

CISCO 200-301

Cisco CCNA Certification Questions & Answers

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200-301

Cisco Certified Network Associate

90-110 Questions Exam – Variable (750-850 / 1000

Approx.) Cut Score – Duration of 120 minutes



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Discover More about the 200-301 Certification

Are you interested in passing the Cisco 200-301 exam? First discover, who benefits from the 200-301 certification. The 200-301 is suitable for a candidate if he wants to learn about Associate. Passing the 200-301 exam earns you the Cisco Certified Network Associate title.

While preparing for the 200-301 exam, many candidates struggle to get the necessary materials. But do not worry; your struggling days are over. The 200-301 PDF contains some of the most valuable preparation tips and the details and instant access to useful [200-301 study materials just at one click](#).

Cisco 200-301 CCNA Certification Details:

Exam Name	Implementing and Administering Cisco Solutions
Exam Number	200-301 CCNA
Exam Price	\$300 USD
Duration	120 minutes
Number of Questions	90-110
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	Implementing and Administering Cisco Solutions (CCNA)
Exam Registration	PEARSON VUE
Sample Questions	Cisco 200-301 Sample Questions
Practice Exam	Cisco Certified Network Associate Practice Test

200-301 Syllabus:

Section	Weight	Objectives
Network Fundamentals	20%	1. Explain the role and function of network components <ul style="list-style-type: none"> • Routers • L2 and L3 switches • Next-generation firewalls and IPS • Access points • Controllers (Cisco DNA Center and WLC) • Endpoints • Servers

Section	Weight	Objectives
		<p>2. Describe characteristics of network topology architectures</p> <ul style="list-style-type: none"> • 2 tier • 3 tier • Spine-leaf • WAN • Small office/home office (SOHO) • On-premises and cloud <p>3. Compare physical interface and cabling types</p> <ul style="list-style-type: none"> • Single-mode fiber, multimode fiber, copper • Connections (Ethernet shared media and point-to-point) • Concepts of PoE <p>4. Identify interface and cable issues (collisions, errors, mismatch duplex, and/or speed)</p> <p>5. Compare TCP to UDP</p> <p>6. Configure and verify IPv4 addressing and subnetting</p> <p>7. Describe the need for private IPv4 addressing</p> <p>8. Configure and verify IPv6 addressing and prefix</p> <p>9. Compare IPv6 address types</p> <ul style="list-style-type: none"> • Global unicast • Unique local • Link local • Anycast • Multicast • Modified EUI 64 <p>10. Verify IP parameters for Client OS (Windows, Mac OS, Linux)</p> <p>11. Describe wireless principles</p> <ul style="list-style-type: none"> • Nonoverlapping Wi-Fi channels • SSID • RF • Encryption

Section	Weight	Objectives
		12. Explain virtualization fundamentals (virtual machines) 13. Describe switching concepts <ul style="list-style-type: none"> • MAC learning and aging • Frame switching • Frame flooding • MAC address table
Network Access	20%	1. Configure and verify VLANs (normal range) spanning multiple switches <ul style="list-style-type: none"> • Access ports (data and voice) • Default VLAN • Connectivity 2. Configure and verify interswitch connectivity <ul style="list-style-type: none"> • Trunk ports • 802.1Q • Native VLAN 3. Configure and verify Layer 2 discovery protocols (Cisco Discovery Protocol and LLDP) 4. Configure and verify (Layer 2/Layer 3) EtherChannel (LACP) 5. Describe the need for and basic operations of Rapid PVST+ Spanning Tree Protocol and identify basic operations <ul style="list-style-type: none"> • Root port, root bridge (primary/secondary), and other port names • Port states (forwarding/blocking) • PortFast benefits 6. Compare Cisco Wireless Architectures and AP modes 7. Describe physical infrastructure connections of WLAN components (AP,WLC, access/trunk ports, and LAG) 8. Describe AP and WLC management access connections (Telnet, SSH, HTTP,HTTPS, console, and TACACS+/RADIUS) 9. Configure the components of a wireless LAN access

Section	Weight	Objectives
		for client connectivity using GUI only such as WLAN creation, security settings, QoS profiles, and advanced WLAN settings
IP Connectivity	25%	1. Interpret the components of routing table <ul style="list-style-type: none"> • Routing protocol code • Prefix • Network mask • Next hop • Administrative distance • Metric • Gateway of last resort 2. Determine how a router makes a forwarding decision by default <ul style="list-style-type: none"> • Longest match • Administrative distance • Routing protocol metric 3. Configure and verify IPv4 and IPv6 static routing <ul style="list-style-type: none"> • Default route • Network route • Host route • Floating static 4. Configure and verify single area OSPFv2 <ul style="list-style-type: none"> • Neighbor adjacencies • Point-to-point • Broadcast (DR/BDR selection) • Router ID 5. Describe the purpose of first hop redundancy protocol
IP Services	10%	1. Configure and verify inside source NAT using static and pools 2. Configure and verify NTP operating in a client and server mode 3. Explain the role of DHCP and DNS within the network

Section	Weight	Objectives
		4. Explain the function of SNMP in network operations 5. Describe the use of syslog features including facilities and levels 6. Configure and verify DHCP client and relay 7. Explain the forwarding per-hop behavior (PHB) for QoS such as classification, marking, queuing, congestion, policing, shaping 8. Configure network devices for remote access using SSH 9. Describe the capabilities and function of TFTP/FTP in the network
Security Fundamentals	15%	1. Define key security concepts (threats, vulnerabilities, exploits, and mitigation techniques) 2. Describe security program elements (user awareness, training, and physical access control) 3. Configure device access control using local passwords 4. Describe security password policies elements, such as management, complexity, and password alternatives (multifactor authentication, certificates, and biometrics) 5. Describe remote access and site-to-site VPNs 6. Configure and verify access control lists 7. Configure Layer 2 security features (DHCP snooping, dynamic ARP inspection, and port security) 8. Differentiate authentication, authorization, and accounting concepts 9. Describe wireless security protocols (WPA, WPA2, and WPA3) 10. Configure WLAN using WPA2 PSK using the GUI
Automation and Programmability	10%	1. Explain how automation impacts network management 2. Compare traditional networks with controller-based networking 3. Describe controller-based and software defined architectures (overlay, underlay, and fabric) <ul style="list-style-type: none"> • Separation of control plane and data plane • North-bound and south-bound APIs 4. Compare traditional campus device management with Cisco DNA Center enabled device management 5. Describe characteristics of REST-based APIs (CRUD, HTTP verbs, and data encoding)

Section	Weight	Objectives
		6. Recognize the capabilities of configuration management mechanisms Puppet, Chef, and Ansible 7. Interpret JSON encoded data

Broaden Your Knowledge with Cisco 200-301 Sample Questions:

Question: 1

If a switch has five workstations attached, how many collision domains are created?

- a) 1
- b) 0
- c) 5
- d) 6

Answer: c

Question: 2

How many more bits are used in an IPv6 address than in an IPv4 address?

- a) 96
- b) 128
- c) 48
- d) 64

Answer: a

Question: 3

You have an interface on a router with the IP address of 192.168.192.10/29. Including the router interface, how many hosts can have IP addresses on the LAN attached to the router interface?

- a) 6
- b) 8
- c) 30
- d) 62
- e) 126

Answer: a

Question: 4

In software defined architectures, which plane is distributed and responsible for traffic forwarding?

- a) management plane
- b) control plane
- c) policy plane
- d) data plane

Answer: d**Question: 5**

The DSCP field constitutes how many fields in the IP header?

- a) 3 bits
- b) 4 bits
- c) 6 bits
- d) 8 bits

Answer: c**Question: 6**

How large is the typical network portion of an IPv6 global unicast address?

- a) 32 bits
- b) 48 bits
- c) 64 bits
- d) 128 bits

Answer: c**Question: 7**

You run ipconfig on your Windows system and see an IPv6 address that starts FE80. What type of address is this?

- a) Link local
- b) Multicast
- c) Anycast
- d) Global unicast

Answer: a

Question: 8

If a notice-level message is sent to a syslog server, which event has occurred?

- a) A network device has restarted.
- b) A debug operation is running.
- c) An ARP inspection has failed.
- d) A routing instance has flapped.

Answer: d

Question: 9

On which default interface have you configured an IP address for a switch?

- a) int fa0/0
- b) int vty 0 15
- c) int vlan 1
- d) int s/0/0

Answer: c

Question: 10

In OSPF, Hellos are sent to what IP address?

- a) 224.0.0.5
- b) 224.0.0.9
- c) 224.0.0.10
- d) 224.0.0.1

Answer: a

Avail the Study Guide to Pass Cisco 200-301 CCNA Exam:

- Find out about the 200-301 syllabus topics. Visiting the official site offers an idea about the exam structure and other important study resources. Going through the syllabus topics help to plan the exam in an organized manner.
- Once you are done exploring the [200-301 syllabus](#), it is time to plan for studying and covering the syllabus topics from the core. Chalk out the best plan for yourself to cover each part of the syllabus in a hassle-free manner.
- A study schedule helps you to stay calm throughout your exam preparation. It should contain your materials and thoughts like study hours, number of

topics for daily studying mentioned on it. The best bet to clear the exam is to follow your schedule rigorously.

- The candidate should not miss out on the scope to learn from the 200-301 training. Joining the Cisco provided training for 200-301 exam helps a candidate to strengthen his practical knowledge base from the certification.
- Learning about the probable questions and gaining knowledge regarding the exam structure helps a lot. Go through the [200-301 sample questions](#) and boost your knowledge
- Make yourself a pro through online practicing the syllabus topics. 200-301 practice tests would guide you on your strengths and weaknesses regarding the syllabus topics. Through rigorous practicing, you can improve the weaker sections too. Learn well about time management during exam and become confident gradually with practice tests.

Career Benefits:

Passing the 200-301 exam, helps a candidate to prosper highly in his career. Having the certification on the resume adds to the candidate's benefit and helps to get the best opportunities.

Here Is the Trusted Practice Test for the 200-301 Certification

NWExam.com is here with all the necessary details regarding the 200-301 exam. We provide authentic practice tests for the 200-301 exam. What do you gain from these practice tests? You get to experience the real exam-like questions made by industry experts and get a scope to improve your performance in the actual exam. Rely on NWExam.com for rigorous, unlimited two-month attempts on the [200-301 practice tests](#), and gradually build your confidence. Rigorous practice made many aspirants successful and made their journey easy towards grabbing the Cisco Certified Network Associate.

Start online practice of 200-301 Exam by visiting URL
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