow identities to access specific objects within buckets a different layered approach than bucket policies which are applied at the bucket level only. ACLs allow you to set certain permissions on each individual object within a specific Bucket. These ACLs do not follow that same format as the policies defined by IAM and Bucket policies, instead they are far less granular and different permissions can be applied depending if you are applying an ACL at the bucket or object level.

Reference: http://docs.aws.amazon.com/AmazonS3/latest/dev/S3_ACLs_UsingACLs.html

QUESTION 176

MFA is used within IAM to....?

- A. Replace your User password with a stronger authentication method
- B. Add an additional level of security when authenticating to your AWS Account
- C. Enable encryption protection against your storage
- D. Enable IAM Groups to authenticate to AWS resources

Correct Answer: B

Explanation**Explanation/Reference:**

Multi-Factor Authentication (MFA) is used to create an additional factor for authentication in addition to your existing methods, such as a password. Therefore creating a 'multi' factor level of authentication.

Reference: <https://aws.amazon.com/iam/details/mfa/>

QUESTION 177

What is the Total Cost of Ownership (TCO) calculator?

- A. A free AWS calculator that shows you the cost of hosting your AWS services in different availability zones or regions.
- B. A service that helps you select most cost-effective EC2 instance types based on your specific application use case.
- C. A free service that allows you to compare the cost of AWS with an on-premise data center.
- D. A dashboard that allows you monitor costs for your on-premise or hybrid configurations.

Correct Answer: C

Explanation

Explanation/Reference:

The Total Cost of Ownership (TCO) Calculator is a free service offered by AWS to allow you to compare the cost of on-premises servers and AWS cloud services. It requires users to answer a short series of questions, and then provides a detailed report on the potential AWS cloud environment that would mirror their on-premise systems.

Reference: <https://aws.amazon.com/tco-calculator/>

QUESTION 178

What does Amazon ElastiCache provide?

- A. An Amazon EC2 instance with the Autocached software pre-installed
- B. A virtual server with a huge amount of cache memory
- C. An automated in-memory service
- D. A managed in-memory cache service

Correct Answer: D

Explanation

Explanation/Reference:

Amazon ElastiCache allows you to improve the performance of your application by providing an in-memory cache service for the objects of your database, as it allows you to reduce the retrieval time of your data by avoiding the costly secondary-memory access needed by typical disk-based databases.

Reference: <http://aws.amazon.com/elasticache/>

QUESTION 179

Which of the choices below best describes what Auto Scaling is well suited for?

- A. Both for applications that have stable demand patterns and that experience hourly, daily, or weekly variability in usage.
- B. Both for applications that use frameworks and SDKs to enhance its customer relationship.
- C. only for applications that experience hourly, daily, or weekly variability in usage.
- D. only for applications with a stable usage pattern but extremely high workload.

Correct Answer: A

Explanation

Explanation/Reference:

Auto Scaling is well suited to both applications that have stable demand patterns and that experience hourly, daily, or weekly variability in usage. Whether the demand is predictable or unpredictable auto scaling can be a good choice. If the demand is predictable and long term you may choose reserved instances. If the demand is unpredictable you may choose on-demand or even spot instance (if you can afford to have an instance lost unexpectedly).

Reference: <http://aws.amazon.com/autoscaling/>

QUESTION 180

Which of the following services is used to send an alert from CloudWatch?

- A. Amazon SQS
- B. Amazon EBS
- C. Amazon SNS
- D. Amazon SES

Correct Answer: C

Explanation

Explanation/Reference:

AWS Auto Scaling and Simple Notification Service (SNS) work in conjunction with CloudWatch. You use Amazon SNS with CloudWatch to send messages when an alarm threshold has been reached.

Reference:

http://docs.aws.amazon.com/AmazonCloudWatch/latest/DeveloperGuide/related_services.html

QUESTION 181

Amazon _____ monitors your AWS resources and applications that you run in AWS in real time, providing you the ability to collect and track metrics as well as setup alarms to send notifications based on rules you define.

- A. CloudWatch
- B. Cognito
- C. CloudFront
- D. Simple Notification Service

Correct Answer: A

Explanation

Explanation/Reference:

Amazon CloudWatch monitors your Amazon Web Services (AWS) resources and the applications you run on AWS in real time. You can use CloudWatch to collect and track metrics, which are variables you can measure for your resources and applications. CloudWatch alarms send notifications or automatically make changes to the resources you are monitoring based on rules that you define

Reference:

<http://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/WhatIsCloudWatch.html>

QUESTION 182

In AWS Elastic Beanstalk, can you have multiple versions of your application running at the same time?

- A. No.
- B. Yes, but you can have only two versions running at any given time.
- C. Yes
- D. You can have unlimited versions, but they cannot be running at the same time.

Correct Answer: C

Explanation

Explanation/Reference:

AWS Elastic Beanstalk is designed to support multiple running environments such as one for integration testing, one for pre-production, and one for production. Each environment is independently configured and runs on its own separate AWS resources. Reference: <https://aws.amazon.com/elasticbeanstalk/faqs/>

QUESTION 183

An organization has setup consolidated billing with 3 different AWS accounts. Which of the below mentioned advantages will organization receive in terms of the AWS pricing?

- A. lower prices for services where volume pricing tiers are available.
- B. The consolidated billing does not bring any cost advantage for the organization
- C. The EC2 instances of each account will receive a total of 750*3 micro instance hours free
- D. The free usage tier for all the 3 accounts will be 3 years and not a single year

Correct Answer: A

Explanation

Explanation/Reference:

For billing purposes, AWS treats all the accounts in the organization as if they were one account. Some services, such as Amazon EC2 and Amazon S3, have volume pricing tiers across certain usage dimensions that give you lower prices the more you use the service. With consolidated billing, AWS combines the usage from all accounts to determine which volume pricing tiers to apply, giving you a lower overall price whenever possible. AWS then allocates each member account a portion of the overall volume discount based on the account's usage.

Reference:

<http://docs.aws.amazon.com/awsaccountbilling/latest/about/consolidatedbilling.html>

QUESTION 184

What statements below regarding AWS pricing is true? (Choose 2 answers)

- A. Discounted rates are available for high volume service usage.
- B. Reserved payment options are available for all AWS services
- C. You can pay less for a service when you reserve it in advance.
- D. In general, payments are a set rate per month regardless of usage

Correct Answer: AC

Explanation

Explanation/Reference:

Discounts are available for service reservations, and you can pay less per unit by using a higher 'volume' of the service. However, reserved services are only available for certain services, and payments are not a set rate. They are generally based on usage, or 'on demand.' Reference: https://d0.awsstatic.com/whitepapers/aws_pricing_overview.pdf

QUESTION 185

Can Amazon EC2 be used in conjunction with Amazon S3?

- A. No, Amazon EC2 is never used along with Amazon S3.
- B. Yes, this is possible but only if they are connected by Canonical user IDs.
- C. Yes, this is possible but only if they are in the same region.
- D. Yes, Amazon EC2 can be used along with Amazon S3.

Correct Answer: D

Explanation

Explanation/Reference:

Amazon EC2 is used jointly with Amazon Simple Storage Service (Amazon S3) for instances with root devices backed by local instance storage. By using Amazon S3, developers have access to the same highly scalable, reliable, fast, inexpensive data storage infrastructure that Amazon uses to run its own global network of web sites.

Reference: <https://aws.amazon.com/ec2/faqs/>

QUESTION 186

Which of the following size ranges is true of Individual Amazon S3 objects?

- A. 0 bytes to 5 terabytes
- B. 5 gigabytes to 5 terabytes
- C. 1 byte to 5 gigabytes
- D. 100 megabytes to 5 gigabytes

Correct Answer: A

Explanation

Explanation/Reference:

The total volume of data and number of objects you can store are unlimited. Individual Amazon S3 objects

can range in size from 0 bytes to 5 terabytes.
Reference: <https://aws.amazon.com/s3/faqs/>

QUESTION 187

Can a user create a bucket within another bucket within S3?

- A. Yes
- B. No
- C. Yes, it can be done only with CloudWatch.
- D. Yes, it can be done only in RRS.

Correct Answer: B

Explanation

Explanation/Reference:

You cannot create a bucket within another bucket. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/BucketRestrictions.html>

QUESTION 188

What is the availability provided by Amazon S3 standard storage?

- A. 99.99%
- B. 99%
- C. 90.99%
- D. 100%

Correct Answer: A

Explanation

Explanation/Reference:

Amazon S3's standard storage is designed to provide 99.999999999% durability and 99.99% availability of objects over a given year. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/DataDurability.html>

QUESTION 189

In S3, what is a key for an object?

- A. A unique identifier of an object to identify it within a bucket
- B. A secure ID to download the object
- C. A secure ID to decrypt the object content
- D. A key to securely access the S3 object

Correct Answer: A

Explanation

Explanation/Reference:

A key is a unique identifier for an object within a bucket. It makes the combination of bucket + key + version ID to uniquely identify the object. Every object in Amazon S3 can be uniquely identified with the help of the web service endpoint (region specific), bucket name (unique across S3), key (A unique identifier) and optionally, a version. For example, in the URL:
<http://mydatatest.s3.amazonaws.com/2014-03-01/AmazonS3.jpg> "mydatatest" is the name of the bucket and "2014-03-01/AmazonS3.jpg" is the key to identify the object "AmazonS3.jpg".
Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 190

In S3, what is the basic difference between a file and an object?

- A. Metadata
- B. They are basically the same
- C. Different permissions are required

D. Size

Correct Answer: A

Explanation

Explanation/Reference:

A file can be a video, a text file, or a photo for example. An object is a file of any kind plus metadata to organize it.

When a user uploads a file from the specified folder to the S3 bucket, S3 assigns a key value that is a combination of the uploaded file name. If the user has specified a folder name the key will have the folder name as a prefix.

Reference:

<http://docs.aws.amazon.com/AmazonS3/latest/UG/UploadingObjectsintoAmazonS3.html>

QUESTION 191

Amazon S3 cannot be used for which of the options given below?

- A. Static Websites Hosting
- B. Image Storage
- C. DB Processing
- D. Video Storage

Correct Answer: C

Explanation

Explanation/Reference:

Amazon S3 is used for static file storage. It does not provide any computing or processing capability like EC2. As an Object Storage service it allows to store static files, but cannot host or operate database or application's file.

Reference: <http://aws.amazon.com/s3/>

QUESTION 192

How can an object be retrieved from the Amazon S3 bucket?

- A. By using a developer-assigned key
- B. By using a metadata Index ID
- C. By using an auto generated object ID
- D. By using a user-assigned Index key

Correct Answer: A

Explanation

Explanation/Reference:

You can store an infinite amount of data in a bucket. Also, you can upload as many objects as you like into an Amazon S3 bucket. Each object can contain up to 5 TB of data. Each object is stored and retrieved using a unique developer-assigned key. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 193

Data stored in Amazon S3 is designed to provide 99.99999999% _____.

- A. scalability
- B. uptime
- C. availability
- D. durability

Correct Answer: D

Explanation

Explanation/Reference:

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.

Reference: <http://aws.amazon.com/s3/faqs/>

QUESTION 194

Who has full control of an S3 object when it is created?

- A. The IAM root user
- B. The object owner
- C. The principal
- D. Nobody

Correct Answer: B

Explanation

Explanation/Reference:

When an object is created, the object owner has full control of the object. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/ObjectAndSoubResource.html>

QUESTION 195

A bucket is a(n) _____ for objects stored in Amazon S3.

- A. umbrella
- B. container
- C. file
- D. linked group

Correct Answer: B

Explanation

Explanation/Reference:

A bucket is a container for objects stored in Amazon S3. Every object is contained in a bucket. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 196

What type of service does Amazon S3 offer?

- A. Cloud-based compute services
- B. Cloud-based messaging services
- C. Cloud-based database services
- D. Cloud-based data storage services

Correct Answer: D

Explanation

Explanation/Reference:

Amazon S3 has a simple web services interface that you can use to store and retrieve any amount of data, at any time, from anywhere on the web. Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 197

In S3, which of the following refers to object metadata?

- A. An auto generated key and it's corresponding value
- B. A set of name-value pairs that describe an object
- C. A unique identifier of an object name within a bucket
- D. A meta model of a bucket that is inherited by an object

Correct Answer: B

Explanation

Explanation/Reference:

Each of the S3 objects consists of object data and metadata. The data portion is opaque to Amazon S3. The metadata is a set of name-value pairs that describe the object. The metadata distinguishes the object from a regular file as it is additional information stored along with the object data. The metadata can be the object name, version ID, created date, Content-Type, and also some more user-defined attributes.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/Introduction.html>

QUESTION 198

You are launching an Amazon EC2 instance and need to decide which instance type is best for your application. You see that Amazon recommends using their current generation types for the best performance. Which instance family is only offered in the previous generation of instance types?

- A. Storage optimized
- B. Accelerated computing
- C. General purpose
- D. Micro instances

Correct Answer: D

Explanation

Explanation/Reference:

Amazon Web Services offers previous generation instances for users who have optimized their applications around these instances and have yet to upgrade. AWS supports these previous generation instances, but recommends that you use the latest generation of instances to get the best performance. Micro instances have low network performance and storage capacity and are no longer offered as a current generation instance type. There are micro instances still available - the t2.micro instance is available as part of the general purpose instance family, but Micro instances are no longer their own separate family. Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instance-types.html>

QUESTION 199

A user has launched an EBS optimized instance with EC2. Which of the below mentioned options is the correct statement?

- A. The user will have a PIOPS based EBS volume
- B. It provides additional dedicated capacity for EBS IO
- C. The attached EBS will have greater storage capacity
- D. It will be launched on dedicated hardware in VPC

Correct Answer: B

Explanation

Explanation/Reference:

An Amazon EBS-optimized instance uses an optimized configuration stack and provides additional, dedicated capacity for the Amazon EBS I/O. This optimization provides the best performance for the user's Amazon EBS volumes by minimizing contention between the Amazon EBS I/O and other traffic from the user's instance. Reference: <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSOptimized.html>

QUESTION 200

How can a user have complete separation of the physical hardware for the virtual machines from the other tenants in EC2?

- A. Use single tenant option
- B. Use dedicated instances
- C. Use enhanced EC2 instances
- D. It is not possible to have hardware separation for EC2

Correct Answer: B

Explanation

Explanation/Reference:

The dedicated instances are Amazon EC2 instances that run in a Virtual Private Cloud (VPC) on hardware that is dedicated to a single customer. The dedicated instances are physically isolated at the host hardware level from the user's instances that are not dedicated instances and from instances that belong to other AWS accounts.

Reference:

<http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/dedicated-instance.html>

QUESTION 201

A user has launched an EBS backed EC2 instance with a Windows operating system. Which statement below is accurate regarding how instances are billed when rebooted or stopped and restarted?

- A. For rebooting AWS does not charge a new instance hour, while every stop or restart will be charged fee for a new instance hour as a separate hour.
- B. For every reboot or start/stop, the user will be charged as a separate hour.
- C. Every reboot is charged by AWS as a separate hour, while multiple start/stop actions during a single hour will be counted as a single hour.
- D. For rebooting AWS charges extra only once, while for every stop/start the user will be charged as a separate hour.

Correct Answer: A

Explanation**Explanation/Reference:**

For an EC2 instance launched with an EBS backed Windows AMI, each time the instance state is changed from stop to start/ running, AWS charges restart a new per-hour charge. Effective October 2, 2017, charges are calculated on a per-second basis for On-Demand, Spot and Reserved instances with Linux operating systems, with a minimum one-minute charge. Regardless of operating system, rebooting an instance AWS does not incur a charge an hour or one-minute minimum charge.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-lifecycle.html>

QUESTION 202

Which of the following is true of modifying the instance type of EC2 Reserved Instance?

- A. A large instance worth 4 units can be replaced only with eight small instance or six medium instances.
- B. We cannot modify the Reserved Instances.
- C. We can modify the Reserved Instances from one type to another within an instance family.
- D. A large instance worth 4 units can be replaced only with two small instances or four medium instances.

Correct Answer: C

Explanation**Explanation/Reference:**

Today we are giving you the ability to change the instance type of your Linux/UNIX reservations. For example, you can change a reservation for four m1.small instances into a single reservation for an m1.large instance. With today's launch you can take advantage of the pricing and capacity benefits of Reserved Instances even as you change from one EC2 instance type to another. The modifications are always done within an instance family (M3, M4 or C4) and are always expressed in terms of normalized units.

Reference:

<https://aws.amazon.com/blogs/aws/new-modify-instance-type-of-ec2-reserved-instance/>

QUESTION 203

Spot instances are ideally designed for which purpose below?

- A. Running long duration and highly transactional applications.
- B. Taking advantage of excess EC2 capacity at prices below standard on-demand rates, for short duration jobs.
- C. Running database instances that can scale up and down based on a specific workload.
- D. For building distributed fault tolerant databases under a tight deadline.

Correct Answer: B
Explanation

Explanation/Reference:

There are four general categories of time-flexible and interruption-tolerant tasks that work well with Spot Instances: Delayable tasks, Optional tasks, Tasks that can be sped up by adding additional computing power and at the end, Tasks that require a large number of compute instances that you can't access any other way. Reference: <http://aws.amazon.com/ec2/spot-instances/>

QUESTION 204

You are experimenting with state of the art game streaming software that requires high parallel processing capability. You would benefit from deploying this software on accelerated computing instances to access dedicated ____ hardware that provides this capability.

- A. CPU
- B. SSD
- C. GPU
- D. AMI

Correct Answer: C
Explanation

Explanation/Reference:

If you require high parallel processing capability, you'll benefit from using accelerated computing instances, which provide access to NVIDIA GPUs. You can use accelerated computing instances to accelerate many scientific, engineering, and rendering applications by leveraging the CUDA or Open Computing Language (OpenCL) parallel computing frameworks. You can also use them for graphics applications, including game streaming, 3-D application streaming, and other graphics workloads.

Reference:

<http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/accelerated-computing-instances.html>

QUESTION 205

If you didn't set the tenancy of an instance to ____ when you launched it into your VPC, you must stop the running instance, set the tenancy, and relaunch it.

- A. reserved
- B. secured
- C. dedicated
- D. default

Correct Answer: C
Explanation

Explanation/Reference:

Dedicated instances are Amazon EC2 instances that run in a virtual private cloud (VPC) on hardware that's dedicated to a single customer. Each instance that you launch into a VPC has a tenancy attribute. This attribute can be either a default type, or a dedicated type, or a host type. You cannot change the tenancy of a default instance after you've launched it. You can change the tenancy of an instance from dedicated to host after you've launched it, and vice versa. To change the tenancy of an instance, you have to select your instance, stop it, modify your instance, and then choose whether to run your instance on dedicated hardware or on a Dedicated Host.

Reference:

<http://docs.aws.amazon.com/AmazonVPC/latest/UserGuide/dedicated-instance.html>

QUESTION 206

If you have two EC2 instances in different regions, how will you be charged for data transfer?

- A. You will not be charged for data transfer.
- B. Each instance is charged only for its data out at Internet Data Transfer rates.
- C. Each instance is charged only for its data in at Internet Data Transfer rates.

D. Each instance is charged for its data in and data out at Internet Data Transfer rates.

Correct Answer: D

Explanation

Explanation/Reference:

Each instance is charged for its data in and data out at Internet Data Transfer rates. Therefore, if data is transferred between these two instances, it is charged at Internet Data Transfer Out for the first instance and at Internet Data Transfer In for the second instance.

Reference: <https://aws.amazon.com/ec2/faqs/>

QUESTION 207

_____ instances in Amazon EC2 provide a balance of compute, memory, and network resources for generalized application deployment, such as simple websites, development environments, and code repositories.

- A. General Purpose
- B. Compute Optimized
- C. Memory Optimized
- D. Accelerated Computing

Correct Answer: A

Explanation

Explanation/Reference:

General Purpose instances provide a balance of compute, memory, and network resources, and are a good choice for many applications. Common use cases are websites and web applications, development environments, build servers, code repositories, micro services, test and staging environments, and line of business applications. Reference: <https://aws.amazon.com/ec2/instance-types/>

QUESTION 208

What is the term used to describe giving an AWS user only access to the exact services he/she needs to do the required job and nothing more?

Choose the Correct answer:

- A. The Least Privilege User Principal
- B. The Principal of Least Privilege
- C. The Only Access Principal.
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

QUESTION 209

What you create and S3 bucket, what rules must be followed regarding the bucket name? (Select all that apply)

Choose the 2 Correct answers:

- A. Bucket names must be unique across all of AWS.
- B. Bucket names must be between 3-63 characters in length.
- C. Bucket names must contain at least one uppercase letter
- D. Bucket names can be formatted as IP addresses

Correct Answer: AB

Explanation

Explanation/Reference:

Although certain regions do allow for uppercase letters in the bucket name, uppercase letters are NOT required. Also, a bucket name cannot be formatted as an IP address.

QUESTION 210

What are the main benefits of On-Demand EC2 instances? (Select all that apply) Choose the 2 Correct answers:

- A. They are the cheapest buying option.
- B. They are the most flexible buying option.
- C. They require 1-2 days for setup and configuration.
- D. Create, start, stop, and terminate at any time.

Correct Answer: BD

Explanation

Explanation/Reference:

On-demand EC2 instances are widely used due to their flexibility. You can create, start, stop, and terminate at any time (with no startup or termination fees). Although due to this flexibility, they are the most expensive buying option.

QUESTION 211

What AWS service must you use if you want to configure an AWS billing alarm? Choose the Correct answer:

- A. CloudWatch
- B. CloudMonitor
- C. Consolidated billing
- D. CloudTrail

Correct Answer: A

Explanation

Explanation/Reference:

CloudWatch is the AWS service that allows you to collect metrics, and create alarms based on those metrics. Billing metrics can be tracked in CloudWatch, therefore billing alarms can be created.

QUESTION 212

What are some common uses of AWS? (Select all that apply) Choose the 4 Correct answers:

- A. Networking
- B. Analytics
- C. Storage
- D. Virtualization

Correct Answer: ABCD

Explanation

Explanation/Reference:

All of the answers are common uses of AWS. AWS has thousands of different uses. In this course we discussed some of the major categories, including: Storage Compute Power Databases Networking Analytics Developer Tools Virtualization Security

QUESTION 213

How much data can you store in S3?
Choose the Correct answer:

- A. Storage capacity is virtually unlimited.
- B. You can store up to 1 petabyte of data.
- C. Each account is given 50 gigabytes of storage capacity and no more can be used.
- D. You can store up to 1 petabyte of data, then you are required to pay an additional fee.

Correct Answer: A
Explanation

Explanation/Reference:

Although there is theoretically a capacity limit, as an S3 user, there is no limit on the amount of data you can store in S3.

QUESTION 214

You have just set up a brand new AWS account. You want to keep monthly billing under \$100, but you are worried about going over that limit. What can you set up in order to be notified when the monthly bill approaches \$100?

Choose the Correct answer:

- A. A CloudTrail billing alarm that triggers an SNS notification to your email address.
- B. A SNS billing alarm that triggers a CloudWatch notification to your email address.
- C. A CloudWatch billing alarm that triggers an SNS notification to your email address.
- D. A CloudWatch billing alarm that triggers a CloudTrail notification to your email address.

Correct Answer: C
Explanation

Explanation/Reference:

In CloudWatch, you can set up a billing alarm that will trigger when your monthly bill hits the set threshold. That alarm can then be set up to trigger an SNS topic that will send you a notification that the alarm threshold has been met.

QUESTION 215

What best describes the purpose of having many Availability Zones in each AWS region? Choose the Correct answer:

- A. Multiple Availability Zones allow for fault tolerance but not high availability.
- B. Multiple Availability Zones allow for cheaper prices due to competition between them.
- C. Multiple Availability Zones allow for duplicate and redundant compute, and data backups.
- D. None of the above.

Correct Answer: C
Explanation

Explanation/Reference:

Availability Zones work together within a region to provide users with the ability to easily setup and configure redundant architecture and backup solutions

QUESTION 216

What TWO services/features are required to have highly available and fault tolerant architecture in AWS? Choose the 2 Correct answers:

- A. Elastic Load Balancer
- B. CloudFront
- C. ElastiCache
- D. Auto Scaling

Correct Answer: AD
Explanation

Explanation/Reference:

QUESTION 217

Which S3 storage class has lowest object availability rating? Choose the Correct answer:

- A. Standard
- B. Reduced Redundancy
- C. Infrequent Access
- D. All of them have the same availability rating

Correct Answer: C

Explanation

Explanation/Reference:

Infrequent access has the lowest availability rating (99.90%). Standard and Reduced Redundancy have an availability rating of 99.99%

QUESTION 218

Your company's upper management is getting very nervous about managing governance, compliance, and risk auditing in AWS. What service should you enable and inform upper management about?
Choose the Correct answer:

- A. CloudAudit
- B. CloudTrail
- C. CloudCompliance
- D. CloudWatch

Correct Answer: B

Explanation

Explanation/Reference:

AWS CloudTrail is designed to log all actions taken in your AWS account. This provides a great resource for governance, compliance, and risk auditing.

QUESTION 219

The concept of elasticity is most closely associated with which of the following? Choose the Correct answer:

- A. Auto Scaling
- B. Network Security
- C. Serverless Computing
- D. Elastic Load Balancing

Correct Answer: A

Explanation

Explanation/Reference:

Elasticity is the concept that a system can easily (and cost-effectively) both increase in capacity based on-demand and also shrink in capacity based on-demand. Auto Scaling on AWS is specifically designed to (automatically) increase and decrease server capacity based on-demand.

QUESTION 220

Which of the following will effect how much you are charged for storing objects in S3? Choose the 2 Correct answers:

- A. The storage class used for the objects stored.
- B. Encrypting data (objects) stored in S3.
- C. Creating and deleting S3 buckets
- D. The total size in gigabytes of all objects stored.

Correct Answer: AD

Explanation

Explanation/Reference:

QUESTION 221

What endpoints are possible to send messages to with Simple Notification Service? (Select all that apply)
Choose the 3 Correct answers:

- A. SMS
- B. FTP
- C. SQS
- D. Lambda

Correct Answer: ACD

Explanation

Explanation/Reference:

QUESTION 222

What does S3 stand for?
Choose the Correct answer:

- A. Simple Storage Service
- B. Simplified Storage Service
- C. Simple Store Service
- D. Service for Simple Storage

Correct Answer: A

Explanation

Explanation/Reference:

QUESTION 223

Big Cloud Jumbo Corp is beginning to explore migrating their entire on-premises data center to AWS. They are very concerned about how much it will cost once their entire I.T. infrastructure is running on AWS. What tool can you recommend so that they can estimate what the cost of using AWS may be?
Choose the Correct answer:

- A. AWS Estimate Calculator
- B. AWS TCO Calculator
- C. AWS Cost Explorer
- D. AWS Migration Cost Calculator

Correct Answer: B

Explanation

Explanation/Reference:

The AWS TCO (Total Cost of Ownership) Calculator is a free tool provided by AWS. It allows you to compare your current on-premises cost vs. estimated AWS cost.

QUESTION 224

Kunal is managing an application running on an on-premises data center. What best describes the challenges he faces that someone using the AWS cloud does not? Choose the Correct answer:

- A. Kunal must research what size (compute capacity) servers he needs to run his application.
- B. Kunal must know how to properly configure network level security.
- C. Kunal must predict future growth, and scaling can be costly and time consuming.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

Scaling is much faster and cost-effective on the AWS cloud. With on-demand instances and auto-scaling, future growth does not have to be predicted. More compute capacity can be added gradually as demand increases.

QUESTION 225

What AWS storage class should be used for long-term, archival storage? Choose the Correct answer:

- A. Glacier
- B. Long-Term
- C. Standard
- D. Infrequent Access

Correct Answer: A

Explanation

Explanation/Reference:

Glacier should be used for (and is specifically designed for) long-term , archival storage.

QUESTION 226

Kim is managing a web application running on the AWS cloud. The application is currently utilizing eight EC2 servers for its compute platform. Earlier today, two of those web servers crashed; however, none of her customer were effected. What has Kim done correctly in this scenario?

Choose the Correct answer:

- A. Properly built an elastic system.
- B. Properly built a scalable system
- C. Properly build a fault tolerant system.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

A fault tolerant system is one that can sustain a certain amount of failure while still remaining operational.

QUESTION 227

What are the benefits of DynamoDB? (Select all that apply) Choose the 3 Correct answers:

- A. Supports multiple known NoSQL database engines like MariaDB and Oracle NoSQL.
- B. Automatic scaling of throughput capacity.
- C. Single-digit millisecond latency.
- D. Supports both document and key-value store data models.

Correct Answer: BCD

Explanation

Explanation/Reference:

DynamoDB does not use/support other NoSQL database engines. You only have access to use DynamoDB's built-in engine.

QUESTION 228

What best describes penetration testing?

Choose the Correct answer:

- A. Testing your applications ability to penetrate other applications.
- B. Testing your IAM users access to AWS services.

- C. Testing your own network/application for vulnerabilities.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

QUESTION 229

Why would a company decide to use AWS over an on-premises data center? (Select all that apply)
Choose the 4 Correct answers:

- A. Highly available infrastructure
- B. Elastic resources based on demand
- C. No upfront cost
- D. Cost-effective

Correct Answer: ABCD

Explanation

Explanation/Reference:

All four answers listed are reasons why a company may decide to use AWS over an on-premises data center.

QUESTION 230

You are trying to organize and import (to AWS) gigabytes of data that are currently structured in JSON-like, name-value documents. What AWS service would best fit your needs? Choose the Correct answer:

- A. Lambda
- B. Aurora
- C. RDS
- D. DynamoDB

Correct Answer: D

Explanation

Explanation/Reference:

DynamoDB is AWS's NoSQL database offering. NoSQL databases are for non-structured data that are typically stored in JSON-like, name-value documents.

QUESTION 231

What best describes what AWS is?
Choose the Correct answer:

- A. AWS is an online retailer
- B. AWS is the cloud.
- C. AWS is a cloud services provider.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

QUESTION 232

What is one benefit AND one drawback of buying a reserved EC2 instance? (Select two) Choose the 2 Correct answers:

- A. You can terminate the instance at any time without any further pricing commitment.
- B. Reserved instances can be purchased as a significant discount over on-demand instances.
- C. You can potentially save a lot of money by placing a lower "bid" price.
- D. You are locked in to either a one- or three-year pricing commitment.

Correct Answer: BD

Explanation

Explanation/Reference:

Reserved instances require a one- or three-year purchase term, so you are committing to paying for that much compute capacity for that full time period. However, in exchange for the long-term commitment, you will receive a discount (of up to 75%) over using an on-demand instance (for that same time period).

QUESTION 233

Before moving and/or storing object in AWS Glacier, what considerations should you make regarding the data you want to store.

Choose the Correct answer:

- A. Make sure the data is properly formatted for storage Glacier.
- B. Make sure the total amount of data you want to store is under 1 terabyte in size.
- C. Make sure you are ok with it taking at minimum a few minutes to retrieve the data once stored in Glacier.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

Objects stored in Glacier take time to retrieve. You can pay for expedited retrieval, which will take several minutes - OR wait several hours (for normal retrieval).

QUESTION 234

John is working with a large data set, and he needs to import it into a relational database service. What AWS service will meet his needs?

Choose the Correct answer:

- A. RDS
- B. Redshift
- C. NoSQL
- D. DynamoDB

Correct Answer: A

Explanation

Explanation/Reference:

RDS is AWS's relational database service.

QUESTION 235

Jeff is building a web application on AWS. He wants to make sure his application is highly available to his customers. What infrastructure components of the AWS cloud allow Jeff to accomplish this goal? (Select all that apply)

Choose the 2 Correct answers:

- A. Availability Zones
- B. Regional Zones
- C. Regions
- D. Data Locations

Correct Answer: AC

Explanation

Explanation/Reference:

As part of AWS' global infrastructure, Regions and Availability Zones allow for backups and duplicate components to be placed in separate (isolated) areas of the globe. If one region/Availability Zone were to fail, duplicates in other regions/Availability Zones can be used.

QUESTION 236

What is AWS's serverless compute service?

Choose the Correct answer:

- A. S3
- B. Lambda
- C. EC2
- D. None of the above

Correct Answer: B

Explanation**Explanation/Reference:**

AWS has two main compute services, EC2 (server-based) and Lambda (serverless).

QUESTION 237

Stephen is having issues tracking how much compute capacity his application is using. Ideally, he wants to track and have alarms for when CPU utilization goes over 70%. What should Stephen do to accomplish this?

Choose the Correct answer:

- A. Configure an SNS topic with an alarm threshold set to trigger when CPU utilization is greater than 70%.
- B. Configure a CloudWatch alarm with an alarm threshold set to trigger when CPU utilization is greater than 70%.
- C. Configure a CloudWatch alarm with an alarm threshold set to trigger when CPU utilization is greater than or equal to 70%.
- D. None of the above.

Correct Answer: B

Explanation**Explanation/Reference:**

The answer is to configure a CloudWatch alarm with an alarm threshold set to trigger when CPU utilization is greater than 70%. This will display the alarm in "alarm" state when CPU utilization is greater than 70%. This question has been worded very specifically with the words "goes above 70%". This disqualifies the answer that stated "greater than or equal to 70%". The AWS exam will have very tricky questions like this.

QUESTION 238

What is the availability and durability rating of S3 Standard Storage Class? Choose the Correct answer:

- A. 99.999999999% Durability and 99.99% Availability
- B. 99.999999999% Availability and 99.90% Durability
- C. 99.999999999% Availability and 99.99% Durability
- D. 99.999999999% Durability and 99.00% Availability

Correct Answer: A

Explanation**Explanation/Reference:**

S3 Standard Storage class has a rating of 99.999999999% durability (referred to as 11 nines) and 99.99% availability.

QUESTION 239

If you want to easily share a file with a friend, family or coworker, what AWS solution should you use?

Choose the Correct answer:

- A. Mail them a flash drive with the file on it.
- B. Create an EC2 instance and give provide login credentials so others can access the file.
- C. Upload the object to S3 and share it via its object's S3 public object URL.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

You can easily share objects uploaded into S3 by provided others with the object's URL.

QUESTION 240

S3 storage classes are rated by what two metric categories? (Select two) Choose the 2 Correct answers:

- A. Objectivity
- B. Durability
- C. Availability
- D. Fault tolerance

Correct Answer: BC

Explanation

Explanation/Reference:

Each S3 storage class is rated on its availability and durability.

QUESTION 241

If an object is stored in the Standard S3 storage class and you want to move it to Glacier, what must you do in order to properly migrate it?

Choose the Correct answer:

- A. Delete the object and reupload it, selecting Glacier as the storage class.
- B. Create a lifecycle policy that will migrate it after a minimum of 30 days.
- C. Change the storage class directly on the object.
- D. None of the above.

Correct Answer: B

Explanation

Explanation/Reference:

Any object uploaded to S3 must first be placed into either the Standard, Reduced Redundancy, or Infrequent Access storage class. Once in S3 the only way to move the object to glacier is through a lifecycle policy.

QUESTION 242

What is the most common type of storage used for EC2 instances? Choose the Correct answer:

- A. Elastic File System (EFS)
- B. EC2 Hard Drives
- C. Elastic Block Store (EBS)
- D. Magnetic Drive (MD)

Correct Answer: C

Explanation

Explanation/Reference:

EC2 instance have several different hard drive options. However, Elastic Block Store (EBS), which is a type of Network Attached Storage, is the most popular and widely used.

QUESTION 243

What AWS service has built-in DDoS mitigation?
Choose the Correct answer:

- A. CloudFront
- B. CloudTrail
- C. CloudWatch
- D. EC2

Correct Answer: A

Explanation

Explanation/Reference:

With CloudFront, you cache content at Edge Locations, which shield your underlying application infrastructure from DDoS attacks.

QUESTION 244

You have been tasked by your department head to upload a batch of files to an S3 bucket; however, when you select S3 on the AWS console, you see a notification stating that you do not have permission to access S3. What is the most probable cause of this error? Choose the Correct answer:

- A. It takes 24 hours to get access to S3.
- B. The S3 service is currently down for maintenance.
- C. You do not have an S3 access policy attached to your IAM user.
- D. Your boss has not enabled proper bucket permissions.

Correct Answer: C

Explanation

Explanation/Reference:

If you get an error stating that you do not have proper permissions to access/use an AWS service, then most likely your IAM user does not have the proper permission policy attached.

QUESTION 245

What are the benefits of AWS's Relational Database Service (RDS)? (Select all that apply) Choose the 3 Correct answers:

- A. Resizable capacity
- B. Automated patches and backups
- C. Cost-efficient
- D. None of the above

Correct Answer: ABC

Explanation

Explanation/Reference:**QUESTION 246**

Thomas is managing the access rights and credentials for all the employees that have access to his company's AWS account. This morning, he was notified that some of these accounts may have been compromised, and he now needs to change the password policy and re-generate a new password for all users. What AWS service does Thomas need to use in order to accomplish this? Choose the Correct answer:

- A. Policy and Access Management
- B. Elastic Cloud Compute
- C. Access Management
- D. None of the above.

Correct Answer: D

Explanation

Explanation/Reference:

Identity and Access Management (IAM) is the AWS service where password policies and user credentials are managed. (Policy and Access Management as a service does not exist).

QUESTION 247

What are the primary benefits of using Lambda? (Select all that apply) Choose the 2 Correct answers:

- A. Pay for only the compute time you consume.
- B. Wide variety of operating systems to select from.
- C. Actively select and manage instance type and capacity.
- D. Run code without provisioning servers.

Correct Answer: AD

Explanation

Explanation/Reference:

Lambda, being AWS's serverless compute platform, means there are no servers, instance types, or capacity to select. That is all managed for you. With Lambda, you only pay for the when your code is actually being executed.

QUESTION 248

If you have a set of frequently accessed files that are used on a daily basis, what S3 storage class should you store them in?

Choose the Correct answer:

- A. Infrequent Access
- B. Reduced Redundancy
- C. Standard
- D. Fast Access

Correct Answer: C

Explanation

Explanation/Reference:

The Standard storage class should be used for files that you access on a daily or very frequent basis.

QUESTION 249

Which of the following will effect price you pay for an EC2 instance? (Select all that apply) Choose the 3 Correct answers:

- A. Instance Type.
- B. Selected Storage Class
- C. How long you use the instance for.
- D. Amazon Machine Image (AMI).

Correct Answer: ACD

Explanation

Explanation/Reference:

EC2 instance pricing varies depending on many variables. 1) The type of buying option 2) Selected Ami 3) Selected instance type 4) Region 5) Data in/out 6) Storage capacity

QUESTION 250

If you want in-depth details on how to create, manage, and attach IAM access policies to IAM users, in what AWS resource should you look?

Choose the Correct answer:

- A. AWS How-To-Help Section
- B. AWS Service Documentation
- C. AWS Whitepapers
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

AWS Service documentation is a collection of documents specific to each AWS service. They contain detailed how-to's, as well as technical walkthroughs and specifications.

QUESTION 251

You notice that five of your 10 S3 buckets are no longer available in your account, and you assume that they have been deleted. You are unsure who may have deleted them, and no one is taking responsibility. What should you do to investigate and find out who deleted the S3 buckets? Choose the Correct answer:

- A. Look at the S3 logs.
- B. Look at the CloudTrail logs.
- C. Look at the CloudWatch Logs.
- D. Look at the SNS logs.

Correct Answer: B

Explanation

Explanation/Reference:

CloudTrail is logging service that logs actions taken by AWS users in your AWS account, such as creating/deleting S3 buckets, starting/stopping EC2 instances, etc.

QUESTION 252

What acts as an address (like a mailing address) for a web server located on a network? Choose the Correct answer:

- A. DNS Server
- B. IP Address
- C. Common language domain name
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

An IP address is a server's address on a network. It is how traffic/request gets routed to it (much like a piece of mail gets routed to your home).

QUESTION 253

What services have built-in DDoS mitigation and/or protection? Choose the Correct answer:

- A. EC2
- B. RDS
- C. SNS
- D. None of the above

Correct Answer: D

Explanation

Explanation/Reference:

AWS services with built-in DDoS mitigation/protection include: 1) Route 53 2) CloudFront 3) WAF (web application firewall) 4) Elastic Load Balancing 5) VPCs and Security Groups

QUESTION 254

What should you do if you believe your AWS account has been compromised? (Select all that apply)
Choose the 4 Correct answers:

- A. Delete any resources in your account that you did not create.
- B. Respond to any notifications you received from AWS through the AWS Support Center.
- C. Change all IAM user's passwords.
- D. Delete or rotate all programmatic (API) access keys.

Correct Answer: ABCD

Explanation

Explanation/Reference:

All these answers are actions you should take if you believe your account has been compromised.

QUESTION 255

Under what circumstances would someone want to use ElastiCache? (Select all that apply) Choose the 2 Correct answers:

- A. They need a NoSQL database option
- B. They need to use Edge Locations to cache content
- C. They need improved performance of their web application.
- D. They need in-memory data store service.

Correct Answer: CD

Explanation

Explanation/Reference:

ElastiCache is used as an in-memory data store or cache in the cloud. Benefits include improved performance for web applications (that rely on information stored in a database). Edge Locations are used for caching content with the CloudFront service, so that is not a answer here.

QUESTION 256

Derek is running a web application and is noticing that he is paying for way more server capacity than is required. What AWS feature should Derek set up and configure to ensure that his application is automatically adding/removing server capacity to keep in line with the required demand?
Choose the Correct answer:

- A. Auto Scaling
- B. Elastic Server Scaling
- C. Elastic Load Balancing
- D. Auto Sizing

Correct Answer: A

Explanation

Explanation/Reference:

Auto scaling is the feature that automated the process of adding/removing server capacity from a system (based on usage demand). Auto scaling creates a very cost effective system by never having too much or too little server capacity.

QUESTION 257

What AWS service uses Edge Locations for content caching? Choose the Correct answer:

- A. ElastiCache
- B. Route 53
- C. CloudFront
- D. CloudCache

Correct Answer: C

Explanation

Explanation/Reference:

CloudFront is a content caching service provided by AWS that utilizes "Edge Locations," which are AWS data centers located all around the world.

QUESTION 258

What is the purpose of AWS's Route 53 service? (Select all that apply) Choose the 2 Correct answers:

- A. Content Caching
- B. Database Management
- C. Domain Registration
- D. Domain Name System (DNS) service

Correct Answer: CD

Explanation

Explanation/Reference:

Route 53 is AWS's domain and DNS management service. You can use it to register new domain names, as well as manage DNS record sets.

QUESTION 259

What are the benefits of AWS Organizations? (Select all that apply) Choose the 2 Correct answers:

- A. Analyze cost across all multiple AWS accounts.
- B. Automate AWS account creation and management.
- C. Centrally manage access policies across multiple AWS accounts.
- D. None of the above.

Correct Answer: BC

Explanation

Explanation/Reference:

AWS Organizations has four main benefits: 1) Centrally manage access policies across multiple AWS accounts. 2) Automate AWS account creation and management. 3) Control access to AWS services 4) Enable consolidated billing across multiple AWS accounts Analyzing cost is done through the Cost Explorer (or TCO calculator), which is not part of AWS Organizations.

QUESTION 260

What AWS service allows you to have your own private network in the AWS cloud? Choose the Correct answer:

- A. Virtual Private Network (VPN)
- B. Virtual Private Cloud (VPC)
- C. Virtual Cloud Network (VCN)
- D. None of the above.

Correct Answer: B

Explanation

Explanation/Reference:

A Virtual Private Cloud (VPC) is a private sub-section of AWS that is your own private network. You control what resources you place inside the VPC and the security features around it.

QUESTION 261

If you are using an on-demand EC2 instance, how are you being charged for it? Choose the Correct answer:

- A. You are charged per second, based on an hourly rate, and there are no termination fees.

- B. You are charged by the hour and must pay a partial upfront fee.
- C. You must commit to a one or three year term and pay upfront.
- D. You are charged per second, based on an hourly rate, and there is a termination fee.

Correct Answer: A

Explanation

Explanation/Reference:

On-demand EC2 instances are exactly that, on-demand. There are no upfront or termination fees, and you are charged for each second of usage (based on an hourly rate).

QUESTION 262

Matt is working on a projects that involves converting an images format from .png to .jpg. Thousands of images have to be converted; however, time is not really an issue and continual processing is not required. What type of EC2 buying option would be most cost-effective for Matt to use?

Choose the Correct answer:

- A. Spot
- B. On-demand
- C. Reserved
- D. None of the above

Correct Answer: A

Explanation

Explanation/Reference:

Spot instances offer the cheapest option of all EC2's buying options. However, spot instances should only be used when there can be interruptions in the processing jobs being conducted. This is due to the fluctuation in spot pricing. If the spot price goes above your bid price, then you will lose access to the spot instance (thus causing a stoppage in processing).

QUESTION 263

David is managing a web application running on dozens of EC2 servers. He is worried that if something goes wrong with one of the servers he will not know about it in a timely manner. What solution could you offer to help him keep updated on the status of his servers? Choose the Correct answer:

- A. Configure each EC2 instance with a custom script to email David when any issues occur.
- B. Configure RDS notifications based on CloudWatch EC2 metric alarms.
- C. Enable CloudTrail to log and report any issues that occur with the EC2 instances.
- D. Configure SNS notifications based on CloudWatch EC2 metric alarms.

Correct Answer: D

Explanation

Explanation/Reference:

CloudWatch is used to track metrics on all EC2 instances. Metric alarms can be configured to trigger SNS messages if something goes wrong.

QUESTION 264

What AWS database is primarily used to analyze data using standard SQL formatting with compatibility for your existing business intelligence tools? Choose the Correct answer:

- A. ElastiCache
- B. DynamoDB
- C. Redshift
- D. RDS

Correct Answer: C

Explanation

Explanation/Reference:

Redshift is a database offering that is fully-managed and used for data warehousing and analytics, including compatibility with existing business intelligence tools.

QUESTION 265

Tracy has created a web application, placing it's underlining infrastructure in the N. Virginia (US-East-1) region. After several months, Tracy notices that much of the traffic coming to her website is coming from Japan. What can Tracy do to (best) help reduce latency for her users in Japan?

Choose the Correct answer:

- A. Copy the current VPC and located in US-East-1 and ask AWS to move it to a region closest to Japan
- B. Create a and manage a complete duplicate copy of the web application and its infrastructure in a region closest to Japan.
- C. Create a CDN using CloudFront, making sure the proper content is cached at Edge Locations closest to Japan.
- D. Create a CDN using CloudCache, making sure the proper content is cached at Edge Locations closest to Japan.

Correct Answer: C

Explanation**Explanation/Reference:**

CloudFront is AWS's content delivery network (CDN) service. You can use it to cache web content at edge locations what are closest to you customers. This will decrease latency for the customer and improve overall performance.

QUESTION 266

What AWS service help you estimate the cost of using AWS vs. an on-premises data center? Choose the Correct answer:

- A. Cost Explorer
- B. Consolidated Billing
- C. TCO Calculator
- D. None of the above

Correct Answer: C

Explanation**Explanation/Reference:**

The TCO (total cost of ownership) calculator helps you estimate the cost of using AWS vs. an on-premises data center.

QUESTION 267

What AWS feature acts as a traffic distribution regulator, making sure each EC2 instance in a system get the same amount of traffic?

Choose the Correct answer:

- A. Availability Zone
- B. ELB
- C. NACL
- D. Auto Scaling

Correct Answer: B

Explanation**Explanation/Reference:**

An Elastic Load Balancer is responsible for evenly distributing incoming web traffic between all the EC2 instances associated with it. This help prevent one server from becoming overloaded with traffic, while another server remains underutilized.

QUESTION 268

What best describes the concept of fault tolerance?

Choose the Correct answer:

- A. The ability for a system to withstand a certain amount of failure and still remain functional.
- B. The ability for a system to grow and shrink based on demand.
- C. The ability for a system to grow in size, capacity, and/or scope.
- D. The ability for a system be accessible when you attempt to access it.

Correct Answer: A

Explanation

Explanation/Reference:

Fault tolerance describes the concept of a system (in our case a web application) to have failure in some of its components and still remain accessible (highly available). Fault tolerant web applications will have at least two web servers (in case one fails).

QUESTION 269

What best describes Amazon Web Services (AWS)?

Choose the Correct answer:

- A. AWS only provides compute and storage services.
- B. AWS is the cloud.
- C. AWS is a cloud services provider.
- D. None of the above.

Correct Answer: C

Explanation

Explanation/Reference:

AWS is defined as a cloud services provider. They provide hundreds of services of which compute and storage are included (not limited to).

QUESTION 270

What are the four primary benefits of using the cloud/AWS? Choose the Correct answer:

- A. Elasticity, scalability, easy access, limited storage.
- B. Fault tolerance, scalability, elasticity, and high availability.
- C. Unlimited storage, limited compute capacity, fault tolerance, and high availability.
- D. Fault tolerance, scalability, sometimes available, unlimited storage

Correct Answer: B

Explanation

Explanation/Reference:

Fault tolerance, scalability, elasticity, and high availability are the four primary benefits of AWS/the cloud.

QUESTION 271

What best describes an AWS region?

Choose the Correct answer:

- A. A specific location where an AWS data center is located.
- B. An isolated collection of AWS Availability Zones, of which there are many placed all around the world.
- C. The physical networking connections between Availability Zones.
- D. A collection of DNS servers.

Correct Answer: B

Explanation

Explanation/Reference:

An AWS region is an isolated geographical area that is comprised of three or more AWS Availability Zones.

QUESTION 272

What best describes a simplified definition of the "cloud"? Choose the Correct answer:

- A. All the computers in your local home network.
- B. A computer located somewhere else that you are utilizing in some capacity.
- C. An on-premises data center that your company owns.
- D. Your internet service provider

Correct Answer: B

Explanation

Explanation/Reference:

The simplest definition of the cloud is a computer that is located somewhere else that you are utilizing in some capacity. AWS is a cloud services provider, as they provide access to computers they own (located at AWS data centers), that you use for various purposes.

QUESTION 273

What is the purpose of a DNS server?

Choose the Correct answer:

- A. To serve web application content.
- B. To convert common language domain names to IP addresses.
- C. To convert IP addresses to common language domain names.
- D. To act as an internet search engine.

Correct Answer: B

Explanation

Explanation/Reference:

Domain name system servers act as a "third party" that provides the service of converting common language domain names to IP addresses (which are required for a web browser to properly make a request for web content).

QUESTION 274

What best describes the concept of high availability? Choose the Correct answer:

- A. The ability for a system to grow and shrink based on demand.
- B. The ability for a system to withstand a certain amount of failure and still remain functional.
- C. The ability for a system to grow in size, capacity, and/or scope.
- D. The ability for a system to be accessible when you attempt to access it.

Correct Answer: D

Explanation

Explanation/Reference:

High availability refers to the concept that something will be accessible when you try to access it. An object or web application is "highly available" when it is accessible a vast majority of the time.

QUESTION 275

What best describes the concept of scalability?

Choose the Correct answer:

- A. The ability for a system to withstand a certain amount of failure and still remain functional.
- B. The ability for a system to grow in size, capacity, and/or scope.
- C. The ability for a system to grow and shrink based on demand.
- D. The ability for a system to be accessible when you attempt to access it.

Correct Answer: B

Explanation

Explanation/Reference:

Scalability refers to the concept of a system being able to easily (and cost-effectively) scale UP. For web applications, this means the ability to easily add server capacity when demand requires.

QUESTION 276

What best describes the concept of elasticity?

Choose the Correct answer:

- A. The ability for a system to grow in size, capacity, and/or scope.
- B. The ability for a system to withstand a certain amount of failure and still remain functional.
- C. The ability for a system to grow and shrink based on demand.
- D. The ability for a system be accessible when you attempt to access it.

Correct Answer: C

Explanation

Explanation/Reference:

Elasticity (think of a rubber band) defines a system that can easily (and cost-effectively) grow and shrink based on required demand.

QUESTION 277

What is the relationship between AWS global infrastructure and the concept of high availability? Choose the Correct answer:

- A. AWS is centrally located in one location and is subject to widespread outages if something happens at that one location.
- B. AWS regions and Availability Zones allow for redundant architecture to be placed in isolated parts of the world.
- C. Each AWS region handles a different AWS services, and you must use all regions to fully use AWS.
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

As an AWS user, you can create your applications infrastructure and duplicate it. By placing duplicate infrastructure in multiple regions, high availability is created because if one region fails you have a backup (in a another region) to use.

QUESTION 278

Mike is setting up the infrastructure for a web application that requires three EC2 instances to handle the expected demand. However, when testing the application, Mike find that all traffic to the application is being routed to only one of the servers. What AWS feature should he add to his application in order to have traffic evenly distributed between all three servers? Choose the Correct answer:

- A. Elastic Load Balancer
- B. Auto Scaling
- C. Route 53
- D. CloudFront

Correct Answer: A

Explanation

Explanation/Reference:

An Elastic Load Balancer is designed to evenly distribute incoming web traffic between all servers that are associated with it.

QUESTION 279

Karen is building a website that is expected to have a minimum of 1000 users continually over the course of 24 hours. For 8 hours each day, traffic is expected to be at about 1800 users. What EC2 buying options should she use to handle all the traffic and be most cost-effective? Choose the Correct answer:

- A. Karen should rely solely on spot instances since that will be the cheapest option.
- B. Karen should buy enough reserved instance capacity to handle all 1800 users and probably buy a little more capacity just in case it is needed.
- C. Karen should buy reserved instances with enough capacity to cover the baseline of 1000 users, then rely on on-demand instances for the 8 hour period of increased traffic each day.
- D. Karen should buy reserved instances with enough capacity to cover the baseline of 1000 users, then rely on spot instances for the 8 hour period of increased traffic each day.

Correct Answer: C

Explanation

Explanation/Reference:

Reserved instances should be used to handle the expected baseline traffic to the website. Reserved instances (in 1/3 year term) can be purchased at a significant discount over on-demand instances. Any varying traffic above the baseline should be handled with on-demand instances (since they can be added/removed at any time, based on current demand). Spot instances should not be used in this scenario.

QUESTION 280

Amit is running a web application with a capacity of 5000 users. Every few days, traffic reaches 5000 users and any additional users are being denied access. What can Amit do to efficiently automate the process of adding and removing server capacity based on traffic demand? Choose the Correct answer:

- A. Enable elastic load balancing on his application.
- B. Automating this process cannot be done
- C. Enable auto scaling on his application.
- D. Write a custom script to automate the process

Correct Answer: C

Explanation

Explanation/Reference:

Auto scaling in AWS allows you to configure metric-based rules that (when triggered) will add and/or remove instances (server capacity) to your application. Adding/removing instances is then automated based on the metric rules you configure.

QUESTION 281

What are the TWO main security layers (firewalls) used inside a VPC? Choose the 2 Correct answers:

- A. NetProtect
- B. Network Access Control List
- C. Security Group
- D. Security Lists

Correct Answer: BC

Explanation

Explanation/Reference:

Network Access Control Lists (NACL) act as a firewall on the subnet level, and Security Groups act as a firewall on the instance level.

QUESTION 282

John, member of your company's development team, needs access to company's AWS account. What AWS service is used to manage such access? Choose the Correct answer:

- A. S3

- B. Route 53
- C. IAM
- D. EC2

Correct Answer: C

Explanation

Explanation/Reference:

Identity & Access Management (IAM) is the AWS service where user accounts, credentials, and service access is managed.

QUESTION 283

What is a main benefit of CloudFront?

Choose the Correct answer:

- A. DNS management
- B. Unlimited storage
- C. Serverless compute capacity
- D. Built-in DDoS protection

Correct Answer: D

Explanation

Explanation/Reference:

CloudFront allows you to cache content at edge locations. When a request is made for that content, the request is sent to an edge location (not your applications hardware), so the edge locations will absorb any DDoS attack and protect your underlining hardware.

QUESTION 284

What best describes the concept of a virtual private cloud? Choose the Correct answer:

- A. A private section of AWS in which you control what resources are placed inside.
- B. A collection of data centers.
- C. A shared section of AWS between you and other AWS account holders.
- D. A private section of AWS in which you control what resources are placed inside and who can access those resources.

Correct Answer: D

Explanation

Explanation/Reference:

A VPC is a private section of AWS in which you control what resources are placed inside and who can access those resources. A VPC defines your own private network that runs on AWS infrastructure.

QUESTION 285

If you have a large collection of reproducible objects, which S3 storage class should you use if low cost is your priority?

Choose the Correct answer:

- A. Glacier
- B. Standard
- C. Reduced Redundancy
- D. None of the above

Correct Answer: C

Explanation

Explanation/Reference:

The reduced redundancy storage class has the lowest durability of all the storage classes. This means object stored in this storage class have the highest probability of being lost. So you should only store

objects in this storage class if they can be easily reproduced. In exchange for the lower durability, the cost is lower than the standard storage class.

QUESTION 286

An Edge Location is a specialized AWS data center that works in conjunction with what AWS service? Choose the Correct answer:

- A. Route 53
- B. CloudWatch
- C. Lambda
- D. CloudFront

Correct Answer: D

Explanation

Explanation/Reference:

CloudFront is comprised of a network of Edge Locations (which is where content is cached).

QUESTION 287

What is the EC2 AMI Marketplace? Choose the Correct answer:

- A. Where you select the storage type of an EC2 instance.
- B. A collection of pay-to-use EC2 AMIs that generally come packaged with licensed enterprise software.
- C. Where you store AMIs that you create.
- D. Where you select to compute capacity of an EC2 instance.

Correct Answer: B

Explanation

Explanation/Reference:

QUESTION 288

Children's All Saints Hospital has millions of old medical records that they must save for regulatory reasons. These records will most likely never be accessed again. What is the best and most cost-effective S3 storage option that will meet the hospitals needs? Choose the Correct answer:

- A. Standard
- B. Infrequent Access
- C. Glacier
- D. Reduced Redundancy

Correct Answer: C

Explanation

Explanation/Reference:

Glacier is specifically designed for long-term archival storage. It is extremely inexpensive and should only be used for items that you access very infrequently.

QUESTION 289

Jacky is creating a website using AWS infrastructure. She has a great idea for a domain name but needs to see if it's available and, if so, register it. What AWS service will allow her to do this? Choose the Correct answer:

- A. CloudFront
- B. DomainServices
- C. CloudWatch
- D. Route 53

Correct Answer: D

Explanation

Explanation/Reference:

Route 53 is AWS's domain and DNS management service. (DomainServices does not exist).

QUESTION 290

Kunal is logged into his company's AWS account. He tries to access EC2 but is getting an error. What is the most likely reason why he cannot access EC2? Choose the Correct answer:

- A. There is not an IAM access policy attached to his IAM user.
- B. He is not part of an IAM Group.
- C. He does not have multi-factor authentication (MFA) enabled.
- D. There is not an IAM access policy attached to his IAM role.

Correct Answer: A

Explanation

Explanation/Reference:

When an IAM user is created, that user has NO access to any AWS services. To gain access to an AWS server, an IAM user must have permission granted to them. This is done by attached an IAM access policy to their IAM user (or through an attached group). However, just being in a group does not grant access. A proper policy would need to be attached to that group.

QUESTION 291

In S3, what is a file that you upload called?
Choose the Correct answer:

- A. Static File
- B. Bucket
- C. Folder
- D. Object

Correct Answer: D

Explanation

Explanation/Reference:

Files that are stored in S3 are referred to as objects.

QUESTION 292

Donna needs to provision a Linux server to run a web application on. What AWS service should she use to create the Linux server?
Choose the Correct answer:

- A. VPC
- B. Lambda
- C. IAM
- D. EC2

Correct Answer: D

Explanation

Explanation/Reference:

Elastic Cloud Compute (EC2) is AWS server-based compute service platform. You can use it to provision and use Linux- and Windows-based servers.

QUESTION 293

What AWS database service is used for data warehousing of petabytes of data? Choose the Correct answer:

- A. RDS
- B. ElastiCache
- C. Redshift
- D. DynamoDB

Correct Answer: C

Explanation

Explanation/Reference:

Redshift is a fully-managed data warehouse that is perfect for storing petabytes worth of data.

QUESTION 294

What are two open source in-memory engines supported by ElastiCache? Choose the 2 Correct answers:

- A. Redis
- B. Aurora
- C. Cachelt
- D. Memcached

Correct Answer: AD

Explanation

Explanation/Reference:

QUESTION 295

What is the name of AWS's RDS SQL database engine?

Choose the Correct answer:

- A. Lightsail
- B. SNS
- C. MySQL
- D. Aurora

Correct Answer: D

Explanation

Explanation/Reference:

AWS created their own custom SQL database engine, which is called Aurora.

QUESTION 296

What is AWS's relational database service?

Choose the Correct answer:

- A. Redshift
- B. DymamoDB
- C. ElastiCache
- D. RDS

Correct Answer: D

Explanation

Explanation/Reference:

RDS offers SQL database options - otherwise known as relational databases.

QUESTION 297

What is the major difference between AWS's RDS and DynamoDB database services? Choose the Correct answer:

- A. RDS offers NoSQL database options, and DynamoDB offers SQL database options.
- B. RDS offers on SQL database option, and DynamoDB offers many NoSQL database options.
- C. RDS offers SQL database options, and DynamoDB offers a NoSQL database option.
- D. None of the above

Correct Answer: C

Explanation

Explanation/Reference:

RDS is a SQL database service (that offers several database engine options), and DynamoDB is a NoSQL database option that only offers one NoSQL engine.

QUESTION 298

If you want to monitor the average CPU usage of your EC2 instances, which AWS service should you use? Choose the Correct answer:

- A. CloudMonitor
- B. CloudTrail
- C. CloudWatch
- D. None of the above

Correct Answer: C

Explanation

Explanation/Reference:

CloudWatch is used to collect, view, and track metrics for resources (such as EC2 instances) in your AWS account.

QUESTION 299

If you want to have SMS or email notifications sent to various members of your department with status updates on resources in your AWS account, what service should you choose? Choose the Correct answer:

- A. STS
- B. RDS
- C. GetSMS
- D. SNS

Correct Answer: D

Explanation

Explanation/Reference:

Simple Notification Service (SNS) is what publishes messages to SMS and/or email endpoints.

QUESTION 300

Under what circumstances would you choose to use the AWS service CloudTrail? Choose the Correct answer:

- A. When you want to collect and view resource metrics.
- B. When you want to log what actions various IAM users are taking in your AWS account.
- C. When you want a serverless compute platform.
- D. When you want to send SMS notificaitons based on events that occur in your account.

Correct Answer: B

Explanation

Explanation/Reference:

CloudTrail is AWS's logging service used to log actions taken by users in your AWS account.

QUESTION 301

What SQL database engine options are available in RDS? (Select all that apply) Choose the 3 Correct answers:

- A. MariaDB
- B. PostgreSQL
- C. MongoDB
- D. MySQL

Correct Answer: ABD

Explanation

Explanation/Reference:

RDS offers the following SQL options: Aurora MySQL MariaDB PostgreSQL Oracle Microsoft SQLServer

QUESTION 302

Which AWS service uses a combination of publishers and subscribers? Choose the Correct answer:

- A. SNS
- B. RDS
- C. EC2
- D. Lambda

Correct Answer: A

Explanation

Explanation/Reference:

In SNS, there are two types of clients: publishers and subscribers. Publishers send the message, and subscribers receive the message.

QUESTION 303

What term best describes the AWS pricing model?

Choose the Correct answer:

- A. Pay-all-up-front
- B. Pay-as-you-go
- C. Pay-all-at-end
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

AWS operates on a pay-as-you-go model. No upfront cost or termination fees.

QUESTION 304

If you want to learn about AWS architectural or security best practices, where will you find that type of information?

Choose the Correct answer:

- A. AWS Yellow Pages
- B. AWS Console Info Section
- C. AWS White Papers
- D. AWS Service Documentation

Correct Answer: C

Explanation

Explanation/Reference:

White papers are a collection of technical documents that outlines many AWS relevant topics.

QUESTION 305

In the AWS Shared Responsibility Model, what is AWS responsible for? (Select all that apply) Choose the 2 Correct answers:

- A. Physical security of the AWS data centers
- B. Server-side encryption
- C. Network level security
- D. The maintenance of the hosts virtualization software.

Correct Answer: AD

Explanation

Explanation/Reference:

QUESTION 306

Consolidated billing is managed through what AWS service? Choose the Correct answer:

- A. AWS TCO
- B. AWS Billing Manager
- C. AWS Consolidated Management
- D. AWS Organizations

Correct Answer: D

Explanation

Explanation/Reference:

AWS Organizations is where you can manage multiple AWS accounts in one place (including it's billing features, such as consolidated billing).

QUESTION 307

What MUST you do before you do any penetration testing on your account? Choose the Correct answer:

- A. Penetration testing is now allowed.
- B. Contact AWS and let them know first.
- C. Nothing, you are free to do penetration testing whenever you like.
- D. None of the above

Correct Answer: B

Explanation

Explanation/Reference:

You must contact AWS before doing any penetration testing on your account. If you do not notify AWS first, they may shut down your account.

QUESTION 308

Which of the following are AWS Support Plans? (Select all that apply) Choose the 3 Correct answers:

- A. Enterprise
- B. Expert
- C. Basic
- D. Business

Correct Answer: ACD

Explanation

Explanation/Reference:

AWS has four support plan levels: Basic Developer Business Enterprise

QUESTION 309

What is a main benefit of consolidated billing?
Choose the Correct answer:

- A. Faster response from AWS technical support.
- B. Gain a volume discount for usage across all your AWS accounts.
- C. Access to a higher support plan level.
- D. None of the above.

Correct Answer: B
Explanation

Explanation/Reference:

Consolidated billing allows you to view, manage, and pay bills for multiple AWS accounts in one user interface. Volume discounts can be earned by combining the usage from all accounts your own.

QUESTION 310

What best describes the difference between the TCO Calculator and the Cost Explorer? Choose the Correct answer:

- A. The TCO Calculator help you analyze current AWS usage charges; the Cost Explorer helps you estimate the cost savings of using AWS.
- B. The TCO Calculator helps you estimate the cost savings of using AWS; the Cost Explorer help you analyze current AWS usage charges.
- C. The Cost Explorer helps you calculate hourly EC2 Usage cost; the TCO Calculator is a price list for each AWS service.
- D. The Cost Explorer is a price list for each AWS service; the TCO Calculator helps you calculate hourly EC2 Usage cost.

Correct Answer: B
Explanation

Explanation/Reference:

The TCO calculator is a free tool provided by AWS that allows you to estimate the cost savings of using AWS vs. using an on-premises data center. The Cost Explorer is a free tool that allows you to view charges of your cost (helps you analyze where you are spending money).

QUESTION 311

What does TCO stand for?
Choose the Correct answer:

- A. Tally of Cost Ownership
- B. Total Continual Ownership
- C. The Cost of Ownership
- D. None of the above

Correct Answer: D
Explanation

Explanation/Reference:

TCO stand for Total Cost of Ownership.

QUESTION 312

What categories full under those analyzed by the AWS Trusted Advisor program? (Select all that apply)
Choose the 2 Correct answers:

- A. Fault tolerance
- B. Scalability
- C. Cost optimization

D. None of the above

Correct Answer: AC

Explanation

Explanation/Reference:

The AWS Trusted Advisor program will analyze your account with check in the following categories: Cost Optimization Performance Security Fault Tolerance

QUESTION 313

In the most recent company meeting, your CEO focused on the fact that everyone in the organization needs to make sure that all of the infrastructure that is built is truly scalable. Which of the following statements is incorrect in reference to scalable architecture?

- A. Increasing resources results in a proportional increase in performance.
- B. A scalable service is resilient.
- C. A scalable service is capable of handling heterogeneity.
- D. A scalable architecture won't be cost effective as it grows.

Correct Answer: D

Explanation

Explanation/Reference:

In AWS it is critical to build a scalable architecture in order to take advantage of a scalable infrastructure. The cloud is designed to provide conceptually infinite scalability. However, you cannot leverage all that scalability in infrastructure if your architecture is not scalable. Both have to work together. You will have to identify the monolithic components and bottlenecks in your architecture, identify the areas where you cannot leverage the on-demand provisioning capabilities in your architecture, and work to refactor your application, in order to leverage the scalable infrastructure and take advantage of the cloud.

Characteristics of a truly scalable application:

- . Increasing resources results in a proportional increase in performance . A scalable service is capable of handling heterogeneity . A scalable service is operationally efficient
- . A scalable service is resilient
- . A scalable service should become more cost effective when it grows (Cost per unit reduces as the number of units increases)

Reference: http://media.amazonwebservices.com/AWS_Cloud_Best_Practices.pdf

QUESTION 314

_____ are objects created within IAM which have Policy permissions associated to them. However, instead of just being associated with users as groups are, _____ can be assigned to instances at the time of launch. This allows the instance to adopt the permissions given by the role without the need to have access keys stored locally on the instance.

- A. IAM Groups
- B. IAM Roles
- C. IAM Users
- D. IAM Policies

Correct Answer: B

Explanation

Explanation/Reference:

IAM Roles are objects created within IAM which have Policy permissions associated to them. However, instead of just being associated with users as groups are, roles can be assigned to instances at the time of launch. This allows the instance to adopt the permissions given by the role without the need to have access keys stored locally on the instance. IAM Users are account objects that allow an individual user to access your AWS environment with a set of credentials. You can issue user accounts to anyone you want to view or administer objects and resources within your AWS environment. Permissions can be applied individually to a user, but the best practice for permission assignments is to add the user to an IAM Group. IAM Groups are objects that have permissions assigned to them via Policies allowing the members of the Group access to specific resources. Having Users assigned to these groups allows for a uniform approach to access management and control. Reference: http://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles.html

QUESTION 315

How many different types of support cases can you open with AWS?

- A. 3
- B. 2
- C. As many as you want
- D. 4

Correct Answer: A

Explanation

Explanation/Reference:

You can sign in to the Support Center at <https://console.aws.amazon.com/support/home#/> by using the email address and password associated with your AWS account. To log in with other credentials, see [Accessing AWS Support](#). When you sign in to the Support Center, there are three types of cases you can open:

. Account and Billing Support cases are available to all AWS customers and connects you to customer service for help with billing and account-related inquiries . The Service Limit Increase request form available to all AWS customers . Technical Support cases connect you to technical support for help with service-related technical issues depending on your support level agreement. Reference: <http://docs.aws.amazon.com/awssupport/latest/user/getting-started.html>

QUESTION 316

You have sensitive data stored on AWS that is no longer needed, and you intend to delete it. When you ask AWS to delete the data in the cloud, what is the standard procedure they'll follow?

- A. AWS does not commission the underlying physical media or mark the storage blocks as unallocated.
- B. AWS decommissions the underlying physical media, and storage blocks are marked as unallocated.
- C. AWS decommissions the underlying physical media, and storage blocks are marked as allocated.
- D. AWS does not decommission the underlying physical media; instead, the storage blocks are marked as unallocated.

Correct Answer: D

Explanation

Explanation/Reference:

You decommission data differently in the cloud than you do in traditional on-premises environments. When you ask AWS to delete data in the cloud, AWS does not decommission the underlying physical media; instead, the storage blocks are marked as unallocated. AWS uses secure mechanisms to reassign the blocks elsewhere. When you provision block storage, the hypervisor or virtual machine manager (VMM) keeps track of which blocks your instance has written to. When an instance writes to a block of storage, the previous block is zeroed out, and then overwritten with your block of data. If your instance attempts to read from a block previously written to, your previously stored data is returned. If an instance attempts to read from a block it has not previously written to, the hypervisor zeros out the previous data on disk and returns a zero to the instance. When AWS determines that media has reached the end of its useful life, or it experiences a hardware fault, AWS follows the techniques detailed in Department of Defense (DoD) 5220.22-M ("National Industrial Security Program Operating Manual") or NIST SP 800-88 ("Guidelines for Media Sanitization") to destroy data as part of the decommissioning process. Reference: http://media.amazonwebservices.com/AWS_Security_Best_Practices.pdf

QUESTION 317

In AWS Billing and Cost Management, which of the following statements is true about Cost Explorer?

- A. The organization member account owner has permission to view billing reports by default.
- B. The organization master account owner has full control of all Billing and Cost Management resources for the master account and all associated member accounts.
- C. An IAM user cannot close AWS accounts
- D. Each IAM Account can only have one approved IAM user who can view account billing information in Cost Explorer.

Correct Answer: C

Explanation

Explanation/Reference:

The following are the user types and billing permissions for each type within AWS Billing and Cost Management:

. The Account Owner is the person or company whose name an AWS account is set up. The account owner has full control of Billing and Cost Management resources, and receives a monthly bill for all charges.

. An IAM user is a person/application defined as a user in an AWS account by an account owner. Accounts can contain multiple IAM users. They have explicitly granted permissions to view Billing and Cost Management services, and cannot close AWS accounts. . An organization master account owner is the person/entity associated with an AWS organizations master account, which pays for AWS usage that is incurred by a member account in an organization. This person has full control of all Billing and Cost Management resources for the master account only, but receives a monthly invoice of AWS charges for the master account and member accounts, and can view the activity of member accounts in the billing reports for the master account.

. An organization member account is the person/entity associated with an AWS Organizations member account. This person does not have permission to review any usage reports or account activity except for its own, and does not have permission to view billing reports. The organization member account has permission to update account information only for its own account, and cannot access other member accounts or the master account.

Reference:

<https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/billing-permissions-ref.html#user-permissions>

QUESTION 318

_____ is a fast, reliable, scalable, fully managed message queuing service.

- A. Amazon SQS
- B. Amazon SNS
- C. Amazon SES
- D. AWS Data Pipeline

Correct Answer: A

Explanation

Explanation/Reference:

Amazon Simple Queue Service (SQS) is a fast, reliable, scalable, fully managed message queuing service. SQS makes it simple and cost-effective to decouple the components of a cloud application.

Decoupling the components of an application ?You have a queue of work items and want to track the successful completion of each item independently. Amazon SQS tracks the ACK/FAIL results, so the application does not have to maintain a persistent checkpoint or cursor. After a configured visibility timeout, Amazon SQS deletes acknowledged messages and redelivers failed messages.

Configuring individual message delay ?You have a job queue and you need to schedule individual jobs with a delay. With standard queues, you can configure individual messages to have a delay of up to 15 minutes.

Dynamically increasing concurrency or throughput at read time ?You have a work queue and want to add more consumers until the backlog is cleared. Amazon SQS requires no pre-provisioning.

Scaling transparently ?You buffer requests and the load changes as a result of occasional load spikes or the natural growth of your business. Because Amazon SQS can process each buffered request independently, Amazon SQS can scale transparently to handle the load without any provisioning instructions from you.

Reference: <http://aws.amazon.com/sqs/>

QUESTION 319

What answer lists all the instance pricing categories that EC2 provides?

- A. On-demand, Reserved, and Spot instances
- B. On-Demand, Reserved, Shared, and Custom
- C. On-Demand, Reserved, Spot, and Custom
- D. On-Demand, Spot Instances, Shared and Dedicated

Correct Answer: A

Explanation

Explanation/Reference:

The specific pricing options AmazonEC2 instances can be either On-Demand, Reserved or Spot instances. With on-demand instances, you can pay for compute capacity by the second (with a minimum one-minute charge), or by the hour, depending on the operating system you select for your virtual machine instance. With on-demand pricing, there is no long-term commitments or upfront payments.

Reserved Instances provide you with a significant discount (up to 75%) compared to On-Demand instance pricing. Amazon EC2 Spot instances allow you to bid on spare Amazon EC2 computing capacity for up to 90% off the on-demand price.

There are also tenancy options, which determine the AWS hardware your instances are hosted on. This is technically different than the pricing options. AWS offers shared tenancy by default, as well as dedicated tenancy, and finally dedicated host tenancy. Shared tenancy means your instances can be hosted on any available hardware in a given availability zone, and will still be secure and separate from other instances with shared tenancy. Dedicated tenancy means your instances only alone run on a specific, single-tenant AWS server. A Dedicated Host is a physical EC2 server dedicated for your use, and you can actually control the server settings. The ability to control the server settings is what separates dedicated tenancy from dedicated host tenancy. The pay-as-you-go pricing was previously per instance-hour, but was updated on October 2, 2017 to include some instance types and operating systems that can be billed at per second. Reference: <http://aws.amazon.com/ec2/faqs/>

QUESTION 320

_____ is a useful and powerful tool within Billing and Cost Management. It allows you to view historical billing information in a graphical format giving you greater insight to your AWS spend

- A. Consolidated Billing
- B. Cost Explorer
- C. Budgets
- D. Cost Allocation Tags

Correct Answer: B

Explanation

Explanation/Reference:

Cost Explorer, this is a useful and powerful tool within Billing and Cost Management. It allows you to view historical billing information in a graphical format giving you greater insight to your AWS spend. A valuable tool that can help to identify where you should be focusing your cost optimization efforts. It also has the ability to forecast your estimated spend up to two months ahead using existing data as a reference. If you can see that your estimated future bills are becoming too high, you have the time now to identify where you can make and initiate cost reduction mechanisms to help mitigate the risk. Cost Explorer comes configured with three pre-defined views which are commonly used to analyse spending across your account:

Monthly Spend by Service view - This covers the current and previous two months and is grouped by AWS services

Monthly Spend by Linked Account View - This covers the current and previous two months and is grouped by Linked Accounts

Daily Spend view - This covers the the daily spend over the previous 60 days Reference:

<http://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/cost-explorer-what-is.html>

QUESTION 321

Which of the following describes operational excellence, one of the five pillars of the AWS's Well-Architected Framework?

- A. Prepare, operate, and evolve
- B. Infrastructure and data protection
- C. Change management and failure management
- D. Review, monitoring and trade-offs

Correct Answer: A

Explanation

Explanation/Reference:

Prepare, operate and evolve are interwoven in the following 6 design principles that make up this pillar

Perform operations as code: This explains how to deploy, respond to events and perform automated operational procedures using code to help prevent human error

Annotate documentation: This defines how it's possible to automatically create and annotate documentation when provisioning AWS resources

Make frequent, small, reversible changes: The focus of this principle is to implement your changes at small scale, and frequently to allow you to easily roll-back the change without affecting a wide customer base if there are issues

Refine operations procedures frequently: This focuses on the importance of consistently refining your operational procedures, evolving them as your business evolves

Anticipate failure: The focus here is to understand and define your potential points of failure and how these can be mitigated

Learn from all operational failures: This principle explains how knowledge sharing is key and how to learn from issues and failures that have occurred.

Reference:
https://d1.awsstatic.com/whitepapers/architecture/AWS_Well-Architected_Framework.pdf

QUESTION 322

What is a benefit of using Federated access?

- A. It minimises the amount of administration required within IAM
- B. You can use the same User to authenticate multiple users externally to your Account
- C. You don't need to configure any IAM Policies to control access
- D. It allows you to authenticate other users from other AWS accounts

Correct Answer: A

Explanation

Explanation/Reference:

Identity federation allows you to access and manage AWS resources even if you don't have a user account within IAM.

Identity federation allows users from identity providers (IdP) which are external to AWS to access AWS resources securely without having to supply AWS user credentials from a valid IAM user account. An example of an identity provider can be your own corporate Microsoft Active Directory, federated access would then allow the users within it to access AWS. Other forms of identity providers can be any OpenID Connect (OIDC) web provider. Common examples of these are FaceBook, Google & Amazon.

As a result, if you need users to access AWS resources that already have identities that could be used as an identity provider, then you could allow access to your environment using these existing accounts instead of setting each of them up a new identity within AWS IAM. The benefits of this is two-fold:

It minimises the amount of administration required within IAM It allows for a a Single Sign-On (SSO) solution

Reference: <https://aws.amazon.com/iam/details/manage-federation/>

QUESTION 323

What are the mechanisms available for access control on S3?

- A. (IAM) policies, Access Control Lists (ACLs), bucket policies, and encryption.
- B. (IAM) policies, Access Control Lists (ACLs), bucket policies, and query string authentication.
- C. Access Control Lists (ACLs), bucket policies, and query string authentication
- D. (IAM) policies, Access Control Lists (ACLs), bucket policies, query string authentication and encryption.

Correct Answer: B

Explanation

Explanation/Reference:

Amazon S3 supports several mechanisms that give you flexibility to control who can access your data as well as how, when, and where they can access it. Amazon S3 provides four different access control mechanisms:

AWS Identity and Access Management (IAM) policies, Access Control Lists (ACLs), bucket policies, and query string authentication.

IAM enables organizations to create and manage multiple users under a single AWS account. With IAM policies, you can grant IAM users fine-grained control to your Amazon S3 bucket or objects. You can use ACLs to selectively add (grant) certain permissions on individual objects. Amazon S3 bucket policies can be used to add or deny permissions across some or all of the objects within a single bucket.

With Query string authentication, you have the ability to share Amazon S3 objects through URLs that are valid for a specified period of time.

Reference: <http://docs.aws.amazon.com/AmazonS3/latest/dev/s3-access-control.html>

QUESTION 324

Which of the following statements is true of automation in RDS?

- A. Amazon RDS automatically manages the database settings that are specific to your application.
- B. Amazon RDS automatically performs backups and patches the database software that powers your DB Instance.
- C. Amazon RDS automatically builds the relational schema that best fits your use case.
- D. Amazon RDS automatically performs system construction activities such as performance tuning to optimize your database for your application's workflow.

Correct Answer: B

Explanation

Explanation/Reference:

Amazon RDS manages the work involved in setting up a relational database: from provisioning the infrastructure capacity you request to installing the database software. Once your database is running on its own DB Instance, Amazon RDS automates common administrative tasks, such as performing backups and patching the database software that powers your DB Instance. For optional Multi-AZ deployments (currently supported for MySQL and Oracle database engines), Amazon RDS also manages synchronous data replication across Availability Zones and automatic failover.

Since Amazon RDS provides native database access, you interact with the relational database software as you normally would. This means you're still responsible for managing the database settings that are specific to your application. You'll need to build the relational schema that best fits your use case and are responsible for any performance tuning to optimize your database for your application's workflow.

Reference: <http://aws.amazon.com/rds/faqs/#3>

QUESTION 325

An organization has launched a large EC2 instance with an EBS store backed AMI and an additional ephemeral drive. The organization wants to ensure that even when an instance is terminated, all the critical data will not be lost. Which of the below is critical in ensuring that EBS survives instance termination?

- A. Setup the EBS volume with the DeleteOnTermination flag set to False .
- B. Keep moving important data to S3 for higher durability.
- C. Take a snapshot of the EBS volume at regular intervals for backup purpose.
- D. Keep moving all the log files generated on the ephemeral drive to the EBS volume for the audit trails.

Correct Answer: A

Explanation

Explanation/Reference:

AWS provides an on demand, scalable infrastructure. AWS EC2 allows the user to launch On-Demand instances and the organization should create an AMI of the running instance. If the organization has launched an instance with the EBS root device and an additional ephemeral drive, it is advised that the organization should keep taking a backup of all critical ephemeral data to EBS. The organization should also keep moving important data to S3 for higher durability. In this way even if the application fails the data can be restored. For the EBS backup, the organization should always take a snapshot at regular intervals. Since the organization is launching an instance with an EBS based root device, by default the DeleteOnTermination flag is set to True. In the present scenario if the instance gets terminated the EBS will also be deleted.

It is recommended to have the flag as False so that when the instance is terminated it will not delete the volume.

Reference:

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/terminating-instances.html#preparing-volumes-on-termination>