**Q2 - SCENARIO**

Macro Life, a healthcare company has recently setup the entire Network and Infrastructure on Azure.

The infrastructure has different components such as Virtual N/W, Subnets, NIC, IPs, NSG etc.

The IT team currently has developed PowerShell scripts to deploy each component where all the properties of each resource is set using PowerShell commands.

The business has realized that the PowerShell scripts are growing over period and difficult to handover when new admin onboards in the IT.

The IT team has now decided to move to ARM based deployment of all resources to Azure.

All the passwords are stored in a Azure Service known as key Vault. The deployments needs to be automated using Azure DevOps using IaC(Infrastructure as Code).

*1) What are different artifacts you need to create - name of the artifacts and its purpose*

*2) List the tools you will to create and store the ARM templates.*

*3) Explain the process and steps to create automated deployment pipeline.*

*4) Create a sample ARM template you will use to deploy a Windows VM of any size*

*5) Explain how will you access the password stored in Key Vault and use it as Admin Password in the VM ARM template.*

- In-order to prepare Infrastructure as Code, we can achieve the same by various approaches like AWS Cloudformation Tempelate, or ARM or Terraform Tool Or Cloud CLI command script.

- Either one of the ways the infrastructure can be created by implementing automation script.

- I can prepare aws CFT or Terraform to make infrastructure spin up and provide service.

- I recommend Terraform open source tool for IaC, as this is compatible for any kind of infrastructure creation like AWS, GCP, Azure etc...

Below are sample Terraform script to prepare AWS EC2 machine. Note: The same can be prepared using either AWS CLI command or CFT or ARM