**Manage Azure subscriptions and resources (15-20%)**

**Manage Azure subscriptions**

 assign administrator permissions

 configure cost center quotas and tagging

 configure policies at Azure subscription level

 implement Management Groups

**Analyze resource utilization and consumption**

 configure diagnostic settings on resources

 create baseline for resources

 create and test alerts

 analyze alerts across subscription

 analyze metrics across subscription

 create action groups and action rules

 monitor for unused resources

 monitor spend

 report on spend

 utilize log queries in Azure Monitor

 view alerts in Azure Monitor

**Manage resource groups**

 use Azure policies for resource groups

 configure resource locks

 configure resource policies

 implement and set tagging on resource groups

 move resources across resource groups

 remove resource groups

**Managed role based access control (RBAC)**

 create a custom role

 configure access to Azure resources by assigning roles

 configure management access to Azure

 troubleshoot RBAC

 implement RBAC policies

 assign RBAC Roles

**Implement and manage storage (15-20%)**

**Create and configure storage accounts**

 configure network access to the storage account

 create and configure storage account

 generate shared access signature

 install and use Azure Storage Explorer

 manage access keys

 monitor activity log by using Monitor Logs

 implement Azure storage replication

 implement Azure AD Authentication

**Import and export data to Azure**

 create export from Azure job

 create import into Azure job

 use Azure Data Box

 configure and use Azure blob storage

 configure Azure content delivery network (CDN) endpoints

 use Azure Data Factory to transfer data to Azure

**Configure Azure files**

 create Azure file share

 create Azure File Sync service

 create Azure sync group

 troubleshoot Azure File Sync

**Implement Azure backup**

 configure and review backup reports

 perform backup operation

 create Recovery Services Vault

 create and configure backup policy

 perform a restore operation

**Deploy and manage virtual machines (VMs) (15-20%)**

**Create and configure a VM for Windows and Linux**

 configure high availability

 configure monitoring, networking, storage, and virtual machine size

 deploy and configure scale sets

**Automate deployment of VMs**

 modify Azure Resource Manager (ARM) template

 configure location of new VMs

 configure VHD template

 deploy from template

 save a deployment as an ARM template

 deploy Windows and Linux VMs

**Manage Azure VM**

 add data discs

 add network interfaces

 automate configuration management by using PowerShell Desired State Configuration (DSC) and VM Agent by using custom script extensions

 manage VM sizes

 move VMs from one resource group to another

 redeploy VMs

 soft delete for Azure VMs

**Manage VM backups**

 configure VM backup

 define backup policies

 implement backup policies

 perform VM restore

 Azure Site Recovery

**Configure and manage virtual networks (30-35%)**

**Create connectivity between virtual networks**

 create and configure VNET peering

 create and configure VNET to VNET connections

 verify virtual network connectivity

 create virtual network gateway

**Implement and manage virtual networking**

 configure private and public IP addresses, network routes, network interface, subnets, and virtual network

**Configure name resolution**

 configure Azure DNS

 configure custom DNS settings

 configure private and public DNS zones

**Create and configure a Network Security Group (NSG)**

 create security rules

 associate NSG to a subnet or network interface

 identify required ports

 evaluate effective security rules

 implement Application Security Groups

**Implement Azure load balancer**

 configure internal load balancer

 configure load balancing rules

 configure public load balancer

 troubleshoot load balancing

**Monitor and troubleshoot virtual networking**

 monitor on-premises connectivity

 use Network resource monitoring

 use Network Watcher

 troubleshoot external networking

 troubleshoot virtual network connectivity

**Integrate on premises network with Azure virtual network**

 create and configure Azure VPN Gateway

 create and configure site to site VPN

 configure Express Route

 verify on premises connectivity

 troubleshoot on premises connectivity with Azure

 use Azure network adapter

**Manage identities (15-20%)**

**Manage Azure Active Directory (AD)**

 add custom domains

 Azure AD Join

 configure self-service password reset

 manage multiple directories

**Manage Azure AD objects (users, groups, and devices)**

 create users and groups

 manage user and group properties

 manage device settings

 perform bulk user updates

 manage guest accounts

**Implement and manage hybrid identities**

 install Azure AD Connect, including password hash and pass-through synchronization

 use Azure AD Connect to configure federation with on-premises Active Directory Domain Services (AD DS)

 manage Azure AD Connect

 manage password sync and password writeback

**Implement multi-factor authentication (MFA)**

 configure user accounts for MFA

 enable MFA by using bulk update

 configure fraud alerts

 configure bypass options

 configure Trusted IPs

 configure verification methods