

Exam AZ-900: Microsoft Azure Fundamentals

Understand Cloud Concepts (15-20%)

- Describe the benefits and considerations of using cloud services
 - Understand terms such as High Availability, Scalability, Elasticity, Agility, Fault Tolerance, and Disaster Recovery
 - Understand the principles of economies of scale
 - Understand the differences between Capital Expenditure (CapEx) and Operational Expenditure (OpEx)
 - Understand the consumption-based model
- Describe the differences between Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS)
 - Describe Infrastructure-as-a-Service (IaaS)
 - Describe Platform-as-a-Service (PaaS)
 - Describe Software-as-a-Service (SaaS)
 - Compare and contrast the three different service types
- Describe the differences between Public, Private and Hybrid cloud models
 - Describe Public cloud
 - Describe Private cloud
 - Describe Hybrid cloud
 - Compare and contrast the three different cloud models

Understand Core Azure Services (30-35%)

- Understand the core Azure architectural components
 - Describe Regions
 - Describe Availability Zones
 - Describe Resource Groups
 - Describe Azure Resource Manager
 - Describe the benefits and usage of core Azure architectural components

- Describe some of the core products available in Azure
 - Describe products available for Compute such as Virtual Machines, Virtual Machine Scale Sets, App Service and Functions
 - Describe products available for Networking such as Virtual Network, Load Balancer, VPN Gateway, Application Gateway and Content Delivery Network
 - Describe products available for Storage such as Blob Storage, Disk Storage, File Storage, and Archive Storage
 - Describe products available for Databases such as CosmosDB, Azure SQL Database, Azure Database Migration service, and Azure SQL Data Warehouse
 - Describe the Azure Marketplace and its usage scenarios
- Describe some of the solutions available on Azure
 - Describe Internet of Things (IoT) and products that are available for IoT on Azure such as IoT Fundamentals, IoT Hub and IoT Central
 - Describe Big Data and Analytics and products that are available for Big Data and Analytics such as SQL Data Warehouse, HDInsight and Data Lake Analytics
 - Describe Artificial Intelligence (AI) and products that are available for AI such as Azure Machine Learning Service and Studio
 - Describe Serverless computing and Azure products that are available for serverless computing such as Azure Functions, Logic Apps and App grid
 - Describe the benefits and outcomes of using Azure solutions
- Understand Azure management tools
 - Understand Azure tools such as Azure CLI, PowerShell, and the Azure Portal
 - Understand Azure Advisor

Understand Security, Privacy, Compliance, and Trust (25-30%)

- Understand securing network connectivity in Azure
 - Describe Azure Firewall
 - Describe Azure DDoS Protection
 - Describe Network Security Group (NSG)
 - Choose an appropriate Azure security solution
- Describe core Azure Identity services

- Understand the difference between authentication and authorization
- Describe Azure Active Directory
- Describe Azure Multi-Factor Authentication
- Describe security tools and features of Azure
 - Describe Azure Security
 - Understand Azure Security center usage scenarios
 - Describe Key Vault
 - Describe Azure Information Protection (AIP)
 - Describe Azure Advanced Threat Protection (ATP)
- Describe Azure governance methodologies
 - Describe Azure Policies
 - Describe Initiatives
 - Describe Role-Based Access Control (RBAC)
 - Describe Locks
 - Describe Azure Advisor security assistance
- Understand monitoring and reporting options in Azure
 - Describe Azure Monitor
 - Describe Azure Service Health
 - Understand the use cases and benefits of Azure Monitor and Azure Service Health
- Understand privacy, compliance and data protection standards in Azure
 - Understand industry compliance terms such as GDPR, ISO and NIST
 - Understand the Microsoft Privacy Statement
 - Describe the Trust center
 - Describe the Service Trust Portal
 - Describe Compliance Manager
 - Determine if Azure is compliant for a business need

- Understand Azure Government services
- Understand Azure Germany services

Understand Azure Pricing and Support (25-30%)

- Understand Azure subscriptions
 - Describe an Azure Subscription
 - Understand the uses and options with Azure subscriptions
- Understand planning and management of costs
 - Understand options for purchasing Azure products and services
 - Understand options around Azure Free account
 - Understand the factors affecting costs such as resource types, services, locations, ingress and egress traffic
 - Understand Zones for billing purposes
 - Understand the Pricing calculator
 - Understand the Total Cost of Ownership (TCO) calculator
 - Understand best practices for minimizing Azure costs such as performing cost analysis, creating spending limits and quotas, and using tags to identify cost owners; use Azure reservations; use Azure Advisor recommendations
 - Describe Azure Cost Management
- Understand the support options available with Azure
 - Understand support plans that are available such as Dev, Standard, Professional Direct and Premier
 - Understand how to open a support ticket
 - Understand available support channels outside of support plan channels
 - Describe the Knowledge Center
- Describe Azure Service Level Agreements (SLAs)
 - Describe a Service Level Agreement (SLA)
 - Determine SLA for a particular Azure product or service
- Understand service lifecycle in Azure

- Understand Public and Private Preview features
- Understand how to access Preview features
- Understand the term General Availability (GA)
- Monitor feature updates