**1. What is AWS? when was AWS started and who owns it?**

A) Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud, offering over 200 fully featured services from data centers globally.

Started on 2006 and Andy Jassy, AWS founder and vice president

**2.what are some of the AWS services.Describe any five of them?**

A)

1. AmazonEC2
2. Amazon RDS
3. Amazon Simple Storage Service (S3)
4. Amazon VPC
5. AWS Autoscaling

**1. AmazonEC2 :** Forget the expensive physical servers with this AWS service that allows us to create virtual machines and manage other features of servers; such as storage, security, ports, etc. With Amazon EC2 you can create servers in minutes with your preferred operating system.

This way you will have more time to take care of your projects and spend less time maintaining your servers.

**2. Amazon RDS :**Amazon helps us to make our infrastructure less complicated, which is why it provides us with the RDS service. But what is it? With this service we will have dedicated instances for databases in a matter of minutes, fully managed by the AWS support team and capable of supporting multiple database engines such as SQL, PostgreSQL, SQL Server, etc …

Finally, we will forget all those hours of maintenance and support to our database servers.

**3**.**Amazon Simple Storage Service (S3) :** Of course not, AWS S3 also has high availability, so accessing your information is just a click away, with almost zero latency of 99.9999999999%. Surely now you wonder how expensive this service is? Well, we are pleased to inform you that it is impressively cheap. First, it has a free layer that includes 5 GB of storage and then starts at the cost of $ 0.023 / month for the first 50TB. Continue reading about AWS S3 pricing!

**4.Amazon VPC :**  with the private network in the cloud your information will only be available to the people or systems that you authorize. With AWS VPC you can create a private virtual network in which your entire IT environment (infrastructure or services) will live totally isolated from the outside world. This way your information is free of exposure.

**5.AWS Autoscaling :** Well, Amazon again gives us the solution. With AutoScaling we can manage a fleet of servers which are capable of supporting all the traffic that our application demands. The service is totally free, the only thing charged is the number of instances for the time they run.

**3. What is AWS region,availability zone?What is number of AWS zones as of mar-2023?**

AWS Regions are separate geographic areas that AWS uses to house its infrastructure. These are distributed around the world so that customers can choose a region closest to them in order to host their cloud infrastructure there.

The AWS Cloud spans 99 Availability Zones within 31 geographic regions around the world, with announced plans for 15 more Availability Zones and 5 more AWS Regions in Canada, Israel, Malaysia, New Zealand, and Thailand.

**4.What are AWSkey-pairs?**

A) A key pair is a combination of a public key that is used to encrypt data and a private key that is used to decrypt data. For more information about key pairs, see Amazon EC2 Key Pairs in the Amazon EC2 User Guide for Linux Instances.

**5. What are the pricing models for EC2 instances?**

**A)** On-Demand Instances

Reserved Instances

Spot Instances

Dedicated Hosts.

**6.What are the different types of instances?**

**A)** General Purpose Instances.

Compute Optimized Instances.

Memory-Optimized Instances.

Accelerated Computing Instances.

Storage Optimized Instances.

**7.what are reserved instances?**

**A)** AWS Reserved Instances (Amazon Reserved Instances) are virtual servers that run in Amazon Web Services' Elastic Compute Cloud (EC2) and Relational Database Service (RDS). The companies purchase the instances at contract prices, plus hourly rates. Instances are available in varied levels of compute power.

**8.what is an AMI?**

A) An Amazon Machine Image (AMI) is a supported and maintained image provided by AWS that provides the information required an instance .You must specify an AMI when you launch an instance

**9.What is public/private and EIP?**

A) A public IP address is a one-of-a-kind numeric code that is never repeated by other devices, whereas a private IP address is a non-unique numeric code that can be reused by other private network devices.

An Elastic IP (EIP) address is more of a static IPv4 address that is designed for dynamic cloud computing. The main purpose of these IPs is to mask the failure of software or instance from your AWS account.

**10.What is instance meta data,instance user data?**

**A)** Instance metadata is data use to configure or manage the running instance. for example, host name, events, and security groups. User Data specified by the user, for example, you added a new bucked, its unique bucked name will be part of user data.