CISCO 300-510

Cisco CCNP Service Provider Certification Questions & Answers

Exam Summary – Syllabus – Questions

300-510

Cisco Certified Specialist Service Provider Advanced Routing Implementation

55-65 Questions Exam – Variable (750-850 / 1000 Approx.) Cut Score – Duration of 90 minutes

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Know Your 300-510 Certification Well:

The 300-510 is best suitable for candidates who want to gain knowledge in the Cisco Service Provider. Before you start your 300-510 preparation you may struggle to get all the crucial CCNP Service Provider materials like 300-510 syllabus, sample questions, study guide.

But don't worry the 300-510 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 300-510 syllabus?
- How many questions are there in the 300-510 exam?
- Which Practice test would help me to pass the 300-510 exam at the first attempt?

Passing the 300-510 exam makes you Cisco Certified Specialist Service Provider Advanced Routing Implementation. 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 300-510 CCNP Service Provider Certification Details:

Exam Name	Implementing Cisco Service Provider Advanced Routing Solutions
Exam Code	300-510
Exam Price	$300 USD
Duration	90 minutes
Number of Questions	55-65
Passing Score	Variable (750-850 / 1000 Approx.)
Recommended Training	**Implementing Cisco Service Provider Advanced Routing Solutions (SPRI)**
Exam Registration	**PEARSON VUE**
Sample Questions	**Cisco 300-510 Sample Questions**

Practice Exam	Cisco Certified Specialist Service Provider Advanced Routing Implementation Practice Test

300-510 Syllabus:

Section	Weight	Objectives
Unicast Routing	35%	- Compare OSPF and IS-IS routing protocols - Troubleshoot OSPF multiarea operations (IPv4 and IPv6) • Route advertisement • Summarization - Troubleshoot IS-IS multilevel operations (IPv4 and IPv6) • Route advertisement • Summarization - Describe the BGP scalability and performance • BGP confederations • Route reflectors - Troubleshoot BGP • Route advertisement • Route reflectors • Confederations • Multihoming • TTL security and inter-domain security • Maximum prefix • Route dampening • Dynamic neighbors • Communities - Describe IPv6 tunneling mechanisms • Static IPv6-in-IPv4 tunnels • Dynamic 6to4 tunnels • IPv6 provider edge (6PE) - Implement fast convergence

Section	Weight	Objectives
		• Bidirectional forwarding detection • Nonstop Forwarding • NSR • Timers • BGP pic (edge and core) • LFA • BGP additional and backup path
Multicast Routing	15%	- Compare multicast concepts • Multicast domains, distribution trees, and IGMP operations • Any-Source Multicast (ASM) versus Source Specific Multicast (SSM) • Intra-domain versus inter-domain multicast routing - Describe multicast concepts • Mapping of multicast IP addresses to MAC addresses • Multiprotocol BGP for IPv4 and IPv6 • Principles and operations of PIM-SM • Multicast Source Discovery Protocol (MSDP) operations • MLDP/P2MP - Implement PIM-SM operations • Auto-RP, PIMv2 BSR, anycast RP • BIDIR-PIM operations • SSM operations • MSDP operations - Troubleshoot multicast routing • Single domain • Multidomain
Routing Policy and Manipulation	25%	- Compare routing policy language and route maps - Describe conditional matching

Section	Weight	Objectives
		• Operations • Semantics of policy applications and statements • Regular expressions • Policy sets • Tags • ACLs • Prefix lists and prefix sets • Route types • BGP attributes and communities • Hierarchical and parameterized structures - Troubleshoot route manipulation for IGPs • IS-IS • OSPF - Troubleshoot route manipulation for BGP • Route filtering • Traffic steering
MPLS and Segment Routing	25%	- Troubleshoot MPLS • LDP • LSP • Unified BGP • BGP free core • RSVP TE tunnels - Implement segment routing • Routing protocol extensions (OSPF, IS-IS, BGP) • SRGB and SRLB • Topology-Independent Loop-Free Alternate (TI-LFA) • Migration procedures (SR prefer and mapping server) - Describe segment routing traffic engineering

Section	Weight	Objectives
		• Automated steering and coloring • Policies (constraints, metrics, and attributes) • PCE-based path calculation - Describe segment routing v6 (SRv6) • Control plane operations • Data plane operations

Cisco 300-510 Sample Questions:

Question: 1

You have configured MSDP peering between two autonomous systems that pass traffic between two sites, but the peering has failed to come up.

Which task do you perform to begin troubleshooting the problem?

a) Verify that PIM-DM is configured on the source interface
b) Verify that multicast has been disabled globally
c) Verify that the two MSDP peers allow asymmetric routing
d) Verify that both source interfaces are reachable from both peers

Answer: d

Question: 2

An engineer is troubleshooting a connectivity issue across the MPLS network and is verifying the forwarding behavior of packets.

Which table does the engineer look at to verify the forwarding behavior of an IP packet as it enters the MPLS network at the ingress LSR?

a) LIB
b) RIB
c) LFIB
d) FIB

Answer: c

Question: 3

You have configured routing policies on a Cisco IOS XR device with routing policy language. Which two statements about the routing policies are true?

(Choose two.)

a) If you make edits to an existing routing policy without pasting the full policy into the CLI, the previous policy is overwritten
b) The routing policies are implemented using route maps
c) The routing policies are implemented in a sequential manner
d) The routing policies affect BGP-related routes only

Answer: c, d

Question: 4

In a PIM-SM environment, which mechanism determines the traffic that a receiver receives?

a) The receiver explicitly requests its desired traffic from the RP on the shared tree
b) The receiver explicitly requests traffic from each desired source, which responds by sending all traffic
c) The receiver explicitly requests traffic from a single source, which responds by forwarding all traffic
d) The RP on the shared tree floods traffic out of all PIM configured interfaces

Answer: b

Question: 5

A network consultant is troubleshooting IS-IS instances to identify why a routing domains is having communication problems between the two instances.

Which description of the possible cause of issues in the routing domain is true?

a) The same interface cannot be advertised in two different IS-IS instances
b) The IS-IS "ISP" and "ISP2" instances are unrelated and unable to intercommunicate
c) The configured IS-IS NSEL value is not allowing the routing systems to establish a neighborship
d) The interface mode ip router is-is command was not included in the script

Answer: a

Question: 6

Which command is used to enable BIDIR-PIM under global configuration mode for Cisco IOS XE Software?

a) multicast-routing
b) ipv4 pim bidir-enable
c) Ip pim bidir-enable
d) ip pim bidir ip

Answer: c

Question: 7

What can be used to determine a path from the head-end to a tail-end router when implementing SR-TE with a head-end, with little information on the network topology?

a) traffic controller
b) path computation engine
c) tail-end router
d) SNMP server

Answer: b

Question: 8

For which reason can two BGP peers fail to establish a neighbor relationship?

a) They are both activated under an IPv4 address family
b) Their BGP timers are mismatched
c) Their BGP send-community strings are misconfigured
d) Their remote-as numbers are misconfigured

Answer: d

Question: 9

Which feature is used in multicast routing to prevent loops?

a) inverse ARP
b) STP
c) RPF
d) split horizon

Answer: c

Question: 10

What is the role of segment routing mapping server?

a) It advertises a local SID mapping policy to all the mapping clients
b) It works with IGP instances to calculate the prefix-SIDs in the absence of a mapping policy
c) It selects multiple mapping entries to create overlapping active mapping policies
d) It reads and translates remotely received SIDs from other mapping servers to create SID mapping entries

Answer: a

Study Guide to Crack Cisco CCNP Service Provider 300-510 Exam:

- Getting details of the 300-510 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 300-510 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 300-510 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 300-510 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 300-510 practice tests is must. Continuous practice will make you an expert in all syllabus areas.

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