HCIA Cloud Computing Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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

1. In Huawei FusionCompute, which action occurs if a host in the cluster becomes unavailable?

A. Virtual machines on this host are automatically restarted.

B. Virtual machines are migrated to another cluster.

C. Virtual machines running on this host are migrated to an available host.

D. Virtual machines are deleted from the cluster.

2. In Huawei FusionCompute, what does "shares" refer to in CPU QoS management?

A. Ensuring minimum resource usage

B. Calculating resources based on CPU share values

C. Specifying maximum limits for usage

D. Adjusting reservation parameters

3. What is necessary for a successful virtual machine migration in cloud computing?

A. Shared storage between servers

B. Same hardware configuration

C. Compatibility with physical servers

D. All of the above

4. Which statement correctly describes SSD disks?

A. SSD disks are mechanical hard disks

B. SSD disks have unlimited life span

C. SSD disks have fast read and write speeds

D. SSD disks consume high power

5. What is a disadvantage of IP SAN compared to FC SAN?

A. Convenient bandwidth expansion.

B. Low construction cost.

C. Extended transmission distance.

D. High transmission efficiency.

6. Which order accurately represents milestone events in the development of the Internet?

A. The establishment of TCP / IP protocol specifications, ARPANET is born, www is officially open to the public, DNS is born

B. www is officially open to the public, the birth of DNS, the establishment of TCP / IP protocol specifications, the birth of ARPANET

C. The birth of ARPANET, the establishment of TCP / IP protocol specifications, the birth of DNS, www is officially open to the public

D. The birth of DNS, the establishment of TCP / IP protocol specifications, the birth of ARPANET, www is officially open to the public

7. Which statement about memory reuse technology is incorrect?

A. Enable memory reuse technology; the higher the reuse ratio, the better the performance of the virtual machine

B. Enabling memory reuse technology can improve the deployment of virtual machines on physical hosts

C. If the user's virtual machine memory usage is high, modifying the memory reuse ratio can optimize it

D. Enabling memory reuse technology allows the total memory of all virtual machines created by the user to exceed the physical memory

8. What technology is essential for the implementation of Quality of Service (QoS) regarding memory resources?

A. Memory expansion technology

B. Memory reuse technology

C. Memory replication technology

D. Memory segmentation technology

9. Which statement about virtual machine templates is incorrect?

A. After cloning a virtual machine as a template, the original virtual machine still exists.

B. Custom parameters can be set when deploying virtual machines using templates.

C. Once converted into a virtual machine, the original template no longer exists.

D. Templates can be utilized across different virtualization platforms.

10. Which statement about the relationship between Host Machines and Guest Machines is correct?

A. A guest can access multiple host resources

B. A guest can only run on the host that created it

C. Only one hypervisor can run on a host machine

D. Multiple guests can run on one host machine

Answers

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

Explanations

1. In Huawei FusionCompute, which action occurs if a host in the cluster becomes unavailable?

A. Virtual machines on this host are automatically restarted.

B. Virtual machines are migrated to another cluster.

C. Virtual machines running on this host are migrated to an available host.

D. Virtual machines are deleted from the cluster.

When a host in the Huawei FusionCompute cluster becomes unavailable, the virtual machines running on that host are automatically migrated to another available host within the same cluster. This action is part of the high availability feature that Huawei FusionCompute provides, ensuring minimal downtime and continuous service availability. The migration process allows virtual machines to seamlessly transition to a functioning host, thereby avoiding data loss and maintaining service continuity. This capability is crucial in a cloud environment, where the availability of applications and services is paramount for user satisfaction and operational efficiency. High availability is an essential aspect of cloud computing infrastructure, enabling systems to automatically handle failures and ensure that workloads are always processed. In this context, the other options do not align with the standard functionality of Huawei FusionCompute regarding host unavailability scenarios. For instance, automatic deletion of virtual machines or migration to a completely different cluster are not standard responses to a host failure, as the system is designed to keep virtual machines operational by redistributing them within the existing cluster resources.

2. In Huawei FusionCompute, what does "shares" refer to in CPU QoS management?

A. Ensuring minimum resource usage

B. Calculating resources based on CPU share values

C. Specifying maximum limits for usage

D. Adjusting reservation parameters

In Huawei FusionCompute, "shares" in CPU QoS (Quality of Service) management specifically refers to the method of calculating resources based on CPU share values. This approach allows the distribution of CPU resources among different virtual machines (VMs) based on a weighting system represented by these share values. When multiple VMs are competing for CPU resources, the system uses these share values to determine how much processing power each VM receives, proportionately. Essentially, if one VM has a higher share value than another, it will receive more CPU resources during contention, ensuring a fair allocation based on predefined priority levels. This mechanism is crucial for maintaining performance consistency, especially in environments with varying workloads, as it allows administrators to prioritize resource allocation effectively without setting strict limits that could lead to underutilization or overloading. Other aspects, such as minimum or maximum resource guarantees or adjusting reservations, are managed through different mechanisms within the QoS framework, illustrating how "shares" specifically focuses on relational resource distribution rather than strict numeric boundaries.

3. What is necessary for a successful virtual machine migration in cloud computing?

A. Shared storage between servers

B. Same hardware configuration

C. Compatibility with physical servers

D. All of the above

For a successful virtual machine migration in cloud computing, shared storage between servers is a critical requirement. When a virtual machine (VM) is migrated from one physical host to another, the VM's data—essentially the disk files—need to be accessible during the migration process. If both the source and destination servers can access the same storage, it allows for a seamless transfer of the VM's state without significant downtime. During migration, the VM can be either moved live (without downtime) or offline (with downtime), but having shared storage simplifies the process. It enables the VM to maintain its state and connections, reducing risks associated with data loss or service interruptions. The other choices, while relevant to specific types of migrations or scenarios, do not universally apply to all successful migrations. Compatibility with physical servers may be important in a traditional setting or when expanding hybrid architectures, but virtualized environments often abstract away specific hardware dependencies. Similarly, having the same hardware configuration can enhance performance or compatibility, but it's typically not a strict requirement in cloud environments where resources are virtualized and managed differently. Thus, shared storage is a foundational necessity for effective VM migration across disparate environments.

4. Which statement correctly describes SSD disks?

A. SSD disks are mechanical hard disks

B. SSD disks have unlimited life span

C. SSD disks have fast read and write speeds

D. SSD disks consume high power

SSDs, or Solid State Drives, utilize flash memory technology rather than mechanical components to store data. This design enables them to achieve significantly faster read and write speeds compared to traditional mechanical hard disks (HDDs). The absence of moving parts in SSDs means that data can be accessed almost instantaneously, which leads to enhanced performance in tasks such as booting up operating systems, loading applications, and transferring files. This capability makes SSDs particularly well-suited for environments that require quick data access and processing, such as gaming, video editing, and server applications. Additionally, because of their efficient technology, SSDs also tend to consume less power than mechanical HDDs, contributing to better energy efficiency, especially in mobile devices and laptops. In contrast, the other statements do not accurately represent SSDs. They are not mechanical hard disks but rather a different technology altogether, and while they have a finite lifespan determined by write cycles, they do not possess an unlimited lifespan. Additionally, SSDs are known for their lower power consumption rather than high energy use. Understanding these characteristics is essential for making informed decisions about data storage solutions in cloud computing and IT infrastructure.

5. What is a disadvantage of IP SAN compared to FC SAN?

A. Convenient bandwidth expansion.

B. Low construction cost.

C. Extended transmission distance.

D. High transmission efficiency.

High transmission efficiency is identified as a disadvantage of IP SAN compared to FC SAN. This is primarily because Fibre Channel (FC) SANs are specifically designed for optimized performance within storage networks. FC SANs typically offer superior data transfer rates and lower latency, which provides a more efficient transmission environment for storage-related data traffic. In contrast, IP SANs, which leverage standard Ethernet for storage networking, may face challenges in achieving the same level of transmission efficiency. The nature of Ethernet involves higher latency and packet overhead due to its design for general-purpose networking rather than specifically for storage. As a result, while IP SANs can be more flexible and economical, they may fall short in terms of performance efficiency compared to their Fibre Channel counterparts, which are purpose-built for high-speed storage communication. The other options highlight aspects such as cost, bandwidth expansion, and transmission distance that are generally seen as advantages of IP SANs rather than disadvantages. This further underscores the idea that while IP SANs have their own benefits, they cannot match the high transmission efficiency characteristic of FC SANs.

6. Which order accurately represents milestone events in the development of the Internet?

A. The establishment of TCP / IP protocol specifications, ARPANET is born, www is officially open to the public, DNS is born

B. www is officially open to the public, the birth of DNS, the establishment of TCP / IP protocol specifications, the birth of ARPANET

C. The birth of ARPANET, the establishment of TCP / IP protocol specifications, the birth of DNS, www is officially open to the public

D. The birth of DNS, the establishment of TCP / IP protocol specifications, the birth of ARPANET, www is officially open to the public

The correct sequence of milestone events in the development of the Internet begins with the birth of ARPANET, which was the first operational packet-switching network and the predecessor to the modern Internet. It laid the foundational framework for how data packets could be transmitted across networks. Following the establishment of ARPANET, the TCP/IP (Transmission Control Protocol/Internet Protocol) specifications were created in the 1970s. These protocols established the standards for how data should be sent and received over networks, effectively forming the backbone of Internet communications. Their adoption is considered a pivotal moment in ensuring that diverse networks could communicate with one another, which is essential for the functioning of the Internet as we know it. Next in the timeline is the development of the Domain Name System (DNS) in the 1980s, which provided a way to translate user-friendly domain names into IP addresses that computers use to identify each other on the network. DNS greatly simplified the process of navigating the Internet, making it more accessible to an average user. Finally, the World Wide Web (WWW) being officially open to the public in the early 1990s illustrated a monumental shift, as it transformed the way information was shared and accessed online, driving a massive increase in Internet usage.

7. Which statement about memory reuse technology is incorrect?

A. Enable memory reuse technology; the higher the reuse ratio, the better the performance of the virtual machine

B. Enabling memory reuse technology can improve the deployment of virtual machines on physical hosts

C. If the user's virtual machine memory usage is high, modifying the memory reuse ratio can optimize it

D. Enabling memory reuse technology allows the total memory of all virtual machines created by the user to exceed the physical memory

The statement regarding memory reuse technology that is deemed incorrect is the one suggesting that a higher reuse ratio always results in better performance for the virtual machine. While memory reuse technology indeed aims to enhance resource utilization by allowing multiple virtual machines to share memory pages, an excessively high reuse ratio can lead to performance degradation. This occurs because the more memory pages that are shared, the greater the risk of contention and the increased likelihood that a virtual machine could experience cache misses or reduced memory access speed. Therefore, while memory reuse can improve efficiency, it is not guaranteed that a higher reuse ratio will translate to better performance for every scenario. Performance optimization involves balancing the reuse ratio with the needs of individual virtual machines and their memory usage patterns. The other options present accurate information about the benefits and functionalities of memory reuse technology, focusing on its ability to improve virtual machine deployment, optimize memory usage based on demand, and allow total virtualized memory to exceed physical memory constraints effectively.

8. What technology is essential for the implementation of Quality of Service (QoS) regarding memory resources?

A. Memory expansion technology

B. Memory reuse technology

C. Memory replication technology

D. Memory segmentation technology

The implementation of Quality of Service (QoS) in relation to memory resources primarily relies on memory reuse technology. This approach ensures that memory is efficiently allocated and reused across different applications and services, which is crucial for maintaining performance and ensuring that critical applications receive the necessary resources in real-time. By optimizing memory usage through reuse, systems can adapt to varying workloads and prioritize resources based on demand. This leads to improved performance and responsiveness for applications that require a guaranteed level of service. The other technologies listed, while relevant in different contexts, do not primarily focus on optimizing memory resource allocation in a way that directly enhances QoS. Memory expansion technology may increase the overall memory capacity but does not address how memory is managed and utilized. Memory replication technology is geared towards data consistency and redundancy, which is more about data availability than optimizing memory for performance. Memory segmentation, while it can aid in organizing memory, does not inherently improve the management and reuse of memory resources to support QoS objectives.

9. Which statement about virtual machine templates is incorrect?

A. After cloning a virtual machine as a template, the original virtual machine still exists.

B. Custom parameters can be set when deploying virtual machines using templates.

C. Once converted into a virtual machine, the original template no longer exists.

D. Templates can be utilized across different virtualization platforms.

The statement about virtual machine templates that is incorrect involves the notion that templates can be utilized across different virtualization platforms. While some virtualization technologies provide compatibility or options for converting templates between different systems, generally, virtual machine templates are designed to work within the specific context of the virtualization platform for which they were created. This means that a template developed in one hypervisor environment may not be directly usable in another without a conversion process or intermediary steps. On the other hand, some aspects of virtual machine templates, such as cloning, custom parameters, and template existence post-cloning, adhere to standard functionality. For instance, cloning a virtual machine to create a template does not erase the original virtual machine, and custom parameters can indeed be set to tailor the deployment of multiple instances efficiently. Furthermore, when a template is converted into a virtual machine, the original template typically remains available until deletion is manually executed, reinforcing that templates are routinely maintained and utilized within their respective environments.

10. Which statement about the relationship between Host Machines and Guest Machines is correct?

A. A guest can access multiple host resources

B. A guest can only run on the host that created it

C. Only one hypervisor can run on a host machine

D. Multiple guests can run on one host machine

The correct understanding of the relationship between Host Machines and Guest Machines is best captured by the statement that multiple guests can run on one host machine. This is because a host machine, equipped with a hypervisor, serves as a physical server that can virtualize its resources, allowing for the creation and operation of multiple guest machines or virtual machines (VMs). Each guest machine operates independently within its own virtual environment, but they all share the underlying physical resources of the host. The hypervisor, which may be of two types - Type 1 (bare-metal) or Type 2 (hosted) - facilitates this virtualization by managing the input and output operations and allocating CPU, memory, and storage resources among the guest machines. Therefore, it is entirely possible for a single host to run numerous guest machines simultaneously, leveraging the host's capabilities. The idea that only one hypervisor can run on a host machine is inaccurate, as it is technically possible to run multiple hypervisors on different partitions or through nested virtualization under specific configurations. Moreover, the claim that a guest can only run on the host that created it does not take into account advanced virtualization techniques where migrations and cloning can occur, allowing guests to operate on different hosts. Lastly, while guests can access

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:

https://hciacloudcomputing.examzify.com

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