AZ-900: Microsoft Azure Fundamentals Sample Questions

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Microsoft is exploring the possibility of providing sample questions as an exam preparation resource, and we would like your feedback. While we prefer that you complete the survey after taking the exam, you may complete it at any time. Thank You!

User Guide

These sample questions are intended to provide an overview of the style, wording, and difficulty of the questions that you are likely to experience on this exam. These questions are **not** the same as what you will see on the exam nor is this document illustrative of the length of the exam or its complexity (e.g., you may see additional question types, multiple case studies, and possibly labs). These questions are **examples** only to provide insight into what to expect on the exam and help you determine if additional preparation is required.

In the first section, you will find the questions without answers so that you can test your knowledge. In the second section, the answer, a rationale, and a URL that will link you to additional information is provided immediately below each question.

Contents

Questions

Question # 1 (Multiple Choice)

Which Azure Active Directory (Azure AD) feature is used to provide access to resources based on organizational policies?

    A. multi-factor authentication (MFA)
    B. single sign-on (SSO)
    C. administrative units
    D. Conditional Access

Question # 2 (Sentence Completion)

Select the answer that correctly completes the sentence.

Single sign-on (SSO) is _____ method that enables users to sign in the first time and access various applications and resource by using same password.

    A. a validation
    B. an authentication
    C. a configuration
    D. an authorization

Question # 3 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Pricing calculator	_____ 1. Estimates workload costs
B. TCO calculator	_____ 2. Estimates the cost savings by comparing datacenter costs to running the same workload on Azure
C. Cost management	_____ 3. Helps control, analyze, and optimize workload costs

Question # 4 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ is a repeatable set of governance tools that helps development teams quickly build and create new environments while adhering to organizational compliance to speed up development and deployment.

    A. Azure DevOps
    B. A Continuous Integration/Continuous Deployment (CI/CD) pipeline configuration
    C. Azure Blueprints
    D. Azure Policy

Question # 5 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Infrastructure as a service (IaaS)	_____ 1. Provides hosting and management of an application and its underlying infrastructure, as well as any maintenance, upgrades, and security patching
B. Platform as a service (PaaS)	_____ 2. Provides a fully managed environment for developing, testing, delivering, and managing cloud-based applications
C. Software as a service (SaaS)	_____ 3. Provides servers and virtual machines, storage, networks, and operating systems on a pay-as-you-go basis

Question # 6 (Multiple Choice)

Which cloud approach is used by organizations to take full advantage of on-premises technology investments and allows data and applications to be shared between two environments?

A. public cloud
B. private cloud
C. hybrid cloud
D. on-premises datacenter

Question # 7 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ copies data to a secondary region from the primary region across multiple datacenters that are located many miles apart.

A. Premium storage
B. Zone redundant storage (ZRS)
C. Geo-redundant storage (GRS)
D. Locally-redundant storage (LRS)

Question # 8 (Multiple Choice)

Which option is used to set the communication between an on-premises VPN device and an Azure VPN gateway through an encrypted tunnel over the internet?

A. ExpressRoute
B. Point-to-Site (P2S) VPN
C. Site-to-Site VPN

Question # 9 (Sentence Completion)

Select the answer that correctly completes the sentence.

You use _____ to organize resources in an Azure subscription.

    A. Azure regions
    B. Resource groups
    C. Management groups
    D. Administrative units

Question # 10 (Multiple Choice)

Which defense in depth layer uses distributed denial of service (DDoS) protection?

    A. Physical security layer
    B. Perimeter layer
    C. Network layer
    D. Application layer

Question # 11 (Multiple Choice)

Which Azure serverless computing technology provides the ability to execute workflows to automate business scenarios by using triggers without writing any code?

    A. Azure Functions
    B. Azure Logic Apps
    C. Azure Front Door
    D. Azure DevOps

Question # 12 (Multiple Choice)

What can you use to launch the Azure Cloud Shell?

    A. Azure portal
    B. Azure PowerShell
    C. Azure Command Line Interface (CLI)
    D. Azure Resource Manager (ARM) template

Question # 13 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ enables you to scale to thousands of virtual machines for high-performance computing and large-scale parallel jobs.

A. An Azure virtual machine scale set
B. An availability set
C. Azure Batch
D. An availability zone

Question # 14 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Azure Resource Locks	_____ 1. Rapidly provisions and runs new environments with the knowledge that they are in line with the organization's compliance requirements
B. Azure Blueprints	_____ 2. Enforces standards and assess compliance across your organization
C. Azure Policy	_____ 3. Prevents resources from being accidentally deleted or changed

Question # 15 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ enables you to provision a group of matching and load-balanced virtual machines in Azure.

A. Azure Logic Apps
B. An availability set
C. An Azure virtual machine scale set
D. Azure Load Balancer

Question # 16 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____in Azure enables you to deploy Azure resources close to the users.

A. Elasticity
B. Scalability
C. Geo-distribution
D. High availability

Question # 17 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ is supported by ExpressRoute for connecting an on-premises network to Azure.

    A. A Point-to-Site VPN
    B. A point-to-point Ethernet connection
    C. A Site-to-Site VPN
    D. Azure Peering service

Question # 18 (Multiple Choice)

Which Azure feature enables you to organize multiple subscriptions in hierarchies for unified policies and compliance?

    A. Resource groups
    B. Management groups
    C. Azure Active Directory (Azure AD)
    D. Azure Container Instances

Question # 19 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ alerts you when service issues occur in an Azure environment, such as a regional Azure outage that affects all Azure customers.

    A. Azure Monitor
    B. Azure Advisor
    C. Azure Service Health
    D. Azure Application Insights

Question # 20 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Authorization	_____ 1. Confirms the identity of a person who wants access
B. Authentication	_____ 2. Grants the proper access to a legitimate user

Questions and Answers

Question # 1 (Multiple Choice)

Which Azure Active Directory (Azure AD) feature is used to provide access to resources based on organizational policies?

    A. multi-factor authentication (MFA)
    B. single sign-on (SSO)
    C. administrative units
    D. Conditional Access

Answer:	D
Objective:	2.4 Describe Azure identity, access, and security
Rationale:	Conditional Access is the tool used by Azure Active Directory to allow (or deny) access to resources based on identity signals. Conditional access is a more refined MFA (multifactor authentication) method.
URL:	https://docs.microsoft.com/en-us/learn/modules/secure-access-azure-identity-services/4-what-are-mfa-conditional-access

Question # 2 (Sentence Completion)

Select the answer that correctly completes the sentence.

Single sign-on (SSO) is _____ method that enables users to sign in the first time and access various applications and resource by using same password.

    A. a validation
    B. an authentication
    C. a configuration
    D. an authorization

Answer:	B
Objective:	2.4 Describe Azure identity, access, and security
Rationale:	Single sign-on is an authentication method that allows users to sign in using one set of credentials to login across applications. Single sign-on makes it easier to manage passwords and increases security capabilities.
URL:	https://docs.microsoft.com/en-us/learn/modules/secure-access-azure-identity-services/3-what-is-azure-active-directory

Question # 3 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Pricing calculator	_____ 1. Estimates workload costs
B. TCO calculator	_____ 2. Estimates the cost savings by comparing datacenter costs to running the same workload on Azure
C. Cost management	_____ 3. Helps control, analyze, and optimize workload costs

Answer:	A1, B2, C3
Objective:	3.1 Describe cost management in Azure
Rationale:	Pricing calculator helps you to estimate workload cost.
	TCO Calculator provided approximate cost savings of operating similar workload on Azure to on-premises datacenter.
	Azure Cost Management helps to understand Azure bill, manage account.
URL:	https://docs.microsoft.com/en-us/learn/modules/plan-manage-azure-costs/

Question # 4 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ is a repeatable set of governance tools that helps development teams quickly build and create new environments while adhering to organizational compliance to speed up development and deployment.

A. Azure DevOps
B. A Continuous Integration/Continuous Deployment (CI/CD) pipeline configuration
C. Azure Blueprints
D. Azure Policy

Answer:	C
Objective:	3.2 Describe features and tools in Azure for governance and compliance
Rationale:	Sometimes Cloud environment grow beyond just one subscription, in that case Azure Blueprints help to scale the configuration. Azure Blueprints help with repeatable tasks so that development teams rapidly build and deploy new environments and speed the overall development and deployment phases.
	Blueprints are a declarative way to orchestrate the deployment of various resource templates.
URL:	https://docs.microsoft.com/en-us/learn/modules/build-cloud-governance-strategy-azure/8-govern-subscriptions-azure-blueprints

Question # 5 (Matching)

Match the services on the left to the correct descriptions on the right.

Services

A. Infrastructure as a service (IaaS)
B. Platform as a service (PaaS)
C. Software as a service (SaaS)

Descriptions

_____ 1. Provides hosting and management of an application and its underlying infrastructure, as well as any maintenance, upgrades, and security patching
_____ 2. Provides a fully managed environment for developing, testing, delivering, and managing cloud-based applications
_____ 3. Provides servers and virtual machines, storage, networks, and operating systems on a pay-as-you-go basis

Answer:	A3, B2, C1
Objective:	1.3 Describe cloud service types
Rationale:	Infrastructure as a service (IaaS) -Offers necessary compute, storage, and networking assets on demand, on a pay-as-you-go basis. Platform as a service (PaaS) - Provide complete development and deployment environment in the cloud, with assets that enable to deliver simple cloud-based apps to cloud-enabled enterprise applications. Software as a service (SaaS) -Host and manage the software application and underlying infrastructure.
URL:	https://docs.microsoft.com/en-us/learn/modules/fundamental-azure-concepts/categories-of-cloud-services

Question # 6 (Multiple Choice)

Which cloud approach is used by organizations to take full advantage of on-premises technology investments and allows data and applications to be shared between two environments?

    A. public cloud
    B. private cloud
    C. hybrid cloud
    D. on-premises datacenter

Answer:	C
Objective:	1.1 Describe cloud computing
Rationale:	Public clouds (For example Microsoft Azure) owned and operated by third-party cloud service providers, to deliver their computing resources such as servers and storage over the Internet. Cloud Provider manage all hardware, software, and other supporting infrastructure. A private cloud refers to cloud computing resources used exclusively by a individual business. A private cloud can be physically located on the company's on-site data Centre. A Hybrid cloud is a type of cloud computing that combines on-premises infrastructure or a private cloud with a public cloud. Hybrid clouds allow data and apps to move between the two environments.
URL:	https://docs.microsoft.com/en-us/learn/modules/fundamental-azure-concepts/types-of-cloud-computing

Question # 7 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ copies data to a secondary region from the primary region across multiple datacenters that are located many miles apart.

    A. Premium storage
    B. Zone redundant storage (ZRS)
    C. Geo-redundant storage (GRS)
    D. Locally-redundant storage (LRS)

Answer:	C
Objective:	2.3 Describe Azure storage services
Rationale:	Geo-redundant storage (GRS) -Replicates your data to a secondary region that is in different geographic locations from the primary region.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-architecture-fundamentals/regions-availability-zones

Question # 8 (Multiple Choice)

Which option is used to set the communication between an on-premises VPN device and an Azure VPN gateway through an encrypted tunnel over the internet?

- A. ExpressRoute
- B. Point-to-Site (P2S) VPN
- C. Site-to-Site VPN

Answer:	C
Objective:	2.2 Describe Azure compute and networking services
Rationale:	Site-to-site VPN: Established between on-premises VPN device and an Azure VPN Gateway that is deployed in a virtual network. This connection type allow communication between any on-premises authorize resource to access a virtual network through an encrypted tunnel.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-architecture-fundamentals/regions-availability-zones

Question # 9 (Sentence Completion)

Select the answer that correctly completes the sentence.

You use _____ to organize resources in an Azure subscription.

- A. Azure regions
- B. Resource groups
- C. Management groups
- D. Administrative units

Answer:	B
Objective:	2.1 Describe the core architectural components of Azure
Rationale:	Azure resources are combined into resource groups, which act as logical containers into which Azure resources like web apps, databases, and storage accounts are deployed and managed.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-architecture-fundamentals/overview

Question # 10 (Multiple Choice)

Which defense in depth layer uses distributed denial of service (DDoS) protection?

    A.   Physical security layer
    B.   Perimeter layer
    C.   Network layer
    D.   Application layer

Answer:	B
Objective:	2.4 Describe Azure identity, access, and security
Rationale:	The perimeter layer uses distributed denial of service (DDoS) protection to filter large-scale attacks before they can cause a denial of service for users.
URL:	https://docs.microsoft.com/en-us/learn/modules/secure-network-connectivity-azure/2-what-is-defense-in-depth

Question # 11 (Multiple Choice)

Which Azure serverless computing technology provides the ability to execute workflows to automate business scenarios by using triggers without writing any code?

    A.   Azure Functions
    B.   Azure Logic Apps
    C.   Azure Front Door
    D.   Azure DevOps

Answer:	B
Objective:	2.2 Describe Azure compute and networking services
Rationale:	Azure Logic Apps are designed in a web-based designer and can execute logic triggered by Azure services without writing any code.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-compute-fundamentals/azure-functions

Question # 12 (Multiple Choice)

What can you use to launch the Azure Cloud Shell?

- A. Azure portal
- B. Azure PowerShell
- C. Azure Command Line Interface (CLI)
- D. Azure Resource Manager (ARM) template

Answer:	A
Objective:	3.3 Describe features and tools for managing and deploying Azure resources
Rationale:	Azure Cloud Shell is an interactive, authenticated, browser-accessible shell for managing Azure resources. It provides the flexibility of choosing the shell experience that best suits the way you work, either Bash or PowerShell. Azure You can access the Cloud Shell in three ways: - Direct link: Open a browser to https://shell.azure.com. - Azure portal: Select the Cloud Shell icon on the Azure portal - Code snippets: On docs.microsoft.com and Microsoft Learn, select the Try It button
URL:	https://docs.microsoft.com/en-us/azure/cloud-shell/overview

Question # 13 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ enables you to scale to thousands of virtual machines for high-performance computing and large-scale parallel jobs.

- A. An Azure virtual machine scale set
- B. An availability set
- C. Azure Batch
- D. An availability zone

Answer:	C
Objective:	2.2 Describe Azure compute and networking services
Rationale:	Azure Batch allows you to scale to thousands of virtual machines for high-performance computing (HPC) and large-scale parallel jobs. Other Azure functionalities allow you to scale multiple VMs, but only Azure Batch will allow for thousands of VMs for HPC.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-compute-fundamentals/azure-virtual-machines

Question # 14 (Matching)

Match the services on the left to the correct descriptions on the right.

Services	Descriptions
A. Azure Resource Locks B. Azure Blueprints C. Azure Policy	_____ 1. Rapidly provisions and runs new environments with the knowledge that they are in line with the organization's compliance requirements _____ 2. Enforces standards and assess compliance across your organization _____ 3. Prevents resources from being accidentally deleted or changed

Answer:	A3, B1, C2
Objective:	3.2 Describe features and tools in Azure for governance and compliance
Rationale:	**Resource locks** can be used to prevent resources from being accidentally deleted or changed. Even with role-based access control policies in place there is still a risk that people with the right level of access could delete a critical resource. Azure Resource Manager locks prevent users from accidentally deleting or modifying a critical resource, and can be applied to a subscription, a resource group, or a resource **Azure Blueprints** provide a way to define a repeatable set of Azure resources. Azure Blueprints enable development teams to rapidly provision and run new environments, with the knowledge that they're in line with the organization's compliance requirements. Teams can also provide Azure resources across several subscriptions simultaneously, meaning they can achieve shorter development times and quicker delivery. **Azure Policy** is designed to help enforce standards and assess compliance across your organization. Through its compliance dashboard, you can access an aggregated view to help evaluate the overall state of the environment. You can drill down to a per-resource, or per-policy level granularity. You can also use capabilities like bulk remediation for existing resources and automatic remediation for new resources, to resolve issues rapidly and effectively
URL:	https://docs.microsoft.com/en-us/learn/modules/build-cloud-governance-strategy-azure/

Question # 15 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ enables you to provision a group of matching and load-balanced virtual machines in Azure.

A. Azure Logic Apps
B. An availability set
C. An Azure virtual machine scale set
D. Azure Load Balancer

Answer:	C
Objective:	2.2 Describe Azure compute and networking services

Rationale:	Virtual machine scale enables you to provision a group of matching and load-balanced virtual machines in Azure. Imagine you are running a website that enables scientists to upload astronomy images that need to be processed. If you duplicated the VM, you would normally need to configure an additional service to route requests between multiple instances of the website. Virtual machine scale sets could do that work for you.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-compute-fundamentals/azure-virtual-machines

Question # 16 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____in Azure enables you to deploy Azure resources close to the users.

A. Elasticity
B. Scalability
C. Geo-distribution
D. High availability

Answer:	C
Objective:	1.2 Describe the benefits of using cloud services
Rationale:	Because of geo-distribution you can deploy apps and data to regional datacenters around the globe, thereby ensuring that your customers always have the best performance in their region.
URL:	https://docs.microsoft.com/en-us/learn/modules/fundamental-azure-concepts/benefits-of-cloud-computing

Question # 17 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ is supported by ExpressRoute for connecting an on-premises network to Azure.

- A. A Point-to-Site VPN
- B. A point-to-point Ethernet connection
- C. A Site-to-Site VPN
- D. Azure Peering service

Answer:	B
Objective:	2.2 Describe Azure compute and networking services
Rationale:	A Point-to-point Ethernet connection is supported by ExpressRoute for connecting your on-premises network to Azure. The three models that ExpressRoute supports are: • CloudExchange colocation • Point-to-point Ethernet connection • Any-to-any-connection
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-networking-fundamentals/express-route-fundamentals

Question # 18 (Multiple Choice)

Which Azure feature enables you to organize multiple subscriptions in hierarchies for unified policies and compliance?

- A. Resource groups
- B. Management groups
- C. Azure Active Directory (Azure AD)
- D. Azure Container Instances

Answer:	B
Objective:	2.1 Describe the core architectural components of Azure
Rationale:	Management groups help you manage access, policy, and compliance for multiple subscriptions. All subscriptions in a management group automatically inherit the conditions applied to the management group.
URL:	https://docs.microsoft.com/en-us/learn/modules/azure-architecture-fundamentals/overview

Question # 19 (Sentence Completion)

Select the answer that correctly completes the sentence.

_____ alerts you when service issues occur in an Azure environment, such as a regional Azure outage that affects all Azure customers.

A. Azure Monitor
B. Azure Advisor
C. Azure Service Health
D. Azure Application Insights

Answer:	C
Objective:	3.4 Describe monitoring tools in Azure
Rationale:	Azure Service Health alerts you about service issues that happen in Azure itself, such as a regional Azure outage
URL:	https://docs.microsoft.com/en-us/learn/modules/monitoring-fundamentals/2-identify-product-options

Question # 20 (Matching)

Match the services on the left to the correct descriptions on the right.

Services
A. Authorization
B. Authentication

Descriptions
_____ 1. Confirms the identity of a person who wants access
_____ 2. Grants the proper access to a legitimate user

Answer:	A2, B1	
Objective:	2.4 Describe Azure identity, access, and security	
Rationale:	Authentication	To confirm the identity of a person who wants access. Authentication is the process of establishing the identity of a person or service that wants to access a resource.
	Authorization	To grant the proper access to a legitimate user. Authorization is the process of establishing what level of access a legitimate user or service should have.
URL:	https://docs.microsoft.com/en-us/learn/modules/secure-access-azure-identity-services/2-compare-authentication-authorization	