Exam AZ-900: Microsoft Azure Fundamentals–Skills Measured

Audience Profile

Candidates for this exam should have foundational knowledge of cloud services and how those services are provided with Microsoft Azure. The exam is intended for candidates who are just beginning to work with cloud-based solutions and services or are new to Azure.

Azure Fundamentals exam is an opportunity to prove knowledge of cloud concepts, Azure services, Azure workloads, security and privacy in Azure, as well as Azure pricing and support. Candidates should be familiar with the general technology concepts, including concepts of networking, storage, compute, application support, and application development.

Azure Fundamentals can be used to prepare for other Azure role-based or specialty certifications, but it is not a prerequisite for any of them.

Skills Measured

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive.NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Describe Cloud Concepts (20-25%)

Identify the benefits and considerations of using cloud services

identify the benefits of cloud computing, such as High Availability, Scalability, Elasticity, Agility, and Disaster Recovery

identify the differences between Capital Expenditure (CapEx) and Operational Expenditure (OpEx)describe the consumption-based model

Describe the differences between categories of cloud services

describe the shared responsibility model

describe Infrastructure-as-a-Service (IaaS),describe Platform-as-a-Service (PaaS)describe serverless computing

describe Software-as-a-Service (SaaS)identify a service type based on a use case

Describe the differences between types of cloud computing

define cloud computing

describe Public cloud

describe Private cloud

describe Hybrid cloud

compare and contrast the three types of cloud computing

Describe Core Azure Services (15-20%)

Describe the core Azure architectural components

describe the benefits and usage of Regions and Region Pairs

describe the benefits and usage of Availability Zones

describe the benefits and usage of Resource Groups

describe the benefits and usage of Subscriptions

describe the benefits and usage of Management Groups

describe the benefits and usage of Azure Resource Manager

explain Azure resources

Describe core resources available in Azure

describe the benefits and usage of Virtual Machines, Azure App Services, Azure Container Instances (ACI), Azure Kubernetes Service (AKS), and Windows Virtual Desktop

describe the benefits and usage of Virtual Networks, VPN Gateway, Virtual Network peering, and ExpressRoute

describe the benefits and usage of Container (Blob) Storage, Disk Storage, File Storage, and storage tiers

describe the benefits and usage of Cosmos DB, Azure SQL Database, Azure Database for MySQL, Azure Database for PostgreSQL, and SQL Managed Instance

describe the benefits and usage of Azure Marketplace

Describe core solutions and management tools on Azure (10-15%)

Describe core solutions available in Azure

describe the benefits and usage of Internet of Things (IoT) Hub, IoT Central, andAzure Sphere

describe the benefits and usage of Azure Synapse Analytics, HDInsight, and Azure Databricks

describe the benefits and usage of Azure Machine Learning, Cognitive Services and Azure Bot Service

describe the benefits and usage of serverless computing solutions that include Azure Functions and Logic Apps

describe the benefits and usage of Azure DevOps, GitHub, GitHub Actions, and Azure DevTest Labs

Describe Azure management tools

describe the functionality and usage of the Azure Portal, Azure PowerShell, Azure CLI, Cloud Shell, and Azure Mobile App

describe the functionality and usage of Azure Advisor

describe the functionality and usage of Azure Resource Manager (ARM) templates

describe the functionality and usage of Azure Monitordescribe the functionality and usage of Azure Service Health

Describe general security and network security features (10-15%)Describe Azure security features

describe basic features of Azure Security Center, including policy compliance, security alerts, secure score,and resource hygiene

describe the functionality and usage of Key Vaultdescribe the functionality and usage of Azure Sentinel

describe the functionality and usage of Azure Dedicated Hosts

Describe Azure network security

describe the concept of defense in depth

describe the functionality and usage of Network Security Groups (NSG)describe the functionality and usage of Azure Firewall

describe the functionality and usage of Azure DDoS protection

Describe identity, governance, privacy, and compliance features(20-25%)

Describe core Azure identity services

explain the difference between authentication and authorization define Azure Active Directory describe the functionality and usage of Azure Active Directory