Microsoft Azure

Duration: 35-40 Hrs Prerequisites

• Basic Knowledge of Operation & Infrastructure

AWS Course Curriculum

1. Introduction to Cloud

- Define cloud computing.
- Cloud computing Infrastructure.
- The requirements that need to be fulfilled to qualify as a cloud service.
- Cloud service and deployment models.
- Common misconceptions about cloud computing.
- Common cloud Implementations.
- Benefits of Cloud
- Architecture discussion
- Lab preparation

2. Microsoft Azure Basics

- Introduction to Azure
- What is SaaS, PaaS, and IaaS
- Azure Regions and Data Centers
- Understanding of Microsoft Azure portal
- Introduction to all Azure services
- Windows Azure Subscription
- Managing Azure Subscriptions and Resources

3. Deploying and Configuring Infrastructure

- Virtual Machine instances
- Deploying and Managing Virtual Machines (VMs)
- Configuring and Managing Virtual Networks
- Azure VM types and Pricing
- Types of Provisioning
- Disks & Images
- Virtual Machine management, automation and scripting
- Cloud Service and Resource Model Deployment
- Implementing and Managing Storage

4. 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
- Hands-on Lab: Create a VET-to-VNET virtual network
- Hands-on Lab: Create a point-to-site virtual network
- Introduction to Azure Traffic Manager
- Available options in Azure Traffic Manager
- Understanding of Deployment Traffic Manager
- Hands-on Lab: Load Balancing using Azure Traffic Manager

5. Microsoft Azure Storage

- Overview of Microsoft Azure Storage
- Azure Storage Account
- Azure Storage Blobs
- Control Access to Storage Blobs and Containers

- Storage Account Replication Techniques
- Type of Azure Storage Account
- Storage Services Blob, Table, queue, File

6. Module 5: Implement an Azure Active Directory

- Active Directory Fundamentals
- Implement Azure AD Connect
- Multifactor Authentication
- Add custom domains
- Monitor Azure AD
- Configure single sign-on with SaaS applications
- Users and Groups Provisioning
- Configure federation
- Implement Azure AD integration in web and desktop applications
- Create an Azure AD B2C Directory
- Implement B2B collaboration Configure partner users
- Integrate with applications
- Azure AD data sync
- Role-based Access Control
- ADFS and Azure Access Control Service
- Hands-on Lab: Authentication On-Premise app using Azure AD
- Overview and Available features and Media Services
- Azure Notification Hub Services

7. Azure SQL Database

- Introduction about Azure SQLDifference 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

8. Azure Web Apps

- Understanding Web App tiers
- Understanding of Web Job Pricing, Security, Monitoring
- Resource Group and Web Hosting Plans in the New Preview portal
- Supported language
- Deploying Web App
- Deployment sources
- Hand-on Lab: Create, Deploy, Manager
- Deployment
- Benefits
- Roles in Azure Cloud services
- Web Role and Worker Role
- Understanding Fault Domain and Upgrade Domain
- Deployment pipeline

9. Module 8: Azure Backup and Site Recovery

- Azure Vaults
- Configuring backups
- Data Protection Manager
- Azure Site Recovery and Disaster Recovery
- On Premise Migration using Recovery Services
- Hands-on Lab: Configure a vault and backup a server from on premise to cloud On-premise to on premise On-premise to Azure

Preparation for Azure Certifications

- **Doubts clarification session**
- ❖ 500+ practice questions, based on exam format