Huawei Certified ICT Professional (HCIP) Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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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

1. What feature allows device discovery by specified product model in network management software?

A. Batch import

B. IP address range

C. Specified product model

D. Automation setup

2. What is true about the process of migrating in a network?

A. Preparation involves only the creation of data backups

B. Implementation does not require any testing

C. Rollback plans are not necessary if migration is planned well

D. All migration steps should be properly documented and tested

3. Which of the following are characteristics of a High Availability (HA) network?

A. Faults cannot occur frequently.

B. Faults can be recovered rapidly.

C. No faults occur.

D. Services can only be restored manually when faults occur.

4. Fast detection technologies can rapidly detect communication faults between neighboring devices.

A. True

B. False

C. Only for specific protocols

D. Requires manual intervention

5. What effect does a small interval for sending VRRP packets have on the backup device?

A. It causes status flapping of the backup device

B. It stabilizes the status of the backup device

C. It improves responsiveness of the backup device

D. It has no effect on the backup device

6. Which items can be used as filtering conditions for historical alarm queries?

A. Alarm severity

B. First occurrence time

C. Alarm source

D. Alarm name

7. In RSTP, which port type functions as a backup?

A. Root port

B. Designated port

C. Backup port

D. Alternate port

8. Which statement regarding the summary automatic command and BGP route summarization is false?

A. This command enables automatic summarization for locally imported routes

B. BGP summarizes routes based on natural network segments

C. BGP sends summarized routes to peers after this command is configured

D. BGP automatically accepts subnet routes advertised by IGPs

9. What is the role of eSight in network operations and maintenance?

A. To configure routers only.

B. To display and manage network resources.

C. To monitor traffic patterns.

D. To enable firewall settings.

10. Which type of packets are LSA Update packets sent in OSPF?

A. Only when a router is initialized

B. To acknowledge Hello packets

C. To synchronize the link state database

D. Only during topology changes

Answers

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

Explanations

1. What feature allows device discovery by specified product model in network management software?

A. Batch import

B. IP address range

C. Specified product model

D. Automation setup

The feature that allows device discovery by specified product model in network management software is indeed focused on the specific attributes of devices based on their model. When a user selects the option for discovery by a specified product model, the network management software can filter and identify devices based on their manufacturer and model number. This targeted approach enhances the efficiency of device management by ensuring that only relevant devices are discovered and managed within the network. Using the specified product model is especially useful in environments where numerous devices from various manufacturers are deployed. By narrowing down the discovery process to particular models, network administrators can more effectively monitor, configure, and maintain those devices, ensuring they meet organizational standards and requirements. In contrast, batch import would involve uploading multiple device details at once but does not focus on real-time discovery by specific models. IP address range allows for discovering devices within a set IP range, which may not provide the precision of filtering by product model. Automation setup refers to scheduling or automating tasks within network management but does not specifically pertain to how devices are discovered based on their model. Thus, focusing on the specified product model streamlines the discovery process and enhances device management in the network.

2. What is true about the process of migrating in a network?

A. Preparation involves only the creation of data backups

B. Implementation does not require any testing

C. Rollback plans are not necessary if migration is planned well

D. All migration steps should be properly documented and tested

The correct answer highlights the critical importance of thorough documentation and testing throughout each phase of the migration process. Proper documentation ensures that all activities are recorded, which is essential for tracking progress, understanding decisions made, and providing a clear reference for future migrations or troubleshooting. It plays a key role in maintaining clarity about what has been done, by whom, and the rationale behind it. Testing is equally vital because it assesses whether the migration meets the desired objectives and functions correctly within the intended network environment. Without proper testing, there is a considerable risk of overlooking issues that could lead to service disruptions, data loss, or compromised security. These testing phases may involve simulations in a controlled environment, validating functionality, performance benchmarks, and ensuring compatibility with existing systems. In essence, thorough documentation and comprehensive testing together minimize risks and enhance the likelihood of a successful network migration.

3. Which of the following are characteristics of a High Availability (HA) network?

A. Faults cannot occur frequently.

B. Faults can be recovered rapidly.

C. No faults occur.

D. Services can only be restored manually when faults occur.

In a High Availability (HA) network, the primary goal is to ensure that services remain operational and accessible even in the event of failures. Among the characteristics listed, the one that aligns best with the principles of HA networks is that faults can be recovered rapidly. High Availability systems are designed with redundancy and failover mechanisms to minimize downtime. This means that when a fault does occur, the systems can quickly switch to backup resources or reroute processes to maintain service continuity. The essence of HA is not that faults never happen or that they cannot occur frequently, but rather that any faults that do occur should not lead to significant service interruptions. The idea that "no faults occur" is unrealistic in any network environment, as faults are inherent risks in complex systems. Furthermore, relying exclusively on manual restoration when faults occur contradicts the efficiency and automation that HA networks strive for. Such manual interventions could lead to extended downtimes, which goes against the very principle of maintaining high availability. Thus, a true characteristic of HA networks is their capacity to recover from faults rapidly, ensuring that users experience minimal disruption in services.

4. Fast detection technologies can rapidly detect communication faults between neighboring devices.

A. True

B. False

C. Only for specific protocols

D. Requires manual intervention

Fast detection technologies are designed to quickly identify communication faults that may arise between neighboring devices in a network. These technologies leverage advanced algorithms and monitoring techniques to minimize downtime and ensure consistent connectivity. When a fault occurs, the system can swiftly detect the issue, allowing for immediate remediation or alerts to network administrators. The concept of rapid detection is critical in today's dynamic network environments, where delays can lead to significant operational disruptions. By promptly identifying faults, these technologies enable better network management and reliability, ultimately enhancing the overall performance of the network. This efficiency is not limited to specific protocols, and while there may be cases where certain protocols have optimizations for fault detection, the statement holds true for a broader range of technologies designed for fault detection across various network types. Additionally, fast detection technologies typically operate automatically, diminishing the need for manual intervention, which further underscores their effectiveness in facilitating swift communication fault detection.

5. What effect does a small interval for sending VRRP packets have on the backup device?

A. It causes status flapping of the backup device

B. It stabilizes the status of the backup device

C. It improves responsiveness of the backup device

D. It has no effect on the backup device

A small interval for sending VRRP (Virtual Router Redundancy Protocol) packets can indeed have the effect of causing status flapping of the backup device. VRRP is designed to facilitate automatic routing failover, allowing one device to take over as the active router when the primary device fails. When the interval for sending VRRP packets is small, the frequency of status checks increases. This can lead to the backup device receiving rapid updates about the state of the primary device. If the primary device experiences temporary issues or network instability, the backup may prematurely assume the role of the active device due to frequent packet transmission suggesting that the primary is down. This results in frequent changes between active and backup states, which is referred to as status flapping. Such flapping can lead to instability in the network, resulting in momentary periods where the active router changes back and forth, potentially disrupting traffic flow and causing confusion in the network routing. Therefore, a small interval can impair the intended reliability of VRRP, causing a flapping scenario rather than fostering a stable or more responsive backup device.

6. Which items can be used as filtering conditions for historical alarm queries?

A. Alarm severity

B. First occurrence time

C. Alarm source

D. Alarm name

Using alarm name as a filtering condition for historical alarm queries is a common practice because it allows users to narrow down their query to specific types of alarms that align with their desired investigation or analysis. By focusing on the alarm name, users can effectively isolate relevant data that pertains to particular issues or events, making it easier to understand their historical context and respond appropriately. Filtering by alarm name helps ensure that the resulting data set consists only of alarms that are pertinent to the area of interest, streamlining the process of troubleshooting and performance monitoring. Alarms often have descriptive names that identify the type of incident or fault, which is crucial for quickly finding and addressing problems within the ICT infrastructure. In the context of the other options, while alarm severity, first occurrence time, and alarm source are also important filtering conditions that can be used to refine queries, focusing strictly on the alarm name allows for targeted searches based on the precise nature of the alarms. This specificity makes it a powerful tool for historical data analysis.

7. In RSTP, which port type functions as a backup?

A. Root port

B. Designated port

C. Backup port

D. Alternate port

In Rapid Spanning Tree Protocol (RSTP), the backup port is a specific port type that takes on the role of a redundant path. It is primarily used to provide a backup connection to the same segment as the designated port. When the designated port fails, the backup port can take over to ensure continued connectivity and minimize downtime. The concept of a backup port is particularly important in switch configurations where network availability is critical. In this role, the backup port remains in a blocking state unless the designated port goes down, at which point it can transition to a forwarding state. This feature helps in reducing the time it takes to recover from a failure by preemptively setting up potential paths that can be activated as needed. In contrast, the root port is the port on a switch that is closest to the root bridge and is used to forward traffic towards it, while the designated port is the one that is elected to forward traffic to and from a given network segment. The alternate port provides a backup path to the root bridge but is not designated for use on the same segment as a backup for the designated port. Thus, only the backup port explicitly serves the unique function of acting as a secondary path for traffic on the same link as the designated port.

8. Which statement regarding the summary automatic command and BGP route summarization is false?

A. This command enables automatic summarization for locally imported routes

B. BGP summarizes routes based on natural network segments

C. BGP sends summarized routes to peers after this command is configured

D. BGP automatically accepts subnet routes advertised by IGPs

The statement regarding BGP automatically accepting subnet routes advertised by IGPs is false because BGP operates under a different set of rules than interior gateway protocols (IGPs). BGP does not automatically accept all routes that are advertised from other protocols. Instead, BGP requires explicit configuration and policies to manage the routes it receives, including route filtering and prefix lists. This ensures that the BGP routing table contains only the routes that an administrator intends to allow, thereby maintaining tight control over the routing decisions and preventing potential routing loops or unauthorized route advertisements. The other statements accurately reflect how BGP and the automatic summarization command function. For instance, the command enables automatic summarization for locally imported routes, meaning that BGP can condense multiple routes into a single summarized route when these routes share common prefixes. Additionally, BGP summarizes routes based on natural network segments, making it efficient in managing and advertising fewer routes. Lastly, when automatic summarization is configured, BGP indeed sends these summarized routes to its peers, reducing the amount of routing information exchanged and helping to conserve bandwidth and improve performance across the network.

9. What is the role of eSight in network operations and maintenance?

A. To configure routers only.

B. To display and manage network resources.

C. To monitor traffic patterns.

D. To enable firewall settings.

The role of eSight in network operations and maintenance is primarily to display and manage network resources. This management platform provides a comprehensive system for overseeing various networking components, which is essential for effective operation and maintenance of the network. By visualizing network resources, eSight allows network administrators to have a holistic view of network performance, facilitate troubleshooting, and optimize resource allocation. Though monitoring traffic patterns and enabling firewall settings are important aspects of network management, eSight's core functionality emphasizes resource management and oversight, making it indispensable for administrators in maintaining an organized and efficient network environment.

10. Which type of packets are LSA Update packets sent in OSPF?

A. Only when a router is initialized

B. To acknowledge Hello packets

C. To synchronize the link state database

D. Only during topology changes

LSA Update packets in OSPF (Open Shortest Path First) are specifically used to synchronize the link state database among routers within the same OSPF area. When a router learns about routes or changes in the network, it generates Link State Advertisements (LSAs) to represent this information. The LSA Update packets are then sent to other OSPF routers to ensure that they have the most current view of the network topology. Synchronizing the link state database is vital for the proper functioning of OSPF, as it ensures all routers maintain a consistent understanding of the network, which is necessary for calculating the shortest paths. This synchronization allows OSPF to maintain its efficiency and effectiveness in routing. The other answer choices do not accurately reflect the purpose of LSA Update packets. For instance, the suggestion that these packets are sent only when a router is initialized does not capture the ongoing nature of OSPF advertisements as network changes occur. Similarly, while acknowledgment of Hello packets is essential for neighbor discovery, LSA Updates serve a broader purpose than merely acknowledging Hello packets. Lastly, while OSPF might send updates during topology changes, LSA Update packets are consistently used to synchronize the database, not limited strictly to when changes occur.

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://huaweiictprohcip.examzify.com

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