

# **Technical Guftgu**

(Established under Ministry of MSME, Govt. of India)

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- √ Certificate provided
- ✓ Recordings Provided
- ✓ Classes In Hindi/urdu
- ✓ Expert Trainers

# **MICROSOFT AZURE ADMINISTRATOR-ASSOCIATE (AZ-104)**

#### **OVERVIEW:**

The AZ-104 course equips IT professionals with the skills to manage Azure cloud environments. It covers securing identities, administering infrastructure, configuring virtual networks, and deploying/scaling resources. This prepares you for the Microsoft Azure Administrator certification. This course helps you become an Azure pro, managing storage, computing, networking, and monitoring for a successful cloud career.

### **PRE-REQUISITES:**

Basic Knowledge of Computer network is Enough to do this course.

#### WHO CAN DO THIS COURSE:

- ❖ Any IT professional with a dedicated interest in Azure or someone who is an enthusiastic cloud user.
- Anybody with a network or system or any kind of administration experience.
- Applicable careers include:
  - Database Administration/Security Administrators/Storage Administrators
  - Network Engineers/DevOps Engineers/Server Engineers/Virtualization Engineers
- Honestly, everyone should be using AZ-104 as it has now become the foundation for doing everything including developing applications. Even software developers who are targeting AZ-204 should also do this course.

## TRAINING AT TECHNICAL GUFTGU:

- This course is delivered by Dr. Bhupinder Rajput who has 15+years of experience.
- We teach every topic consequently and them demonstrate the same practically with real time use-cases so that you can directly implement the gained knowledge in your on-job role.
- ❖ You will get courseware which is of a very high standard and will be very helpful in preparation for interviews.
- ❖ You can access videos and live sessions under the same subscription. Videos can be used for learning the subject and practicing. Live sessions can be used for directly interacting with the trainer and clarifying doubts then and there.

#### **COURSE OUTLINE:**

## **Module 1: Cloud Computing Introduction**

Cloud computing delivers on-demand access to computing resources like servers, storage, and databases over the internet for scalability and cost-efficiency.

- What is Cloud Computing
- Cloud Characteristics
- Cloud Computing Service Models
- Deployment Models in Cloud Computing
- Basics of IP Addressing and Virtualisation
- OSI Model and Types of Network

# **Module 2: Getting Started with Azure**

Leverage Microsoft Azure's free tier to experiment with its comprehensive cloud services (storage, computing, database) for cost-effective development and deployment in a scalable, online environment.

- Introduction to Azure
- Why, What and Benefits of Azure
- ❖ Azure Hosting Models
- Azure Services
- Subscribing to Microsoft Azure
- ❖ Azure Portals
- Azure Key Concepts
- Azure Resource Group

#### **Module 3: Azure Virtual Networks**

Azure Virtual Networks (VNets) are the foundation for private networks within Microsoft Azure. They provide a secure environment for your Azure resources, like virtual machines (VMs), to communicate with each other.

- Introduction to Networking
- Introduction to VNet
- Understanding IP Address space
- Creating VNet and Subnet
- Creating NSG and Rules
- NSG Rules in Action
- Advanced NSG and Features
- Application Security Group
- ❖ Azure Bastion
- User-Defined Route Table

- ❖ Azure Firewall
- Public and Private DNS Zone
- About VNet Connectivity
- VNet Peering Connection

## **Module 4: Load Balancing Solutions**

Load balancing solutions distribute incoming traffic across multiple servers or resources, ensuring high availability and performance for your applications.

- ❖ About Availability Set
- About Availability Zones
- ❖ About Azure Load Balancer SKU Type and Tier
- Creating VMs for Load Balancing
- Basic Load Balancer
- NAT Rules in Load Balancer

## **Module 5: Azure Storage Services**

Azure Storage Services offer highly scalable and secure cloud storage for various data types, from blobs for unstructured data to disks for VMs and files for traditional applications.

- Introduction to Azure Storage Service
- Creating a Storage Account
- Working with Containers and Blobs
  - Working with Blob Storage
    - Types of Blobs (Block, Append, Page)
    - Container and Metadata
    - Soft copy
    - Azure Storage Explorer
    - Transfer Data using AZ Copy
    - Programming Blob Storage
    - Async Blob Copy
    - Import and Export Service
    - Implement and configure CDN
    - Configure Custom Domain
    - Scale Blob Storage
    - Storage Service Encryption
- Storage Explorer and AzCopy
- Import Export and other Data Migration Options
- Securing Storage Account using Access Key or SAS Token and Azure AD
- ❖ Firewall and Service Endpoint
- Private Endpoint for Storage Account
- Azure File Storage
- Azure Storage Sync Services

#### **Module 6: Virtual Machines**

Virtual Machines (VMs) are on-demand, cloud-based computers that act like traditional physical machines. You can configure VMs with operating systems and applications to run in the Azure cloud.

- Introduction To Virtual Machine
- Creating Virtual Machine
- Virtual Machine Disk
- Azure Disk Encryption
- Disk Snapshot
- Virtual Machine Scale Sets

# **Module 7: Azure App Services and Web Apps**

Azure App Service provides a platform to easily build, deploy, and scales web apps, APIs, and mobile backends in the cloud.

- Introduction to App Services
- Creating App Services and Publishing WebApp from Visual Studio
- Publish using Downloaded Publish Profile
- Using Deployment Center for Deployment
- ❖ App Service Plan
- Scaling App Service Plans
- ❖ App Service Configuration
- Deployment Slots
- Custom Domain and TLS Certificate
- Backup and Restore
- ❖ App Service Inbound Restrictions
- App Service and VNET Integration

#### **Module 8: Azure Container Registry**

Azure Container Registry acts as a secure, private Docker registry within Azure for storing, managing, and deploying container images.

- Working with Docker Registry
- Working with Container Instances

### **Module 9: Administrating Microsoft Entra ID**

Microsoft Entra ID, formerly Azure Active Directory, empowers IT admins to manage user identities and control access to applications and resources across your organization in a secure cloud environment.

- Introduction Microsoft Entra ID
- About Entra ID Tenant
- Managing Users Groups and Devices
- Self Service Password Reset

Administrative Units

## Module 10: Azure Subscription and RBAC

Explore the various types of Azure subscription and their relationship with Azure Active Directory. Understand how Management Groups and Resource Groups organize resources, and learn about Role-Based Access Control (RBAC) for managing permissions and access.

- About Types of Azure Subscription
- How are Azure Subscriptions and Azure AD Related
- Understanding Management Groups and Resources Groups
- Role-Based Access Control (RBAC)

#### **Module 11: Azure Governance**

Azure Governance establishes guardrails with policies, tools, and processes to manage and secure your Azure resources effectively.

- Azure Policy
- ❖ Azure Blueprint
- Azure Governance-Misc Features

#### **Module 12: ARM Templates and Resources Group**

ARM templates define your Azure infrastructure as code, while Resources Groups act as containers to organize and manage those resources in a single location.

- Introduction to ARM Templates
- Writing And Executing ARM Template
- Linked and Nested Templates

## Module 13: Azure Backup and Restore

Azure Backup safeguards your cloud data (VMs, databases) by creating backups in Azure storage, enabling easy restore when needed for disaster recovery or accidental data loss.

- Introduction to Azure Backup
- Direct Backup and Restore of Azure VM
- Azure Backup Azure VM SQL Server Backup and Restore
- Backup and Restore of On-Premises Physical Machines Files and Folders

## **Module 14: Azure Monitoring and Log Analytics**

Azure Monitor collects and analyzes data from your Azure resources, while Log Analytics allows you to query and gain insights from those logs for proactive management and troubleshooting.

- Azure Monitoring Introduction
- Capture and View Metrics and Logs
- Managing Alerts
- Azure Log Analytic

## **KEY HIGHLIGHTS OF THIS TRAINING PROGRAM:**

- ✓ Entire training programme is in Hindi Language for Better understanding.
- ✓ Special focus on Non technical and Fresher candidates.
- ✓ Resume Preparation for Fresher's and Experienced Both.
- ✓ Provides Recording of each live session which you can access from anywhere anytime for One year.
- ✓ Interview Cracking tips during live sessions.
- ✓ Provide complete notes and books for exam Preparation.
- ✓ Provide Latest Azure Exam dumps for AZ-104 Certification.

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