**Azure fundamental assignment 2**

1. **What is serverless computing?**

**Ans-**  Serverless computing means computing is done over cloud and cloud service provider take care of all requirements of developer like computing power, scalability, platform integration and availability of server.

1. **Explain Azure subscriptions, management groups and resources?**

**Ans-** **Azure Subscription -** These are the logical containers which contain information about resources you opt from Azure service like Virtual Machine, Database etc.

**Management groups -** containers that help you manage access, policy, and compliance across multiple subscriptions. Create these containers to build an effective and efficient hierarchy that can be used with Azure Policy and Azure Role Based Access Controls.

**Resources** - The entity provided by Azure as services eg. Database, Virtual Machine etc.

1. **Explain Azure regions, availability zones, and region pairs.**

**Ans-** **Azure regions -** Azure region features datacenters deployed within a latency-defined perimeter. They're connected through a dedicated regional low-latency network. This design ensures that Azure services within any region offer the best possible performance and security.

**Availability zones -** Azure availability zones are physically separate locations within each Azure region that are tolerant to local failures. These failures can be software or hardware related.To ensure resilience, a minimum of three separate availability zones are present in all availability zone-enabled regions.

**Region pairs -** An Azure Region Pair is a relationship between 2 Azure Regions within the same geographic region for disaster recovery purposes. If one of the regions were to experience a disaster or failure, then the services in that region will automatically failover to that region's secondary region in the pair.

1. **Explain Azure Resource Manager, Azure subscription and management group.**

**Ans- Resource Manager** - Azure Resource Manager is the deployment and management service for Azure. It provides a management layer that enables you to create, update, and delete resources in your Azure account. You use management features, like access control, locks, and tags, to secure and organize your resources after deployment.

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1. **Provide overview of Azure Compute Services.**

**Ans** -Azure compute services are the hosting services responsible for hosting and running the application workloads. These include Azure Virtual Machines (VMs), Azure Container Service, Azure App Services, Azure Batch, and Azure ServiceFabric.

1. **What is an Azure virtual machine and when to opt for an Azure virtual machine?**

**Ans-** Azure virtual machine separate working environment over cloud provided by azure, it is a different working environment over your physical system it may consist of the same or different operating system.

Reason for opting Azure virtual machine.-

1. Low cost of hardware compared to physical machines.
2. High scalability.
3. Less risk.
4. Global connectivity with high security.