

# Microsoft Azure

## Module 1

### Introduction to Cloud Computing

1. Understanding different Cloud Models
2. Advantages of Cloud Computing
3. Different Cloud Services
4. What is PaaS/ SaaS/ IaaS

## Module 2

### Microsoft Azure Platform

1. Introduction to Azure
2. Azure Features
3. Azure Services
4. Azure Management Portal
5. Azure Advantages
6. Managing Azure with the Azure portal
7. Managing Azure with Windows PowerShell
8. Overview of Azure Resource Manager
9. Azure management services

## Module 3

### Implementing and managing Azure networking

1. Overview of Azure networking
2. Implementing and managing Azure virtual networks
3. Configuring Azure virtual networks
4. Configuring Azure virtual network connectivity
5. Overview of Azure classic networking

## Module 4

### Implementing virtual machines

1. Overview of Azure Resource Manager virtual machines
2. Planning for Azure virtual machines
3. Deploying Azure Resource Manager virtual machines
4. Authoring Azure Resource Manager templates
5. Overview of classic virtual machines

## Module 5

### Managing virtual machines

1. Configuring virtual machines
2. Configuring virtual machine disks
3. Managing and monitoring Azure virtual machines
4. Managing classic virtual machines

## Module 6

### Implementing Azure App services

1. Introduction to App Service
2. Planning app deployment in App Service
3. Implementing and maintaining web apps
4. Configuring web apps
5. Monitoring web apps and Web Jobs
6. Implementing mobile apps
7. FTP Client(File Share)

## Module 7

### Implementing VM backup, restore

1. Implementing VM backup.
2. Working with SYSPREP
3. Implementing VM restore.
4. Blobs
5. Azure Files
6. Storage Queues
7. Tables

## Module 8

### Azure Storage

1. Implementing Storage in Microsoft Azure
2. Understand Cloud Storage
3. Azure Files
4. Blobs
5. Storage Queues
6. Tables
7. Create and Manage Storage
8. Configure Diagnostics and Monitoring

## Module 9

### Implementing Azure SQL Database

1. Planning and deploying Azure SQL Database
2. Implementing and managing Azure SQL Database
3. Managing Azure SQL Database security
4. Monitoring Azure SQL Database
5. Managing Azure SQL Database business continuity
6. Migrate the on-premises DB to Azurecloud
7. Create database in on-premises and synch with azure cloud
8. Sql Elastic Pool

## Module 10

### Protocols

1. Use protocols
2. Types of protocols
3. Differences between the protocols

## Module 11

### Implementing Azure Active Directory

1. Creating and managing Azure AD tenants
2. Configuring application and resource access with Azure AD
3. Overview of Azure AD Premium
4. Administering Active AD
5. Configuring Multi-Factor Authentication

## Module 12

### Managing Active Directory in a hybrid environment

1. Extending an on-premises Active Directory domain to Azure IaaS
2. Implementing directory synchronization by using Azure AD Connect
3. Implementing federation
4. Configuring directory synchronization
5. Synchronizing directories

## Module 13

### Implementing Azure Load Balancer

1. Create a Basic load balancer
2. Create virtual machines
3. Create a health probe
4. Create back-end servers
5. Create a load balancer rule
6. install IIS on the VM
7. Test the load balancer

## Module 14

### Azure with Power Shell

1. working with PowerShell
2. Create VNet, VM and other services

## Module 15

### Azure with CLI