

100-105

Interconnecting Cisco Networking Devices Part 1

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SUCCESS GUIDE TO CISCO CERTIFICATION

Exam Summary — Syllabus — Questions



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Introduction to 100-105 Exam on Interconnecting Cisco Networking Devices Part 1

A great way to start the Cisco Certified Entry Networking Technician (ICND1) preparation is to begin by properly appreciating the role that syllabus and study guide play in the Cisco 100-105 certification exam. This study guide is an instrument to get you on the same page with Cisco and understand the nature of the Cisco CCENT exam.

Our team of experts has composed this Cisco 100-105 exam preparation guide to provide the overview about Cisco Interconnecting Cisco Networking Devices Part 1 exam, study material, sample questions, practice exam and ways to interpret the exam objectives to help you assess your readiness for the Cisco ICND1 exam by identifying prerequisite areas of knowledge. We recommend you to refer the simulation questions and practice test listed in this guide to determine what type of questions will be asked and the level of difficulty that could be tested in the Cisco CCENT certification exam.

Cisco 100-105 Certification Details:

Exam Name	Interconnecting Cisco Networking Devices Part 1
Exam Number	100-105 ICND1
Exam Price	\$165 USD
Duration	90 minutes
Number of Questions	45-55
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	CCNA Routing and Switching Training Videos Interconnecting Cisco Networking Devices Part 1 (ICND1) Cisco Certification Practice Exam by MeasureUp: ICND1 (100- 105)
Exam Registration	PEARSON VUE
Sample Questions	Cisco 100-105 Sample Questions
Practice Exam	Cisco Certified Entry Networking Technician Practice Test



Cisco 100-105 Exam Syllabus:

Section	Weight	Objectives
		1 Compare and contrast OSI and TCP/IP models
		2 Compare and contrast TCP and UDP protocols
		3 Describe the impact of infrastructure components in an enterprise network a) Firewalls b) Access points c) Wireless controllers
		4 Compare and contrast collapsed core and three-tier architectures
		5 Compare and contrast network topologies a) Star b) Mesh c) Hybrid
Network Fundamentals		6 Select the appropriate cabling type based on implementation requirements
	20%	7 Apply troubleshooting methodologies to resolve problems a) Perform fault isolation and document b) Resolve or escalate c) Verify and monitor resolution
		8 Configure, verify, and troubleshoot IPv4 addressing and subnetting
		9 Compare and contrast IPv4 address types a) Unicast b) Broadcast c) Multicast
		10 Describe the need for private IPv4 addressing
		11 Identify the appropriate IPv6 addressing scheme to satisfy addressing requirements in a LAN/WAN environment
		12 Configure, verify, and troubleshoot IPv6 addressing
		13 Configure and verify IPv6 Stateless Address Auto Configuration
		14 Compare and contrast IPv6 address types a) Global unicast



Section	Weight	Objectives
LAN Switching Fundamentals	Weight 26%	b) Unique local c) Link local d) Multicast e) Modified EUI 64 f) Autoconfiguration g) Anycast 1 Describe and verify switching concepts a) MAC learning and aging b) Frame switching c) Frame flooding d) MAC address table 2 Interpret Ethernet frame format 3 Troubleshoot interface and cable issues (collisions, errors, duplex, speed) 4 Configure, verify, and troubleshoot VLANs (normal range) spanning multiple switches a) Access ports (data and voice) b) Default VLAN 5 Configure, verify, and troubleshoot interswitch connectivity a) Trunk ports b) 802.1Q c) Native VLAN
		c) Native VLAN 6 Configure and verify Layer 2 protocols a) Cisco Discovery Protocol b) LLDP 7 Configure, verify, and troubleshoot port security a) Static b) Dynamic c) Sticky d) Max MAC addresses e) Violation actions f) Err-disable recovery
Routing Fundamentals	25%	1 Describe the routing concepts a) Packet handling along the path through a network b) Forwarding decision based on route lookup c) Frame rewrite 2 Interpret the components of routing table a) Prefix b) Network mask c) Next hop d) Routing protocol code



Section	Weight	Objectives
		e) Administrative distance f) Metric g) Gateway of last resort
		3 Describe how a routing table is populated by different routing information sources a) Admin distance
		4 Configure, verify, and troubleshoot inter-VLAN routing a) Router on a stick
		5 Compare and contrast static routing and dynamic routing
		6 Configure, verify, and troubleshoot IPv4 and IPv6 static routing a) Default route b) Network route c) Host route d) Floating static
		7 Configure, verify, and troubleshoot RIPv2 for IPv4 (excluding authentication, filtering, manual summarization, redistribution)
		1 Describe DNS lookup operation
		2 Troubleshoot client connectivity issues involving DNS
		3 Configure and verify DHCP on a router (excluding static reservations) a) Server b) Relay c) Client d) TFTP, DNS, and gateway options
Infrastructure Services	15%	4 Troubleshoot client- and router-based DHCP connectivity issues
		5 Configure and verify NTP operating in client/server mode
		6 Configure, verify, and troubleshoot IPv4 standard numbered and named access list for routed interfaces
		7 Configure, verify, and troubleshoot inside source NAT a) Static b) Pool c) PAT



Section	Weight	Objectives	
Section	Weight	1 Configure and verify device-monitoring using syslog 2 Configure and verify device management a) Backup and restore device configuration b) Using Cisco Discovery Protocol and LLDP for device discovery c) Licensing d) Logging e) Timezone f) Loopback 3 Configure and verify initial device configuration 4 Configure, verify, and troubleshoot basic device	
Infrastructure Maintenance	14%	,	
		5 Perform device maintenance a) Cisco IOS upgrades and recovery (SCP, FTP, TFTP, and MD5 verify) b) Password recovery and configuration register c) File system management	
		6 Use Cisco IOS tools to troubleshoot and resolve problems a) Ping and traceroute with extended option b) Terminal monitor c) Log events	

100-105 Sample Questions:

01. Which command can you enter to allow Telnet to be supported in addition to SSH?

- a) transport input telnet
- b) transport input telnet ssh
- **c)** no transport input telnet
- d) privilege level 15

02. Which is the most secure method of remotely accessing a network device?

- a) HTTP
- **b)** SSH
- c) Telnet
- d) RMON



03. Which Cisco IOS command will indicate that interface GigabitEthernet 0/0 is configured via DHCP?

- a) show interface GigabitEthernet 0/0
- b) show ip interface GigabitEthernet 0/0 dhcp
- c) show ip interface dhcp
- d) show ip interface GigabitEthernet 0/0
- e) show ip interface GigabitEthernet 0/0 brief

04. Which statement about the nature of NAT overload is true?

- a) applies a one-to-one relationship to internal IP addresses
- **b)** applies a one-to-many relationship to internal IP addresses
- c) applies a many-to-many relationship to internal IP addresses
- d) can be configured only on Gigabit interfaces

05. Which command is used to configure an IPv6 static default route?

- a) ipv6 route ::/0 interface next-hop
- **b)** ipv6 route default interface next-hop
- c) ipv6 route 0.0.0.0/0 interface next-hop
- **d)** ip route 0.0.0.0/0 interface next-hop

06. Which command correctly assigns a subinterface to VLAN 50 using 802.1Q trunking?

- a) Router(config)#encapsulation 50 dot1Q
- **b)** Router(config)#encapsulation 802.1Q 50
- c) Router(config-if)#encapsulation dot1Q 50
- d) Router(config-if)#encapsulation 50 802.1Q

07. Which three statements about MAC addresses are correct?

(Choose three.)

- a) The MAC address is also referred to as the IP address.
- **b)** To communicate with other devices on a network, a network device must have a unique MAC address.
- **c)** The MAC address of a device must be configured in the Cisco IOS CLI by a user with administrative privileges.
- **d)** A MAC address contains two main components, the first of which identifies the manufacturer of the hardware and the second of which uniquely identifies the hardware.
- e) An example of a MAC address is 0A:26:B8:D6:65:90.
- **f)** A MAC address contains two main components, the first of which identifies the network on which the host resides and the second of which uniquely identifies the host on the network.

08. Which information does the show vlan command display?

- a) VTP domain parameters
- **b)** VMPS server configuration parameters
- c) ports that are configured as trunks
- d) names of the VLANs and the ports that are assigned to the VLANs

09. Which three statements about network characteristics are true?

(Choose three.)



- a) Speed is a measure of the data rate in bits per second of a given link in the network.
- **b)** Scalability indicates how many nodes are currently on the network.
- **c)** The logical topology is the arrangement of cables, network devices, and end systems.
- **d)** Availability is a measure of the probability that the network will be available for use when it is required.
- e) Reliability indicates the dependability of the components that make up the network.

10. Which two statements about the purpose of the OSI model are accurate? (Choose two.)

- a) defines the network functions that occur at each layer
- **b)** facilitates an understanding of how information travels throughout a network
- c) ensures reliable data delivery through its layered approach
- **d)** changes in one layer do not impact other layers

Answers to 100-105 Exam Questions:

Question: 01	Question: 02	Question: 03	Question: 04	Question: 05
Answer: b	Answer: b	Answer: d	Answer: b	Answer: a
Question: 06	Question: 07	Question: 08	Question: 09	Question: 10
Answer: c	Answer: b, d, e	Answer: d	Answer: a, d, e	Answer: a, b

Note: If you find any typo or data entry error in these sample questions, we request you to update us by commenting on this page or write an email on feedback@nwexam.com