D --> Dogru

Y --> Yanlis

* 1. Both AWS and traditional IT distributors provide a wide range of virtual servers to meet their customers’ requirements. What is the name of these virtual servers in AWS?

AWS EC2 Instances (Dogru)

* 1. What does AWS offer to secure your network?

Customer controlled encryption in transit (Dogru)

* 1. What AWS tools can be used to call AWS Services from different programming languages?

AWS Software Development Kit (SDK)(D)

* 1. Which AWS Service can perform health checks on Amazon EC2 instances?

AWS Route 53 (D) ayrica Elastic Load Balancing service also performs health checks on Amazon EC2

* 1. How does AWS notify customers about security and privacy events pertaining to AWS services?

Using Security Bulletins

* 1. Which of the following are types of AWS Identity and Access Management (IAM) identities?

Identities on AWS include users (or groups) and roles.

* 1. Which AWS Group assists customers in achieving their desired business outcomes?

AWS Professional Services

* 1. Which of the following services can help protect your web applications from SQL injection and other vulnerabilities in your application code?

AWS WAF

* 1. Your application has recently experienced significant global growth, and international users are complaining of high latency. What is the AWS characteristic that can help improve your international users’ experience?

Global Reach(D)

Elasticity (Y)

* 1. What is the AWS data warehouse service that supports a high level of query performance on large amounts of datasets?

AWS Redshift(D)

AWS RDS(Y)

* 1. A company has created a solution that helps AWS customers improve their architectures on AWS. Which AWS program may support this company?

AWS Consulting Partners(D)

AWS TAM(Y) Techincal konularda hizmet veriyor

* 1. What are the default security credentials that are required to access the AWS management console for an IAM user account?

User name and password

* 1. An organization has a legacy application designed using monolithic-based architecture. Which AWS Service can be used to decouple the components of the application?

AWS SQS

* 1. What is the AWS Support feature that allows customers to manage support cases programmatically?

AWS Support API(D)

AWS Personal Health Dashboard(Y)

* 1. What is the name of the DynamoDB replication capability that provides fast read \ write performance for globally deployed applications?

Global Tables(Y)

* 1. Which of the following approaches will help you eliminate human error and automate the process of creating and updating your AWS environment?

Use code to provision and operate your AWS infrastructure(D)

Use AWS CodeDeploy to build and automate AWS environment(Y)

* 1. Which AWS service enables you to quickly purchase and deploy SSL/TLS certificates?

AWS ACM(D) --> AWS Certificate Manager

AWS WAF(Y)

* 1. Which AWS Service offers a filesystem that can be mounted concurrently from multiple EC2 instances?

AWS EFS(D)

AWS EBS(Y) --> EBS cannot be mounted to multiple EC2 instances

* 1. You are facing a lot of problems with your current contact center. Which service provides a cloud-based contact center that can deliver a better service for your customers?

AWS Connect(D)

AWS LightSail(Y)

* 1. An organization needs to build a financial application that requires support for ACID transactions. Which AWS database service is most appropriate in this case?

AWS RDS(D)

AWS Redshift(Y)

* 1. Which of the following services provide real-time auditing for compliance and vulnerabilities?

AWS Config

* 1. Which service can be used for building and integrating loosely-coupled, distributed applications?

AWS SNS

* 1. Which service can you use to provision a preconfigured server with little to no AWS experience?

AWS LightSail(D)

AWS EC2(Y)

* 1. Which AWS services are used for analytics?

 AWS EMR and AWS Athena

* 1. Which AWS service allows you to use block-based volumes on-premise that are then asynchronously backed up to Amazon S3?

AWS S3 Storage Gateway Volume Gateway

* 1. Which IAM entity can be used for assigning permissions to AWS services?

IAM Role (D)

IAM Policy (Y)

* 1. Which Amazon RDS feature can reduce the burden on a database that is experiencing heavy read traffic?

Read Replica (D)

Multi AZ (Y)

* 1. Which of the following is NOT an AWS service used for transferring large amounts of data into Amazon S3?
     + S3 Transfer Acceleration
     + AWS Snowmobile
     + AWS DMS
     + AWS Snowball

* 1. Which feature of Amazon S3 adds a layer of additional security to prevent accidental deletion?
     + Lifecycle management
     + MFA delete
     + Encryption
     + Versioning

* 1. **An architect wants to find a tool for consistently deploying the same resources through a templated configuration. Which AWS service can be used?**
     + **AWS CloudFormation (Correct). FREE service at the same time**
     + **AWS CodeBuild**
     + **AWS CodeDeploy (Incorrect)**
     + **AWS Elastic Beanstalk**

* 1. **How can an organization assess application for vulnerabilities and deviations from best practice?**
     + **Use AWS WAF**
     + **Use AWS Inspector (Correct)**
     + **Use AWS Artifact**
     + **Use AWS Shield**

* 1. Which service can be used to easily create multiple accounts?

AWS Organizations

AWS IAM (Y) account create etmede kullanilmaz

**A security operations engineer needs to implement threat detection and monitoring for malicious or unauthorized behavior. Which service should be used?**

* + AWS GuardDuty**(Correct)**
  + AWS Shield**(Incorrect) --> DDoS**
  + AWS KMS
  + AWS CloudHSM

* + **Which of the below AWS services supports automated backups as a default configuration?**
    - **Amazon S3 (Incorrect)**
    - **Amazon RDS(Correct)**
    - **Amazon EBS**
    - **Amazon EC2**

* 1. **Which IAM entity can be used for assigning permissions to AWS services?**
     + **Security Token Service (STS)**
     + **IAM Access Key ID and Secret Access Key**
     + **IAM Policy(Incorrect)**
     + **IAM Role(Correct)**

* 1. **Where is the information stored that defines an EC2 instance such as the template for the root volume, launch permissions and block device mappings?**
     + **EFS**
     + **ARN**
     + **AMI(Correct)**
     + **EBS(Incorrect)**

* 1. **When using Amazon IAM, what authentication methods are available to use? (choose 2)**
     + **AES 256(Incorrect)**
     + **Client certificates**
     + **Access keys(Correct)**
     + **Server certificates(Correct)**
     + **AWS KMS**

* 1. **You are concerned that you may be getting close to some of the default service limits for several AWS services. What AWS tool can be used to display current usage and limits?**
     + **AWS Trusted Advisor(Correct)**
     + **AWS CloudWatch   (Incorrect)**
     + **AWS Systems Manager**
     + **AWS Personal Health Dashboard**

* 1. How can a systems administrator specify a script to be run on an EC2 instance during launch?
     + AWS Config
     + Metadata
     + User Data
     + Run Command

* 1. How can an organization track resource inventory and configuration history for the purpose of security and regulatory compliance?
     + Implement Amazon GuardDuty
     + Create an Amazon CloudTrail trail
     + Run a report with AWS Artifact
     + Configure AWS Config with the resource types

* 1. Which AWS components aid in the construction of fault-tolerant applications? (choose 2)
     + Block device mappings
     + ARNs
     + AMIs
     + **Elastic IP addresses**
     + Tags

Elastic IP addresses can be easily remapped between EC2 instances in the event of a failure. Amazon Machine Images (AMIs) can be used to quickly launch replacement instances when there is a failure

* 1. Which Amazon RDS deployment type is best used to enable fault tolerance in the event of the failure of an availability zone?
     + Multiple Regions
     + **Multiple Availability Zones**
     + Write Replicas
     + Read Replicas

* 1. Which type of connection should be used to connect an on-premises data center with the AWS cloud that is high speed, low latency and does not use the Internet?
     + AWS Managed VPN
     + VPC Endpoints
     + Direct Connect
     + IPSec VPN

* 1. Which AWS feature of Amazon EC2 allows an administrator to create a standardized image that can be used for launching new instances?
     + Amazon EBS Mount Point
     + Amazon Machine Image
     + Amazon Block Template
     + Amazon Golden Image

* 1. Which AWS service allows you to automate the evaluation of recorded configurations against desired configuration?
     + AWS CloudFormation
     + AWS Service Catalog
     + **AWS Config**
     + AWS OpsWorks

* 1. Which AWS services form the app-facing services of the AWS serverless infrastructure? (choose 2)
     + AWS Step Functions --> Orchestration purposes serverless
     + Amazon EFS
     + **AWS Lambda**
     + Amazon DynamoDB
     + Amazon API Gateway

* 1. Which types of root storage devices are available for Amazon EC2 instances? (choose 2)
     + Instance Store
     + EFS file system
     + RAM
     + **EBS volume**
     + S3 Bucket

* 1. How can a company configure automatic, asynchronous copying of objects in Amazon S3 buckets across regions?
     + Using cross-region replication
     + Using lifecycle actions
     + By configuring multi-master replication
     + This is done by default by AWS

* 1. What can you use to quickly connect your office securely to your Amazon VPC?
     + Route Table
     + Internet Gateway
     + Direct Connect
     + AWS managed VPN

Which service provides alerts and remediation guidance when AWS is experiencing events that may impact you?

AWS Inspector

AWS Trusted Advisor

AWS Personal Health Dashboard

AWS Shield

An Elastic IP Address can be remapped between EC2 instances across which boundaries?

* + Regions
  + Edge Locations
  + Availability Zones
  + DB Subnets

Which of the below are valid options for interacting with Amazon Glacier archives? (choose 2)

* + Using the REST API
  + Through IAM
  + **From the AWS CLI**
  + **Directly through the management console**
  + Using S3 Multipart Upload

Assuming you have configured them correctly, which AWS services can scale automatically without intervention? (choose 2)

* + **Amazon S3**
  + Amazon EC2
  + Amazon EBS
  + **Amazon DynamoDB**
  + Amazon RDS

Which of the below is an example of optimizing for cost?

* + Provision extra capacity to allow for growth
  + Choosing the fastest EC2 instance to ensure performance
  + Deploy resources with AWS CloudFormation
  + Replace an EC2 compute instance with AWS Lambda(DIKKAT)

Where possible, you should replace EC2 workloads with AWS managed services that don’t require you to take any capacity decisions.

Which IAM entity is associated with an access key ID and secret access key?

* + IAM Group
  + **IAM User**
  + IAM Role
  + IAM Policy

How can you configure Amazon Route 53 to monitor the health and performance of your application?

* + Using DNS lookups
  + Using the Route 53 API
  + Using CloudWatch
  + **Using Route 53 health checks**

What is the scope of an Amazon Virtual Private Cloud (VPC)?

* + It spans a single CIDR block
  + **It spans all Availability Zones within a region**
  + It spans multiple subnets
  + It spans all Availability Zones in all regions

What offerings are included in the Amazon Lightsail product set? (choose 2)

* + NoSQL database
  + **Managed MySQL database**
  + **Virtual Private Server**
  + Object storage
  + Serverless functions

When instantiating compute resources, what are two techniques for using automated, repeatable processes that are fast and avoid human error? (choose 2)

* + Snapshotting
  + **Bootstrapping**
  + Fault tolerance
  + Performance monitoring
  + **Infrastructure as code**

What considerations are there when choosing which region to use? (choose 2)

* + Available compute capacity
  + Pricing in local currency
  + **Data sovereignty**
  + Available storage capacity
  + **Latency**

**With which service can a developer upload code using a ZIP or WAR file and have the service handle the end-to-end deployment of the resources?**

* + Amazon ECS
  + AWS Elastic Beanstalk   **(Correct) (also lets Git)**
  + AWS CodeDeploy   **(Incorrect)**
  + AWS CodeCommit

**Which of the following descriptions is incorrect in relation to the design of Availability Zones?**

* + AZ’s have direct, low-latency, high throughput and redundant network connections between each other
  + AZs are physically separated within a typical metropolitan region and are located in lower risk flood plains
  + Each AZ is designed as an independent failure zone   **(Incorrect)**
  + Each subnet in a VPC is mapped to all AZs in the region **(Correct)**

**Which AWS program can help an organization to design, build, and manage their workloads on AWS?**

* + AWS Technical Account Manager **(Incorrect)**
  + AWS Business Development Manager
  + APN Technology Consultants
  + APN Consulting Partners **(Correct)**

**Which AWS services form the app-facing services of the AWS serverless infrastructure? (choose 2)**

* + Amazon DynamoDB   **(Incorrect)**
  + AWS Lambda   **(Correct)**
  + AWS Step Functions
  + Amazon EFS
  + Amazon API Gateway  **(Correct)**

**Assuming you have configured them correctly, which AWS services can scale automatically without intervention? (choose 2)**

* + Amazon EBS **(Incorrect)**
  + Amazon DynamoDB **(Correct)**
  + Amazon RDS
  + Amazon S3 **(Correct)**
  + Amazon EC2

**Which support plan is the lowest cost option that allows unlimited cases to be open?**

* + Basic
  + Enterprise
  + Developer **(Correct)**
  + Business **(Incorrect)**

**Which type of EBS volumes can be encrypted?**

* + Both non-root and root volumes **(Correct)**
  + Only non-root volumes created from snapshots
  + Non-root volumes only
  + Only root volumes can have encryption applied at launch time

**What are the primary benefits of using AWS Elastic Load Balancing? (choose 2)**

* + Elasticity    **(Correct)**
  + High availability    **(Correct)**
  + Regional resilience    **(Incorrect)**
  + Automation
  + Caching

**A cloud practitioner needs to decrease application latency and increase performance for globally distributed users. Which services can assist? (Select TWO.)**

* + Amazon S3 **(Correct)**
  + Amazon ECS
  + Amazon AppStream 2.0
  + Amazon ElastiCache **(Incorrect)**
  + Amazon CloudFront **(Correct)**

**Under the AWS Shared Responsibility Model, which of the following is the customer NOT responsible for?**

* + Applying bucket policies to share Amazon S3 data    **(Incorrect)**
  + Applying encryption to data stored on an EBS volume
  + Adding firewall rules to security groups and network ACLs
  + Installing firmware updates on host servers    **(Correct)**

**Which AWS components aid in the construction of fault-tolerant applications? (choose 2)**

* + Tags
  + Block device mappings
  + AMIs **(Correct)**
  + Elastic IP addresses    **(Correct)**
  + ARNs **(Incorrect)**

**A developer needs a way to automatically provision a collection of AWS resources. Which AWS service is primarily used for deploying infrastructure as code?**

* + AWS CodeDeploy    **(Incorrect)**
  + AWS CloudFormation   **(Correct)**
  + Jenkins
  + AWS Elastic Beanstalk

**Which AWS service can be used to send automated notifications to HTTP endpoints?**

* + Amazon SES
  + Amazon SWF
  + Amazon SQS    **(Incorrect)**
  + Amazon SNS   **(Correct)**

Amazon Simple Notification Service (Amazon SNS) is a web service that makes it easy to set up, operate, and send notifications from the cloud. SNS can be used to send automated or manual notifications to email, mobile (SMS), SQS, and HTTP endpoints.

**What offerings are included in the Amazon LightSail product set? (choose 2)**

* + Object storage    **(Incorrect)**
  + Virtual Private Server **(Correct)**
  + Managed MySQL database    **(Correct)**
  + Serverless functions
  + NoSQL database

Amazon LightSail provides an easy, low cost way to consume cloud services without needing the skill set for using VPC resources. The product set includes virtual private servers (instances), managed MySQL databases, HA storage, and load balancing

* + **What are the benefits of using IAM roles for applications that run on EC2 instances? (choose 2)**
  + More secure than storing access keys within applications    **(Correct)**

**------------------------------------------------------------------------------------------------------------------------------------------**

**Which service can be used for building and integrating loosely-coupled, distributed applications?**AMAZON SNS

**Free services include:**

* Amazon VPC.
* Elastic Beanstalk (but not the resources created).
* CloudFormation (but not the resources created).
* Identity Access Management (IAM).
* Auto Scaling (but not the resources created).
* OpsWorks.
* Consolidated Billing.

Amazon CloudWatch Logs lets you monitor and troubleshoot your systems and applications using your existing system, application and custom log files.

COST TRACKER SERVICES

The AWS Cost Explorer is a free tool that allows you to view charts of your costs.

* You can view cost data for the past 13 months and forecast how much you are likely to spend over the next three months.
* Cost Explorer can be used to discover patterns in how much you spend on AWS resources over time and to identify cost problem area.
* enables you to visualize your usage patterns over time and to identify your underlying cost drivers

The AWS Simple Monthly Calculator helps customers and prospects estimate their monthly AWS bill more efficiently.

The TCO calculator is a free tool provided by AWS that allows you to estimate the cost savings of using the AWS Cloud vs. using an on-premised data center.

AWS Budgets gives you the ability to set custom budgets that alert you when your costs or usage exceed (or are forecasted to exceed) your budgeted amount.

A private network link to the AWS cloud can be provisioned using **AWS Direct Connect or an IPSec VPN.**

Automated deployment of resources is performed using **CloudFormation.**

**CODE SERVICES**

AWS CodeCommit is a fully-managed **source control service that hosts secure Git-based repositories**. It makes it easy for teams to **collaborate on code in a secure and highly scalable ecosystem.**

AWS CodeStar enables you to quickly **develop, build, and deploy applications on AWS**. AWS CodeStar provides a **unified user interface**, enabling you to easily **manage your software development activities in one place.**

AWS Cloud9 is a **cloud-based integrated development environment (IDE)** that lets you **write, run, and debug your code with just a browser.**

AWS CodeDeploy is a **deployment service that automates application deployments to Amazon EC2 instances, on-premises instances, or serverless Lambda functions.**

**Which AWS services can be used to connect the AWS Cloud and on-premises resources?**

**An AWS Managed VPN** is a virtual private network connection over the public Internet. This creates an encrypted link between the on-premises network and your AWS VPC. Another way to achieve this outcome is to provision an **AWS Direct Connection** which connects on-premises networks to AWS using private network links.

**When a customer deploys a database on Amazon RDS, what is the customer responsible for?**

The Amazon Relational Database Service (RDS) is a managed service where AWS manage **administration tasks including hardware provisioning, database setup, patching and backups.** The customer is responsible for **configuring security groups to control access to the database.**

CloudFront is a content delivery network (CDN) that allows you to store (cache) your content at “edge locations” located around the world. This allows customers to access content more quickly and provides security against DDoS attacks. CloudFront can be used for data, videos, applications, and APIs.

**Benefits include:**

– Cache content at Edge Location for fast distribution to customers.

– Built-in Distributed Denial of Service (DDoS) attack protection.

– Integrates with many AWS services (S3, EC2, ELB, Route 53, Lambda).

Subnets and Security groups can be configured from **within the VPC console.**

AWS Trusted Advisor provides **real-time guidance to help customers provision resources** following AWS best practices. The service offers guidance for:

* cost optimization,
* performance,
* security,
* fault tolerance,
* service limits.

Amazon Route 53 is a highly available and scalable **Domain Name System (DNS) service** using hosted zones. It can also be used for **domain registration**, **health checks**, and **traffic flow.**

**Which aspects of security on AWS are customer responsibilities?**

**AWS are responsible for** the “security of the cloud”. This includes protecting the infrastructure that runs all of the services offered in the AWS Cloud. This infrastructure is composed of the hardware, software, networking, and facilities that run AWS Cloud services.

**The customer is responsible for** “security in the cloud”. Customer responsibility depends on the service consumed but includes aspects such as Identity and Access Management (includes password policies), encryption of data, protection of network traffic, and operating system, network and firewall configuration.

**Which services are involved in reducing application latency and increasing performance for end users?**

* **Amazon CloudFront**
* **Amazon ElastiCache**

**Inherit Controls:**

* **Physical Controls**
* **Environmental Controls**

**Shared Controls:**

* **Patch Management**
* **Configuration Management**
* **Awareness & Training**

**Which AWS service can an organization use to automate operational tasks on EC2 instances using existing Chef cookbooks?**

**AWS OpsWorks** is a configuration management service that provides managed instances of Chef and Puppet. With Chef, you use code templates, or cookbooks, to describe the desired configuration of instances or on-premises server.

**What considerations are there when choosing which region to use?**

You may choose a region

* to reduce latency,
* minimize costs, or
* address regulatory requirements (data sovereignty)

**Which AWS service can you use to install a third-party database?    Amazon EC2**

AWS DataSync makes it simple and fast to **move large amounts of data online between on-premises storage and Amazon S3, Amazon Elastic File System (Amazon EFS), or Amazon FSx for Windows File Server.**

Public/private keys are used **for encryption and are also associated with the key pairs** used to authenticate to EC2 instances.

CONFIG SERVICES

AWS OpsWorks is a **configuration management** **service** that provides managed instances of Chef and Puppet. Chef and Puppet are **automation platforms** that allow you to **use code to automate the configurations of your servers.**

OpsWorks lets you use Chef and Puppet to **automate how servers are configured, deployed, and managed across your**[**Amazon EC2**](https://aws.amazon.com/ec2/)**instances or on-premises compute environments**,

AWS Config is a service that enables you to **assess, audit, and evaluate the configurations of your AWS resources.**

AWS CloudFormation provides **a common language for you to model and provision AWS** **and third party application resources in your cloud environment.**

AWS Systems Manager gives you visibility and control of your infrastructure on AWS. Systems Manager provides a unified user interface so you can view operational data from multiple AWS services and allows you to automate operational tasks across your AWS resources.

Amazon Elastic Container Service (ECS) is a highly scalable, high performance container management service that supports Docker containers and allows you to easily **run applications on a managed cluster of Amazon EC2 instances.**

Amazon Elastic Container Registry (ECR) is a fully-managed Docker container registry that makes it easy for developers **to store, manage, and deploy Docker container images.**

**A user has limited knowledge of AWS services, but wants to quickly deploy a scalable Node.js application in an Amazon VPC. Which service should be used to deploy the application? AWS Elastic Beanstalk**

**Which AWS service provides elastic web-scale cloud computing allowing you to deploy operating system instances?   AMAZON EC2**

AWS Glue is an Extract, Transform, and Load (ETL) service. You can use AWS Glue with data sources on Amazon S3, RedShift and other databases. With AWS Glue you transform and move the data to various destinations. It is used to prepare and load data for analytics.

Amazon EMR is a managed Hadoop framework running on EC2 and S3. It is used for analyzing data, not for ETL.

Amazon Kinesis is used for collecting, processing and analyzing **real-time streaming data.**

Amazon RedShift is a data warehouse. With a data warehouse you load data from other databases such as transactional SQL databases and run analysis. You can analyze data using SQL and Business Intelligence tools.

**A Cloud Practitioner wants to build an application stack that will be highly elastic. What AWS services can be used that don’t require you to make any capacity decisions upfront?  AMAZON S3 and AWS LAMBDA**

**Which AWS hybrid storage service enables a user’s on-premises applications to seamlessly use AWS Cloud storage? AWS STORAGE GATEWAY**

AWS Backup is a fully managed backup service that makes it easy to centralize and automate the backup of data across AWS services.

The customer is responsible for installing security updates on EC2 instances and enabling MFA. AWS is responsible for security of the physical data center and the infrastructure upon which customer services run.

**What are the benefits of using the AWS Managed Services?**

AWS Managed Services manages the daily operations of your AWS infrastructure in alignment with ITIL processes. AWS Managed Services provides a baseline integration with IT Service Management (ITSM) tools such as the ServiceNow platform.

AWS Managed Services provides ongoing **management of your AWS infrastructure so you can focus on your applications**. By implementing best practices to maintain your infrastructure, AWS Managed Services helps to reduce your operational overhead and risk.

AWS Managed Services currently supports the 20+ services most critical for Enterprises, and will continue to expand our list of integrated AWS services.

AWS Managed Services is **designed to meet the needs of Enterprises** that require stringent SLAs, adherence to corporate compliance, and integration with their systems and ITIL®-based processes.

The AWS Storage Gateway service enables hybrid storage between on-premises environments and the AWS Cloud. It provides low-latency performance by caching frequently accessed data on premises, while storing data securely and durably in Amazon cloud storage services. AWS Storage Gateway supports three storage interfaces: **file, volume, and tape**

File gateway provides a **virtual on-premises file server**, which enables you to store and retrieve **files as objects in Amazon S3**

The volume gateway represents the family of gateways that support **block-based volumes**, previously referred to **as gateway-cached and gateway-stored modes**

Tape Gateway (formerly known as Gateway Virtual Tape Library) is used for **backup with popular backup software.**

Amazon S3 is an object storage system. Typical use cases include: **Backup and storage, application hosting, media hosting, software delivery and hosting a static website.**

Amazon SWF helps developers build, run, and scale background jobs that have parallel or sequential steps. You can think of Amazon SWF as a fully-managed state tracker and task coordinator in the Cloud.  
**Which AWS service should a Cloud Practitioner use to establish a secure network connection between an on-premises network and AWS? VIRTUAL PRIVATE NETWORK**

AWS Mobile Hub is used for building, testing, and monitoring mobile applications that make use of one or more AWS services.

**Which AWS service helps customers meet corporate, contractual, and regulatory compliance requirements for data security by using dedicated hardware appliances within the AWS Cloud? AWS CLOUDHSM**

Reserved Instances (RI) provide a significant **discount (up to 72%)** compared to On-Demand pricing and provide a capacity reservation when used in a specific Availability Zone. The following types of RI are available:

**Standard RIs:** These provide the **most significant discount (up to 75% off On-Demand)** and are **best suited for steady-state usage.**

**Convertible RIs:** These provide a **discount (up to 54% off On-Demand)** and the capability to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value. Like Standard RIs, Convertible RIs are **best suited for steady-state usage.**

**Scheduled RIs:** These are available to launch **within the time windows you reserve**. This option allows you to match your capacity reservation to a predictable recurring schedule that only requires **a fraction of a day, a week, or a month.**

**A Cloud Practitioner requires a simple method to identify if unrestricted access to resources has been allowed by security groups. Which service can the Cloud Practitioner use? AWS TRUSTED ADVISOR**

VPC Flow Logs are used to capture network traffic information

AWS Systems Manager gives you visibility and control of your infrastructure on AWS. Systems Manager provides a unified user interface so you can view operational data from multiple AWS services and allows you to automate operational tasks across your AWS resources.

When using AWS Organizations with consolidated billing, best practices include:

– Always enable multi-factor authentication (MFA) on the root account.

– Always use a strong and complex password on the root account.

– The Paying account should be used for billing purposes only. Do not deploy resources into the Paying account.

There is a default limit of 20 linked accounts but this can be extended and there is no reason why you should stick to a maximum of 20 accounts.

**Which AWS services can be used as infrastructure automation tools?**

* **AWS OpsWorks**
* **AWS CloudFormation**

Benefits of AWS Direct Connect:

* – Reduce cost when using large volumes of traffic.
* – Increase reliability (predictable performance).
* – Increase bandwidth (predictable bandwidth).
* – Decrease latency.

**Which IAM entity can be used for assigning permissions to AWS services?**

**IAM Role**

An IAM policy is a policy document that is used to define permissions that can be applied to users, groups and roles. You don’t apply the policy to the service, you apply it to the role. The role is then used to assign permissions to the AWS service.

**Which AWS services are associated with Edge Locations?**

**Edge Locations** are parts of the **Amazon CloudFront content delivery network (CDN)** that are all around the world and are used to get content closer to end-users for better performance.

**AWS Shield** which protects against Distributed Denial of Service (DDoS) attacks is available globally on Amazon CloudFront Edge Locations.

**Which AWS tools can be used for automation?**

* **AWS Elastic Beanstalk**
* **AWS CloudFormation**

**What is a benefit of moving an on-premises database to Amazon Relational Database Service (RDS)?**

**There is no need to manage operating systems.**

Reservations provide you with greater discounts, up to 75%, by paying for capacity ahead of time. Some of the services you can reserve include: EC2, DynamoDB, ElastiCache, RDS, and RedShift.

**What are the charges for using Amazon Glacier?**

With Amazon Glacier you pay for **storage on a per GB / month basis, retrieval requests** **and quantity (based on expedited, standard, or bulk),** and **data transfer out of Glacier.**

**Which of the following represent economic advantages of moving to the AWS cloud?**

With the AWS Cloud you can increase efficiency through the use of automation and reduce the need to manage infrastructure, allowing you to concentrate on managing applications instead.

**Which of the below AWS services supports automated backups as a default configuration?**

**AMAZON RDS**

**To ensure the security of your AWS account, what are two AWS best practices for managing access keys?**

– Don’t generate an access key for the root account user.

– Use Temporary Security Credentials (IAM Roles) Instead of Long-Term Access Keys.

– Manage IAM User Access Keys Properly.

**Which authentication method is used to authenticate programmatic calls to AWS services?**

ACCESS KEYS

There are six design principles for security in the cloud:

– Implement a strong identity foundation.

– Enable traceability.

– Apply security at all layers.

– Automate security best practices.

– Protect data in transit and at rest.

– Prepare for security events.

There are five design principles for cost optimization in the cloud:

– Adopt a consumption model.

– Measure overall efficiency.

– Stop spending money on data center operations.

– Analyze and attribute expenditure.

– Use managed services to reduce cost of ownership.

There are five design principles for reliability in the cloud:

– Test recovery procedures.

– Automatically recover from failure.

– Scale horizontally to increase aggregate system availability.

– Stop guessing capacity.

– Manage change in automation.

There are five design principles for performance efficiency in the cloud:

– Democratize advanced technologies.

– Go global in minutes.

– Use serverless architectures.

– Experiment more often.

– Mechanical sympathy.