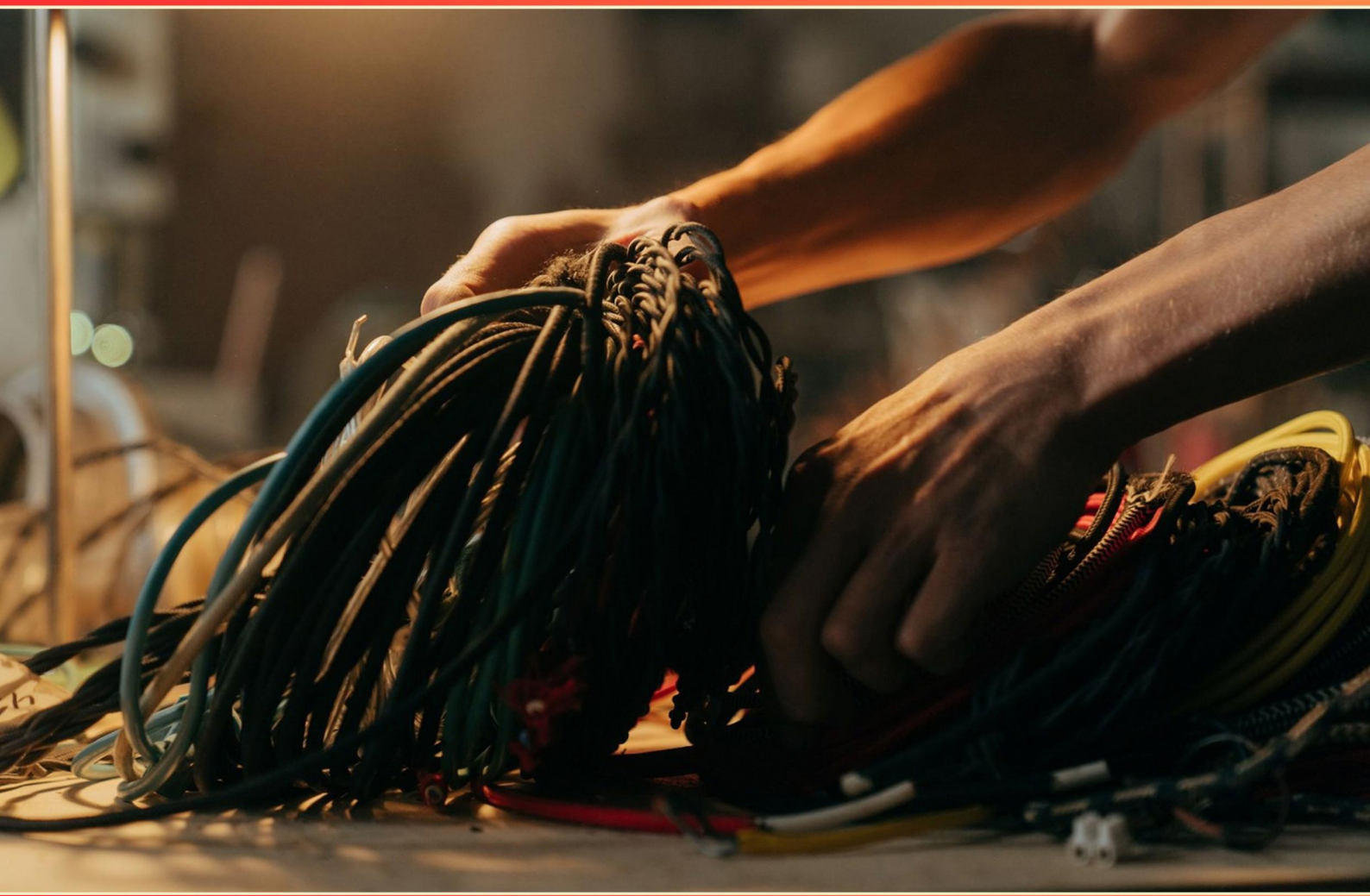
CCNP 350-401 – IMPLEMENTING AND OPERATING CISCO ENTERPRISE NETWORK CORE TECHNOLOGIES (ENCOR) PRACTICE TEST (SAMPLE)

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. What command is used to enable multicast routing on a router?

A. ip multicast-enable

B. ip multicast-routing

C. ip route multicast

D. multicast routing start

2. Which protocol does SNMP primarily use for transport?

A. TCP

B. SSH

C. UDP

D. HTTP

3. What cloud deployment model allows multiple organizations to share resources within a collaborative space?

A. Public Cloud

B. Hybrid Cloud

C. Community Cloud

D. Private Cloud

4. Which port type is not elected during the STP process?

A. Root Port

B. Designated Port

C. Non-Root Bridge

D. Alternate Port

5. What is an Extended Service Set (ESS) designed for?

A. To operate with only one access point

B. To cover larger areas with multiple access points

C. To create a separate network for guest users

D. To connect devices in ad-hoc mode

6. Which of the following is NOT a BGP message type?

A. Request message

B. Keepalive message

C. Update message

D. Notification message

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7. Which of the following is true regarding YANG?

A. It is a proprietary data modeling language

B. It is an IETF standard defined by RFCs

C. It cannot be used with RESTCONF

D. It is only applicable for IPv6

8. What software enables per-application selection of the destination cloud platform?

A. Cloud Management Software

B. Cloud Brokering Software

C. Application Delivery Controller

D. Network Monitoring Software

9. What kind of packets does EIGRP use to communicate with neighbors during the establishment of adjacency?

A. Only update packets

B. Only acknowledgment packets

C. Hello packets

D. Only query packets

10. What data modeling language is used by NETCONF?

A. XML

B. JSON

C. SMI

D. YANG

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Answers

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

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Explanations

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1. What command is used to enable multicast routing on a router?

A. ip multicast-enable

B. ip multicast-routing

C. ip route multicast

D. multicast routing start

The command used to enable multicast routing on a router is "ip multicast-routing." This command activates the multicast routing feature on a Cisco router, allowing it to forward multicast traffic. Enabling multicast routing is essential for facilitating the efficient distribution of data streams to multiple destinations without sending multiple copies of the same data. Once multicast routing is enabled, the router can participate in multicast protocols like Protocol Independent Multicast (PIM), enabling it to manage multicast group memberships and efficiently route multicast packets throughout the network. This capability is crucial for applications such as streaming media, online gaming, and other services that rely on multicast traffic. The other options provided do not represent valid commands for enabling multicast routing. They either do not exist or do not serve the purpose of enabling multicast routing on Cisco devices. By using the correct command, network engineers ensure that multicast traffic can be appropriately handled and routed as needed.

2. Which protocol does SNMP primarily use for transport?

A. TCP

B. SSH

C. UDP

D. HTTP

Simple Network Management Protocol (SNMP) primarily uses User Datagram Protocol (UDP) for transport. UDP is a connectionless protocol that allows for low-latency and low-overhead communication, making it suitable for network management tasks where timely delivery is often more critical than reliable delivery. The nature of SNMP operations often involves sending and receiving small packets of information, such as traps and queries, which fits well with UDP's lightweight characteristics. While TCP (Transmission Control Protocol) is known for its reliability, ensuring that packets are delivered in order and without errors, SNMP does not require the same level of reliability due to its operational model. SNMP can tolerate some lost packets in a network monitoring context, where it's better to receive current updates periodically rather than waiting for guaranteed delivery of every packet. Protocols like SSH (Secure Shell) and HTTP (Hypertext Transfer Protocol) serve different purposes in networking, with SSH focusing on secure remote access and management, and HTTP being dedicated to transferring web content. Therefore, they are not suitable for the specific transport needs of SNMP. The primary transport mechanism of SNMP being UDP enables efficient communication in network management scenarios.

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3. What cloud deployment model allows multiple organizations to share resources within a collaborative space?

A. Public Cloud

B. Hybrid Cloud

C. Community Cloud

D. Private Cloud

The community cloud deployment model is specifically designed for use by multiple organizations that share common concerns, such as security, compliance, or jurisdiction. In this model, organizations collaborate to share the cloud infrastructure, which could reduce costs and improve resource efficiency while also providing a tailored environment that meets their needs. By collaborating in a community cloud, these organizations benefit from shared resources like applications, infrastructure, and governance policies that are suited to their collective requirements. In contrast, other cloud models like the public cloud are designed for general use by the public and do not focus on a specific group's unique needs. The hybrid cloud combines both public and private clouds but does not inherently facilitate the collaboration between multiple organizations as effectively as the community cloud. The private cloud is dedicated to a single organization, further distancing it from the collaborative aspect seen in the community cloud deployment model.

4. Which port type is not elected during the STP process?

A. Root Port

B. Designated Port

C. Non-Root Bridge

D. Alternate Port

The selection of port types in the Spanning Tree Protocol (STP) process is crucial for maintaining a loop-free network topology. The concept of port election involves determining the role each port on a switch will play in the STP hierarchy, which facilitates redundancy while preventing loops. A Non-Root Bridge does not participate in the election of port types during the STP process because it is not a port itself, but rather a designation for any bridge in the network that is not the Root Bridge. In STP, the Root Bridge is the central point of reference, and all port type elections (Root Port, Designated Port, and Alternate Port) occur in the context of the Root Bridge. The Root Port is the port on a non-root bridge that has the best path to the Root Bridge, while the Designated Port is the port on a switch that has the least-cost path to the Root Bridge for a specific segment. The Alternate Port is a backup path that can be used if the active port fails but does not become the designated improvement in this situation. Since Non-Root Bridge is more of a categorization rather than a functional port type within the context of STP, it does not undergo port election. Thus, it is accurate

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5. What is an Extended Service Set (ESS) designed for?

A. To operate with only one access point

B. To cover larger areas with multiple access points

C. To create a separate network for guest users

D. To connect devices in ad-hoc mode

An Extended Service Set (ESS) is specifically designed to cover larger areas by utilizing multiple access points. This setup allows for a seamless wireless network experience across extensive spaces by integrating several Basic Service Sets (BSS) that communicate with each other. In an ESS, each access point serves a designated area, ensuring that users can move throughout the coverage zone without losing connectivity, as their devices automatically associate with the strongest signal from the nearest access point. The architecture of an ESS includes a Distribution System (DS) that connects the different access points, enabling them to share the same network. This system is especially useful in environments where users need wireless coverage in larger areas, such as campuses, large offices, or public spaces. In contrast, operating with only one access point indicates a Basic Service Set (BSS), not an ESS. Creating a separate network for guest users typically involves network segmentation or the use of virtual LANs (VLANs) rather than the structure of an ESS. Connecting devices in ad-hoc mode refers to a decentralized network configuration, again distinct from the hierarchical and structured approach of an ESS, which relies on established access points.

6. Which of the following is NOT a BGP message type?

A. Request message

B. Keepalive message

C. Update message

D. Notification message

BGP (Border Gateway Protocol) uses several specific message types to facilitate communication between peers. The message types defined in the BGP specification are Keepalive, Update, and Notification messages. Keepalive messages are sent periodically to confirm that a BGP connection is still active and to maintain the session. Update messages convey routing information, including path attributes and withdrawn routes. Notification messages are used to communicate errors or provide status updates regarding the BGP session, indicating issues such as changes in connection states. The Request message, however, is not a defined message type within the BGP protocol. This omission means that while BGP has mechanisms for request-like behavior through other means, such as session negotiation, it does not specifically recognize a "Request message" as part of its defined communication structure. This makes the Request message the correct answer as the one that is NOT a BGP message type.

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7. Which of the following is true regarding YANG?

A. It is a proprietary data modeling language

B. It is an IETF standard defined by RFCs

C. It cannot be used with RESTCONF

D. It is only applicable for IPv6

YANG is indeed an IETF standard defined by a series of Request for Comments (RFCs). It is primarily used for data modeling in network management applications. YANG allows for the definition of data structures that can be used to configure, manage, and monitor devices in a network. Its standardization by the IETF ensures broad interoperability and consistency across different network devices and protocols. This standardization is beneficial because it allows network operators and software developers to utilize YANG models in various environments without being constrained by vendor-specific implementations. This means YANG can be applied across diverse platforms and technologies, not limited to any proprietary systems. Furthermore, YANG supports the creation of applications that use protocols like NETCONF and RESTCONF for managing network devices, which is essential in modern network automation. The flexibility and standardization of YANG make it a critical element in contemporary network management practices.

8. What software enables per-application selection of the destination cloud platform?

A. Cloud Management Software

B. Cloud Brokering Software

C. Application Delivery Controller

D. Network Monitoring Software

The correct answer is Cloud Brokering Software, which plays a crucial role in multi-cloud environments by facilitating the selection of the most suitable cloud provider for specific applications. This software acts as an intermediary that can assess the requirements of an application—such as performance, compliance, cost, and availability—and match those needs with the appropriate cloud services from different providers. Cloud brokering software allows organizations to optimize their cloud resources, ensuring that each application is hosted on the platform that best meets its specific demands. It can automate the decision-making process and manage resources across multiple clouds, enabling a seamless and efficient deployment. While other choices may have relevant functions, they do not specifically focus on the per-application selection process for cloud platforms. For instance, Cloud Management Software typically provides tools for managing cloud resources and monitoring usage, but it may not emphasize selecting cloud destinations on an application-by-application basis. Application Delivery Controllers, on the other hand, primarily focus on optimizing the delivery of applications via load balancing and traffic management rather than the selection of cloud platforms. Network Monitoring Software is used for tracking network performance and health, which is vital but not directly related to the application-specific selection of cloud platforms.

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9. What kind of packets does EIGRP use to communicate with neighbors during the establishment of adjacency?

A. Only update packets

B. Only acknowledgment packets

C. Hello packets

D. Only query packets

EIGRP, or Enhanced Interior Gateway Routing Protocol, utilizes hello packets as its primary means of establishing adjacency with neighboring routers. When a router wants to establish a neighbor relationship, it sends hello packets to discover other EIGRP routers in the network. The hello packets contain essential information, such as the hold time, the router's EIGRP process ID, and other parameters needed for successful communication. Once the target router receives the hello packet, it verifies the received information and can respond back, which is crucial for forming and maintaining adjacency. This process allows routers to exchange information about their networking capabilities and their respective states, ensuring that they can communicate effectively for routing purposes. This is distinct from other types of EIGRP packets, such as update packets, which are used to share routing information after adjacency is established, acknowledgment packets, which confirm the receipt of other packet types, and query packets, which are utilized to solicit information from neighboring routers under specific circumstances.

10. What data modeling language is used by NETCONF?

A. XML

B. JSON

C. SMI

D. YANG

NETCONF utilizes YANG as its data modeling language. YANG is specifically designed to model configuration and state data manipulated by network management protocols like NETCONF. It provides a structured way to define the data sent and received by these protocols, allowing for the representation of the hierarchical data structures necessary for managing network configurations. YANG's design supports features such as modularity, which enables reusability of data models across different network devices and services. Additionally, it allows for the inclusion of constraints, documentation, and descriptions of data elements, enhancing the clarity and usability of network configurations. While XML is commonly used as a transport format in NETCONF for sending messages, it is not the data modeling language employed. JSON, although it is another popular data interchange format, is not used in NETCONF for data modeling purposes. SMI, which stands for Structure of Management Information, is an older specification related to SNMP and not directly relevant to NETCONF operations or YANG. Thus, YANG is the correct answer as it defines the structure and types of data that can be managed using the NETCONF protocol.

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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:

https://ccnp350401.examzify.com

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

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