MTCNA Foundation Deck Practice Exam (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. **Which component would you use to implement a prioritized tree of queues for bandwidth management?**

   A. Queue Tree

   B. Bridge Mode

   C. Wireless Interface

   D. SSID

2. **Which tool is typically used to manage MikroTik devices over the network using a dedicated GUI client?**

   A. WinBox

   B. WebFig

   C. QuickSet

   D. MAC-WinBox

3. **Which old RouterOS feature is deprecated and associated with switch grouping?**

   A. Master Port

   B. Switch Chip

   C. ARP

   D. DHCP Client

4. **Which function provides bandwidth management to control upload/download speeds?**

   A. Queues

   B. Simple Queue

   C. FastTrack

   D. NAT

5. **Which section would you refer to for authentication control of local RouterOS accounts?**

   A. Users & Groups

   B. Logs

   C. Health

   D. License

6. Which metric is used to determine route preference, where lower values are preferred?

A. Distance

B. Gateway

C. Masquerade

D. Connection Tracking

7. What term covers assigning IPv4/IPv6 addresses to interfaces for routing and communication?

A. IP Addressing

B. Default Route

C. ARP

D. DHCP Server

8. To verify the device's license level (e.g., CHR or RouterBOARD), which section would you inspect?

A. License

B. Health

C. Files

D. Packages

9. Which section lists software modules installed on RouterOS, such as system, wireless, and routing?

A. Packages

B. Health

C. License

D. Neighbors Discovery

10. Which term refers to a table listing MAC addresses learned on interfaces with their corresponding IPs?

A. ARP Table

B. ARP

C. IP Addressing

D. Switch Chip

Answers

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

Explanations

1. Which component would you use to implement a prioritized tree of queues for bandwidth management?

A. Queue Tree

B. Bridge Mode

C. Wireless Interface

D. SSID

To implement a prioritized tree of queues, you use a Queue Tree. This structure lets you create a root queue for overall bandwidth and then add child queues for different traffic classes, each with its own limit and priority. The scheduler serves the highest-priority child first and only uses lower-priority queues when bandwidth is available, ensuring critical traffic gets precedence even under heavy load. You can also apply per-connection queuing inside each child to keep flows fair, giving you fine-grained control over how bandwidth is shared. This hierarchical, priority-based approach is what makes Queue Tree the right tool for bandwidth management, unlike options that focus on bridging, wireless interface settings, or network naming.

2. Which tool is typically used to manage MikroTik devices over the network using a dedicated GUI client?

A. WinBox

B. WebFig

C. QuickSet

D. MAC-WinBox

Managing MikroTik devices over a network is done with a dedicated GUI client that provides a full graphical interface to RouterOS. That client is WinBox. WinBox is MikroTik's own Windows application designed specifically for RouterOS, connecting to devices by IP or MAC address and giving you access to the complete set of configuration and monitoring options—interfaces, routing, firewall, VPN, wireless, and more. It's lightweight, purpose-built for MikroTik gear, and widely used in day-to-day administration, which is why it's the typical choice for a GUI-based management workflow. WebFig exists as a browser-based interface, which is convenient but not a standalone desktop GUI client. QuickSet is geared toward a quick initial configuration rather than ongoing full management. MAC-WinBox isn't a separate tool you'd use for management. So the best-fit option for a dedicated GUI client is WinBox.

3. Which old RouterOS feature is deprecated and associated with switch grouping?

A. Master Port

B. Switch Chip

C. ARP

D. DHCP Client

Grouping multiple ports to behave as a single switch path in RouterOS used to be done with a Master Port. This approach is deprecated because modern RouterOS relies on the built-in switch chip and dedicated switch interfaces to manage port groups, VLANs, and bridging. In current configurations, you set up a switch using the switch chip's features rather than assigning a master/slave relationship between ports. The other options don't describe how port groups are deprecated for switching: ARP is about mapping IPs to MACs, DHCP Client handles obtaining IP settings from a server, and the Switch Chip refers to the hardware that performs switching today rather than a deprecated configuration method.

4. Which function provides bandwidth management to control upload/download speeds?

A. Queues

B. Simple Queue

C. FastTrack

D. NAT

Bandwidth management is handled by the queues system. Queues let you limit how much data can be sent or received, assigning maximum upload and download rates per user, per IP, or per interface, and you can layer rules to prioritize some traffic over others. Simple Queue is a straightforward way to apply those limits for individual hosts, but the broader mechanism that provides this control is the queues feature as a whole. NAT translates addresses and doesn't regulate speed, while FastTrack speeds up certain traffic by bypassing queueing, which defeats bandwidth control. So for controlling upload/download speeds, the queues mechanism is the right tool.

5. Which section would you refer to for authentication control of local RouterOS accounts?

A. Users & Groups

B. Logs

C. Health

D. License

Authentication control for local RouterOS accounts is handled in the Users & Groups area. This is where you define each local user, assign them to a group with specific permissions (such as read, write, or admin), and set how they authenticate (passwords, and what login methods are allowed). By organizing users into groups, you apply consistent access rules across the device and can enable or disable accounts as needed, plus fine-tune which services each user can use. The other sections don't configure who can log in: Logs records login events, Health shows system status, and License handles licensing. So for controlling local account access, you reference the Users & Groups area.

6. Which metric is used to determine route preference, where lower values are preferred?

A. Distance

B. Gateway

C. Masquerade

D. Connection Tracking

Routing decisions rely on a cost metric, with the path that has the smaller cost chosen as the preferred route. This metric is distance, which encodes the route's overall cost; the lower the distance value, the more preferred the route becomes. A gateway is simply the next-hop address to reach the destination, not a ranking metric. Masquerade is NAT, altering the source IP for outbound traffic. Connection tracking manages state for connections in NAT/firewall, not the route's cost.

7. What term covers assigning IPv4/IPv6 addresses to interfaces for routing and communication?

A. IP Addressing

B. Default Route

C. ARP

D. DHCP Server

IP addressing is the process of configuring IPv4 or IPv6 addresses on network interfaces so devices can be uniquely identified and packets can be routed between them. It covers how interfaces get their addresses, including static assignments and dynamic methods, and includes aspects like the address itself and the network prefix that defines reachability. While DHCP is a common way to automatically assign addresses as part of IP addressing, the broad term describing this activity is IP addressing. The other options refer to different concepts: a default route is the fallback path for unknown destinations, ARP translates IP addresses to MAC addresses on a local link, and a DHCP server provides addresses but isn't the overall act of configuring interfaces with addresses.

8. To verify the device's license level (e.g., CHR or RouterBOARD), which section would you inspect?

A. License

B. Health

C. Files

D. Packages

The section that holds licensing details is the place to verify the device's license level. In RouterOS, the License area shows the current license type (such as CHR or RouterBOARD) and any related limitations, so it's the authoritative source for confirming what you're licensed to run. You can also use the command-line equivalent, for example, to print the license information, which will display the same details. The Health section is about system status and hardware health, not licensing. The Files section lists stored files on the device, and the Packages section shows installed or available software packages—useful for knowing what's present, but not for confirming the license level itself.

9. Which section lists software modules installed on RouterOS, such as system, wireless, and routing?

A. Packages

B. Health

C. License

D. Neighbors Discovery

In RouterOS, the set of software modules installed on the device is shown in the Packages section. Each package corresponds to a group of features, such as system, wireless, or routing, so this is where you can see exactly which modules are present and what version they're at. This view is also where you'd manage those modules (enable/disable or update as needed, noting that some changes require a reboot to take effect). The other sections serve different purposes: Health reports device status and performance metrics, License shows the licensing state, and Neighbors Discovery lists devices found on the network. None of these display the installed software modules like the Packages section does.

10. Which term refers to a table listing MAC addresses learned on interfaces with their corresponding IPs?

A. ARP Table

B. ARP

C. IP Addressing

D. Switch Chip

The concept here is how devices learn which MAC address goes with which IP address on a local network. This mapping is stored in the ARP table (often called the ARP cache). When a device needs to send a frame to an IP on the same LAN, it uses ARP to resolve that IP to a MAC address, and the result is kept in this table for quick lookups on subsequent frames. The ARP protocol handles the discovery by broadcasting a request and receiving a reply, and entries in the ARP table can time out and be refreshed as devices come and go. The other options don't fit the description: ARP is the protocol used to learn mappings, not the table itself; IP Addressing is about the numerical addresses, not the MAC-to-IP mapping; a Switch Chip is hardware implementing switching functions, not the IP-to-MAC mapping table.

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://mtcnafoundationdeck.examzify.com

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