

Cisco

350-501 Exam

**Implementing and Operating Cisco Service Provider Network
Core Technologies**

**Questions & Answers
Demo**

Version: 12.1

Question: 1

Egress PE NAT is being used via a single centralized router to provide Internet access to L3VPN customers.

Which description of the NAT operation is true?

- A. Users in different VRFs cannot share the same outside global IP address
- B. The NAT table contains a field to identify the inside VRF of a translation
- C. Multiple address pools are needed for the same L3VPN because each site has a separate NAT
- D. The different L3VPNs using the Internet access must not have IP overlaps internally

Answer: B

Question: 2

How much must the MTU be increased when configuring the 802.1q VLAN tag?

- A. 2 bytes
- B. 4 bytes
- C. 8 bytes
- D. 12 bytes

Answer: B

Question: 3

Refer to the exhibit:

```
ip flow-export source loopback 0
ip flow-export destination 192.168.1.1
ip flow-export version 9 origin-as
```

Export statistics received do not include the BGP next hop.

Which statement about the NetFlow export statistics is true?

- A. Only the origin AS of the source router will be included in the export statistics.
- B. Loopback 0 must be participating in BGP for it to be included in the export statistics.
- C. The origin AS and the peer-as will be included in the export statistics.
- D. To include the BGP next hop in the export statistics, those keywords must be included with the version 9 entry.

Answer: D

Question: 4

Refer to the exhibit:

```

PE-A#show ip bgp vpnv4 vrf Customer-A neighbors 10.10.10.2 routes
BGP table version is 13148019, local router ID is 10.10.10.10
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
               r RIB-failure, S Stale, m multipath, b backup-path, f RT-Filter,
               x best-external, a additional-path, c RIB-compressed,
Origin codes: i - IGP, e - EGP, ? - incomplete
RPKI validation codes: V valid, I invalid, N Not found

   Network          Next Hop          Metric LocPrf Weight Path
Route Distinguisher: 65000:1111 (default for vrf Customer-A)
*> 192.168.0.0/19   10.10.10.2        0             0 4282 65001 ?
*> 192.168.0.0/17   10.10.10.2        0             0 4282 65001 ?
*> 192.168.0.0/16   10.10.10.2        0             0 4282 65001 ?

Total number of prefixes 5

PE-A#config t
Enter configuration commands, one per line.  End with CNTL/Z.
PE-A(config)#ip prefix-list ALLOW permit 192.168.0.0/16 ge 17 le 19
PE-A(config)#router bgp 65000
PE-A(config-router)#address-family ipv4 vrf Customer-A
PE-A(config-router-af)#neighbor 10.10.10.2 prefix-list ALLOW in

```

Which three outcomes occur if the prefix list is added to the neighbor? (Choose three)

- A. 192.168.0.0/19 is denied.
- B. 192.168.0.0/17 is denied.
- C. 192.168.0.0/17 is permitted
- D. 192.168.0.0/16 is denied
- E. 192.168.0.0/16 is permitted
- F. 192.168.0.0/19 is permitted

Answer: CDF

Question: 5

Which statement about segment routing prefix segments is true?

- A. It is linked to a prefix SID that is globally unique within segment routing domain.
- B. It is the longest path to a node.
- C. It is linked to an adjacency SID that is globally unique within the router.
- D. It requires using EIGRP to operate.

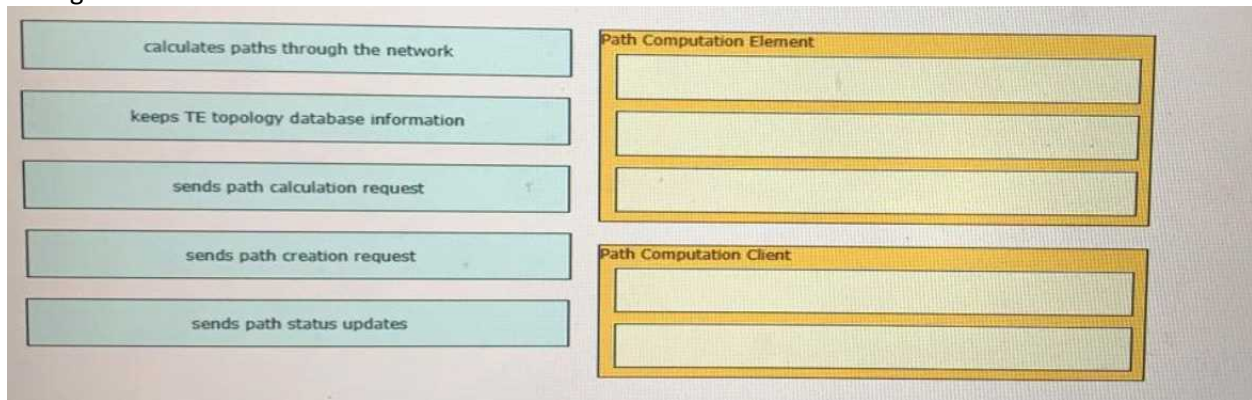
Answer: A

Question: 6

DRAG DROP

Drag and drop the functions from the left onto the correct Path Computation Element Protocol roles on

the right



Answer:

Path Computation Element (Calculates paths through the network, keeps TE topology database information, sends path status updates)

Path computation Client (sends path calculation request, sends path creation request)

Path Computation Element (PCE)

Represents a software module (which can be a component or application) that enables the router to compute paths applying a set of constraints between any pair of nodes within the router’s TE topology database. PCEs are discovered through IGP.

Path Computation Client (PCC)

Represents a software module running on a router that is capable of sending and receiving path computation requests and responses to and from PCEs. The PCC is typically an LSR (Label Switching Router).

https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs_r5-3/mpls/configuration/guide/b-mpls-cg53x-crs/b-mpls-cg53x-crs_chapter_0110.html#con_1279822

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 tunnel’s router?

- A. error
- B. reservation
- C. path
- D. tear

Answer: C

Question: 8

An engineer is setting up overlapping VPNs to allow VRF ABC and XYZ to communicate with VRF CENTRAL but wants to make sure that VRF ABC and XYZ cannot communicate. Which configuration accomplishes these objectives?

- A)

```
vrf ABC
address-family ipv4 unicast
import route-target
 65000:1111
 65000:4444
!
export route-target
 65000:1111
 65000:3333
!
vrf XYZ
address-family ipv4 unicast
import route-target
 65000:2222
 65000:3333
!
export route-target
 65000:2222
 65000:4444
!
vrf CENTRAL
address-family ipv4 unicast
import route-target
 65000:3333
!
export route-target
 65000:4444
!
```

B)

```
vrf ABC
address-family ipv4 unicast
import route-target
 65000:1111
 65000:4444
:
export route-target
 65000:1111
 65000:3333
:
vrf XYZ
address-family ipv4 unicast
import route-target
 65000:2222
 65000:4444
:
export route-target
 65000:2222
 65000:3333
:
vrf CENTRAL
address-family ipv4 unicast
import route-target
 65000:3333
:
export route-target
 65000:4444
:
```

c)

```

vrf ABC
 address-family ipv4 unicast
  import route-target
    65000:1111
  !
  export route-target
    65000:1111
  !
vrf XYZ
 address-family ipv4 unicast
  import route-target
    65000:2222
  !
  export route-target
    65000:2222
    65000:1111
  !
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
    65000:3333
    65000:1111
    65000:2222
  !
  export route-target
    65000:3333
    65000:1111
    65000:2222
  !
    
```

- A. Option A
- B. Option B
- C. Option C

Answer: B

Question: 9

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

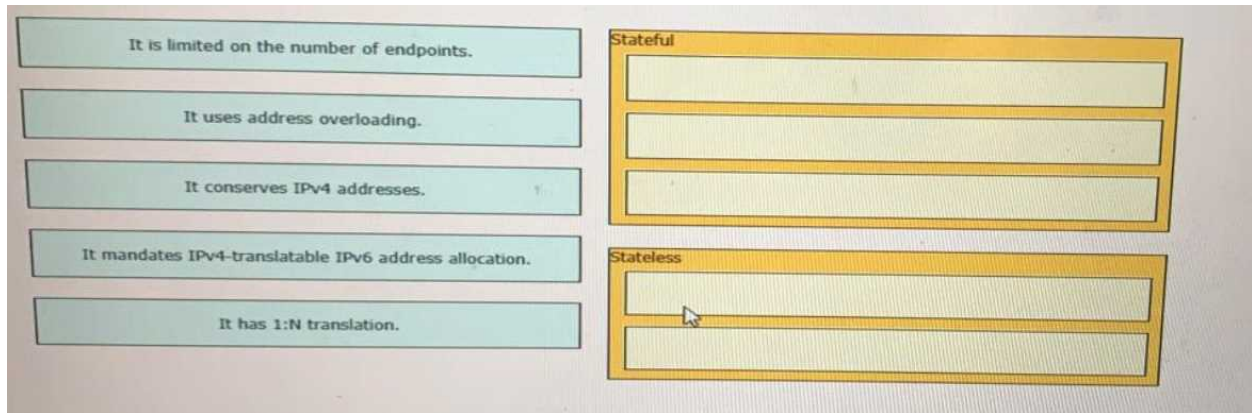
- A. OSPF
- B. LDP
- C. RSVP-TE
- D. EIGRP

Answer: A

Question: 10

DRAG DROP

Drag and drop the NAT64 descriptions from the left onto the correct NAT64 types on the right.



Answer:

Stateful (It has 1: N translation, It uses address overloading, It conserves IPv4 addresses)

Stateless (It is limited on the number of endpoints, It mandates IPv4-translatable IPv6 address allocation)

Question: 11

Which statement about Network Services Orchestrator (NSO) is true?

- A. It is used only in service provider environments
- B. It can be used only with XML coding
- C. It uses YANG modeling language to automate devices
- D. It must use SDN as an overlay for addressing

Answer: C

Question: 12

Which task must be performed first to Implement BFD in an IS-IS environment?

- A. Disable Cisco Express Forwarding on all interfaces running routing protocols other than IS-IS
- B. Configure BFD under the IS-IS process
- C. Configure all ISIS routers as Level 2 devices
- D. Configure BFD in an interface configuration mode

Answer: B

Question: 13

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. The final entry in a prefix list must be /32
- C. An engineer must identify the prefix list with a number only
- D. An engineer must include only the prefixes for which he needs to log activity.

Answer: A

Question: 14

Refer to the exhibit:

```
mpls label protocol ldp
mpls ldp router-id loopback 0
mpls ip
ip cef
```

A network operator working for service provider with an employee id 3715 15:021 applied this configuration to a router.

Which additional step should the engineer use to enable LDP?

- A. Disable Cisco Express Forwarding globally
- B. Delete the static router ID
- C. Enable MPLS LDP on the interface
- D. Configure the both keyword to enable LDP globally

Answer: C

Question: 15

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

- A. MPLS
- B. LDP neighbor
- C. global
- D. interface

Answer: C

Question: 16

Which statement describes the advantage of a Multi-Layer control plane?

- A. It automatically provisions monitors, and manages traffic across Layer 0 to Layer 3
- B. It minimizes human error configuring converged networks
- C. It supports dynamic wavelength restoration in Layer 0
- D. It provides multivendor configuration capabilities for Layer 3 to Layer 1

Answer: C

Question: 17

Refer to the exhibit:

```
R1
router isis
  net 52.0011.0000.0000.0001.00
  is-type level-2

interface gigabitethernet0/1
  ip address 192.168.0.1 255.255.255.0
  ip router isis

R2
router isis
  net 52.0022.0000.0000.0002.00
  is-type level-1

interface gigabitethernet0/1
  ip address 192.168.0.2 255.255.255.0
  ip router isis
```

Which statement about the status of the neighbor relationship between R1 and R2 is true?

- A. The neighbor relationship is down because the two routers are configured with different area types
- B. The neighbor relationship is down because the two routers are in the same subnet.
- C. The neighbor relationship is up because R2 is level 1 and level 2 router.
- D. The neighbor relationship is down because R2 is operating as a Level 1 router and the two routers are in different area

Answer: B

Question: 18

Refer to the exhibit:

```
R1
router bgp 65000
  router-id 192.168.1.1
  neighbor 192.168.1.2 remote-as 65012
  neighbor 192.168.1.2 local-as 65112
```

A network engineer is implementing a BGP protocol. Which effect of the local-as keyword in this configuration is true?

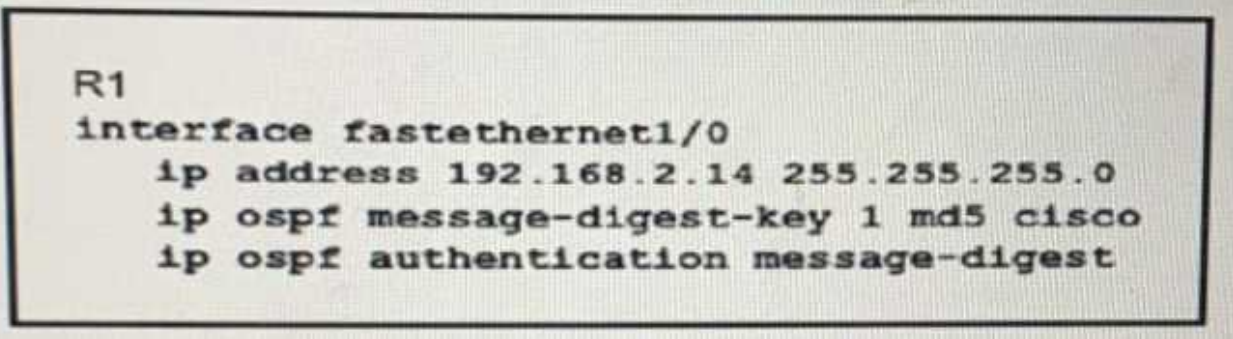
- A. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65012 and the VPNv4 address family
- B. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65012 without additional configuration
- C. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65112 and the VPNv4 address family

D. It enables peer 192.168.1.2 to establish a BGP relationship with R1 using AS 65112 without additional configuration.

Answer: D

Question: 19

Refer to the exhibit:



```
R1
interface fastethernet1/0
  ip address 192.168.2.14 255.255.255.0
  ip ospf message-digest-key 1 md5 cisco
  ip ospf authentication message-digest
```

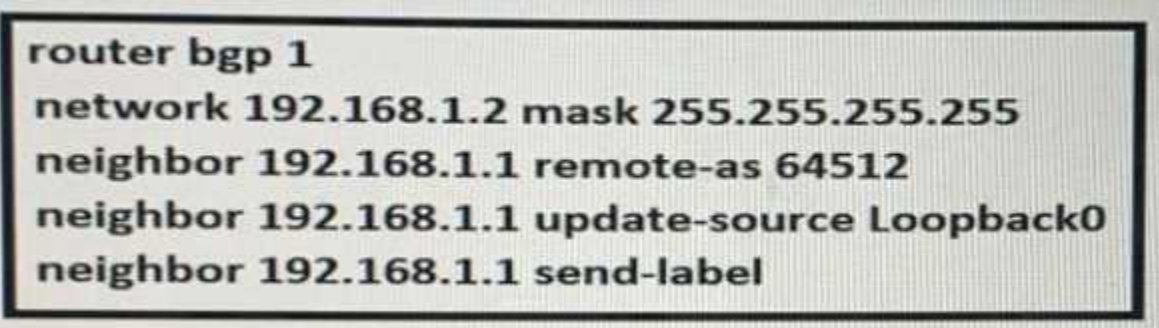
Which condition must be met by the OSPF peer of router R1 before the two devices can establish communication?

- A. The interface on the OSPF peer must use the same key ID and key value as the configured interface
- B. The interface on the OSPF peer may have a different key ID, but it must use the same key value as the configured interface
- C. The OSPF peer must be configured as an OSPF stub router
- D. The OSPF peer must use clear-text authentication

Answer: A

Question: 20

Refer to the exhibit:



```
router bgp 1
network 192.168.1.2 mask 255.255.255.255
neighbor 192.168.1.1 remote-as 64512
neighbor 192.168.1.1 update-source Loopback0
neighbor 192.168.1.1 send-label
```

Which statement about the neighbor statements for 192.168.1.1 is true?

- A. The router must have TDP configured for the send-label command to operate
- B. The neighbor router receives at least four labels from this router
- C. The router sends BGP labels for its prefixes to this peer
- D. The router sends only a label for the prefix for Loopback0.

Answer: C
