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.

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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!

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Questions

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1. Which method allows for efficient management of virtual machine provisioning with strict adherence to compliance?

A. Azure Policy

B. RBAC roles

C. Resource Locks

D. Azure Blueprints

2. Which solution is recommended to replace a storage account queue for improved transaction processing in a multi-application environment?

A. one Azure Data Factory pipeline

B. multiple storage account queues

C. one Azure Service Bus queue

D. one Azure Service Bus topic

3. For a highly available SQL Server deployment that minimizes costs and failover time, what should be included in the recommendation?

A. An Always On availability group with premium storage disks

B. An Always On Failover Cluster Instance with a standard file share

C. An Always On availability group with a distributed network name

D. An Always On Failover Cluster Instance with a premium file share

4. To expose microservices hosted in an AKS cluster while ensuring security and minimizing costs, what solution should be included?

A. Azure App Gateway with Azure Web Application Firewall (WAF)

B. Azure API Management Standard tier with a service endpoint

C. Azure Front Door with Azure Web Application Firewall (WAF)

D. Azure API Management Premium tier with virtual network configuration

5. What is the purpose of Azure Active Directory (Azure AD)?

A. To monitor application performance

B. To manage identity and access securely

C. To store large amounts of data

D. To host virtual machines

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6. What purpose does Azure Resource Manager serve?

A. It manages billing for Azure subscriptions

B. It provides a set of tools for application debugging

C. It enables the management of Azure resources through a unified interface

D. It governs network security settings

7. Which solution should you recommend to meet the monitoring requirements for App2?

A. VM insights

B. Azure Application Insights

C. Microsoft Sentinel

D. Container insights

8. 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

9. How does Azure ExpressRoute influence network latency?

A. It provides higher latency than traditional internet connections

B. It provides lower latency compared to traditional internet connections

C. It has no effect on latency

D. It only applies to specific regions

10. What is the primary purpose of designing Azure infrastructure solutions?

A. To create scalable, resilient, and cost-effective environments

B. To maintain legacy systems in the cloud

C. To ensure compliance with all regulations

D. To replace on-premises infrastructure completely

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Answers

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

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Explanations

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1. Which method allows for efficient management of virtual machine provisioning with strict adherence to compliance?

A. Azure Policy

B. RBAC roles

C. Resource Locks

D. Azure Blueprints

The method that allows for efficient management of virtual machine provisioning while ensuring strict adherence to compliance is Azure Policy. Azure Policy enables organizations to define rules and effects for Azure resources, ensuring that resources are created and managed in a manner that aligns with compliance requirements. By applying policies, you can enforce conditions such as allowed regions, specific configurations, and resource types, thus actively governing the provisioning and management of virtual machines. Using Azure Policy, administrators can automatically audit resources, evaluate compliance, and remediate non-compliant resources. This means that when a virtual machine is provisioned, it can be validated against the policies in place, preventing configurations that violate compliance norms from being applied. In contrast, while RBAC (Role-Based Access Control) roles manage who has access to resources and what actions they can perform, they do not specifically enforce compliance about how resources should be configured. Resource Locks prevent accidental deletion or modification of resources but do not govern compliance rules or provisioning practices. Azure Blueprints provide a way to package and deploy resources, including policies, but they primarily serve to streamline the deployment of environments rather than actively managing compliance on an ongoing basis. Azure Policy stands out as the core tool specifically designed for ensuring compliance throughout the lifecycle of Azure resources.

2. Which solution is recommended to replace a storage account queue for improved transaction processing in a multi-application environment?

A. one Azure Data Factory pipeline

B. multiple storage account queues

C. one Azure Service Bus queue

D. one Azure Service Bus topic

The recommended solution for replacing a storage account queue for improved transaction processing in a multi-application environment is one Azure Service Bus topic. Azure Service Bus topics allow for a publish-subscribe messaging pattern that supports multiple subscribers, making it ideal for scenarios where multiple applications or components need to react to the same set of messages. Using a Service Bus topic, messages can be sent to a single topic and delivered to multiple subscribers without the need for each application to poll or check a queue individually. This not only enhances scalability but also ensures that each application can independently process messages in real-time, allowing for better coordination across different services in a multi-application environment. The built-in features of Azure Service Bus, such as dead-lettering, sessions, and transactional support, further improve the reliability and management of messaging between applications compared to traditional queue storage. These capabilities make it much simpler to handle complex workflows and maintain efficient communication in distributed systems. Additionally, the other options do not provide the same level of functionality or scalability for multi-application environments. For instance, while a single Azure Service Bus queue could work for many applications, it lacks the publish-subscribe model that a topic offers. Multiple storage account queues could lead to greater complexity and challenges in managing message

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3. For a highly available SQL Server deployment that minimizes costs and failover time, what should be included in the recommendation?

A. An Always On availability group with premium storage disks

B. An Always On Failover Cluster Instance with a standard file share

C. An Always On availability group with a distributed network name

D. An Always On Failover Cluster Instance with a premium file share

The recommendation of an Always On availability group with a distributed network name is particularly suitable for achieving high availability while also being cost-effective and minimizing failover time. Always On availability groups allow for multiple databases to be hosted and maintained across a set of replicas, which can provide both high availability and disaster recovery. The configuration enables automatic failover for these databases, significantly reducing downtime during failover events. Using a distributed network name simplifies the client connection management by allowing clients to connect through a single DNS name regardless of which specific server instance is handling the requests at any given time. This approach enhances the user experience and reduces complexity, which contributes to minimizing failover times. The other choices, while beneficial in their own contexts, may not align as closely with the criteria of cost-effectiveness and minimal failover duration. For example, Premium storage disks and file shares can increase costs without necessarily offering proportional benefits for high availability, especially if the goal is to minimize expenses. An Always On Failover Cluster Instance is more suited for scenarios where you need to manage entire SQL Server instances rather than individual databases, which may not be as cost-effective or efficient for every use case.

4. To expose microservices hosted in an AKS cluster while ensuring security and minimizing costs, what solution should be included?

A. Azure App Gateway with Azure Web Application Firewall (WAF)

B. Azure API Management Standard tier with a service endpoint

C. Azure Front Door with Azure Web Application Firewall (WAF)

D. Azure API Management Premium tier with virtual network configuration

The most suitable solution for exposing microservices hosted in an AKS cluster while ensuring security and minimizing costs is to utilize Azure API Management Premium tier with virtual network configuration. This option allows for secure access and management of APIs hosted within the AKS environment. Using the Premium tier of Azure API Management offers advanced features such as private endpoints and virtual network integration. This integration ensures that the APIs can securely communicate with the microservices running in the AKS cluster without exposing them directly to the public internet, thus minimizing security risks. Furthermore, the Premium tier includes the capability to manage higher traffic volumes efficiently while also providing caching, transformation, and analytics features that can enhance performance and reduce operational costs. In contrast, while Azure App Gateway with WAF and Azure Front Door with WAF provide options for web application security and load balancing, they are not specifically designed as an API management solution. This could lead to complexity in managing and securing API calls directly against microservices in the AKS. Azure API Management Standard tier, while it offers some essential features for API management, does not include the advanced capabilities of virtual network configuration available in the Premium tier, which is essential for integrating securely with an AKS cluster. Thus, choosing the Premium tier with virtual network configuration

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5. What is the purpose of Azure Active Directory (Azure AD)?

A. To monitor application performance

B. To manage identity and access securely

C. To store large amounts of data

D. To host virtual machines

The purpose of Azure Active Directory (Azure AD) is to manage identity and access securely. This cloud-based identity and access management service enables organizations to authenticate and authorize users and devices. With Azure AD, businesses can control user access to applications, data, and resources, ensuring that only the right individuals have the appropriate level of access. By leveraging Azure AD, organizations benefit from features such as single sign-on (SSO), multi-factor authentication (MFA), and conditional access policies. These capabilities enhance security while simplifying the user experience. Azure AD also plays a crucial role in integrating with other Microsoft services and third-party applications, allowing for streamlined user management across multiple platforms. In contrast, the other choices do not accurately describe the primary functions of Azure AD. Monitoring application performance is handled by other services, such as Azure Monitor. Storing large amounts of data is the domain of Azure storage solutions like Azure Blob Storage or Azure SQL Database. Likewise, hosting virtual machines is managed through Azure's Infrastructure as a Service (IaaS) offerings, such as Azure Virtual Machines.

6. What purpose does Azure Resource Manager serve?

A. It manages billing for Azure subscriptions

B. It provides a set of tools for application debugging

C. It enables the management of Azure resources through a unified interface

D. It governs network security settings

Azure Resource Manager (ARM) is fundamentally designed to enable users to manage Azure resources through a unified interface. It provides a consistent management layer that allows you to deploy, manage, and monitor Azure resources, independent of the specific resource type. The ability to handle resources as a group rather than individually enhances operational efficiency, as it simplifies the deployment of resources in a predictable manner. This unified control is particularly beneficial for organizations with complex cloud architectures, enabling them to organize resources logically and implement governance policies effectively. ARM also supports features like resource tagging, role-based access control (RBAC), and the use of templates for infrastructure as code (IaC), making it a powerful tool for automating and managing Azure environments effectively. Other options misrepresent the primary function of ARM. For instance, managing billing for Azure subscriptions pertains more to Azure Cost Management, while application debugging is a feature associated with development tools and monitoring services. Governing network security settings falls under the umbrella of Azure Networking services rather than ARM specifically. Thus, the correct option highlights the core purpose of Azure Resource Manager within the Azure ecosystem.

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7. Which solution should you recommend to meet the monitoring requirements for App2?

A. VM insights

B. Azure Application Insights

C. Microsoft Sentinel

D. Container insights

Azure Application Insights is the most appropriate solution for monitoring App2 because it is designed specifically for monitoring the performance and usage of applications within the Azure environment. It provides powerful capabilities such as tracking the application's availability, performance metrics, and usage patterns, which allows developers to identify and diagnose issues in real time. With Azure Application Insights, you can gain deep insights into how your application is performing from an end-user perspective. It supports a wide range of application types, including cloud applications, web apps, and microservices, making it versatile for various application architectures. Application Insights also provides robust analytics capabilities through Application Analytics Queries, which can highlight trends and provide actionable insights into user engagement. In contrast, while VM insights, Microsoft Sentinel, and Container insights have their benefits, they are not specifically tailored for application performance monitoring. VM insights focus on monitoring virtual machines' performance, Microsoft Sentinel is largely a security information event management (SIEM) tool, and Container insights are geared towards monitoring the performance of containerized applications. None of these options aligns with the specific needs for detailed application performance and telemetry that Azure Application Insights addresses proficiently. Therefore, recommending Azure Application Insights offers the most advantageous monitoring solution for App2.

8. 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.

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9. How does Azure ExpressRoute influence network latency?

A. It provides higher latency than traditional internet connections

B. It provides lower latency compared to traditional internet connections

C. It has no effect on latency

D. It only applies to specific regions

Azure ExpressRoute is specifically designed to create private connections between an organization's on-premises networks and Microsoft Azure data centers. One of the key benefits of using Azure ExpressRoute is its capability to provide lower latency compared to traditional internet connections. This is achieved because ExpressRoute establishes a direct private connection, bypassing the public internet, which is often congested and can introduce additional latency due to routing complexities and varying network conditions. The dedicated nature of ExpressRoute means that data travels on a bespoke circuit, minimizing delays caused by internet traffic fluctuations and providing a more stable and consistent network performance. This is particularly beneficial for scenarios that require real-time data processing or applications sensitive to delays, such as financial transactions or interactive applications. The advantages offered by Azure ExpressRoute make it an ideal choice for enterprises that require reliable, high-performance, and low-latency connectivity to their Azure services.

10. What is the primary purpose of designing Azure infrastructure solutions?

A. To create scalable, resilient, and cost-effective environments

B. To maintain legacy systems in the cloud

C. To ensure compliance with all regulations

D. To replace on-premises infrastructure completely

The primary purpose of designing Azure infrastructure solutions is to create scalable, resilient, and cost-effective environments. This approach emphasizes flexibility and efficiency, allowing organizations to adapt to changing demands and workloads. Scalability is crucial, as businesses grow and fluctuate, requiring resources that can adjust dynamically. Resilience ensures that applications remain available and performant, even in the face of failures or unexpected traffic spikes. Cost-effectiveness is essential in optimizing resource use, avoiding over-provisioning, and ensuring that organizations maximize their return on investment in the cloud. This comprehensive focus on these attributes is what enables organizations to leverage Azure effectively for various applications, whether they are developing new services or enhancing existing ones. The other choices, while important aspects of cloud strategy, do not align as closely with the main strategic goal of designing Azure infrastructure solutions. For example, maintaining legacy systems may be part of a broader cloud adoption strategy but is not the focus of infrastructure design. Compliance is also essential but often comes as a subcomponent of a well-designed infrastructure rather than the primary goal. Replacing on-premises infrastructure completely may also not be necessary or practical for all organizations, especially as hybrid environments become more popular.

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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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