200-125

Cisco Certified Network Associate

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SUCCESS GUIDE TO CISCO CERTIFICATION

Exam Summary – Syllabus – Questions

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Introduction to 200-125 Exam on Cisco Certified Network Associate

A great way to start the Cisco Certified Network Associate Routing and Switching (CCNA) preparation is to begin by properly appreciating the role that syllabus and study guide play in the Cisco 200-125 certification exam. This study guide is an instrument to get you on the same page with Cisco and understand the nature of the Cisco CCNA Routing and Switching exam.

Our team of experts has composed this Cisco 200-125 exam preparation guide to provide the overview about Cisco Cisco Certified Network Associate exam, study material, sample questions, practice exam and ways to interpret the exam objectives to help you assess your readiness for the Cisco CCNA 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 CCNA Routing and Switching certification exam.

Cisco 200-125 Certification Details:

Exam Name	Cisco Certified Network Associate
Exam Number	200-125 CCNA
Exam Price	$325 USD
Duration	90 minutes
Number of Questions	50-60
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	CCNA Routing and Switching Training Videos Interconnecting Cisco Networking Devices: Accelerated (CCNAX)
Exam Registration	PEARSON VUE
Sample Questions	Cisco 200-125 Sample Questions
Practice Exam	**Cisco Certified Network Associate Routing and Switching Practice Test**

Cisco 200-125 Exam Syllabus:

Section	Weight	Objectives
Network Fundamentals	15%	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 Describe the effects of cloud resources on enterprise network architecture a) Traffic path to internal and external cloud services b) Virtual services c) Basic virtual network infrastructure 5 Compare and contrast collapsed core and three-tier architectures 6 Compare and contrast network topologies a) Star b) Mesh c) Hybrid 7 Select the appropriate cabling type based on implementation requirements 8 Apply troubleshooting methodologies to resolve problems a) Perform and document fault isolation b) Resolve or escalate c) Verify and monitor resolution 9 Configure, verify, and troubleshoot IPv4 addressing and subnetting 10 Compare and contrast IPv4 address types a) Unicast b) Broadcast c) Multicast 11 Describe the need for private IPv4 addressing 12 Identify the appropriate IPv6 addressing scheme to satisfy addressing requirements in a LAN/WAN environment 13 Configure, verify, and troubleshoot IPv6 addressing 14 Configure and verify IPv6 Stateless Address Auto Configuration

Section	Weight	Objectives
		15 Compare and contrast IPv6 address types a) Global unicast b) Unique local c) Link local d) Multicast e) Modified EUI 64 f) Autoconfiguration g) Anycast
LAN Switching Technologies	21%	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/extended range) spanning multiple switches a) Access ports (data and voice) b) Default VLAN 5 Configure, verify, and troubleshoot interswitch connectivity a) Trunk ports b) Add and remove VLANs on a trunk c) DTP, VTP (v1&v2), and 802.1Q d) Native VLAN 6 Configure, verify, and troubleshoot STP protocols a) STP mode (PVST+ and RPVST+) b) STP root bridge selection 7 Configure, verify and troubleshoot STP related optional features a) PortFast b) BPDU guard 8 Configure and verify Layer 2 protocols a) Cisco Discovery Protocol b) LLDP 9 Configure, verify, and troubleshoot (Layer 2/Layer 3) EtherChannel a) Static b) PAGP c) LACP

Section	Weight	Objectives
		10 Describe the benefits of switch stacking and chassis aggregation
Routing Technologies	23%	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 a routing table a) Prefix b) Network mask c) Next hop d) Routing protocol code 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 b) SVI 5 Compare and contrast static routing and dynamic routing 6 Compare and contrast distance vector and link state routing protocols 7 Compare and contrast interior and exterior routing protocols 8 Configure, verify, and troubleshoot IPv4 and IPv6 static routing a) Default route b) Network route c) Host route d) Floating static 9 Configure, verify, and troubleshoot single area and multi-area OSPFv2 for IPv4 (excluding authentication, filtering, manual summarization, redistribution, stub, virtual-link, and LSAs) 10 Configure, verify, and troubleshoot single area and multi-area OSPFv3 for IPv6 (excluding authentication, filtering, manual summarization, redistribution, stub, virtual-link, and LSAs)

Section	Weight	Objectives
		11 Configure, verify, and troubleshoot EIGRP for IPv4 (excluding authentication, filtering, manual summarization, redistribution, stub) 12 Configure, verify, and troubleshoot EIGRP for IPv6 (excluding authentication, filtering, manual summarization, redistribution, stub) 13 Configure, verify, and troubleshoot RIPv2 for IPv4 (excluding authentication, filtering, manual summarization, redistribution) 14 Troubleshoot basic Layer 3 end-to-end connectivity issues
WAN Technologies	10%	1 Configure and verify PPP and MLPPP on WAN interfaces using local authentication 2 Configure, verify, and troubleshoot PPPoE client-side interfaces using local authentication 3 Configure, verify, and troubleshoot GRE tunnel connectivity 4 Describe WAN topology options a) Point-to-point b) Hub and spoke c) Full mesh d) Single vs dual-homed 5 Describe WAN access connectivity options a) MPLS b) Metro Ethernet c) Broadband PPPoE d) Internet VPN (DMVPN, site-to-site VPN, client VPN) 6 Configure and verify single-homed branch connectivity using eBGP IPv4 (limited to peering and route advertisement using Network command only) 7 Describe basic QoS concepts a) Marking b) Device trust c) Prioritization c. [i] Voice c. [ii] Video c. [iii] Data d) Shaping e) Policing f) Congestion management
Infrastructure Services	10%	1 Describe DNS lookup operation

Section	Weight	Objectives
		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 4 Troubleshoot client- and router-based DHCP connectivity issues 5 Configure, verify, and troubleshoot basic HSRP a) Priority b) Preemption c) Version 6 Configure, verify, and troubleshoot inside source NAT a) Static b) Pool c) PAT 7 Configure and verify NTP operating in a client/server mode
Infrastructure Security	11%	1 Configure, verify, and troubleshoot port security a) Static b) Dynamic c) Sticky d) Max MAC addresses e) Violation actions f) Err-disable recovery 2 Describe common access layer threat mitigation techniques a) 802.1x b) DHCP snooping c) Nondefault native VLAN 3 Configure, verify, and troubleshoot IPv4 and IPv6 access list for traffic filtering a) Standard b) Extended c) Named 4 Verify ACLs using the APIC-EM Path Trace ACL analysis tool 5 Configure, verify, and troubleshoot basic device hardening a) Local authentication b) Secure password c) Access to device

Section	Weight	Objectives
		c. [i] Source address c. [ii] Telnet/SSH d) Login banner 6 Describe device security using AAA with TACACS+ and RADIUS
Infrastructure Management	10%	1 Configure and verify device-monitoring protocols a) SNMPv2 b) SNMPv3 c) Syslog 2 Troubleshoot network connectivity issues using ICMP echo-based IP SLA 3 Configure and verify device management a) Backup and restore device configuration b) Using Cisco Discovery Protocol or LLDP for device discovery c) Licensing d) Logging e) Timezone f) Loopback 4 Configure and verify initial device configuration 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 d) Local SPAN 7 Describe network programmability in enterprise network architecture a) Function of a controller b) Separation of control plane and data plane c) Northbound and southbound APIs

200-125 Sample Questions:

01. 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.

02. 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

03. How does STP prevent forwarding loops at OSI Layer 2?
a) TTL
b) MAC address forwarding
c) collision avoidance
d) port blocking

04. Which two statements about EtherChannel technology are true?
(Choose two.)
a) EtherChannel provides increased bandwidth by bundling existing FastEthernet or Gigabit Ethernet interfaces into a single EtherChannel.
b) STP does not block EtherChannel links.
c) You can configure multiple EtherChannel links between two switches, using up to a limit of sixteen physical ports.
d) EtherChannel does not allow load sharing of traffic among the physical links within the EtherChannel.
e) EtherChannel allows redundancy in case one or more links in the EtherChannel fail.

05. Which statement about static and dynamic routes is true?
a) Dynamic routes are manually configured by a network administrator, while static routes are automatically learned and adjusted by a routing protocol.
b) Static routes are manually configured by a network administrator, while dynamic routes are automatically learned and adjusted by a routing protocol.
c) Static routes tell the router how to forward packets to networks that are not directly connected, while dynamic routes tell the router how to forward packets to networks that are directly connected.
d) Dynamic routes tell the router how to forward packets to networks that are not directly connected, while static routes tell the router how to forward packets to networks that are directly connected.

06. What is the purpose of the show ip ospf interface command?
a) displaying OSPF-related interface information
b) displaying general information about OSPF routing processes
c) displaying OSPF neighbor information on a per-interface basis
d) displaying OSPF neighbor information on a per-interface-type basis

07. Which two of the following are GRE characteristics?
(Choose two.)

a) GRE encapsulation uses a protocol-type field in the GRE header to support the encapsulation of any OSI Layer 3 protocol.
b) GRE itself is stateful. It includes flow-control mechanisms, by default.
c) GRE includes strong security mechanisms to protect its payload.
d) The GRE header, together with the tunneling IP header, creates at least 24 bytes of additional overhead for tunneled packets.

08. 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

09. 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

10. What will happen if you configure the logging trap debug command on a router?
a) It causes the router to send all messages with the severity levels Warning, Error, Critical, and Emergency to the syslog server.
b) It causes the router to send messages with lower severity levels to the syslog server.
c) It causes the router to send all messages to the syslog server.
d) It causes the router to stop sending all messages to the syslog server.

Answers to 200-125Exam Questions:

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

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