Microsoft Azure Boot Camp Syllabus

1. **Introduction to Cloud Computing**

   - What is Cloud Computing
   - Advantages of Cloud Computing
   - Types of Cloud's
   - Different Cloud Services SaaS, PaaS and IaaS

2. **Introduction to Microsoft Azure**

   - Overview to Microsoft Azure
   - Azure Regions and Data Centers
   - Overview of Azure Portal
   - Creation of free subscription account in Azure portal
   - Hands on experience for the services
   - Manage Azure subscription, resources and Azure tenants

3. **Overview of Azure Services**

   - Overview to Azure Virtual Machines
   - Overview of VM creation
   - Create and configure a VM for Windows
   - Add data disks
   - Configure high availability
   - Deploy and configure scale sets
   - Add network interfaces
   - Manage VM sizes
   - Redeploy VMs
   - Deploying Custom Images
   - Practical session

4. **Azure Storage Accounts**
   - Implement and manage storage accounts
   - Data replication
   - Azure Storage Explorer
   - Blob Storage
   - Shared access keys
   - Practical Session

5. **Azure Virtual Network**

   - Configure and manage virtual network
   - Configure private and public IP address, network routes
   - Configure network interface, subnets

- Create Security rules
- Associate NSG to a subnet or network interface
- Identify required ports
- Practical Session

6. **Load balancer and Traffic Manager**

- Configure Load balancer and traffic manager
- Overview of Traffic Manager
- Configuring Traffic manager
- Overview and configuring of firewall
- Create and configure VNET peering
- Create and configure VNET to VNET
- Practical Session

7. **Virtual Private Network**

- Overview of VPN's
- Configuring Virtual Network Private Gateway
- Configuring P-T-S VPN
- Verify Virtual Network Connectivity
- Practical Session

8. **Azure App Services**

- Overview of App services
- Deploying the web app
- Configuring the App Services
- Scaling of Websites
- Overview of Logic App's
- Configuring the Logic App's
- Practical Session

9. **Windows Active Directory**

- Creating Windows AD
- Creating Users and Groups
- Creating Custom RBAC policies
- Creating Azure Active Directory (Entra ID)
- Managing Azure Active Directory (Entra ID)
- Integrating Windows D with Azure AD
- Enable the MFA for bulk users
- Practical Session

10. Azure Recovery Service Vault

- Overview of Azure Recovery Service Vault
- Creating Recovery Service Vault
- Create and configure backup policy
- Configure VM backup
- Configure file backup
- Practical Session

11. Azure Backups

- Restore the VM Backups
- Restore the File Backup
- Overview of Disaster Recovery
- Configuring the DR for the VMs
- Replicating the VM's using ASR
- Practical Session

12. Azure Monitoring

- Overview of Azure Monitoring
- Configuring the Alerts
- Creating the Azure alerts using Azure Monitor
- Overview of Azure advisors
- Automating the Patch Management
- Practical Session

13. SQL Servers

- Overview of the SQL Servers
- Configuring the Log Analytic Workspace
- Configuring Logs for Azure services
- Practical Session

14. Azure Database

- Configuring the databases in the Azure
- Advance Capabilities
- Benefits of SQL Database
- Scaling SQL Database
- Practical Session

15. **Database Backup**

- Configuring the database backups
- Configuring the database backups
- Configuring the Authentication for the SQL Databases

- Restoring the Corrupted database
- Practical Session