Standard offers 50 GB of storage space, while Basic only gives 10 GB.

- operational expenditure model is good for pay as you go, not elastic model.

-cosmos db is not preferable for the build, test, and deploy predictive analytics in AI azure model, instead of that you can use Azure Machine Learning Studio.

- Azure Resource Manager templates be included to create Azure resources automatically

- for a guaranteed availability of 99.99 percent You include two virtual machines and two availability zones in your strategy

- to limit inboud traffic use firewall

- azure key vault is used to store the certificates.

-Cognitive Services is an API that Azure provides, that gives access to a set of pre-built machine learning models including vision services, speech services, knowledge management and chat bots.

-agaility-It refers to the ability to quickly respond to and drive changes in the market

-Microsoft Defender for Cloud - unified security management and threat protection; a security dashboard inside Azure Portal

-Preview features are not fully ready and this phase does not include formal support.

- p2s- WFH to the azure services

-S2s- for the VPN-site-to-site VPN connection with Azure, a VPN Gateway is required on your company's internal network

-the maximum number of virtual machines that can be included in a single Virtual Machine Scale Set-1000

-Serverless model. Azure Logic Apps, Azure Functions, and Azure Service Fabric

-Azure DevOps contains many services, one of which is Pipelines.

-Purview Compliance Manager will track your own compliance with various standards and laws.

-Application Gateway with WAF is generally a good idea for production systems

-Anyone can use a GA service. It is fully supported and can be used for production.

-Cosmos DB - extremely low latency (fast) storage designed for smaller pieces of data quickly; SaaS. Cosmos DB is low latency, and even offers sub 5-ms response times at some levels.

-Having multiple subscriptions can technically be done for any reason, but it only makes sense if you have to separate billing directly, or have actual clients logging into the Portal to manage their resources.

-Public Preview is for anyone to use, but it is not supported nor guaranteed to continue to be available for production use.

-HDIinsight- Hadoop

-Azure App Services, platform as a service, consists of code and configuration.

-Each Azure free account includes 750 hours free for Azure B1S General Purpose Virtual Machines for the first 12 months.

-Azure Cognitive Services is the set of Machine Learning and AI API's

-The customer, such as you, is responsible for keeping the guest operating system (Windows or Linux) updated on an Azure Virtual Machine.

-Blob storage is the default storage account type used by AzCopy.

-The customer, such as you, is responsible for keeping the guest operating system (Windows or Linux) updated on an Azure Virtual Machine

-Ultra Disks are the highest-performing storage option in Azure, specifically designed for intense workloads like SAP HANA or transaction-heavy applications.

-vertical scaling typically involves moving from a smaller machine to a larger (more powerful) machine

-Blob storage is the default storage account type used by AzCopy

-To create a highly available application in Azure, a minimum of two Availability Zones is required

-B2B is for business-to-business collaboration, while B2C is for business-to-customer interactions.

-Data migration and integration are NOT core capabilities of Microsoft Purview

-Managed operating system is NOT a characteristic of Infrastructure as a Service (IaaS)

-Azure Storage accounts have a maximum capacity of 5 Petabytes

-Azure supports up to 1000 instances in a virtual machine scale set

-Containers are designed to package applications and their dependencies in a consistent manner, ensuring that they behave the same way across different environments

-Management in the cloud speaks to HOW you’re able to manage your cloud environment and resources. You do this through the Web Portal, command line, or APIs.

-Management of the cloud speaks to managing your cloud resources. This includes setting up rules for autoscaling servers.

-Site-to-site VPN establishes a secure connection between your on-premises network and Azure over the public Internet

-Azure ExpressRoute provides a private, dedicated connection between your on-premises network and Azure data centers

-The customer is typically responsible for the security and protection of their own data.

-scale out scaling in cloud computing has practically no limit(horizontal scaling)

-Device type is not a condition that can be used in a Conditional Access policy

-Azure Disks are specifically designed to provide block-level storage volumes managed by Azure for use with virtual machines (VMs)

-Azure Blob Storage is designed for storing large amounts of unstructured data, such as text or binary data

- management groups in Azure can be nested, but subscription and resource groups cannot be nested

-public cloud model typically utilizes the consumption-based pricing model

-Table Storage is the correct choice for the lowest-cost NoSQL storage option for structured, non-relational data.

-The Data Protection Addendum is a legal document that specifically outlines the obligations of both you and Microsoft regarding the processing and security of Customer Data and Personal Data in connection with Azure.

-Hot, cool and cold access tiers can be set at the account level. The archive access tiers is NOT available at the account level.

-Microsoft Sentinel is the correct choice as it is a cloud-native SIEM (Security Information and Event Management) service that can collect and analyze log security events from various security services within an enterprise environment.

-All sub-management groups, subscriptions, resource groups, and resources under the management group inherit the assigned permissions.

-In Azure, to automate the creation and management of your cloud environment using infrastructure as code (IaC), you can use tools like Azure Resource Manager (ARM) Templates and Bicep

-A Resource Group can only be associated with a single subscription at a time

-Tags allow you to associate metadata with a resource to help keep track of resource management, costs and optimization, security, and so on.

-An Azure AD tenant can have multiple subscriptions, but an Azure subscription can only be associated with one Azure AD tenant.

-Service health provides incident reports called root cause analysis (RCA).

-A management group tree can support up to six levels of depth.

-The five recommendation categories for Azure Advisor are: Reliability, Security, Performance, Operational Excellence, and Cost.

-composite SLA is always calculated as the product of SLA's

-Autoscaling is the best example of elasticity.

-Azure Budgets is a tool that allows you to set spending limits and create budgets to monitor your Azure resource costs.

-Application Insights is an extension of Azure Monitor and provides application performance monitoring (APM) features

-CapEx is typically a one-time, up-front expenditure to purchase or secure tangible resource

-ARM templates provides a common platform for deploying objects to cloud infrastructure.

-If you are putting two or more Azure Virtual Machines into the same Availability Set, Microsoft offers SLA of 99.95 %

-you need to modify the code and minimize administrative effort on the operating system, you should use Azure App Service i.e. PaaS. you need to run interactively with access to the operating system of the server, you should consider using an Azure Virtual Machine (VM) i.e. IaaS

-You are charged per dedicated hosts not per number of VMs in azure dedicated host.

-Global Administrators in Azure AD have the highest level of access and are responsible for managing users, groups, and other identity-related objects within the directory.

-Resource group does not have nested structure that means you can not have a resource group inside of another resource group.

-You are charged for the virtual machines where AVD runs

-azure Kubernetes Service (AKS) is a managed Kubernetes container orchestration service provided by Microsoft Azure

-Azure Firewall does not encrypt traffic but it is used to allow/block traffic based on source/destination Address, port or protocol.

-At least two or more VMs in an availability set helps highly available applications and meets the 99.95% Azure SLA.

-Azure Functions is a serverless compute service that allows you to build event-driven applications without managing the underlying infrastructure

-Resources don't inherit the tags you apply to a resource group or a subscription

-standard general-purpose v2 storage account type for blobs, file shares, queues, and tables. Recommended for most scenarios using Azure Storage.

-storage account is required to use Azure Cloud Shell.

-Microsoft privacy statement explain what personal data Microsoft process , how Microsoft process it, and its process

-azure policy can be used to enforce tagging values and rules on resources

- trust centre is a great resource for people in your organization who might play a role security, privacy , and compliance.

-Correlate events=Azure Log Analytics

Collect events= Azure Event Hubs

-Azure containers are the backbone of the virtual disks platform for Azure IaaS.

-Archive data must be rehydrated before the data can be accessed.

-Service Trust Portal is the Microsoft public site for publishing audit reports and other compliance-related information relevant to Microsoft’s cloud services. STP users can download audit reports

-Azure Policy can be used to enforce tagging values and rules on resources

-Azure Cost Management is an Azure product that provides a set of tools for monitoring, allocating, and optimizing your Azure costs.

-Load balancing/auto scaling is not supported in basic plan

-Free = 1 GB

Shared = 1 GB

Basic = 10 GB

Standard = 50 GB

Premium = 250 GB

Isolated = 1 TB

-Microsoft Defender for Cloud - unified security management and threat protection; a security dashboard inside Azure Portal

-Purview Compliance Manager will track your own compliance with various standards and laws.

-scaleset 95.55% and different AZ -99.99%

-A defense-in-depth model improves overall security by making it more difficult for attackers to breach multiple layers of security

-In the cloud computing model, the IT infrastructure is typically owned by the vendor, such as Microsoft Azure or Amazon AWS

-public cloud is the consumption based model

-A private cloud is dedicated to a single organization and provides control, customization, and security benefits while maintaining the benefits of cloud computing.

-You are charged per dedicated hosts not per number of VMs.

-azure Arc is the correct choice as it provides the capability to manage resources across multi-cloud and on-premises environments from a single platform.

-A defense in depth strategy uses a series of mechanisms to slow the advancement of an attack that aims to gain unauthorized access to data

- PaaS is designed to support the complete web application lifecycle: building, testing, deploying, managing, and updating.

- After an outage, Service Health provides official incident reports called root cause analysis (RCA), which you can share with stakeholders.

- the databox disk (8TB)

- the data box (100TB)

-databox heavy(1PB)

4 tires access:

-hot storage is the default when you first create the storage account. This is what you get if you don't change it. This is basically a good balance between the cost of storing the data and the cost of retrieving the data.

-Premium, of course, is HOT is the cheapest to access and most expensive to store. Hot is the default.

-Cool is cheaper. you can set cool as the default. It is a little cheaper to store, probably 50% off. And more expensive to read and write.example: log files, maybe you store them as cool because you're not really going to go back to your log files too often. 30 days retention.

-cold, which is even cheaper to store and a little bit more expensive for reads and writes. 90 days retention.

cool tier on general-purpose v2 accounts have a minimum retention duration of 30 days. Objects in the cold tier on general-purpose v2 accounts have a minimum retention duration of 90 days

- Archive tier, It's the cheapest to store. It's basically 90% off the price of hot tier, but it is more expensive to retrieve, and there are significant delays in getting your files back. This is good for anything you have to legally keep. It takes several hours to get these files out of archive.

-The public cloud is defined as computing services offered by third party providers over the public internet, making them available to anyone who wants to purchase them.

-Traffic coming inbound is free, so Microsoft doesn't mind you sending traffic to them.

-there's also a five gigabyte per month free tier for traffic.

-vertical scaling is that there is an upper limit to it, you can get a 96 CPU server with 384 gigabytes of memory. And if that is not enough for your application to run, then you basically have reached the upper limit of the size of a machine.

- in vertical scaling, you are increasing capacity, that does not actually improve your availability. increasing the size of it is scaling up, but there's a limit.

-horizontal scaling,it is scale in or scale out .Then you've scaled out that system by additional four server. The great thing about horizontal scaling is there's really no limits to the amount that you can scale.

- the Azure portal is your web interface to create all the resources. You've got both CLI, a bash scripting, and PowerShell scripting available.

-Being able to programmatically create and manage your resources through arm templates, Azure Bicep, Terraform, and other tools like that.

- owner-level permissions gives you obviously full access to that particular resource or all resources, depending on the role. And it also allows you to assign those permissions to other people. So owners have the unique ability to assign permissions to others.

-The contributor role does give you full access to a resource, but you can't share that permission with anyone else. So you are an administrator, but you can't make other people administrators.

-the reader permission is a read-only type role. So if you ever see a storage account reader, that would imply that you have access to the storage account, but you can't change anything.You can't change the settings, you can't scale it, you can't move folders around, things like that. Reader access implies readaccess.

-Application Insights – a tool for monitoring your web applications performance

-Microsoft Purview is a comprehensive suite of data governance, risk, and compliance tools that offer a unified view into data across on-premises, multicloud, and software-as-a-service environments. Purview Compliance Manager will track your own compliance with various standards and laws.

-Azure Cloud Shell is a browser-based shell tool within the Azure portal that provides users with a command-line interface for creating, configuring, and managing Azure resources.

-Application Insights is an extension of Azure Monitor and provides application performance monitoring (APM) features

- the Azure portal is your web interface to create all the resources. You've got both CLI, a bash scripting, and PowerShell scripting available.

-Azure Firewall does not encrypt traffic but it is used to allow/block traffic based on source/destination Address, port or protocol.

-Log Analytics Workspace is required to collect logs and metrics

-Queue storage is best suited for asynchronous communication, where the sender and receiver do not need to interact in real-time.

-Device type is not a condition that can be used in a Conditional Access policy.