



CISCO 200-301

Cisco CCNA Certification Questions & Answers

Exam Summary – Syllabus – Questions

200-301

[Cisco Certified Network Associate](#)

90-110 Questions Exam – Variable (750-850 / 1000 Approx.) Cut Score – Duration of 120 minutes

Table of Contents:

Know Your 200-301 Certification Well:	2
Cisco 200-301 CCNA Certification Details:	2
200-301 Syllabus:.....	3
Cisco 200-301 Sample Questions:	7
Study Guide to Crack Cisco CCNA 200-301 Exam:	10

Know Your 200-301 Certification Well:

The 200-301 is best suitable for candidates who want to gain knowledge in the Cisco Associate. Before you start your 200-301 preparation you may struggle to get all the crucial CCNA materials like 200-301 syllabus, sample questions, study guide.

But don't worry the 200-301 PDF is here to help you prepare in a stress free manner.

The PDF is a combination of all your queries like-

- What is in the 200-301 syllabus?
- How many questions are there in the 200-301 exam?
- Which Practice test would help me to pass the 200-301 exam at the first attempt?

Passing the 200-301 exam makes you Cisco Certified Network Associate. Having the CCNA certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

Cisco 200-301 CCNA Certification Details:

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

200-301 Syllabus:

Section	Weight	Objectives
Network Fundamentals	20%	<p>1. Explain the role and function of network components</p> <p>Routers</p> <p>L2 and L3 switches</p> <p>Next-generation firewalls and IPS</p> <p>Access points</p> <p>Controllers (Cisco DNA Center and WLC)</p> <p>Endpoints</p> <p>Servers</p> <p>2. Describe characteristics of network topology architectures</p> <p>2 tier</p> <p>3 tier</p> <p>Spine-leaf</p> <p>WAN</p> <p>Small office/home office (SOHO)</p> <p>On-premises and cloud</p> <p>3. Compare physical interface and cabling types</p> <p>Single-mode fiber, multimode fiber, copper</p> <p>Connections (Ethernet shared media and point-to-point)</p> <p>Concepts of PoE</p> <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> <p>Global unicast</p> <p>Unique local</p> <p>Link local</p> <p>Anycast</p>

Section	Weight	Objectives
		<p>Multicast</p> <p>Modified EUI 64</p> <p>10. Verify IP parameters for Client OS (Windows, Mac OS, Linux)</p> <p>11. Describe wireless principles</p> <p>Nonoverlapping Wi-Fi channels</p> <p>SSID</p> <p>RF</p> <p>Encryption</p> <p>12. Explain virtualization fundamentals (virtual machines)</p> <p>13. Describe switching concepts</p> <p>MAC learning and aging</p> <p>Frame switching</p> <p>Frame flooding</p> <p>MAC address table</p>
Network Access	20%	<p>1. Configure and verify VLANs (normal range) spanning multiple switches</p> <p>Access ports (data and voice)</p> <p>Default VLAN</p> <p>Connectivity</p> <p>2. Configure and verify interswitch connectivity</p> <p>Trunk ports</p> <p>802.1Q</p> <p>Native VLAN</p> <p>3. Configure and verify Layer 2 discovery protocols (Cisco Discovery Protocol and LLDP)</p> <p>4. Configure and verify (Layer 2/Layer 3) EtherChannel (LACP)</p> <p>5. Describe the need for and basic operations of Rapid PVST+ Spanning Tree Protocol and identify basic operations</p> <p>Root port, root bridge (primary/secondary), and other port names</p>

Section	Weight	Objectives
		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 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 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 Longest match Administrative distance Routing protocol metric 3. Configure and verify IPv4 and IPv6 static routing Default route Network route Host route Floating static 4. Configure and verify single area OSPFv2 Neighbor adjacencies Point-to-point

Section	Weight	Objectives
		<p>Broadcast (DR/BDR selection)</p> <p>Router ID</p> <p>5. Describe the purpose of first hop redundancy protocol</p>
IP Services	10%	<p>1. Configure and verify inside source NAT using static and pools</p> <p>2. Configure and verify NTP operating in a client and server mode</p> <p>3. Explain the role of DHCP and DNS within the network</p> <p>4. Explain the function of SNMP in network operations</p> <p>5. Describe the use of syslog features including facilities and levels</p> <p>6. Configure and verify DHCP client and relay</p> <p>7. Explain the forwarding per-hop behavior (PHB) for QoS such as classification, marking, queuing, congestion, policing, shaping</p> <p>8. Configure network devices for remote access using SSH</p> <p>9. Describe the capabilities and function of TFTP/FTP in the network</p>
Security Fundamentals	15%	<p>1. Define key security concepts (threats, vulnerabilities, exploits, and mitigation techniques)</p> <p>2. Describe security program elements (user awareness, training, and physical access control)</p> <p>3. Configure device access control using local passwords</p> <p>4. Describe security password policies elements, such as management, complexity, and password alternatives (multifactor authentication, certificates, and biometrics)</p> <p>5. Describe remote access and site-to-site VPNs</p> <p>6. Configure and verify access control lists</p> <p>7. Configure Layer 2 security features (DHCP snooping, dynamic ARP inspection, and port security)</p> <p>8. Differentiate authentication, authorization, and accounting concepts</p> <p>9. Describe wireless security protocols (WPA, WPA2, and WPA3)</p> <p>10. Configure WLAN using WPA2 PSK using the GUI</p>
Automation and Programmability	10%	<p>1. Explain how automation impacts network management</p> <p>2. Compare traditional networks with controller-based networking</p>

Section	Weight	Objectives
		<p>3. Describe controller-based and software defined architectures (overlay, underlay, and fabric)</p> <p>Separation of control plane and data plane North-bound and south-bound APIs</p> <p>4. Compare traditional campus device management with Cisco DNA Center enabled device management</p> <p>5. Describe characteristics of REST-based APIs (CRUD, HTTP verbs, and data encoding)</p> <p>6. Recognize the capabilities of configuration management mechanisms Puppet, Chef, and Ansible</p> <p>7. Interpret JSON encoded data</p>

Cisco 200-301 Sample Questions:

Question: 1

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: 2

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: 3

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: 4

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: 5

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

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

Answer: c

Question: 6

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: 7

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

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

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: 10

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 s0/0/0

Answer: c

Study Guide to Crack Cisco CCNA 200-301 Exam:

- Getting details of the 200-301 syllabus, is the first step of a study plan. This pdf is going to be of ultimate help. Completion of the syllabus is must to pass the 200-301 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the Cisco provided training for 200-301 exam could be of much help. If there is specific training for the exam, you can discover it from the link above.
- Read from the 200-301 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on 200-301 practice tests is must. Continuous practice will make you an expert in all syllabus areas.

Reliable Online Practice Test for 200-301 Certification

Make NWExam.com your best friend during your Implementing and Administering Cisco Solutions exam preparation. We provide authentic practice tests for the 200-301 exam. Experts design these online practice tests, so we can offer you an exclusive experience of taking the actual 200-301 exam. We guarantee you 100% success in your first exam attempt if you continue practicing regularly. Don't bother if you don't get 100% marks in initial practice exam attempts. Just utilize the result section to know your strengths and weaknesses and prepare according to that until you get 100% with our practice tests. Our evaluation makes you confident, and you can score high in the 200-301 exam.

Start online practice of 200-301 Exam by visiting URL

<https://www.nwexam.com/cisco/200-301-implementing-and-administering-cisco-solutions-ccna>