



QUICKSTEP COMPUTER CENTER

National Accreditation Board of Education Training.
(NABET)- Quality council of India) An ISO 9001:2008

*****Microsoft Azure Training Course Syllabus*****

❖ **Cloud Computing**

- ✓ Introduction to Azure
- ✓ Different segments SaaS, PaaS, and IaaS
- ✓ Azure Regions and Data Centers
- ✓ Understanding of Microsoft Azure portal
- ✓ Introduction to all Azure services
- ✓ Windows Azure Subscription
- ✓ Setting Up a Trial Subscription
- ✓ Installation of Azure cmdlets on windows PowerShell

❖ **Azure Virtual Machines**

- ✓ Operating System Images Supported
- ✓ Virtual Machine instances
- ✓ Azure VM types and Pricing
- ✓ Types of Provisioning
- ✓ Disks & Images
- ✓ Virtual Machine management, automation and scripting
- ✓ Cloud Service and Resource Model Deployment
- ✓ Setting up VM in Availability set using Load Balanced Endpoint
- ✓ VM Availability using Availability Sets
- ✓ Creation of VMs with portal, ARM Templates and PowerShell
- ✓ Deploying two VMs in Availability Set and load balancing it

❖ **Introduction to Azure Virtual Network and Services**

- ✓ Types of Azure Virtual Network VNET to VNET, point-to-site and site-to-site, Express Route
- ✓ Creating Virtual Networks in Azure
- ✓ Azure Subnet and IP ranges
- ✓ Endpoints
- ✓ Load Balancing Endpoints
- ✓ Understanding Network ACL and Network Security Group Setting up Private and Public IP
- ✓ Introduction to Azure Traffic Manager
- ✓ Available options in Azure Traffic Manager
- ✓ Understanding of Deployment Traffic Manager
- ✓ Create a VET-to-VNET virtual networks
- ✓ Create a point-to-site virtual network.
- ✓ Create a site-to-site virtual network.
- ✓ Load Balancing using Azure Traffic Manager.

❖ Microsoft Azure Storage

- ✓ Overview of Microsoft Azure Storage
- ✓ Storage Account
- ✓ Storage Account Replication Techniques
- ✓ Protocols and Consistency Model
- ✓ Type of Azure Storage Account
- ✓ Storage Services Blob, Table, queue, File
- ✓ Azure CDN Services, Managed and Unmanaged Disk
- ✓ Provisioning Azure Storage services
- ✓ Create an Azure Storage Account
- ✓ Deploying Blob Storage
- ✓ Deploying Table Storage
- ✓ Deploying Queue Storage
- ✓ Deploying File Storage

❖ Manage AzureActive Directory (AD)

- ✓ Azure Active Directory Overview
- ✓ Self-Service Password Reset
- ✓ Azure AD Identity Protection
- ✓ Integrating SaaS Applications with Azure AD
- ✓ Azure Domains and Tenants
- ✓ Azure Users and Groups
- ✓ Azure Roles
- ✓ Managing Devices
- ✓ Implement Azure Active Directory.
- ✓ Configure Self-Service Password Reset
- ✓ Implement Azure AD Identity Protection
- ✓ Configure integrated SaaS applications
- ✓ Configure domains and tenants, users and groups
- ✓ Manage roles and devices
- ✓ Migration of OnPrem AD Users to Azure AD
- ✓ Configure MFA

❖ Manage App Service Plans

- ✓ App Service Overview
- ✓ App Service monitoring overview
- ✓ Web Role and Worker Role
- ✓ App Service Plan
- ✓ Deploy Web App
- ✓ App Service Diagnostics

❖ Azure SQL Database

- ✓ Understanding Database as a service
- ✓ Difference between SQL server and Azure SQL
- ✓ Advantage and Benefits of SQL database Scaling SQL database
- ✓ Backup and Performance Options Security in Azure
- ✓ SQL Pricing Model
- ✓ Azure SQL Data Warehouse
- ✓ Migrate a database from on premise to SQL Azure

❖ Azure Backup and Site Recovery

- ✓ Azure Vaults
- ✓ Configuring backups
- ✓ Data Protection Manager
- ✓ Azure Site Recovery and Disaster Recovery
- ✓ On Premise Migration using Recovery Services
- ✓ Configure a Recovery Service Vault and backup files from on premise to cloud
- ✓ Site Recovery of a VM
- ✓ Back up of a VM

*****Advanced –Azure*****

❖ Azure ARM Template

- ✓ Introduction to Azure ARM Templates and its content
- ✓ Deploying ARM Template with PowerShell

❖ Configure Serverless Computing

- ✓ Serverless Computing, Functions and Logic Apps
- ✓ Logic Apps
- ✓ Creating a Function App

❖ Manage App Services

- ✓ App Settings
- ✓ Deployment Slots
- ✓ App Settings
- ✓ Deployment Slots

❖ **Data Factory**

- ✓ Introduction to Azure Data Factory
- ✓ Core Concepts – Data sets, Pipelines and activities, Scheduling and execution
- ✓ Run Samples – Customer Profiling
- ✓ Moving Data, Transformation and Analysis
- ✓ Monitoring and managing the Pipelines
- ✓ Common Use Cases and Samples
- ✓ Orchestrating the On-Prem data from SQL DB to Azure DB by creating a data pipeline using Blob storage.

❖ **Azure Container Service**

- ✓ Introduction to Azure Container Service
- ✓ Overview of Containers
- ✓ Introduction to Azure Container Registry
- ✓ Azure Kubernetes Services
- ✓ Introduction
- ✓ Deploy an Azure container registry
- ✓ Build a container image using Azure Container Registry Tasks
- ✓ Deploy the container to an Azure container instance
- ✓ Replicate the container image to multiple Azure datacenters
- ✓ Run Docker containers with Azure Container Instance
- ✓ Run Azure Container Instances
- ✓ Deploying AKS in Azure

❖ **Azure Cosmos DB**

- ✓ Introduction
- ✓ What is a request unit?
- ✓ What is Partition Strategy and Key?
- ✓ Query types
- ✓ Create an Azure Cosmos DB account in the Azure portal
- ✓ Create a database and collection in Azure Cosmos DB
- ✓ Run queries in the Azure portal