1. What is cloud computing? What is Azure?

Cloud computing is provision of computer services which incl servers, storage, network, software etc without need of managing infrastructure part.

Some of key benefits incl:

- Cost effective
- Performance
- Global scaling
- No infrastructure maintenance/management
- Reliability
- security

Azure is cloud computing platform and infrastructure created by Microsoft -designed to provide services over internet (Ex: Iaas, Paas, Saas)

2. How to create an Azure account list the steps and requirements?

Requirements for creating Azure free account

Basic knowledge of cloud concepts

Valid credit card to register for azure free account which is used only for validity or verification and won't be charged until user's upgrade.

Creating Azure account:

Creating azure account through azure portal is simplest option besides it's the fastest and easiest way for organizations of all sizes to get started with Azure and users can manage Azure deployments and usage as well.

Step by step procedure:

- Visit azure portal
- Select option start free
- Fill in basic info: First / last name, email address, phone number
- Use mobile number for identification or verification purpose
- Review the privacy statement and select sign up

3. Describe different types of cloud models.

Cloud models are of 3 types: Public, Private and Hybrid Cloud

Public cloud is a Saas service offered to users over internet where users can access large pool of computing power over internet. Also, ability to rapidly scale a service. Public cloud has vast spare capacity sufficient for customers needing resources.

Advantages: Public cloud also offers high scalability and elasticity.

Private cloud: Cloud solution dedicated for use in own organization.
Private cloud is customizable to meet the unique business and security needs of the organization. With greater visibility and control into the infrastructure, organizations can operate compliance-sensitive IT workloads without compromising on the security and performance previously only achieved with dedicated on-premises data centers.

Advantages: Custom security, efficient performance, and flexibility

Hybrid cloud: The hybrid cloud is any cloud infrastructure environment that combines both public and private cloud solutions. The resources are typically orchestrated as an integrated infrastructure environment. Apps and data workloads can share the resources between public and private cloud deployment based on organizational business and technical policies

Advantages: Cost control, Policy driven options and Reliability.

4. Describe different cloud services.

Cloud services fall into diff categories such as Iaas, Paas and Saas

Iaas: we rent whole IT infrastructure which incl Servers, Storage, Virtual machines, OS from cloud provider and pay for the services alone.

Paas: Platform as a Service: suited for users like web or app developers assisting in development, testing, delivery and administration of software programs. Using Paas users don't require to configure servers, manage network, storage etc.

Saas: method of delivering software over the internet where cloud providers do manage software app, relevant network infrastructure, security, storage etc… normally for Saas users can connect via browser

Using mobile app,tablet,PC/laptop.

5.What are some cloud computing advantages?

Cloud computing enables business set up virtual office anywhere, anytime with flexibility of connecting your business.

Key advantages of Cloud Computing

Flexibility

Reduced IT cost

Scalability

Business Continuity

High speed (quick deployment)

Automatic upgrades (software)

Lowest margin of failure (data loss, server crash)

Efficiency and cost reduction

6.Differentiate Capital expenses vs. operating expenses

Operating Expense: An expense required for the day-to-day functioning of a business. This means a business incurs an operating expense on a recurring basis. Operating Exp are expenses occurred on day-to-day basis.

Few examples of Operating Exp are: Payroll, Lease, Administrative expense, Utilities etc.

Capital Expense: Capital Exp is incurred to create benefit in the future. Normally CAPEX is long term in nature.

Few examples of Capex are: Purchase of fixed assets, facility upgrades.