Microsoft Azure Fundamentals (AZ-900)

Duration: 1 Months (20 hrs.)

1. Cloud Computing Concepts

Benefits and considerations of using cloud services

- Benefits of cloud computing, such as High Availability, Scalability, Elasticity, Agility, and Disaster Recovery
- Differences in Capital Expenditure (CapEx) & Operational Expenditure (OpEx)
- Consumption-based model

Differences between categories of cloud services

- Shared responsibility model
- Infrastructure-as-a-Service (IaaS),
- Platform-as-a-Service (PaaS)
- Serverless computing
- Software-as-a-Service (SaaS)

Differences between types of cloud computing

- Define cloud computing
- Public cloud
- Private cloud
- Hybrid cloud
- Compare and contrast the three types of cloud computing

2. Azure Services

Azure architectural components

- Regions and Region Pairs
- Availability Zones
- Resource Groups
- Subscriptions
- Management Groups
- Azure Resource Manager
- Explain Azure resources

Core resource available in Azure

- Virtual Machines, Azure App Services, Azure Container Instances (ACI), Azure Kubernetes Service (AKS), and Windows Virtual Desktop
- Virtual Networks, VPN Gateway, Virtual Network peering, and ExpressRoute
- Container (Blob) Storage, Disk Storage, File Storage, and storage tiers
- Cosmos DB, Azure SQL Database, Azure Database for MySQL, Azure Database for PostgreSQL, and SQL Managed Instance
- Azure Marketplace

3. Core solutions and management tools on Azure

Core solutions available in Azure

- Internet of Things (IoT) Hub, IoT Central, and Azure Sphere
- Azure Synapse Analytics, HDInsight, and Azure Databricks
- Azure Machine Learning, Cognitive Services and Azure Bot Service
- Serverless computing solutions that include Azure Functions & Logic Apps
- Azure DevOps, GitHub, GitHub Actions, and Azure DevTest Labs

Azure management tools

- Azure Portal, Azure PowerShell, Azure CLI, Cloud Shell, and Azure Mobile App
- Azure Advisor
- Azure Resource Manager (ARM) templates
- Azure Monitor
- Azure Service Health

4. General security and network security features

- Azure security features
- Azure Security Center, including policy compliance, security alerts, secure score, and resource hygiene
- Key Vault
- Azure Sentinel
- Azure Dedicated Hosts

Azure network security

- Concept of defense in depth
- Network Security Groups (NSG)
- Azure Firewall
- Azure DDoS protection

5. Identity, governance, privacy, and compliance features

Core Azure identity services

- Difference between authentication and authorization
- Azure Active Directory
- Conditional Access, Multi-Factor Authentication (MFA), and Single Sign-On (SSO)

Azure governance features

- Role-Based Access Control (RBAC)
- Resource locks
- Tags
- Azure Policy
- Azure Blueprints
- Cloud Adoption Framework for Azure

Privacy and compliance resources

- Microsoft core tenets of Security, Privacy, and Compliance
- Microsoft Privacy Statement, Online Services Terms (OST) and Data Protection Amendment (DPA)
- Trust Center
- Azure compliance documentation
- Azure Sovereign Regions (Azure Government cloud services and Azure China cloud services)

6. Azure cost management and Service Level Agreements

Methods for planning and managing costs

- Factors that can affect costs (resource types, services, locations, ingress and egress traffic)
- Factors that can reduce costs (reserved instances, reserved capacity, hybrid use benefit, spot pricing)
- Pricing calculator and the Total Cost of Ownership (TCO) calculator
- Azure Cost Management

Azure Service Level Agreements (SLAs) and service lifecycles

- Azure Service Level Agreement (SLA)
- Identify actions that can impact an SLA (i.e. Availability Zones)
- Service lifecycle in Azure (Public Preview and General Availability)

Contact Us

SkillPetals
B-609, Mehak Jeevan
Raj Nagar Extension
Ghaziabad-201003
Uttar Pradesh, India

Mobile: +91 82876 64554
E-mail: info@skillpetals.com
Website: https://www.skillpetals.com/