**Day 3: Assignment**

**1. Explain the types of AWS support plans**

**Ans:** There are 5 types of AWS Support Plans:  Basic, Developer, Business, Enterprise On-Ramp, and Enterprise.

**Basic**: Basic Support offers support for account and billing questions and service quota increases.

**Developer**: Customers with a Developer Support plan have access to these additional features such as Best practice guidance, Client side diagnostic tools, guidance on how to use AWS products, features, and services together, supports an unlimited number of support cases.

**Business**: AWS products, features, and services to use to best support your specific needs, AWS trusted advisor who helps in opportunities to save money, close security gaps, and improve system reliability and performance.

Supports an unlimited number of AWS Identity and Access Management (IAM) users who can open technical support cases.

**Enterprise and Enterprise on ramp**:Application architecture guidance, Infrastructure event management, technical account manager for specific uses cases and applications, Management business reviews.

**2. Explain AWS pricing models.**

**Ans**: There are three fundamental drivers of cost with AWS: **compute, storage, and outbound data transfer** which are further provided with the usage and requirements of an organization or the user.

**Pay as you go -** Pay-as-you-go allows you to easily adapt to changing business needs without over committing budgets and improving your responsiveness to changes. With a pay-as-you-go model, you can adapt your business depending on need and not on forecasts, reducing the risk of over provisioning or missing capacity.   
**Save when you reserve**- For AWS Compute and AWS Machine Learning, Savings Plans offer savings over On-Demand in exchange for a commitment to use a specific amount (measured in $/hour) of an AWS service or a category of services, for a one- or three-year period.  
**Pay less by using more -** With AWS, you can get volume based discounts and realize important savings as your usage increases. For services such as S3, pricing is tiered, meaning the more you use, the less you pay per GB. AWS also gives you options to acquire services that help you address your business needs.

**3. Explain types of reserved instances.**

**Ans**: Reserved Instances are available in 2 options in **Convertible** and **Standard** instances.

**Convertible**: Enables users to modify Availability Zone, networking type, and instance size (within the same instance type) of the Reserved Instance, the instance can also be sold in the reserved instance market.

**Standard**: Enables users to exchange one or more Convertible Reserved Instances for another Convertible Reserved Instance with a different configuration, including instance family, operating system, and tenancy. A standard reserved instance cannot be sold in the Reserved Instance Marketplace.

**4. Explain 5 pricing models available for EC2.**

Ans: The different types of pricing models available are 1. On-demand 2. Reserved 3. Spot instances 4.Dedicated host 5.Saving plans.

**On-demand**: With On-Demand instances, users pay for compute capacity by the hour or the second depending on the type of an instance used. Also the option allows users to increase or decrease your compute capacity depending on the demand.

**Spot instances**: With Spot Instances, users pay the Spot price that's in effect for the time period to which the instances are running. Spot Instance prices are set by Amazon EC2 and adjust gradually based on long-term trends in supply and demand for Spot Instance capacity.

**Dedicated Hosts**: With this option a user or an organization is provided with an individual physical server which can be purchased as a Reservation for up to 70% off the On-Demand price.

**Reserved Instances**: Amazon EC2 Reserved Instances provide you with a discount up to 75% compared to On-Demand Instance pricing. It also provides capacity reservation when used in specific Availability Zone.

**Saving plans**: Savings Plans are a flexible pricing model that offers low prices on EC2 where the user or an organization can provide a commitment to AWS with the minimum usage for 1 year with an available plan of 1 to 3 years.

**5. What are the different options available to pay for reserved instances?**

**Ans:** Reserved Instances provide three payment options: All Upfront, Partial Upfront, and No Upfront.

**All upfront** : Full payment is made at the start of the term, with no other costs or additional hourly charges incurred for the remainder of the term, regardless of hours used.

**Partial upfront**: A portion of the cost must be paid up front and the remaining hours in the term are billed at a discounted hourly rate, regardless of whether you’re using the Reserved Instance.

**No upfront**: No upfront payment is required. You are billed a discounted hourly rate for every hour within the term, regardless of whether the Reserved Instance is being used but a successful billing history is required before you can purchase No Upfront Reserved Instances.

**6. Explain about Savings plan.**

**Ans**: Savings Plans is a flexible pricing model offering lower prices compared to On-Demand pricing, in exchange for a specific usage commitment measured in number of hours used for a one or three-year period.

**Benefits**: Savings plan comes with a few benefits such as Flexible plans, significant savings and is easy to use.

Savings Plans offers significant cost savings in exchange for a commitment to consistent amount of usage for a 1- or 3-year term, with the minimum being 1 year for the user or the organization

**7. Explain about storage pricing.**

**Ans**: Storage prices are basically calculated on the volume of data stored in AWS databases, where the AWS storage system acts similar to the hard disk of a laptop or a computer.

It also depends on the volume of space requested by the user or an organization to store their data, charges will incur even if the entire volume is not occupied since the space on the storage is allocated to the user or an organizations request.