

## **AZ-900T00: Microsoft Azure Fundamentals**

**Duration : 8 Hours**

### **Audience profile**

As a candidate for this exam, you're a technology professional who wants to demonstrate foundational knowledge of cloud concepts in general and Microsoft Azure in particular. This exam is a common starting point in a journey towards a career in Azure.

You can describe Azure architectural components and Azure services, such as:

- Compute
- Networking
- Storage

You can also describe features and tools to secure, govern, and administer Azure.

You should have skills and experience working with an area of IT, such as:

- Infrastructure management
- Database management
- Software development

### **Skills at a glance**

- Describe cloud concepts (25–30%)
- Describe Azure architecture and services (35–40%)
- Describe Azure management and governance (30–35%)

### **Describe cloud concepts (25–30%)**

#### **Describe cloud computing**

- Define cloud computing
- Describe the shared responsibility model
- Define cloud models, including public, private, and hybrid
- Identify appropriate use cases for each cloud model
- Describe the consumption-based model
- Compare cloud pricing models
- Describe serverless

## **Describe the benefits of using cloud services**

- Describe the benefits of high availability and scalability in the cloud
- Describe the benefits of reliability and predictability in the cloud
- Describe the benefits of security and governance in the cloud
- Describe the benefits of manageability in the cloud

## **Describe cloud service types**

- Describe infrastructure as a service (IaaS)
- Describe platform as a service (PaaS)
- Describe software as a service (SaaS)
- Identify appropriate use cases for each cloud service type (IaaS, PaaS, and SaaS)

## **Describe Azure architecture and services (35–40%)**

### **Describe the core architectural components of Azure**

- Describe Azure regions, region pairs, and sovereign regions
- Describe availability zones
- Describe Azure datacenters
- Describe Azure resources and resource groups
- Describe subscriptions
- Describe management groups
- Describe the hierarchy of resource groups, subscriptions, and management groups

### **Describe Azure compute and networking services**

- Compare compute types, including containers, virtual machines, and functions
- Describe virtual machine options, including Azure virtual machines, Azure Virtual Machine Scale Sets, availability sets, and Azure Virtual Desktop
- Describe the resources required for virtual machines
- Describe application hosting options, including web apps, containers, and virtual machines
- Describe virtual networking, including the purpose of Azure virtual networks, Azure virtual subnets, peering, Azure DNS, Azure VPN Gateway, and ExpressRoute
- Define public and private endpoints

## **Describe Azure storage services**

- Compare Azure Storage services
- Describe storage tiers
- Describe redundancy options
- Describe storage account options and storage types
- Identify options for moving files, including AzCopy, Azure Storage Explorer, and Azure File Sync
- Describe migration options, including Azure Migrate and Azure Data Box

## **Describe Azure identity, access, and security**

- Describe directory services in Azure, including Microsoft Entra ID and Microsoft Entra Domain Services
- Describe authentication methods in Azure, including single sign-on (SSO), multi-factor authentication (MFA), and passwordless
- Describe external identities in Azure, including business-to-business (B2B) and business-to-customer (B2C)
- Describe Microsoft Entra Conditional Access
- Describe Azure role-based access control (RBAC)
- Describe the concept of Zero Trust
- Describe the purpose of the defense-in-depth model
- Describe the purpose of Microsoft Defender for Cloud

## **Describe Azure management and governance (30–35%)**

### **Describe cost management in Azure**

- Describe factors that can affect costs in Azure
- Compare the pricing calculator and the Total Cost of Ownership (TCO) Calculator
- Describe cost management capabilities in Azure
- Describe the purpose of tags

### **Describe features and tools in Azure for governance and compliance**

- Describe the purpose of Microsoft Purview in Azure
- Describe the purpose of Azure Policy
- Describe the purpose of resource locks

## **Describe features and tools for managing and deploying Azure resources**

- Describe the Azure portal
- Describe Azure Cloud Shell, including Azure Command-Line Interface (CLI) and Azure PowerShell
- Describe the purpose of Azure Arc
- Describe infrastructure as code (IaC)
- Describe Azure Resource Manager (ARM) and ARM templates

## **Describe monitoring tools in Azure**

- Describe the purpose of Azure Advisor
- Describe Azure Service Health
- Describe Azure Monitor, including Log Analytics, Azure Monitor alerts, and Application Insights