

MICROSOFT AZ-305 PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

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- 1. What is an Azure Virtual Network Gateway used for?**
 - A. To route traffic between Azure services
 - B. To send encrypted traffic between an Azure virtual network and an on-premises location
 - C. To manage network connections for hybrid applications
 - D. To facilitate public access to private endpoints
- 2. What is the primary use of Azure Blob Storage?**
 - A. To store structured data
 - B. To store unstructured data such as documents, images, and videos
 - C. To serve as a database for relational data
 - D. To manage user access for applications
- 3. Which Azure resource is specifically tasked with logs related to RBAC permissions changes?**
 - A. Azure Activity Log
 - B. Azure Resource Manager
 - C. Azure Monitor
 - D. Azure Resource Graph
- 4. What should be included in the recommendation to meet the application development requirements?**
 - A. The Azure App Configuration service
 - B. An Azure Container Registry instance
 - C. Deployment slots
 - D. Continuous Integration/Continuous Deployment (CI/CD) sources
- 5. What should you deploy on a virtual machine running Windows Server 2019 to support Azure Data Factory integration with Azure Data Lake Storage?**
 - A. the On-premises data gateway
 - B. the Azure Pipelines agent
 - C. the self-hosted integration runtime
 - D. the Azure File Sync agent

- 6. When migrating an application to Azure, which Azure Storage option is best suited for hosting data considering security requirements?**
- A. A general-purpose storage account
 - B. An Azure File Share
 - C. A Blob storage account
 - D. A private endpoint within a storage account
- 7. Which Azure service should be part of a solution for provisioning and managing a High Performance Computing (HPC) cluster that uses a third-party scheduler?**
- A. Azure Automation
 - B. Azure CycleCloud
 - C. Azure Purview
 - D. Azure Lighthouse
- 8. What Azure service should be used to manage and organize network resources seamlessly?**
- A. Azure Resource Manager
 - B. Azure Traffic Manager
 - C. Azure Load Balancer
 - D. Azure App Service
- 9. Which service is utilized for analyzing large volumes of data in Azure?**
- A. Azure Data Lake Storage
 - B. Azure Machine Learning
 - C. Azure Synapse Analytics
 - D. Azure Cognitive Services
- 10. Which Azure feature would you enable to automatically apply governance and compliance requirements when provisioning resources?**
- A. Azure Policy
 - B. Azure Role-Based Access Control
 - C. Azure Resource Manager Templates
 - D. Azure Blueprints

Answers

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1. B
2. B
3. A
4. C
5. C
6. D
7. B
8. A
9. C
10. A

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Explanations

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1. What is an Azure Virtual Network Gateway used for?

- A. To route traffic between Azure services
- B. To send encrypted traffic between an Azure virtual network and an on-premises location**
- C. To manage network connections for hybrid applications
- D. To facilitate public access to private endpoints

An Azure Virtual Network Gateway is primarily designed to enable secure communication between an Azure virtual network and an on-premises location. This is accomplished through the use of encrypted connections, typically via VPN or ExpressRoute. The gateway functions as a key component in hybrid cloud architectures, where data needs to flow securely between private data centers and Azure resources. By establishing a secure tunnel for traffic, it ensures that sensitive information is protected during transit, which is essential for maintaining confidentiality and integrity. This capability is critical for businesses that rely on both on-premises resources and cloud services, allowing them to seamlessly integrate their networking infrastructure. While the other functions mentioned can be part of broader networking features in Azure, they don't specifically define the role of a Virtual Network Gateway. For example, routing traffic between Azure services is generally handled by Azure's internal routing mechanisms and not a gateway. Hybrid application connection management is broader than just network gateways and may involve various Azure services working together. Facilitating public access to private endpoints is typically managed through other Azure offerings, such as Azure Private Link or Azure Application Gateway. These aspects highlight the unique focus of the Virtual Network Gateway on secure communication between Azure and on-premises environments.

2. What is the primary use of Azure Blob Storage?

- A. To store structured data
- B. To store unstructured data such as documents, images, and videos**
- C. To serve as a database for relational data
- D. To manage user access for applications

Azure Blob Storage is primarily designed for storing unstructured data, which encompasses a wide range of file types such as documents, images, videos, and backups. This type of storage is optimized for large amounts of unstructured data, allowing businesses and developers to easily store and retrieve hefty files without the need for complex systems. Blob Storage provides a simple interface for uploading and downloading data. The varying tiers of blob storage (hot, cool, and archive) allow users to optimize costs based on how often they need to access the data. This versatility in managing unstructured data makes it an essential component in various scenarios, including data analytics, content delivery, media storage, and backup solutions. The ability to scale with growing amounts of unstructured data without impacting performance further emphasizes its suitability for these use cases. In contrast, structured data typically requires relational databases, which are better suited for organizing data in tables with predefined schemas. Therefore, while the other choices may involve some form of data storage or management, they do not capture the primary function of Azure Blob Storage as effectively as the correct answer.

3. Which Azure resource is specifically tasked with logs related to RBAC permissions changes?

- A. Azure Activity Log**
- B. Azure Resource Manager
- C. Azure Monitor
- D. Azure Resource Graph

The Azure Activity Log is specifically designed to track and record events that affect resources in an Azure subscription, including changes related to Role-Based Access Control (RBAC) permissions. When an RBAC permission is modified, such as when a user is assigned a role or when a role is altered, the Azure Activity Log captures these changes as part of its monitoring capabilities. This provides administrators with the necessary insights into who made the changes, what changes were made, and when they occurred, which is crucial for auditing and compliance purposes. Azure Resource Manager, while important for managing and deploying resources through templates, does not specifically log events; instead, it serves as the framework for managing Azure resources. Azure Monitor offers broader monitoring features beyond access logs and would not specifically pinpoint RBAC permission changes. Azure Resource Graph, on the other hand, is designed for querying resources at scale across Azure subscriptions but does not track changes or provide logs related to permissions like the Activity Log does.

4. What should be included in the recommendation to meet the application development requirements?

- A. The Azure App Configuration service
- B. An Azure Container Registry instance
- C. Deployment slots**
- D. Continuous Integration/Continuous Deployment (CI/CD) sources

In the context of application development within Azure, recommending deployment slots is particularly beneficial for providing a seamless deployment experience. Deployment slots allow developers to host multiple versions of a web app in Azure App Service without affecting the production environment. By utilizing deployment slots, teams can implement a staging environment that mirrors production, enabling thorough testing before switching to the live version. This capability is essential for minimizing downtime and ensuring that new features or changes are validated in a non-production setting. Once testing is complete, a simple swap operation can be performed to promote the staging version to production, considerably reducing the risk associated with deploying code changes. Other choices, while valuable for different scenarios, do not directly address the specific needs of managing deployment processes and ensuring application stability during updates. For instance, while Continuous Integration/Continuous Deployment (CI/CD) sources are important for automating the software development lifecycle, and services such as Azure App Configuration and Azure Container Registry serve crucial roles in application configurations and container management, respectively, these elements do not encompass the immediate benefits that come with using deployment slots in the context of application development.

5. What should you deploy on a virtual machine running Windows Server 2019 to support Azure Data Factory integration with Azure Data Lake Storage?

- A. the On-premises data gateway
- B. the Azure Pipelines agent
- C. the self-hosted integration runtime**
- D. the Azure File Sync agent

To facilitate integration between Azure Data Factory and Azure Data Lake Storage when using a virtual machine running Windows Server 2019, deploying the self-hosted integration runtime is essential. The self-hosted integration runtime acts as a bridge that enables data movement and transformation between different network environments. This means it can connect on-premises data sources or services that may not be directly accessible to Azure Data Factory. By using the self-hosted integration runtime, you can set up secure communication and data flow to and from Azure Data Lake Storage, ensuring that data is transferred seamlessly. Additionally, this runtime can be configured to manage the data integration process, executing tasks that involve data transformation, scheduling, and triggering workflows within Azure Data Factory. In contrast, the on-premises data gateway is typically used for connecting on-premises data sources to various Azure services, but it is more geared towards services like Power BI or Logic Apps rather than direct integration with Azure Data Factory. The Azure Pipelines agent is intended for automating CI/CD workflows and is not relevant for data integration scenarios. The Azure File Sync agent is designed for synchronizing files between on-premises Windows Servers and Azure File Storage, which does not fulfill the integration needs between Azure Data Factory and Azure Data Lake Storage.

6. When migrating an application to Azure, which Azure Storage option is best suited for hosting data considering security requirements?

- A. A general-purpose storage account
- B. An Azure File Share
- C. A Blob storage account
- D. A private endpoint within a storage account**

When considering the migration of an application to Azure and the associated security requirements for hosting data, utilizing a private endpoint within a storage account is the most suitable option. A private endpoint allows secure access to Azure Storage resources via a private IP address in your virtual network. This mechanism ensures that data traffic between your virtual network and the Azure Storage account remains within the Azure backbone, mitigating exposure to the public internet and enhancing data security. By leveraging private endpoints, you can configure secure connections that are only accessible from within your organization's network, thus isolating your data from potential threats posed by public network access. This architectural choice aligns well with best practices for maintaining data security and compliance, which is crucial in many scenarios, especially when sensitive information is involved. In contrast, the other storage options lack the same level of inherent security provided by private endpoints. For example, a general-purpose storage account is versatile and supports various types of data but does not offer the same degree of access control and isolation as private endpoints. Additionally, while Azure File Shares and Blob storage accounts provide useful storage functionalities, they also do not ensure that all traffic to these resources is secured within a private network, making them less ideal for scenarios where stringent security measures are necessary.

7. Which Azure service should be part of a solution for provisioning and managing a High Performance Computing (HPC) cluster that uses a third-party scheduler?

- A. Azure Automation
- B. Azure CycleCloud**
- C. Azure Purview
- D. Azure Lighthouse

Azure CycleCloud is specifically designed for provisioning and managing high-performance computing (HPC) clusters, making it the most appropriate choice for scenarios that involve third-party schedulers. This service simplifies the process of creating, configuring, and managing HPC clusters in the Azure cloud, providing a user-friendly interface and integrated capabilities tailored for computational workloads. CycleCloud allows users to optimize the performance of these clusters by efficiently managing resources, automating scaling, and integrating with popular HPC workloads and schedulers. In contrast, Azure Automation focuses on automating repetitive tasks and managing configurations but does not specifically cater to the requirements of HPC clusters. Azure Purview is primarily aimed at data governance and compliance, and while it offers features for managing data, it does not deal with HPC resource management. Azure Lighthouse is designed for managing multiple Azure tenants, primarily from a management perspective, rather than provisioning and managing compute resources necessary for HPC tasks. Thus, Azure CycleCloud stands out as the ideal solution due to its specific capabilities in handling high-performance computing environments.

8. What Azure service should be used to manage and organize network resources seamlessly?

- A. Azure Resource Manager**
- B. Azure Traffic Manager
- C. Azure Load Balancer
- D. Azure App Service

The Azure service best suited for managing and organizing network resources seamlessly is Azure Resource Manager. This service provides a comprehensive framework for deploying, managing, and organizing resources in Azure. Through Azure Resource Manager, you can define your infrastructure as code, enabling you to use templates for consistent deployments and organization of resources. It also supports role-based access control (RBAC), which allows you to manage access to specific resources based on user roles, thus enhancing security and governance. Furthermore, Azure Resource Manager allows you to group related resources, making it easier to manage them collectively rather than individually. This organization simplifies tasks such as monitoring and scaling, as you can effectively manage the entire environment as a cohesive unit. It streamlines operations and fosters a more efficient approach to resource management in Azure, ensuring that users can utilize and organize their network resources effectively. Other options, like Azure Traffic Manager and Azure Load Balancer, serve specific roles within the network management domain, but they do not provide the overarching management capabilities and organizational features that Azure Resource Manager offers. Azure App Service is primarily focused on hosting web applications, adding another layer of functionality that does not relate to network resource management specifically.

9. Which service is utilized for analyzing large volumes of data in Azure?

- A. Azure Data Lake Storage
- B. Azure Machine Learning
- C. Azure Synapse Analytics**
- D. Azure Cognitive Services

Azure Synapse Analytics is designed to analyze large volumes of data efficiently. It integrates big data and data warehousing services, providing the ability to analyze massive datasets quickly and perform complex queries using SQL. Synapse Analytics combines various data processing technologies within a single framework, allowing users to leverage serverless and provisioned resources seamlessly. The service supports a variety of data integration and transformation capabilities, making it essential for organizations looking to execute analytics at scale. Its architecture allows for the combination of structured and unstructured data inputs, which broadens the scope of analytical tasks that can be performed. With Azure Synapse Analytics, users can build data pipelines, run transformations, and even incorporate machine learning models, all within a single workspace. The platform is optimized for performance and scalability, making it highly suitable for businesses that require real-time analytics or need to gain insights from large datasets. In contrast, while Azure Data Lake Storage is an ideal solution for storing large amounts of data, it does not provide the analytics capabilities directly. Azure Machine Learning specializes in predictive analytics and building machine learning models, and Azure Cognitive Services focuses more on infusing AI capabilities into applications rather than data analysis. Thus, for the purpose of analyzing large volumes of data in Azure, Azure Synapse

10. Which Azure feature would you enable to automatically apply governance and compliance requirements when provisioning resources?

- A. Azure Policy**
- B. Azure Role-Based Access Control
- C. Azure Resource Manager Templates
- D. Azure Blueprints

Enabling Azure Policy is the best choice for automatically applying governance and compliance requirements during the resource provisioning process. Azure Policy provides a way to define rules that ensure resources are compliant with specific standards or regulations. By creating and assigning policies, organizations can consistently enforce rules like allowed resource types, locations for resource deployment, and tagging standards. This helps prevent non-compliant resources from being created, automatically enforcing governance across the entire Azure environment. Azure Role-Based Access Control (RBAC) focuses on managing user permissions rather than enforcing compliance on resources themselves. While it is crucial for defining who can access and manage resources, it does not intrinsically contain features for compliance and governance during the resource provisioning stage. Azure Resource Manager Templates are used for deploying resources in a declarative manner. While they enable infrastructure as code principles, they do not inherently provide governance capabilities. Templates define the structure and configuration of the resources but rely on Azure Policy for compliance management. Azure Blueprints are designed to package artifacts like templates, policies, and role assignments together. They provide a more comprehensive approach to governance by associating various resources, but for straightforward compliance enforcement during the provisioning phase, Azure Policy is the fundamental capability that evaluates resources against defined compliance rules.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

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We wish you the very best on your exam journey. You've got this!

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