CISCO 350-501

Cisco CCNP Service Provider Certification Questions & Answers

Exam Summary – Syllabus – Questions

350-501

Cisco Certified Network Professional Service Provider

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

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Know Your 350-501 Certification Well:

The 350-501 is best suitable for candidates who want to gain knowledge in the Cisco Service Provider. Before you start your 350-501 preparation you may struggle to get all the crucial CCNP Service Provider materials like 350-501 syllabus, sample questions, study guide.

But don't worry the 350-501 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 350-501 syllabus?
- How many questions are there in the 350-501 exam?
- Which Practice test would help me to pass the 350-501 exam at the first attempt?

Passing the 350-501 exam makes you Cisco Certified Network Professional Service Provider. Having the CCNP Service Provider 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 350-501 CCNP Service Provider Certification Details:

Exam Name	Implementing and Operating Cisco Service Provider Network Core Technologies
Exam Code	350-501
Exam Price	$400 USD
Duration	120 minutes
Number of Questions	90-110
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	**Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR)**
Exam Registration	**PEARSON VUE**
Sample Questions	**Cisco 350-501 Sample Questions**

Practice Exam	Cisco Certified Network Professional Service Provider Practice Test

350-501 Syllabus:

Section	Weight	Objectives
Architecture	15%	1. Describe service provider architectures • Core architectures (Metro Ethernet, MPLS, unified MPLS, SR) • Transport technologies (Optical, xDSL, DOCSIS, TDM, and xPON) • Mobility (packet core, RAN xhaul transport for 4G and 5G) 2. Describe Cisco network software architecture • IOS • IOS XE • IOS XR 3. Describe service provider virtualization • NFV infrastructure • VNF workloads • OpenStack 4. Describe QoS architecture • MPLS QOS models (Pipe, Short Pipe, and Uniform) • MPLS TE QoS (MAM, RDM, CBTS, PBTS, and DS-TE) • DiffServ and IntServ QoS models • Trust boundaries between enterprise and SP environments • IPv6 flow label 5. Configure and verify control plan security • Control plane protection techniques (LPTS and CoPP) • BGP-TTL security and protocol authentication • BGP prefix suppression

Section	Weight	Objectives
		• LDP security (authentication and label allocation filtering) • BGP sec • BGP flowspec 6. Describe management plane security • Traceback • AAA and TACACS • RestAPI security • DdoS 7. Implement data plane security • uRPF • ACLs • RTBH
Networking	30%	1. Implement IS-IS (IPv4 and IPv6) • Route advertisement • Area addressing • Multitopology • Metrics 2. Implement OSPF (v2 and v3) • Neighbor adjacency • Route advertisement • Multiarea (addressing and types) • Metrics 3. Describe BGP path selection algorithm 4. Implement BGP (v4 and v6 for IBGP and EBGP) • Neighbors • Prefix advertisement • Address family • Path selection • Attributes • Redistribution

Section	Weight	Objectives
		5. Implement routing policy language and route maps (BGP, OSPF, IS-IS) 6. Troubleshoot routing protocols • Neighbor adjacency (IS-IS, OSPF, BGP) • Route advertisement (IS-IS, OSPF, BGP) 7. Describe IPv6 transition (NAT44, NAT64, 6RD, MAP, and DS Lite) 8. Implement high availability • NSF / graceful restart • NSR • BFD • Link aggregation
MPLS and Segment Routing	20%	1. Implement MPLS • LDP sync • LDP session protection • LDP neighbors • Unified MPLS • MPLS OAM 2. Describe traffic engineering • ISIS and OSPF extensions • RSVP functionality • FRR 3. Describe segment routing • Segment types • IGP control plane • Segment routing traffic engineering • TI-LFa • PCE-PCC architectures
Services	20%	1. Describe VPN services • EVPN • Inter-AS VPN

Section	Weight	Objectives
		• CSC • mVPN 2. Configure L2VPN and Carrier Ethernet • Ethernet services (E-Line, E-Tree, E-Access, E-LAN) • IEEE 802.1ad, IEEE 802.1ah, and ITU G.8032 • Ethernet OAM • VLAN tag manipulation 3. Configure L3VPN • Intra-AS VPN • Shared services (extranet and Internet) 4. Implement multicast services • PIM (PIM-SM, PIM-SSM, and PIM-BIDIR) • IGMP v1/v2/v3 and MLD 5. Implement QoS services • Classification and marking • Congestion avoidance, traffic policing, and shaping
Automation and Assurance	15%	1. Describe the programmable APIs used to include Cisco devices in network automation 2. Interpret an external script to configure a Cisco device using a REST API 3. Describe the role of Network Services Orchestration (NSO) 4. Describe the high-level principles and benefits of a data modeling language, such as YANG 5. Compare agent vs. agentless configuration management tools, such as Chef, Puppet, Ansible, and SaltStack 6. Describe data analytics and model-driven telemetry in service provider 7. Configure dial-in/out telemetry streams using gRPC 8. Configure and verify NetFlow/IPFIX 9. Configure and verify NETCONF and RESTCONF 10. Configure and verify SNMP (v2c/v3)

Cisco 350-501 Sample Questions:

Question: 1

Why do Cisco MPLS TE tunnels require a link-state routing protocol?

a) The tunnel endpoints can use the link-state database to evaluate the entire topology and determine the best path
b) The link state database provides segmentation by area, which improves the path-selection process
c) The link-state database provides a data repository from which the tunnel endpoints can dynamically select a source ID
d) Link-state routing protocols use SPF calculations that the tunnel endpoints leverage to implement the tunnel

Answer: a

Question: 2

A customer of an ISP requests support to preferred exit points for the customer AS?

a) highest local preference outbound
b) lowest local preference inbound
c) highest local preference inbound
d) lowest multi-exit discriminator

Answer: c

Question: 3

An engineer working for telecommunication company with an employee id: 3715 15 021 needs to secure the LAN network using a prefix list.

Which best practice should the engineer follow when he implements a prefix list?

a) An engineer must use non sequential sequence numbers in the prefix list so that he can insert additional entries later.
b) An engineer must include only the prefixes for which he needs to log activity.
c) An engineer must identity the prefix list with a number only
d) The final entry in a prefix list must be /32

Answer: a

Question: 4

Which two IS-IS parameters must match before two Level 2 peers can form an adjacency? (Choose two)

a) authentication settings
b) area ID
c) hello timer setting
d) system ID
e) MTU

Answer: a, e

Question: 5

How can shared services in an MPLS Layer 3 VPN provide Internet access to the customers of a central service provider?

a) Route distinguishes are used to identify the routes that CEs can use to reach the Internet
b) Static routes on CE routers allow route leakage from a PE global routing table
c) The CE router can establish a BGP peering to a PE router and use the PE device to reach the Internet
d) The customer VRF uses route targets to import and export routes to and from a shared services VRF

Answer: d

Question: 6

When configuring traffic engineering tunnels in Cisco MPLS core network, you see the traffic is not taking the expected path in the core.

Which command do you use to quickly check path of a TE tunnel?

a) traceroute <tunnel destination IP>
b) show mpls traffic-engineering tunnels
c) Ping <tunnel destination IP>
d) traceroute mpls ipv4 <tunnel destination>

Answer: d

Question: 7

You are creating new Cisco MPLS TE tunnels. Which type of RSVP message does the headend router send to reserve bandwidth on the path to the tailend router?

a) path
b) tear
c) error
d) reservation

Answer: a

Question: 8

What do Ansible and SaltStack have in common?

a) They both use DSL configuration language.
b) They both use YAML configuration language.
c) They both have agents running on the client machine.
d) They both can be designed with more than one master server.

Answer: b

Question: 9

Which configuration mode do you use to apply the mpls ldp graceful-restart command in IOS XE Software?

a) LDP neighbor
b) interface
c) MPLS
d) global

Answer: d

Question: 10

In an MPLS network, which protocol can be used to distribute a Segment Prefix?

a) OSPF
b) RSVP-TE
c) EIGRP
d) LDP

Answer: a

Study Guide to Crack Cisco CCNP Service Provider 350-501 Exam:

- Getting details of the 350-501 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 350-501 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 350-501 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 350-501 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 350-501 practice tests is must. Continuous practice will make you an expert in all syllabus areas.