



"Please note that these files may not be up to date. However, the questions will help you understand the exam format and typical question patterns."

www.atmicnetworks.com

Warning: Keep connected with our support team
for latest updates

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

Explanation:

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

Explanation:

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

Explanation:

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

Explanation:

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.

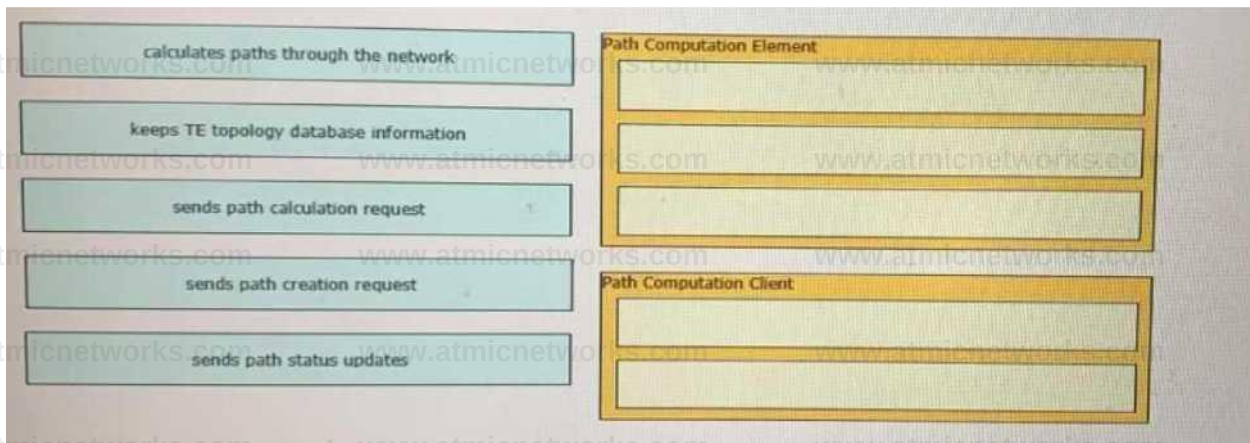
Answer: A

Explanation:

Question: 6

DRAG DROP

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



Answer:

Explanation:

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

Explanation:

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?

```

vrf ABC
 address-family ipv4 unicast
  import route-target
    45000:1111
    45000:3333
  !
  export route-target
    45000:1111
    45000:3333
vrf XYZ
 address-family ipv4 unicast
  import route-target
    45000:2222
    45000:3333
  !
  export route-target
    45000:2222
    45000:3333
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
    45000:3333
  !
  export route-target
    45000:3333

```

```

vrf ABC
 address-family ipv4 unicast
  import route-target
    45000:1111
    45000:4444
  !
  export route-target
    45000:1111
    45000:3333
vrf XYZ
 address-family ipv4 unicast
  import route-target
    45000:2222
    45000:3333
  !
  export route-target
    45000:2222
    45000:4444
vrf CENTRAL
 address-family ipv4 unicast
  import route-target
    45000:3333
  !
  export route-target
    45000:4444

```

```

* f ABC
i c:tti'lumy ipv4 uaxcaat lapozt routc-taxg<t
  45000:1111
  45000:4444

```

```

export route-target 45000:1111
45000:1111

```

ref xrx

```

agireaa-ftally ipv4 unicast laport route-target
  45000:1:12
  48000:4444

```

```

♦ apor rcute-target
  45000:1122
  45000:1133

```

erf CIXTMi.

```

turet-f ax: 1/ ipv4 unicast taport route-target
  45000:1131 t
  tapart reata-cargat 45000:4444

```

```

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
- D. Option D

Answer: C

Explanation:

Explanation:

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

Explanation:

Question: 10

DRAG DROP

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

Descriptions	Stateful	Stateless
It is limited on the number of endpoints.		
It uses address overloading.		
It conserves IPv4 addresses.		
It mandates IPv4-translatable IPv6 address allocation.		
It has 1:N translation.		

Answer:

Explanation:

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

Explanation:

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: D

Explanation:

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?

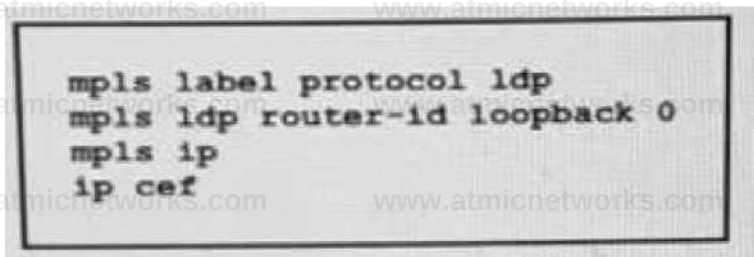
- A. An engineer must use non sequential sequence numbers in the prefix list so that he can insert additional entries later.
- B. The final entry in a prefix list must be /32
- C. An engineer must identify the prefix list with a number only
- D. An engineer must include only the prefixes for which he needs to log activity.

Answer: A

Explanation:

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

Explanation:

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

Explanation:

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

Explanation:

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: D

Explanation:

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

Explanation:

<https://www.cisco.com/c/en/us/support/docs/ip/border-gateway-protocol-bgp/13761-39.html>

Question: 19

Refer to the exhibit:

```
R1 interface fastethernet1/0
Ip address 192.168 2.14 255.255.235.0

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

Explanation:

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

Explanation:

Question: 21

DRAG DROP

Drag and drop the LDP features from the left onto the correct usages on the right.

session protection	It prevents valid routes from being overwritten until labels are assigned.
IGP synchronization	It allows stale label bindings to be used for a an LDP neighbor is unreachable
targeted-hello accept	It uses LDP Targeted hellos to protect L
graceful restart	It uses LDP to form neighborhood between connected routers.

Answer:

Explanation:

1: graceful restart 2: IGP synchronization 3: session protection 4: targeted-hello accept

Question: 22

Which regular expression query modifier function indicates the start of a string?

- A. ^

B. [^]

C. +

D. \$

Answer: A

Explanation:

Question: 23

Refer to the exhibit:

RP/0/0/CPV0:iosxrv-llshow npls Sat		ldp discovery brief	
Apr 2 22:43:11.362 UTC			
Local LDP Identifier: 192.168.0.2:0			
Discovery Source Session	VRF Name	Peer LDP Id	Holdtime
G10/0/1	default	192.168.0.3:0	15
GiO/O/2	default	192.168.0.4:0	15
G10/0/3	default	192.168.0.5:0	15
Tgt:192.163.0.1	default	192.168.0.1:0	90
Tgt:192.168.0.3	default	192.168.0.3:0	90
Tgt:192.168.0.5	default		

With which router does IOSXRV-1 have LDP session protection capability enabled but session hold up is not active?

A. 192.168.0.1

B. 192.168.0.3

C. 192.168.0.4

D. 192.168.0.5

Answer: B

Explanation:

Question: 24

Refer to the exhibit:



```
R2#show mpls ldp neighbor
```

```
R2*show mpls ldp discovery detail Local LDP Identifier:
```

```
2.2.2.2: 0
```

```
Discovery Sources:
```

```
Targeted Hellos:
```

```
2.2.2.2 -> 1.1.1.1 (ldp): active/passive, xmit
```

```
Hello interval: 5000 ms; Transport IP addr: 0.0.0.0
```

When implementing an LDP protocol, an engineer experienced an issue between two directly connected routers and noticed that no LDP neighbor exists for 1.1.1.1.

Which factor should be the reason for this situation?

- A. LDP needs to be enabled on the R2 physical interface
- B. R2 does not see any hellos from R1
- C. LDP needs to be enabled on the R2 loopback interface
- D. R2 sees the wrong type of hellos from R1

Answer: B

Explanation:

Question: 25

What are the two uses of the YANG data modeling language? (Choose two.)

- A. It is used to access a device by HTTP.
- B. It is used to model the configuration used by NETCONF operations.
- C. It is used to shape state data of network elements.
- D. It is used to replace RESTCONF as a mechanism to install and manipulate configuration.
- E. It is used to replace the OSI model for troubleshooting.

Answer: B C

Explanation:

Question: 26

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

- A. The CE router can establish a BGP peering to a PE router and use the PE device to reach the Internet
- B. Route distinguishes are used to identify the routes that CEs can use to reach the Internet
- C. The customer VRF uses route targets to import and export routes to and from a shared services VRF

D. Static routes on CE routers allow route leakage from a PE global routing table

Answer: C

Explanation:

Question: 27

How can a network administrator secure rest APIs?

- A. They can allow read and write privileges to all users
- B. They can ensure that user sessions are authenticated using TACACS+ only
- C. They can have a general administrator login for multiple users to access that has command entries logged
- D. They can authenticate user sessions and provide the appropriate privilege level

Answer: D

Explanation:

Question: 28

Refer to the exhibit.

```
^----- interface FastEthernet0/0/1
description **** HUB CE router **** ip address 10.0.12.1
255.255.255.0

router ospf 100
log-adjacency-changes network 10.0.12.0 0.0.255.255 area 0

CE2# interface Serial0/0/9 description **** SPOKE CE router ****
encapsulation ppp ip address 10.0.12.12 255.255.255.0

router ospf 100 log-adjacency-changes network 10.0.12.0 0.0.255.255
area 0
```

A network engineer is configuring customer edge routers to finalize a L2VPN over MPLS deployment. Assume that the AToM L2VPN service that connects the two CEs is configured correctly on the service provider network. Which action causes the solution to fail?

- A. A loopback with a /32 IP address has not been used
- B. OSPF does not work with L2VPN services
- C. The xconnect statement has not been defined
- D. The routing protocol network types are not compatible

Answer: D

Explanation:

Question: 29

Refer to the exhibit:

<pre>PE-A ! interface FastEthernet0/0 ip address 10.10.10.1 255.255.255.252 ip ospf authentication null ip ospf 1 area 0 duplex full end router ospf 1 log-adjacency-changes passive-interface Loopback0 network 10.10.10.0 0.0.0.3 area 0 default-metric 200 !</pre>	<pre>PE-B ! interface FastEthernet0/0 ip address 10.10.10.2 255.255.255.252 ip ospf authentication null ip mtu 1400 ip ospf 1 area 0 duplex half end ! R1#sho run b router ospf router ospf 1 log-adjacency-changes passive-interface Loopback10 network 10.10.10.0 0.0.0.255 area 0 default-metric 100</pre>
--	---

Which configuration prevents the OSPF neighbor from establishing?

- A. mtu
- B. duplex
- C. network statement
- D. default-metric

Answer: A

Explanation:

Question: 30

After you analyze your network environment, you decide to implement a full separation model for Internet access and MPLS L3VPN services. For which reason do you make this decision?

- A. It enables you to choose whether to separate or centralize each individual service.
- B. It is easier to manage a system in which services are mixed.
- C. It requires only one edge router.
- D. It enables EGP and IGP to operate independently.

Answer: D

Explanation:

Question: 31

Which configuration modifies Local Packet Transport Services hardware policies?

A)

```
configure
lpts pifib hardware police
flow ospf unicast default rate 200
flow bgp configured rate 200
flow bgp default rate 100
```

```
lpts pifib hardware police location 0/2/CPU0
flow ospf unicast default rate 100
flow bgp configured rate 300
```

flow icmp application rate 100

flow icmp default rate 100

i

B)

configure

Ipts punt police location 0/0/CPU0

exception invalid rate 400

protocol cdp rate 50

protocol arp rate 5000

protocol ipv4 options rate 100

exception icmp rate 200

C)

```
configure
lpts pifib police hardware
flow ospf unicast default rate 200
flow bgp configured rate 200
flow bgp default rate 100
!
lpts pifib police hardware location 0/2
flow ospf unicast default rate 100
flow bgp configured rate 300
flow icmp application rate 100
flow icmp default rate 100
!
```

D)

```
configure
lpts police
exception invalid rate 400
protocol cdp rate 50
protocol arp rate 5000
```

A. Option A

B. Option B

C. Option C

D. Option D

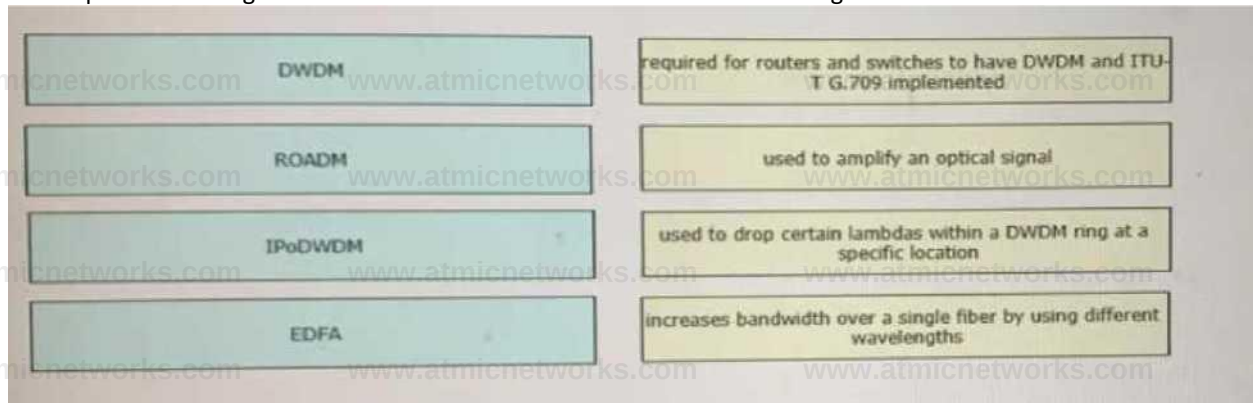
Answer: C

Explanation:

Question: 32

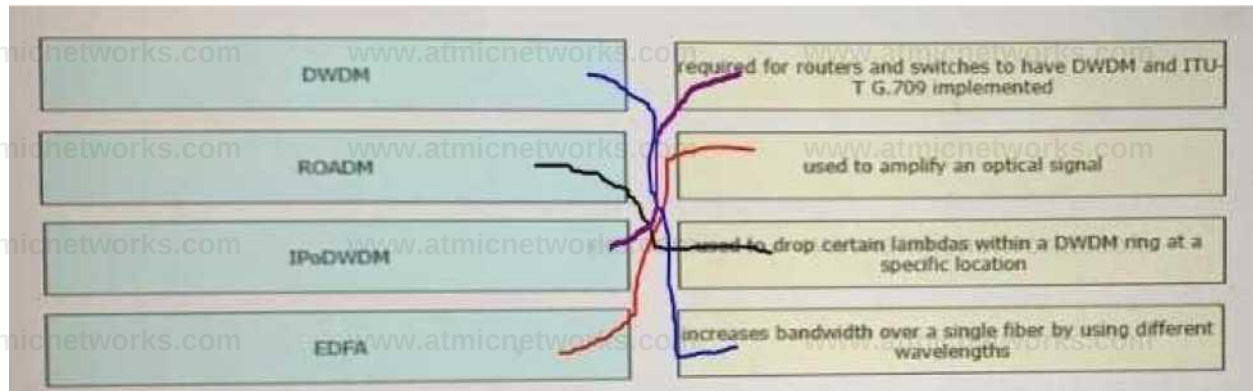
DRAG DROP

Drag and drop the technologies from the left onto the correct definitions on the right.



Answer:

Explanation:



Question: 33

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. system ID
- D. MTU
- E. hello timer setting

Answer: AD

Explanation:

Question: 34

Which three OSPF parameters must match before two devices can establish an OSPF adjacency? (Choose three.)

- A. IP address
- B. interface cost
- C. subnet mask
- D. process ID
- E. hello timer setting
- F. area number

Answer: CEF

Explanation:

Question: 35

Refer to the exhibit:

Router 1:

```
ip route 192.168.1.0 255.255.255.0 null 0 tag 1
```

```
route-map ddos
```

```
match tag 1
```

```
set local preference 150
```

```
set community no export
```

```
route-map ddos permit 20
```

```
router bgp 65513
```

```
redistribute static route-map ddos
```

Router 2:

```
Interface gigabitethernet0/1
```

```
ip verify unicast reverse-path
```

An engineer is preparing to implement data plane security configuration.

Which statement about this configuration is true?

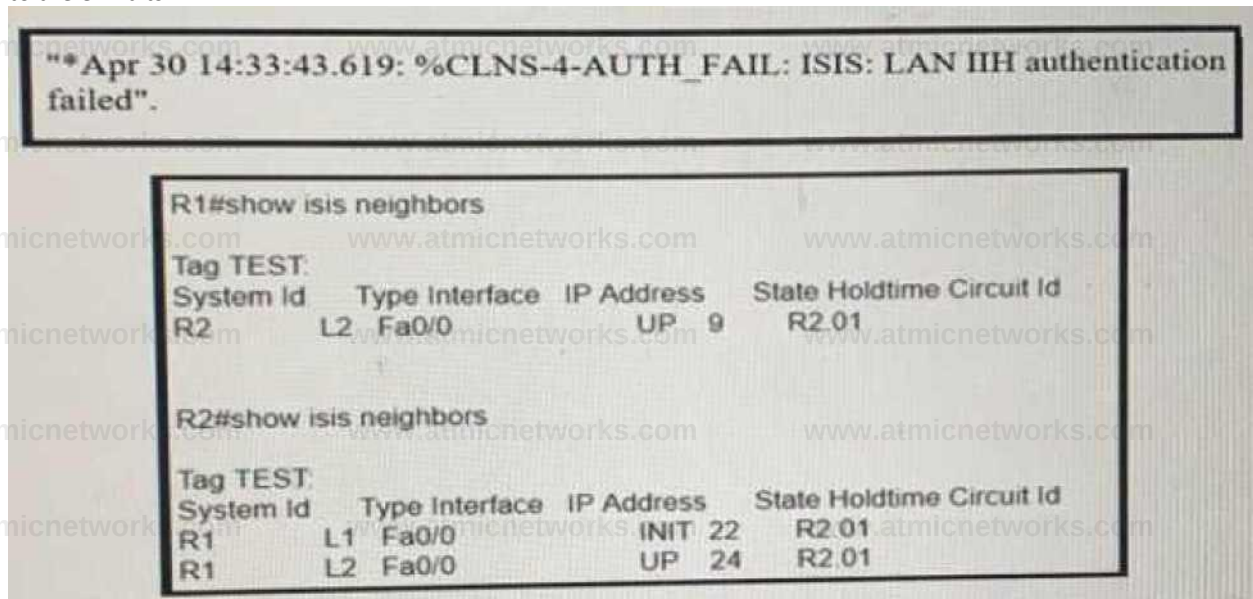
- A. Router 2 must configure a route to null 0 for network 192.168.1.0/24 for the RTBH implementation to be complete.
- B. Router 1 is the trigger router in a RTBH implementation.
- C. Router 1 must be configured with uRPF for the RTBH implementation to be effective.
- D. Router 2 is the router receiving the DDoS attack

Answer: B

Explanation:

Question: 36

Refer to the exhibits:



R1 and R2 are directly connected and IS-IS routing has been enabled between R1 and R2. R1 message periodically. Based on this output, which statement is true?

- A. IS-IS neighbor authentication is failing for Level 2 first and then for Level 1 PDUs
- B. IS-IS neighbor authentication is failing for Level 1 and Level 2 PDUs.
- C. IS-IS neighbor authentication is failing for Level 1 PDUs only
- D. IS-IS neighbor authentication is failing for Level 2 PDUs only.

Answer: C

Explanation:

Question: 37

Which BGP attribute is used first when determining the best path?

- A. origin

- B. AS path
- C. local preference
- D. weight

Answer: D

Explanation:

Question: 38

While implementing TTL security, you issue the PE(config-router-af)#neighbor 2.2.2.2 ttl-security hops 2 command.

After you issue this command, which BGP packets does the PE accept?

- A. from 2.2.2.2, with a TTL of 253 or more
- B. from 2.2.2.2, with a TTL of less than 2
- C. to 2.2.2.2, with a TTL of less than 253
- D. to 2.2.2.2, with a TTL of 2 or more

Answer: A

Explanation:

Question: 39

Refer to the exhibit:

```
telemetry model-driven
subscription cisco
sensor-group-id ciscotest sample-interval 60000
commit
```

This configuration is being applied on an IOS XR router.

Which statement about this configuration is true?

- A. It is used to set up configuration to poll network data
- B. It is used to enable gRPC
- C. It is used to create a streaming subscription with a 60-second interval
- D. It is used to create a streaming subscription with a 600-second interval

Answer: C

Explanation:

Question: 40

What do Ansible and Salt Stack 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: D

Explanation:

Question: 41

Refer to the exhibit:

```
R1
router isis
 net 49.0012.1111.1111.1111.00
 is-type level-1
 area-password cisco
R2
router isis
 net 49.0022.1111.1111.1112.00
 is-type level-1-2
 area-password cisco
```

What is the effect of this configuration?

- A. The two routers fail to form a neighbor relationship because their system IDs are different.
- B. The two routers successfully form a neighbor relationship
- C. The two routers fail to form a neighbor relationship because the authentication configuration is missing
- D. The two routers fail to form a neighbor relationship because they have different ISIS area types.

Answer: B

Explanation:

Question: 42

DRAG DROP

Drag and drop the OSPF area types from the left onto the correct statements on the right

backbone	required area that allows Interarea communication
not-so-stubby	area that can learn interarea routes and the default route
stub	area that can learn only the default route and routes within Its own area
totally stubby	area that can serve as a redistribution point for external routes to enter the OSPF domain

Answer:

Explanation:

backbone
stub
totally stubby
not-so-stubby

Question: 43

Refer to the exhibit:

<tag/>

What does this value mean when it is received in XML?

- A. It shows the ending of the script
- B. It indicates a break in a sequence
- C. It indicates a value assigned by a network administrator to tag a route
- D. It means a data field is blank

Answer: D

Explanation:

Question: 44

Refer to the exhibit:

```
interface gigabitethernet1/0
xconnect 192.168.0.1 12 encapsulation mpls pw-class cisco
```

Which effect of this configuration is true?

- A. it creates a pseudowire class named Cisco
- B. It enables tagging for VLAN 12 on the interface
- C. It enables MPLS on the interface
- D. It enables ATOM on interface gigabitethemet1/0

Answer: D

Explanation:

Question: 45

Refer to the exhibit:

```
PE-A#config t
PE-A(config)#class-map VOIP
PE-A(config-cmap)"match precedence 5
PE-A(config-cmap)"policy-map MARK-TRAFFIC
PE-A(config-pmap)"class VOIP
```

Which command is used to complete this configuration for QoS class-based marking?

- A. PE-A(config-pmap-c)#set dscp ef
- B. PE-A(config-pmap-c)#fair-queue
- C. PE-A(config-pmap-c)#random-detect
- D. PE-A(config-pmap-c)#priority

Answer: A

Explanation:

Question: 46

Refer to the exhibit:

```
interface gigabitethernet1/0/1
switchport mode access
switchport access vlan 5
channel-group 1 mode desirable
```

An engineer is preparing to implement link aggregation configuration.

Which statement about this configuration is true?

- A. The switch port actively sends packets to negotiate an EtherChannel using PAgP
- B. The switch port accepts LACP and PAgP packets from a connected peer and negotiate an EtherChannel using the common EtherChannel mode.
- C. The switch port passively negotiates an EtherChannel if it receives PAgP packets from a connected peer
- D. The switch port negotiates an EtherChannel if it receives LACP packets from a connected peer

Answer: A

Explanation:

Question: 47

Refer to the exhibit:

```
RP/0/RSP0/CPU0:JFK-PE#show mpls ldp bindings 192.168.10.10/32
Fri Nov 11 21:02:33.124 UTC
192.168.10.10/32, rev 2
  Local binding: label: ImpNull
  Remote bindings: (2 peers)
    Peer                Label
    -----
    10.10.10.2:0         562656
    10.10.10.5:0         378337
```

After implementing a new design for the network, a technician reviews the pictured CLI output as part of the MOP.

Which two statements describe what the technician can ascertain from the ImpNull output? (Choose two.)

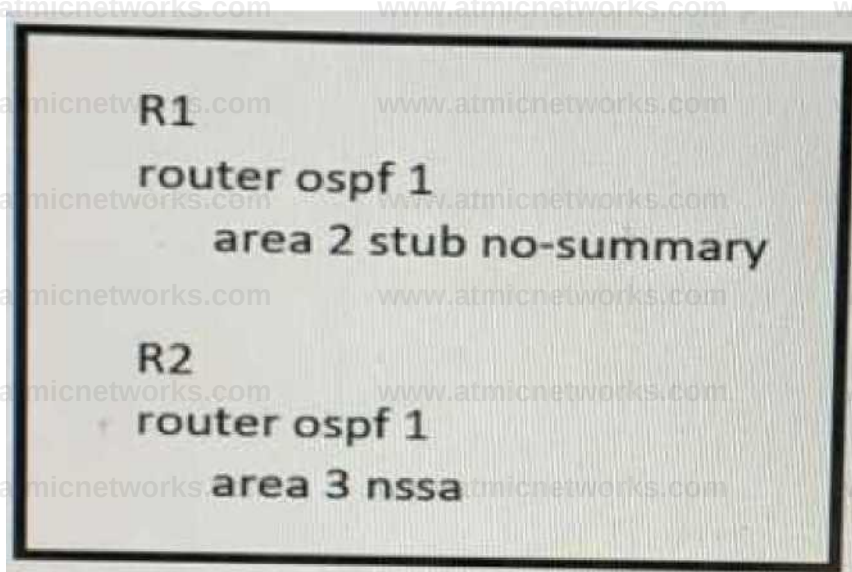
- A. Label 0 is used for the prefix displayed but will not be part of the MPLS label stack for packets destined for 192.168.10.10.
- B. Ultimate Hop Popping is in use for the prefix displayed.
- C. Label 0 is used for the prefix displayed and will be part of the MPLS label stack for packets destined for 192.168.10.10
- D. Penultimate Hop Popping is in use for the prefix displayed
- E. Label 3 is in use for the prefix displayed and will be part of the MPLS label stack for packets destined for 192.168.10.10

Answer: DE

Explanation:

Question: 48

Refer to the exhibit:



In which way does router R1 operate differently than router R2?

- A. R1 sends LSA type 2 only, while R2 sends type 1 and type 7 LSAs
- B. R1 sends LSA types 1 and 2, while R2 sends type 1, 2, and 7 LSAs
- C. R1 sends LSA type 2 only and R2 sends LSA type 1 only
- D. R1 sends LSA types 5 and 7, while R2 sends type 1, 2, and 7 LSAs

Answer: B

Explanation:

Question: 49

A network engineer must enable the helper router to terminate the OSPF graceful restart process if it detects any changes in the LS

A. Which command enables this feature?

- A. nsf ietf helper disable
- B. nsf cisco enforce global

C. nsf ietf helper strict-lsa-checking

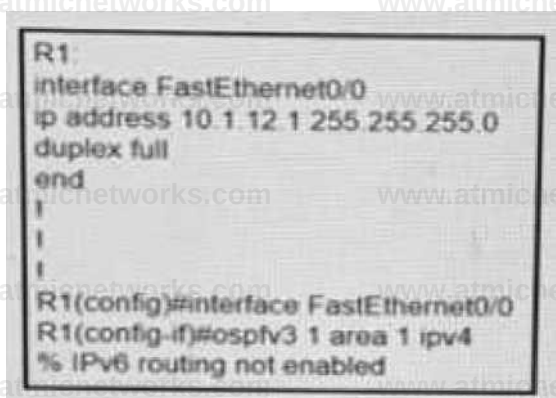
D. nsf Cisco helper disable

Answer: C

Explanation:

Question: 50

Refer to the exhibit:



```
R1:
interface FastEthernet0/0
ip address 10.1.12.1 255.255.255.0
duplex full
end
!
!
R1(config)#interface FastEthernet0/0
R1(config-if)#ospfv3 1 area 1 ipv4
% IPv6 routing not enabled
```

A network engineer is implementing an OSPF configuration Based on the output, which statement is true?

- A. In the ospfv3 1 area 1 ipv4 command, area 0 must be configured instead of area 1.

B. OSPFv3 does not run for IPv4 on FastEthernet0/0 until IPv6 routing is enabled on the router and IPv6 is enabled on interface FastEthernet0/0

C. OSPFv3 cannot be configured for IPv4; OSPFv3 works only for IPv6.

D. "IPv6 routing not enabled" is just an informational message and OSPFv3 runs for IPv4 on interface FastEthernet0/0 anyway

Answer: B

Explanation:

Question: 51

Refer to the exhibit:

```

R1
interface fastethernet1/0
ip address 192.168.1.3 255.255.255.0
router bgp 65000
router-id 192.168.1.1
neighbor 192.168.1.2 remote-as 65012

R2
interface fastethernet1/0
ip address 192.168.1.2 255.255.255.0
router bgp 65012
router-id 192.168.1.1
neighbor 192.168.1.3 remote-as 65000
neighbor 192.168.1.3 local-as 65112

```

Assume all other configurations are correct and the network is otherwise operating normally. Which conclusion can you draw about the neighbor relationship between routers R1 and R2?

- A. The neighbor relationship will be up only if the two devices have activated the correct neighbor relationships under the IPv4 address family
- B. The neighbor relationship is down because R1 believes R2 is in AS 65012.
- C. The neighbor relationship is up
- D. The neighbor relationship is down because the local-as value for R2 is missing in the R1 neighbor statement

Answer: B

Explanation:

Question: 52

Which statement about the Cisco MPLS TE forwarding adjacency feature is true?

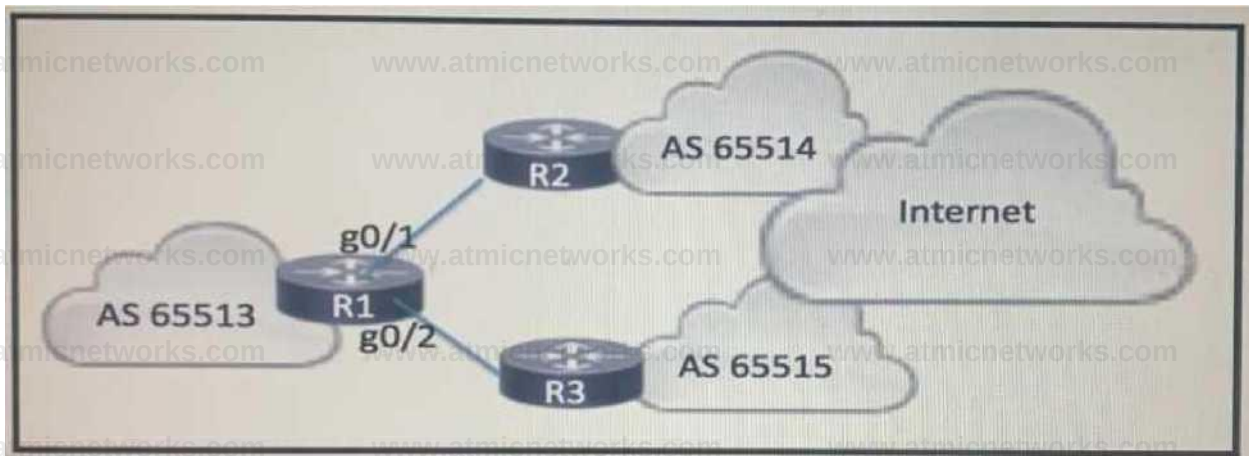
- A. It enables the headend and tailend routers to establish a bidirectional tunnel
- B. It enables the tailend router to advertise routes to the headend router over the tunnel
- C. It enables the MPLS core to use EIGRP as the routing protocol
- D. It enables the Cisco MPLS TE tunnel to be advertised into the running IGP.

Answer: D

Explanation:

Question: 53

Refer to the exhibit:



R1 is connected to two service providers and is under a DDoS attack Which statement about this design is true if uRPF in strict mode is configured on both interfaces'?

- A. R1 accepts source addresses on interface gigabitethernet0/1 that are private addresses
- B. R1 permits asymmetric routing as long as the AS-RATH attribute entry matches the connected AS
- C. R1 drops destination addresses that are routed to a null interface on the router
- D. R1 drops all traffic that ingresses either interface that has a FIB entry that exits a different interface

Answer: D

Explanation:

Question: 54

A router is configured to perform MPLS LDP graceful restart.

Which three steps are included when the RP sends an LDP initialization to a neighbor to establish an LDP session?

(Choose three)

- A. Reconnect Timeout field
- B. Learn from Neighbor (N) flag, set to 1
- C. Graceful restart capability in OPEN message
- D. Recovery Time field
- E. Learn from Network (L.) flag, set to 1
- F. Type-9 LSA

Answer: ADE

Explanation:

Question: 55

Refer to the exhibit:

```
ip flow-export destination 192.168.1.2
ip flow-export version 9
interface gigabitethernet0/1
ip flow ingress
```

Which information is provided for traceback analysis when this configuration is applied?

- A. BGP version
- B. packet size distribution

C. source interface

D. IP sub flow cache

Answer: B

Explanation:

Question: 56

Refer to the exhibit:



```
class-map WEB
match protocol http
```

Which statement describes the effect of this configuration?

A. It applies a service policy to all interfaces remarking HTTP traffic

B. It creates an ACL named WEB that filters HTTP traffic.

C. It matches HTTP traffic for use in a policy map

D. It modifies the default policy map to allow all HTTP traffic through the router

Answer: C

Explanation:

Question: 57

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

A. Link-state routing protocols use SPF calculations that the tunnel endpoints leverage to implement the tunnel

B. The link-state database provides a data repository from which the tunnel endpoints can dynamically select a source ID

- C. The tunnel endpoints can use the link-state database to evaluate the entire topology and determine the best path
- D. The link state database provides segmentation by area, which improves the path-selection process

Answer: C

Explanation:

Question: 58

Which additional feature does MPLS DiffServ tunneling support?

- A. matching EXP and DSCP values
- B. interaction between MPLS and IGP
- C. using GRE tunnels to hide markings
- D. PHB layer management

Answer: D

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_te_diffserv/configuration/15-mt/mp-te-diffserv-15-mt-book/mp-diffserv-tun-mode.html

Question: 59

You are writing an RPL script to accept routes only from certain autonomous systems. Consider this code.

```
RP/0/RP0/CPU0:router(config-rpl)# if as-path in (ios-regex •/77$'j
RP/0/RP0/CPU0 router(config-ig-rpl-if)# pass RP/0'RP0/CPU0router(config-rpl-if)# endif
```

If you apply this code to BGP filters, which effect does the code have on your router?

- A. denies routes from AS 7070
- B. allows routes from AS 7077
- C. denies routes from AS 7007
- D. allows routes from AS 770

Answer: B

Explanation:

Question: 60

Refer to the exhibit:

```
route-policy qppb-as6000
if as-path in (ios-regex '61100, 61200, 61300') then
set qos-group 10

router bgp 100 bgp
table-policy qppb-as6000
```

Which statement supports QPPB implementation?

- A. QoS policies are identified in the MPLS forwarding table
- B. QoS policies rely exclusively on BGP attributes to manipulate traffic
- C. QoS policies use BGP to gain full coverage on the network.
- D. QPPB policies affect only egress traffic

Answer: B

Explanation:

Question: 61

Refer to the exhibit:

```
POST https://router1:8000/api/mo/uni/Descriptions.xml
```

What does the REST API command do?

- A. It retrieves the information requested by Descriptions.xml
- B. It removes the information identified by Descriptions.xml
- C. It executes the commands specified in Descriptions.xml
- D. It displays the information identified by Descriptions.xml

Answer: C

Explanation:

Question: 62

Why do packet loops occur during the configuration of BIDIR-PIM?

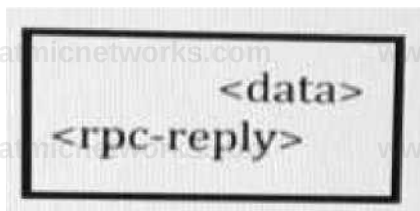
- A. The network does not support BIDIR-PIM
- B. The network is partially upgraded to support BIDIR-PIM
- C. No interface for carrying traffic for multicast groups has been configured
- D. The router has not been configured to advertise itself

Answer: B

Explanation:

Question: 63

Refer to the exhibit:



This output is included at the end of an output that was provided by a device using NETCONF.

What does the code show?

- A. It shows the hostname of the device as rpc-reply
- B. It shows that the running configuration is blank
- C. It shows NETCONF uses remote procedure calls.
- D. It shows that the full configuration is being modeled by VANG

Answer: C

Explanation:

Question: 64

Refer to the exhibit:

<https://192.168.1.100/api/mo/uni/tn-ciscotest.xml>

What is the URL used for with REST API?

- A. It is used to contact a URL filter to determine the efficacy of a web address
- B. It is used to send a TACACS+ authentication request to a server
- C. It is used to send a message to the APIC to perform an operation on a managed object or class operator
- D. It is used to initiate an FTP session to save a running configuration of a device.

Answer: C

Explanation:

Question: 65

You are configuring MPLS traffic-engineering tunnels in the core.

Which two ways exist for the tunnel path across the core? (Choose two)

- A. Tunnel links inherit IGP metrics by default unless overridden
- B. Tunnels can be configured with dynamic path or explicitly defined path
- C. A zero bandwidth tunnel is not a valid option
- D. The bandwidth statement creates a "hard" reservation on the link-The dynamic path option is supported only with IS-IS

Answer: AB

Explanation:

Question: 66

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?

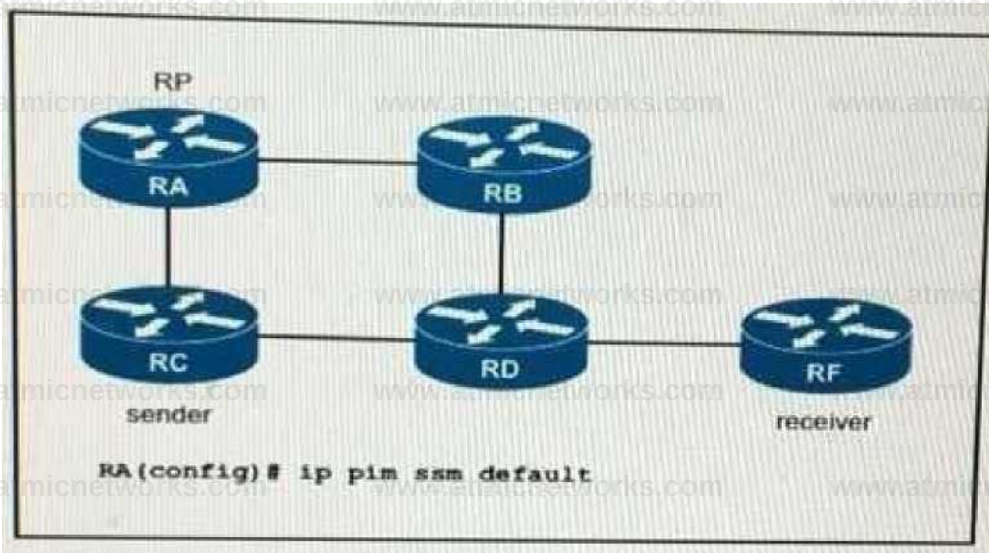
- A. Traceroute mpls ipv4 -tunnel destination
- B. Ping <tunnel destination IP>
- C. show mpls traffic-engineering tunnels
- D. traceroute <tunnel destination IP>

Answer: A

Explanation:

Question: 67

Refer to the exhibit:



If router RA is configured as shown, which IPv4 multicast address space does it use?

- A. 224.0.0.0/8
- B. 225.0.0.0/8
- C. 232.0.0.0/8
- D. 239.0.0.0/8

Answer: C

Explanation:

Question: 68

Refer to the exhibit:



P3 and PE4 are at the edge of the service provider core and serve as ABR routers. Aggregation areas are on either side of the core.

Which statement about the architecture is true?

- A. If each area is running its own IGP, the ABR routers must redistribute the IGP routing table into BGP
- B. To support seamless MPLS, TDP must be used as the label protocol
- C. If each area is running its own IGP, BGP must provide an end-to-end MPLS LSP
- D. To support seamless MPLS, the BGP route reflector feature must be disabled

Answer: C

Explanation:

Question: 69

Which service is a VNF role?

- A. Compute
- B. Network
- C. Firewall
- D. Storage

Answer: B

Explanation:

Question: 70

Refer to the exhibit:

```

mpls traffic-eng tunnels

segment-routing mpls
connected-prefix-sid-map
address-family ipv4
  192.168.1.1/32 index 10 range 1
exit-address-family

set-attributes
address-family ipv4
sr-label-preferred
exit-address-family

interface Loopback1
ip address 192.168.1.1 255.255.255.255
ip router isis 1

int gig0/0
ip address 192.168.1.2 255.255.255.0
ip router isis 1
mpls traffic-eng tunnels
isis network point-to-point

router isis 1
net 50.0000.0000.0000.0001.00
metric-style wide
is-type level-1
segment-routing mpls
segment-routing prefix-sid-map advertise-
local
mpls traffic-eng router-id Loopback1
mpls traffic-eng level-1

```

Which statement about this configuration is true"

- A. It requires an explicit Cisco MPLS TE path to be configured for the tunnel to run
- B. It requires OSPF to also be running to have optimized Cisco MPLS TE tunnels
- C. It requires a dynamic Cisco MPLS TE path to be configured for the tunnel to run
- D. It is the configuration for the head-end router of a Cisco MPLS TE tunnel with segment routing

Answer: D

Explanation:

Question: 71

Refer to the exhibit:

```

PE-A#config t
PE-A(config)#interface FastEthernet0/0
PE-A(config-if)#ip ospf message-digest-key 1 md5 44578611
PE-A(config-if)#ip ospf authentication message-digest

PE-B#config t
PE-B(config)#interface FastEthernet0/0

```

An engineer wants to authenticate the OSPF neighbor between PEA and PE-B using MD5.

Which command on PE-B successfully completes the configuration?

A)

PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611 PE-B(config-if)#ip ospf authentication message-digest

B)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44568611  
PE-B(config-if)#ip ospf authentication null
```

C)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611 PE-B(config-if)#ip ospf authentication null
```

D)

```
PE-B(config-if)#ip ospf message-digest-key 1 md5 44578611  
PE-B(config-if)#ip ospf authentication key-chain 44578611
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation:

Question: 72

Refer to the exhibit:

```
ip flow-export source loopback 0  
ip flow-export destination 192.168.1.1 ip flow-export version 5 origin-as
```

It the NetFlow configuration is updated to version 9, which additional piece of information can be reported"?

A. IPv6 flow information

B. flow sequence numbers

C. BGP AS information

D. IPv4 flow information

Answer: A

Explanation:

Question: 73

You are testing the capabilities of MPLS OAM ping.

Which statement is true?

- A. MPLS OAM ping works solely with Cisco MPLS TE
- B. MPLS OAM ping works solely with P2P LSPs
- C. An LSP breakage results in the ingress MPLS router never receiving any reply
- D. An LSP is not required for the reply to reach the ingress MPLS router

Answer: D

Explanation:

Question: 74

Which utility can you use to locate MPLS faults?

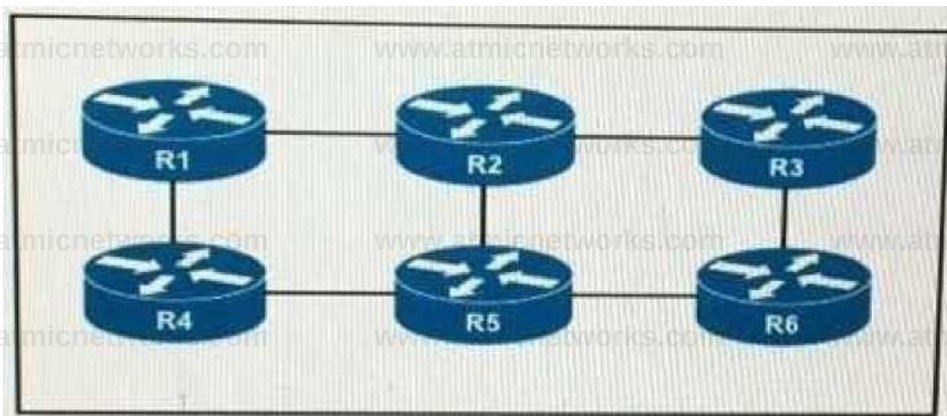
- A. MPLS traceroute
- B. EEM
- C. MPLS LSP ping
- D. QoS

Answer: C

Explanation:

Question: 75

Refer to the exhibit:



You are configuring an administrative domain implement so that devices can dynamically learn the RP?

- A. SSM
- B. BID1R-PIM
- C. BSR
- D. Auto-RP

Answer: C

Explanation:

Question: 76

Refer to the exhibit:

```
snmp-server host 192.168.1.1 version 2c public
```

A network administrator wants to enhance the security for SNMP for this configuration.

Which action can the network administrator implement?

- A. Re-configure to use SNMPv2 with MD5 authentication
- B. Add a community string to the existing entry
- C. Re-configure to use SNMPv3.
- D. Maintain the configuration but switch to an encrypted password for device access through SSH

Answer: C

Explanation:

Question: 77

Refer to the exhibit:

```
R1
ip cef distributed
mpls ldp graceful-restart
interface GigabitEthernet 0/0/1
 mpls ip
 mpls label protocol ldp
```

Which effect of this configuration is true?

- A. R1 can support a peer that is configured for LDP SSO/NSF as the peer recovers from an outage
- B. R1 can failover only to a peer that is configured for LDP SSO/NSF
- C. R1 can failover to any peer
- D. R1 can support a graceful restart operation on the peer, even if graceful restart is disabled on the peer

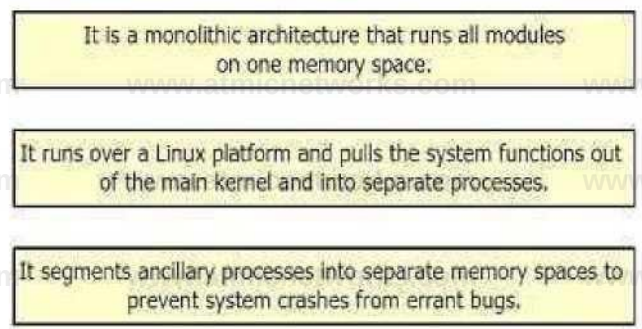
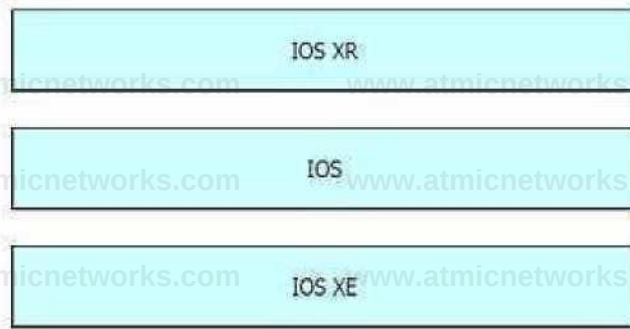
Answer: B

Explanation:

Question: 78

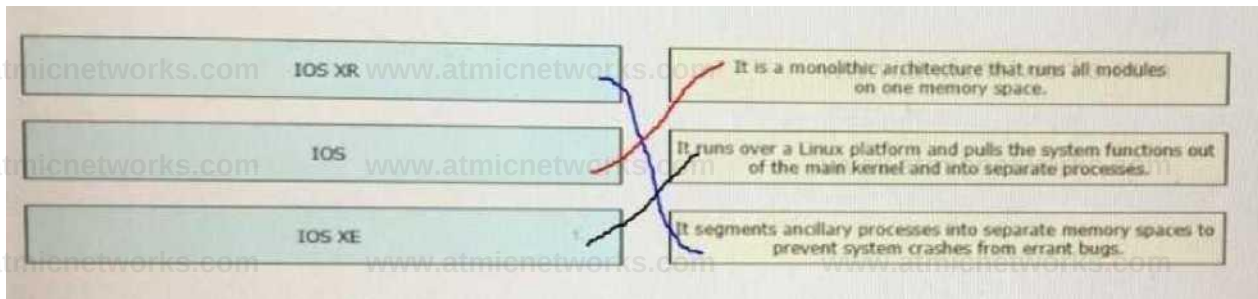
DRAG DROP

Drag and drop the OSs from the left onto the correct deceptions on the right.



Answer:

Explanation:



Question: 79

DRAG DROP

Drag and drop the multicast concepts from the left onto the correct descriptions on the right.

IGMP	multicast routing protocol that floods traffic to all peers
PIM-DM	technology that manages the process of joining and leaving multicast groups
PIM-SM	technology that requires an RP
shared tree	technology that uses the RP as the single common root
source tree	shortest-path tree

Answer:

Explanation:

1: PIM-DM 2:IGMP 3:PIM-SM 3:shared tree 4:source tree

Question: 80

A customer of an ISP requests support to setup a BGP routing policy. Which BGP attribute should be configured to choose specific BGP speakers as 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: A

Explanation:

Question: 81

Refer to the exhibit:

```
ip cef
interface gigabitethernet0/1
ip verify unicast source reachable-via any
```

Router 1 was experiencing a DDoS attack that was traced to interface gigabitethernet0/1.

Which statement about this configuration is true?

- A. Router 1 drops all traffic that ingresses interface gigabitethernet0/1 that has a FIB entry that exits a different interface
- B. Router 1 accepts source addresses on interface gigabitethernet0/1 that are private addresses
- C. Router 1 accepts all traffic that ingresses and egresses interface gigabitethernet0/1
- D. Router 1 accepts source addresses that have a match in the FIB that indicates it is reachable through a real interface

Answer: D

Explanation:

Question: 82

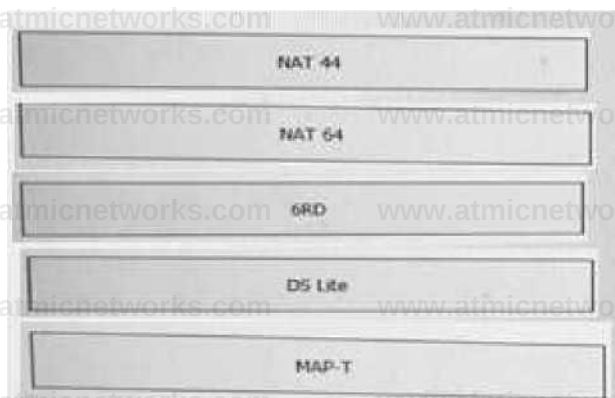
DRAG DROP

Drag and drop the functionalities from the left onto the correct target fields on the right.

MAP-T	Can translate RFC1918 IPv4 to Public IPv4
NAT 64	Can be Stateless or stateful
NAT 44	Provides reachability of IPv6 host over IPv4 domains
DS Lite	Provides reachability to IPv4 host over IPv6 domains
6RD	Requires IPv6 access network

Answer:

Explanation:



Question: 83

Refer to the exhibit:

```
snmp-server community ciscotest ro 2
```

What is significant about the number 2 in the configuration?

- A. It is the numeric name of the ACL that contains the list of SNMP managers with access to the agent
- B. It dictates the number of sessions that can be open with the SNMP manager

- C. It indicates two SNMP managers can read and write with the agent using community string cisco test
- D. It represents the version of SNMP running

Answer: A

Explanation:

Question: 84

A regional MPLS VPN provider operates in two regions and wants to provide MPLS L3VPN service for a customer with two sites in these separate locations. The VPN provider approaches another organization to provide backbone carrier services so that the provider can connect to these two locations.

Which statement about this scenario is true?

- A. When edge routers at different regional sites are connected over the global carrier backbone, MP- eBGP must run between the routers to exchange the customer VPNv4 routes
- B. When eBGP is used for label exchange using the send label option, MPLS-BGP forwarding is configured under the global ABC CSC PE-to CE interface
- C. When IGP is used for route exchange and LDP for label exchange, MPLS is enabled only on the VRF interface on the backbone-earner PE side.
- D. When BGP is used for both route and label exchange, the neighbor a.b.c.d send-label command is used under the address family VPNv4 command mode.

Answer: B

Explanation:

Question: 85

What is the difference between SNMP and model-driven telemetry?

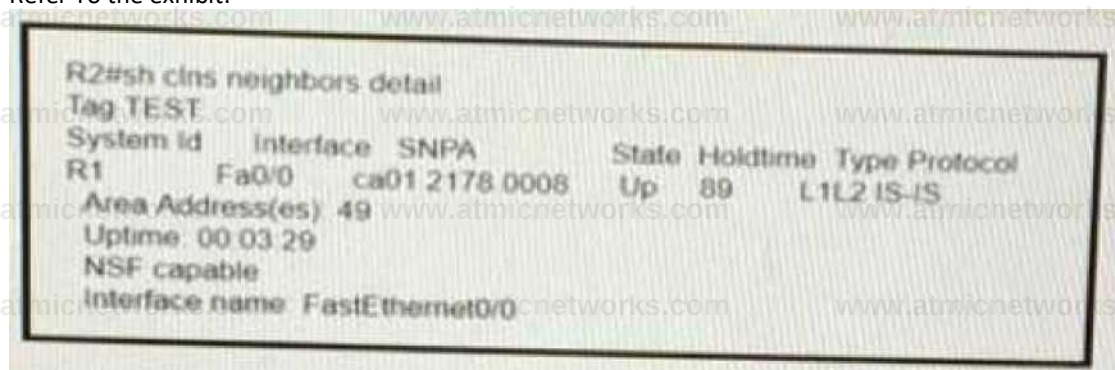
- A. Telemetry allows for modeled network data to be pushed to the network administrator on an as-needed basis
- B. Telemetry uses traps and inform messages to deliver data to a network administrator on a polling basis
- C. SNMP uses the YANG data modeling language
- D. SNMP pushes network data to the network administrator whenever it is queried

Answer: A

Explanation:

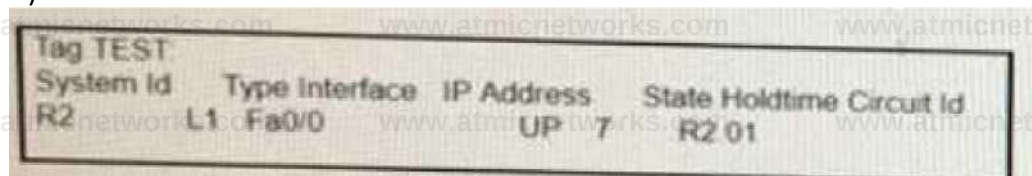
Question: 86

Refer To the exhibit:



On R1, which output does the show isis neighbors command generate?

A)



B)

Tag TEST						
System Id	Type	Interface	IP Address	State	Holdtime	Circuit Id
R2	L2	Fa0/0	UP	9		R2 01

C)

Tag TEST						
System Id	Type	Interface	IP Address	State	Holdtime	Circuit Id
R2	L2	Fa0/0	UP	7		R2 01
R2	L2	Fa0/0	UP	9		R2 01

D)

Tag TEST						
System Id	Type	Interface	IP Address	State	Holdtime	Circuit Id
R2	L1	Fa0/0	UP	7		R2 01
R2	L2	Fa0/0	UP	9		R2 01

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 87

Which configuration enables BGP FlowSpec client function and installation of policies on all local interfaces?

A)

**flowspec
address-family ipv4 local-install all-interface**

B)

flowspec address-family ipv4 install interface-all

C)

**flowspec
address-family ipv4 local-install interface-all**

D)

flowspec address-family ipv4 install interface-all local

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 88

Refer to the exhibit:

Router 1:

```
ip route 192.0.2.0 255.255.255.0 null 0  
ip route 192.168.1.0 255.255.255.0 null 0 tag 1
```

```
route-map ddos  
  match tag 1  
  set ip next-hop 192.0.2.1  
  set local-preference 150  
  set community no export
```

```
route-map ddos permit 20
```

```
router bgp 65513  
  redistribute static route-map ddos
```

Router 2:

```
ip route 192.0.2.0 255.255.255.0 null 0
```

An engineer is preparing to implement data plane security configuration.

Which statement about this configuration is true?

- A. Router 1 drops all traffic with a local-preference set to 150
- B. All traffic is dropped
- C. All traffic to 192.168.1.0/24 is dropped
- D. Router 1 and Router 2 advertise the route to 192.0.2.0/24 to all BGP peers.

Answer: C

Explanation:

Question: 89

Refer to the exhibit:

```
telemetry model-driven
sensor-group cisco
sensor-path Cisco-IOS-XR-infra-statsd-oper:infra-statistics/interfaces/interface/latest/generic-counters
commit
```

This configuration is being applied on an IOS XR router.

Which statement about this configuration is true?

- A. It is used to create a subscription to specify the streaming interval
- B. It is used to identify traps for SNMP polling
- C. It is used to identify MIB entries and has a list of YANG models
- D. It is used to create a sensor-group and has a list of YANG models for streaming

Answer: D

Explanation:

Question: 90

Refer to the exhibit:



BGPsec is implemented on R1, R2, R3, and R4. BGP peering is established between neighboring autonomous systems. Which statement about implementation is true?

- A. BGP updates from the eBGP peers are appended with an additional AS path value that is statically set by the domain administrator

- B. BGP updates from the iBGP peers are appended with a community of local-as
- C. BGP updates from the all BGP peers are appended with a community of no export
- D. BGP updates from the eBGP peers are appended with a BGPsec attribute sequence that includes a public key hash and digital signature

Answer: D

Explanation:

Question: 91

Refer to the exhibit:

```
R1:
!
interface FastEthernet0/0
 ip address 10.1.12.1 255.255.255.0
 duplex full
!
router ospf 1
 network 0.0.0.0 255.255.255.255 area 0
R2:
!
interface FastEthernet0/0
 ip address 10.1.12.2 255.255.255.252
 duplex full
!
router ospf 1
 network 0.0.0.0 255.255.255.255 area 0
```

R1 and R2 are directly connected with Fast Ethernet interfaces and have the above configuration applied OSPF adjacency is not formed. When the debug ip ospf hello command is issued on R1. these log messages are seen.

```
*Mar 6 21:57:33.051: OSPF-1 HELLO Fa0/0: Mismatched hello parameters from 10.1.12.2
*Mar 6 21:57:33.051: OSPF-1 HELLO Fa0/0: Dead R 40 C 40, Hello R 10 C 10 Mask R 255.255.255.252 C 255.255.255.0
```

Which command can be configured on routers R1 and R2 on f0/0 interfaces to form OSPF adjacency?

- A. ip ospf network non-broadcast
- B. ip ospf network point-to- multipoint non-broadcast
- C. ip ospf network point-to-point
- D. ip ospf network broadcast

Answer: C

Explanation:

Question: 92

Refer to the exhibit:

```
RP/0/0/CPU0:router# show bgp neighbors 192.168.2.2
```

```
BGP neighbor is 192.168.2.2, remote AS 1, local AS 140, external link
```

```
Remote router ID 0.0.0.0
```

```
BGP state • Idle
```

```
Last read 90:00:00, hold time is 180, keepalive interval is 60 seconds
```

```
Received 0 messages, 0 notifications, 0 in queue
```

```
Sent 0 messages, 0 notifications, 0 in queue
```

```
Minimum time between advertisement runs is 15 seconds
```

```
For Address Family: IPv4 unicast
```

```
BGP neighbor version 0
```

```
Update group: 0.1
```

```
eBGP neighbor with no inbound or outbound policy; defaults to 'drop'
```

```
Route refresh request: received 0, sent 9
```

```
0 accepted prefixes
```

```
Prefix advertised 0, suppressed 0, withdrawn 0, maximum limit 524288
```

```
Threshold for warning message 75%
```

```
Connections established 0; dropped 0
```

```
Last reset 00:02:03, due to BGP neighbor initialized External BGP neighbor not directly connected.
```

Based on the show/ command output, which result is true after BGP session is established?

- A. The IOS XR router advertises all routes to the neighbor 192.168.2.2, but it does not accept any routes from 192.168.2.2
- B. The IOS XR router advertises and accepts all routes to and from eBGP neighbor 192.168.2.2
- C. No routes are accepted from the neighbor 192.168.2.2, nor are any routes advertised to it
- D. The IOS XR router does not advertise any routes to the neighbor 192.168.2.2, but it accepts all routes from 192.168.2.2.

Answer: B

Explanation:

Question: 93

Refer to the exhibit:

```
Router I:
netconf-yang
netconf-yang feature candldata-datastore
```

Which statement describes this configuration?

- A. Router 1 has its running configuration locked so changes can be made only when the administrator issues a kill session
- B. Router 1 can be remotely managed by the CLI using Telnet
- C. Router 1 has a new data store to collect SNMP information, but configuration must still be done at the CLI only
- D. Router 1 has a temporary data store where a copy of the running configuration can be manipulated and verified before committing the configuration

Answer: D

Explanation:

Question: 94

Refer to the exhibit:

```
route-policy ciscotest
  if destination in acl10 then
    pass
  else
    set local-preference 300
  endif
end-policy end
```

A network engineer is implementing a BGP routing policy.

Which effect of this configuration is true?

- A. All traffic that matches acl10 is allowed without any change to its local-preference
- B. All traffic that matches acl10 is dropped without any change to its local-preference
- C. If traffic matches acl10, it is allowed and its local-preference is set to 300
- D. All traffic is assigned a local-preference of 300 regardless of its destination

Answer: A

Explanation:

Question: 95

Which component is similar to an EVPN instance?

- A. MPLS label
- B. IGP router ID
- C. VRF
- D. router distinguisher

Answer: C

Explanation:

Question: 96

Refer to the exhibit:

```
R1
router bgp 65000
router-id 192.168.1.1
neighbor 192.168.1.2 remote-as 65001
neighbor 192.168.1.2 password cisco
```

Router R1 and its peer R2 reside on the same subnet in the network, If does it make connections to R2?

- A. R1 establishes UDP connections that are authenticated with an MD5 password
- B. R1 establishes TCP connections that are authenticated with a clear-text password
- C. R1 establishes UDP connections that are authenticated with a clear-text password
- D. R1 establishes TCP connections that are authenticated with an MD5 password

Answer: D

Explanation:

Question: 97

Which MPLS design attribute can you use to provide Internet access to a major customer through a separate dedicated VPN?

- A. The customer that needs the Internet access service is assigned to the same RTs as the Internet gateway
- B. The Internet gateway inserts the full Internet BGP routing table into the Internet access VPN
- C. The Internet gateway router is connected as a PE router to the MPLS backbone.
- D. The CE router supports VRF-Ute and the full BGP routing table.

Answer: B

Explanation:

Question: 98

Which two tasks must you perform when you implement LDP NSF on your network? (Choose two.)

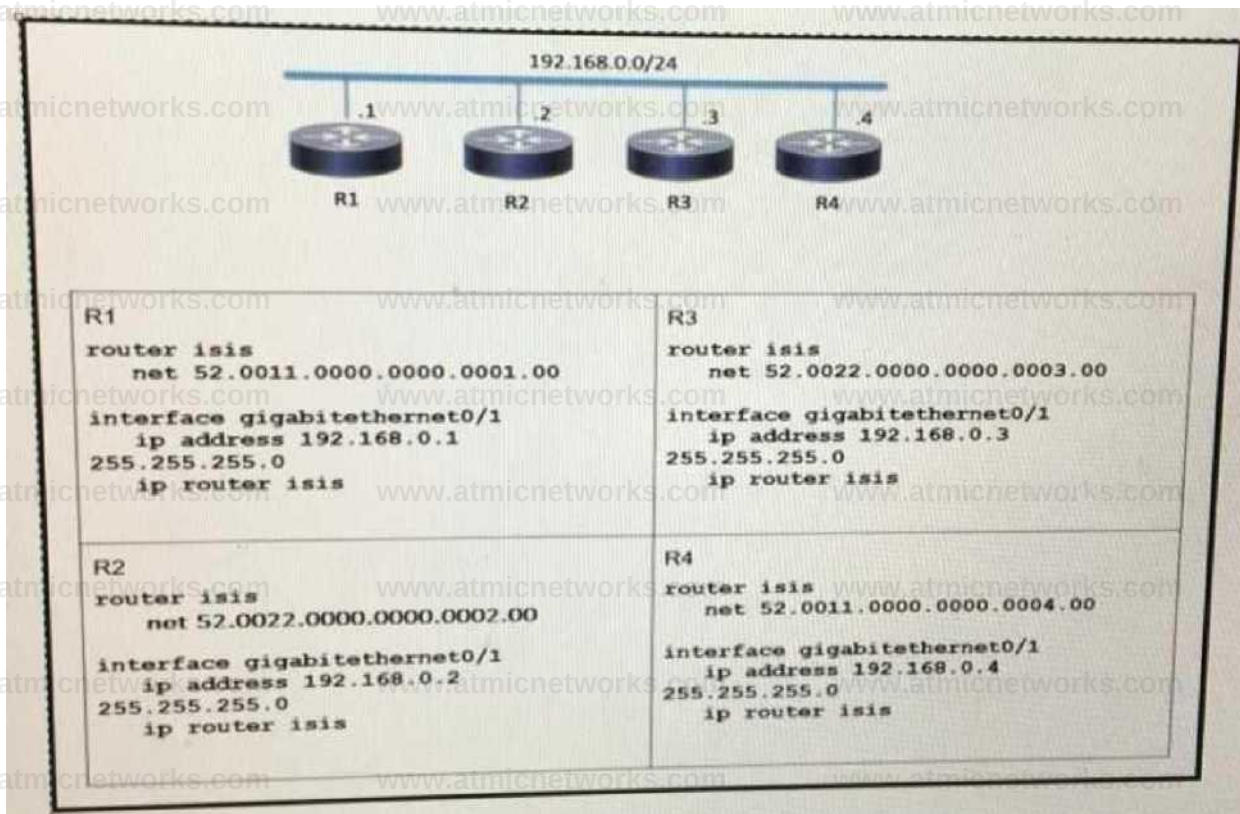
- A. Enable NSF for EIGRP
- B. Enable NSF for the link-state routing protocol that is in use on the network.
- C. Disable Cisco Express Forwarding
- D. Implement direct connections for LDP peers
- E. Enable NSF for BGP

Answer: BE

Explanation:

Question: 99

Refer to the exhibit:



Which two statements about the ISIS topology are true? (Choose two.)

- A. All four routers are operating as Level 1 routers only.
- B. All four routers are operating as Level 2 routers only.
- C. All four routers are operating as Level 1-2 routers.
- D. R1 and R2 are Level 2 neighbors.
- E. R1 and R4 are Level 2 neighbors

Answer: CD

Explanation:

Question: 100

Refer to the exhibit:

```
class-map match-any class1
match protocol ipv4
match qos-group 4
```

A network engineer is implementing QoS services. Which two statements about the QoS-group keyword on Cisco IOS XR 3 are true? (Choose two)

- A. The QoS group numbering corresponds to priority level
- B. QoS group marking occurs on the ingress
- C. It marks packets for end to end QoS policy enforcement across the network
- D. QoS group can be used in fabric QoS policy as a match criteria
- E. It cannot be used with priority traffic class

Answer: BD

Explanation:

https://www.cisco.com/c/en/us/td/docs/routers/ncs6000/software/ncs6k_r6-1/qos/configuration/guide/b-qos-cg-ncs6k-61x/b-qos-cg-ncs6k-61x_chapter_0110.html

Fabric QoS policy class maps are restricted to matching a subset of these classification options:

precedence

dscp

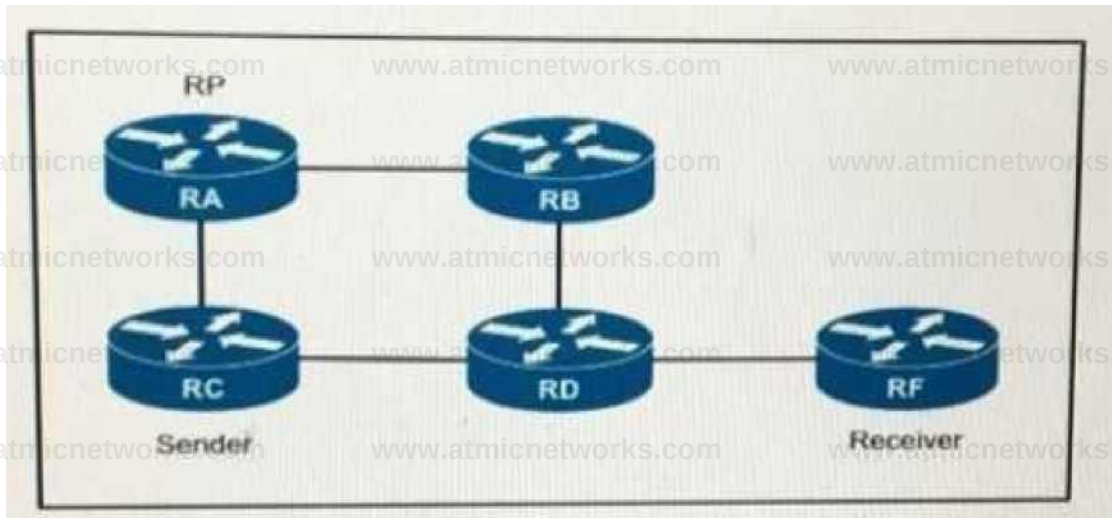
qos-group

discard-class

mpls experimental topmost

Question: 101

Refer to the exhibit:



If router A is the RP, which PIM mode can you configure so that devices will send multicast traffic toward the RP?

- A. PIM-SM
- B. PIM-DM
- C. BIDIR-PIM
- D. PIM-SSM

Answer: C

Explanation:

Question: 102

Refer to the exhibit:

router ospf 1 nsf ietf restart interval 90

Which purpose of implementing NSF with this configuration is true?

- A. The router uses NSF to load balance traffic between two links, with the primary link alternating every 90 seconds
- B. The router uses NSF to reduce neighbor-relationship downtime during RP switchover
- C. The router uses NSF to load balance traffic on a routed EtherChannel
- D. The router uses NSF to handle RP switchover while allowing neighbor relationships to remain up

Answer: D

Explanation:

Question: 103

DRAG DROP

Refer to the exhibit.

```

R1#show ip bgp
BGP table version is 3, local router ID is 50.50.50.1
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
               r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network        Next Hop        Metric LocPrf Weight Path
*> 22.22.22.22/32  50.50.50.2              0      100 500 ?
* 40.40.40.2       40.40.40.2              0      200   0 400 ?
* 30.30.30.2       30.30.30.2              0          0 300 300 ?
* 20.20.20.2       20.20.20.2              0          0 200 ?

R1#show ip bgp 22.22.22.22
BGP routing table entry for 22.22.22.22/32, version 3
Paths: (4 available, best #1, table Default-IP-Routing-Table)
Flag: 0x820
   Advertised to update-groups:
     1
 500
 50.50.50.2 from 50.50.50.2 (50.50.50.2)
   Origin incomplete, metric 0, localpref 100, weight 100, valid, external, best
400
40.40.40.2 from 40.40.40.2 (40.40.40.2)
   Origin incomplete, metric 0, localpref 200, valid, external
300 300
30.30.30.2 from 30.30.30.2 (30.30.30.2)
   Origin incomplete, metric 0, localpref 100, valid, external
200
20.20.20.2 from 20.20.20.2 (20.20.20.2)
   Origin incomplete, metric 0, localpref 100, valid, external

```

An engineer wants to determine which paths are best, second best, third best, and fourth best. Drag and drop the peer addresses on the left to the corresponding BGP best-path selection order on the right.

20.20.20.2	Best Path
30.30.30.2	2nd Best Path
40.40.40.2	3rd Best Path
50.50.50.2	4th Best Path

Answer:

Explanation:

Best – 50.50.50.2

2nd Best – 40.40.40.2

3rd Best – 20.20.20.2

44th Best – 30.30.30.2

Question: 104

ASN 65001 is peering with ASN 65002 to exchange IPv6 BGP routes. All routes that originate in ASN 65001 have a standard community value of 65001:100, and ASN 65002 is allowed to advertise only 2001:db8:aaaa::/48. An engineer needs to update the ASN 65001 route-filtering configuration to meet these conditions:

- * Looped routes into ASN 65001 and routes that have traversed 10 or more ASNs must be denied.
- * Routes accepted into ASN 65001 must be assigned a community value of 65001:200.

Which configuration must the engineer apply to the ASN 65001 border router?

```
route-policy PEER-AS65002-IN
> if as-path length ge 10 or as-path passes-through '65001' or community matches-any (65001:100) then drop
endif
if destination in (2001:db8:aaaa::/48) then
done
else
drop
endif
set community (65001:200)
end-policy

route-policy PEER-AS65002-IN
if as-path length ge 10 and as-path passes-through '65001' or community matches-any (65001:100) then drop
endif
if destination in (2001:db8:aaaa::/48) then
pass
endif
set community (65001:200)
end-policy

route-policy PEER-AS65002-IN
if as-path length ge 10 then
drop
endif
if as-path passes-through '6500T or community matches-any (65001:100) then drop
endif
if destination in (2001:db8:aaaa::/48) then pass
endif
set community (65001:200)
end-policy
```

```
route-policy PEER-AS65002-IN
  if as-path length ge 10 then
    drop
  endif
  if as-path passes-through '65001' or community matches-any (65001:100) then drop
  endif
  if destination in (2001:db8:aaaa::/48) then
    set community (65001:200)
```

```
route-policy PEER-AS65002-IN
  if as-path length ge 10 then
    drop
  endif
  if as-path passes-through *65001'or community matches-any (65001:100) then drop
  endif
  if destination in (2001:db8:aaaa::/48) then
    set community (65001:200)
  else
    drop endif end-policy
```

A. Option A

B. Option B

C. Option C

D. Option D

E. Option E

Answer: D

Explanation:

Question: 105

Refer to the exhibit.

```
router bgp 65000 router-id 192.168 1.1 no bgp default ipv4-unicast neighbor 192.168 1.2 remote-as 65001
```

Which task completes the configuration?

- A. Specify the maximum number of prefixes that R1 receives from neighbor 192.168.1.2.
- B. Specify the source interface in the neighbor statement.
- C. Specify the activate neighbor 192.168.1.2 under the IPv4 address family.
- D. Specify the local-as value in the neighbor statement.

Answer: C

Explanation:

Question: 106

Refer to the exhibit.

Router 1:

```
Interface gigabitethernet0/1
ip address 192.168.1.1 255.255.255.0

router ospf 1
network 192.168.1.0 0.0.0.255 area 1
```

Router 2:

```
Interface gigabitethernet0/1
ip address 192.168.1.2 255.255.255.0

Interface loopback 0
ip address 192.168.2.1 255.255.255.0

router ospf 2
network 192.168.1.2 0.0.0.0 area 2
network 192.168.2.1 0.0.0.0 area 1
```

Router 1 is missing the route for the router 2 loopback 0. What should the engineer change to fix the problem?

- A. the area numbers on Router 1 and Router 2 to be similar
- B. the wildcard mask network statement in OSPF of Router 2
- C. Router 1 to be an ABR
- D. the hello timers on Router 1 and Router 2 to be different

Answer: A

Explanation:

Question: 107

What is a role of NSO?

- A. It automates the deployment of access points with its built-in wireless LAN controller.
- B. It manages WAN infrastructure using a virtual switch.
- C. It provides full lifecycle management of a device.

D. It resides on a hypervisor that runs the Windows OS.

Answer: C

Explanation:

Question: 108

Which utility must be used to locate MPLS faults?

- A. QoS
- B. MPLS LSP ping
- C. MPLS traceroute
- D. EEM

Answer: C

Explanation:

Question: 109

Refer to the exhibit.

```
R1(config)# router Isis areal
R1(config-router)# net 49.0001.0000.0000.000b.00

R1(config-router)# interface loopback 0
R1(config-if)# ipv6 address 2001:0000:1001:10001:1/128
R1(config-if)# exit
R1(config)# interface Ethernet 1/2
R1(config-if)# ipv6 address 2001:0000:1001:1000A::1/64
R1(config-if)# ipvfi router Isis areal
R1(config-if)# exit
```

A network engineer with an employee id: 3812:12:993 has started to configure router R1 for IS-IS as

shown. Which additional configuration must be applied to configure the IS-IS instance to advertise only network prefixes associated to passive interfaces?

```
RI (config)# router isis areal
R1 (config-router)# passive-interface loopback 0
R1 (config-router)# address-family ipv6
RI(config-router-af)# advertise passive-only
```

```
RI (config-router)# address-family ipv6
RI(config-router-af)# advertise passive-only
```

```
R1 (config)# router isis areal
R1 (config-router)# loopback 0 passive-interface
RI (config-router)# address-family ipv6
RI(config-router-af)# prc-interval 20
```

```
RI (config)# router isis areal
R1 (config-router)# passive-interface loopback 0
```

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

Answer: A

Explanation:

Question: 110

What does DWDM use to combine multiple optical signals?

- A. frequency
- B. IP protocols

c. time slots

D. wavelength

Answer: D

Explanation:

Question: 111

Refer to the exhibit.

PE-A.

```
vrf definition Customer-A
 rd 65000:1111
 route-target export 65000:1111
 route-target import 65000:1111 !
 address-family ipv4
  mdt default 233.15.38.120
  mdt data 233.15.38.121 0.0.0.0 threshold 100
  mdt mtu 5000
interface GigabitEthernet0/0
 vrf forwarding Customer-A
 ip address 10.10.10.1 255.255.255.252
 !
 ip multicast-routing vrf Customer-A
```

An engineer is implementing Auto-RP and reviewing the configuration of the PE

A. Which configuration permits Auto-RP messages to be forwarded over this interface?

A. PE-A(config-if)#ip pim sparse-mode

B. PE-A(config-if)#no ip pim bsr-border

C. PE-A(config-if)#ip igmp version 3

D. PE-A(config-if)#ip pim sparse-dense-mode

Answer: D

Explanation:

Question: 112

Which protocol does a Cisco MPLS TE tunnel use to maintain paths within the core?

- A. RSVP
- B. VTP
- C. STP
- D. RPF

Answer: A

Explanation:

Question: 113

Refer to the exhibit.

```
R1
ip cef distributed
mpls ldp graceful-restart
interface GigabitEthernet 0/0/1
 mpls ip
 mpls label protocol ldp
```

What is the effect of this configuration?

- A. R1 supports a graceful restart operation on the peer, even if graceful restart is disabled on the peer.
- B. R1 supports a peer that is configured for LDP SSO/NSF as the peer recovers from an outage.
- C. R1 failovers only to a peer that is configured for LDP SSO/NSF.
- D. R1 failovers to any peer.

Answer: B

Explanation:

Question: 114

Refer to the exhibit.

Router 1:

```
Interface gigabitethernet0/1
 ip address 192.168.1.1 255.255.255.0
 ip ospf hello-interval 1
```

```
router ospf 1
 network 192.168.1.0 0.0.0.255 area 1
```

Router 2:

```
Interface gigabitethernet0/1
 ip address 192.168.1.2 255.255.255.0
 ip ospf hello-interval 2
```

```
router ospf 2
 network 192.168.1.2 0.0.0.0 area 1
```

What reestablishes the OSPF neighbor relationship between Router 1 and Router 2?

- A. authentication is added to the configuration
- B. correct wildcard mask is used on Router 2
- C. OSPF process IDs match
- D. hello intervals match

Answer: D

Explanation:

Question: 115

Refer to the exhibit.

RP/0/RP0/CPU0:XR1#sh Ipts pi-Fib hardware entry location 0/0/CPU0

```
L4 Protocol      : ICMP
VRF ID           : any
Destination IP   : any
Source IP/BFD Disc: any
Port/Type        : Port:8
Source Port      : any
Is Fragment      : 0
Is SYN           : any
Is Bundle        : na
Is Virtual       : na
Interface        : any
Slice            : 0
V/L/T/F          : 0/IPv4_STACK/0/ICMP-local
DestNode         : Local
DestAddr         : Punt
Accepted/Dropped : 16810/14
Po/Ar/Bu         : 19/0pps/100ms
State            : pl_pifib_state_complete
```

While troubleshooting the network, a network operator with an employee id: 3812:12:993 is trying to ping XR1. Which result should the operator expect when trying to ping to an XR1 local address?

- A. ICMP traffic works at a policed rate of 19 bytes per second every 100 ms
- B. All ICMP traffic responds successfully.
- C. All ICMP traffic is dropped.
- D. ICMP traffic works at a policed rate of 19 packets every 100 ms.

Answer: B

Explanation:

Question: 116

A network engineer is configuring a BGP route policy for the SUBNET prefix set. Matching traffic must be dropped, and other traffic must have its MED value set to 400 and community 4:400 added to the route. Which configuration must an engineer apply?

```
route-policy CISCO
  if destination in SUBNET then
    drop
  else
    set med 400
    set community (4:400) additive
  endif
end-policy
end
```

```
route-policy CISCO
  if destination in SUBNET then
    drop
  endif
  set med 400
  if community matches-any SUBNET then
    set local-preference 400
    set med 500
    set community (4:400) additive
  endif
end-policy
end
```

```
route-policy SUBNET
  if destination In SUBNET then
    drop
  endif
  set med 400
  set local-preference 400
  if community matches-any SUBNET then set community (4:400)
  endif
end-policy
end
```

```
route-policy SUBNET
  if destination in BGP then
    drop
  else
```

```
set med 400
set community (4:400)
endif
end-policy
end
```

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

Answer: A

Explanation:

Question: 117

Refer to the exhibit.

```
snmp-server community ciscotest ro 2
```

What does the number 2 mean in the configuration?

- A. It dictates the number of sessions that will be open with the SNMP manager
- B. It represents the version of SNMP running.
- C. It indicates two SNMP managers are able to read and write with the agent using community string ciscotest.
- D. It is the numeric name of the ACL that contains the list of SNMP managers with access to the agent.

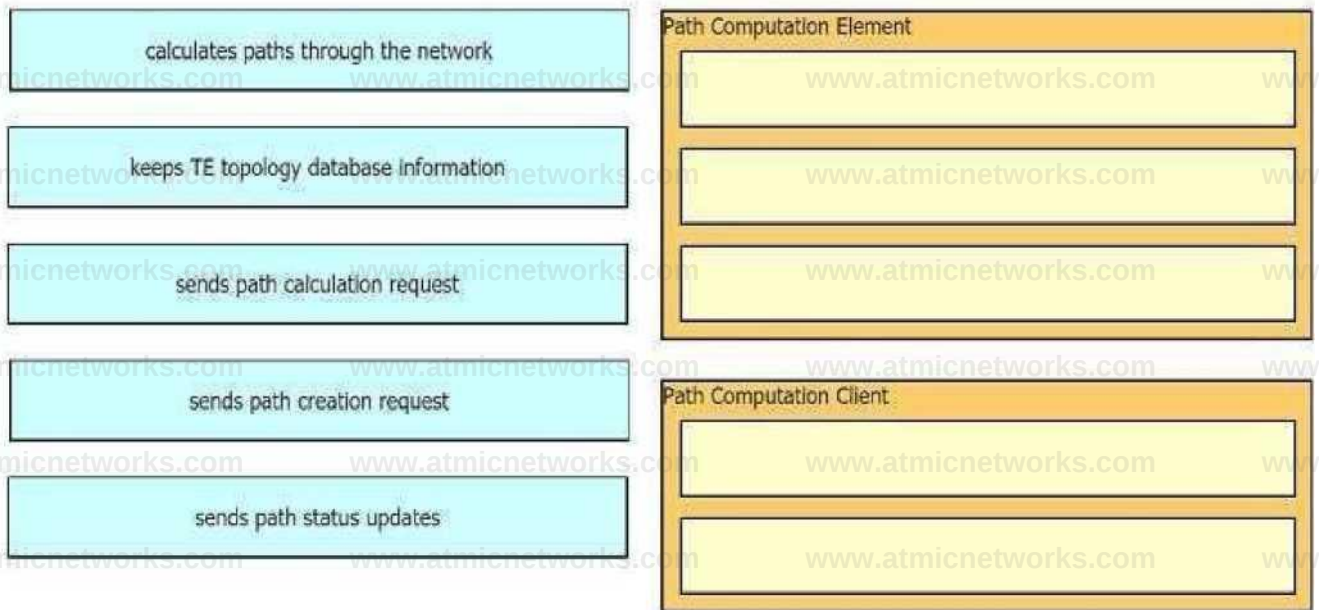
Answer: D

Explanation:

Question: 118

DRAG DROP

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



Answer:

Explanation:

PCE – 1,2,5

PCC- 3,4

Question: 119

Refer to the exhibit.

Router 1:

router isis

net 49.0011.0000.0000.0001.00

Router 2:

router isis

net 49.0001.0000.0000.0001.00

Router 3:

router isis

net 49.0011.0000.0000.0002.00

Router 4 is added to the network and must be in the same area as router

1. Which NET should the engineer assign?

A. 49.0001.0000.0000.0004.00

B. 49.0111.0000.0000.0001.00

C. 49.0011.0000.0000.0003.00

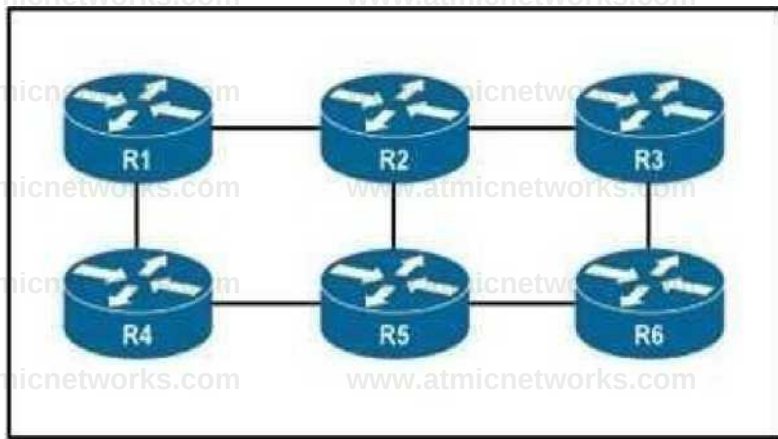
D. 49.0011.0000.0000.0002.00

Answer: C

Explanation:

Question: 120

Refer to the exhibit.



An engineer is configuring an administrative domain in the given multi-vendor environment with PIM-SM. Which feature must the engineer implement so that devices will dynamically learn the RP?

- A. Auto-RP
- B. BIDIR-PIM
- C. SSM
- D. BSR

Answer: D

Explanation:

Question: 121

What causes multicast traffic to permanently stay on the shared tree and not switch to the source tree?

- A. The SPT threshold is set to infinity.
- B. The RP IP address is configured incorrectly.
- C. The RP announcements are being filtered.
- D. SSM range is being used.

Answer: C

Explanation:

Network administrators can force traffic to stay on the shared tree by using the Cisco IOS `ip pim spt-threshold infinity` command

https://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/ip_multicast/White_papers/mcst_ovr.html

Question: 122

Refer to the exhibit.

```
Reconfigure terminal
R1(config)* mpls ip
R1(config)* mpls label protocol Idp

RKconflg}* Interface Ethernet 1/0
R1(config-if)* ip address 10.1.1.1 255.255.255.255
R1(config-if)* mpls ip

R1(config)* router ospf 1
R1(config-router)* network 10.0.0.0 0.255.255.255 area 3
```

A network engineer is configuring MPLS LDP synchronization on router R1. Which additional configuration must an engineer apply to R1 so that it will synchronize to OSPF process 1?

```
RI (config)# router ospf 1
RI (config-router)# mpls ldp sync

R1 (config)# router ospf 1
RI (config-router)# mpls ldp autoconfig

R1 (config)# router ospf 1
R1 (config-router)# mpls ldp igp sync holddown 60

R1 (config)# router ospf 1
RI (config-router)# no mpls ldp igp sync/strong>
RI (config-router)# bfd all-interfaces
```

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

Answer: A

Explanation:

Question: 123

What is a primary benefit of IPoATM or MPLS over ATM backbone service provider networks?

- A. dedicated circuits
- B. variable-length packets
- C. isochronous system
- D. fixed-length cells

Explanation:

Answer: A

Question: 124

How does model-driven telemetry use YANG?

- A. to reset network devices that malfunction
- B. to set informs and traps on clients to report back to a centralized server
- C. to subscribe to data that is streamed from a device
- D. to poll network devices on a 30-minute interval

Explanation:

Answer: C

Question: 125

Refer to the exhibit.

```
configure terminal ip cef distributed
interface gigabitethernet 1/0
ip verify unicast reverse-path 12
```

Which show command should be implemented to display per-interface statistics about uRPF drops and suppressed drops?

- A. show ip traffic
- B. show ip interface
- C. show cef interface
- D. show ip interface brief

Answer: B

Explanation:

Question: 126

Refer to the exhibit.

Router 1:

```
tacacs-server host 192.168.1.2 single-connection  
tacacs-server key ciscotest
```

What is the result of this configuration?

- A. Router 1 opens and closes a TCP connection to the TACACS+ server every time a user requires authorization.
- B. Router 1 and the TACACS+ server maintain one open connection between them only when network administrator is accessing the router with password ciscotest.
- C. Router 1 and the TACACS+ server maintain one open connection between them.
- D. Router 1 opens and closes a TCP connection to the TACACS+ server every time a user requires authentication.

Answer: C

Explanation:

<https://www.ccexpert.us/cisco-secure/configuring-tacacs-on-cisco-ios.html>

single-connection (Optional) Used to specify a single connection. Rather than have the router open and close a TCP connection to the daemon each time it must communicate, the single-connection option maintains a single open connection between the router and the daemon. This is more efficient because it allows the daemon to handle a higher number of TACACS operations.

Question: 127

Which QoS model allows hosts to report their QoS needs to the network?

A. DiffServ

B. CB-WFQ

C. IntServ

D. MQC

Answer: A

Explanation:

To facilitate true end-to-end QoS on an IP-network, the Internet Engineering Task Force (IETF) has defined two models: Integrated Services (IntServ) and Differentiated Services (DiffServ). IntServ follows the signaled-QoS model, where the end-hosts signal their QoS needs to the network, while DiffServ works on the provisioned-QoS model, where network elements are set up to service

Question: 128

Refer to the exhibit.

```
R2# configure terminal
R2 (config)* interface Ethernet0/0
R2(config-if)* ip address 10.1.1.1 255.255.255.255
```

An engineer is configuring two routers to support MPLS LDP sessions between them. The R1 configuration is complete, and work has started on R2 as shown. Which additional configuration must the engineer apply to R2 to complete the task?

R2(config)# mpls label protocol ldp R2(config)# interface Ethernet1/0 R2(config-if)# mpls
bgp forwarding

R2(config)# mpls label protocol ldp

R2(config)# interface Ethernet1/1 R2(config-if)# ip vrf forwarding CISCO R2(config-if)# ip
ospf network point-to-point

R2(config)# mpls ip

R2(config)# mpls label protocol ldp

R2(config)# interface Ethernet1/0

R2(config-if)# mpls ip

R2(config)# mpls label protocol ldp

R2(config)# interface Ethernet1/0 R2(config-if)# ip vrf forwarding CISCO

R2(config-if)# ip ospf 1 area 0

A. Option A

B. Option B

C. Option C

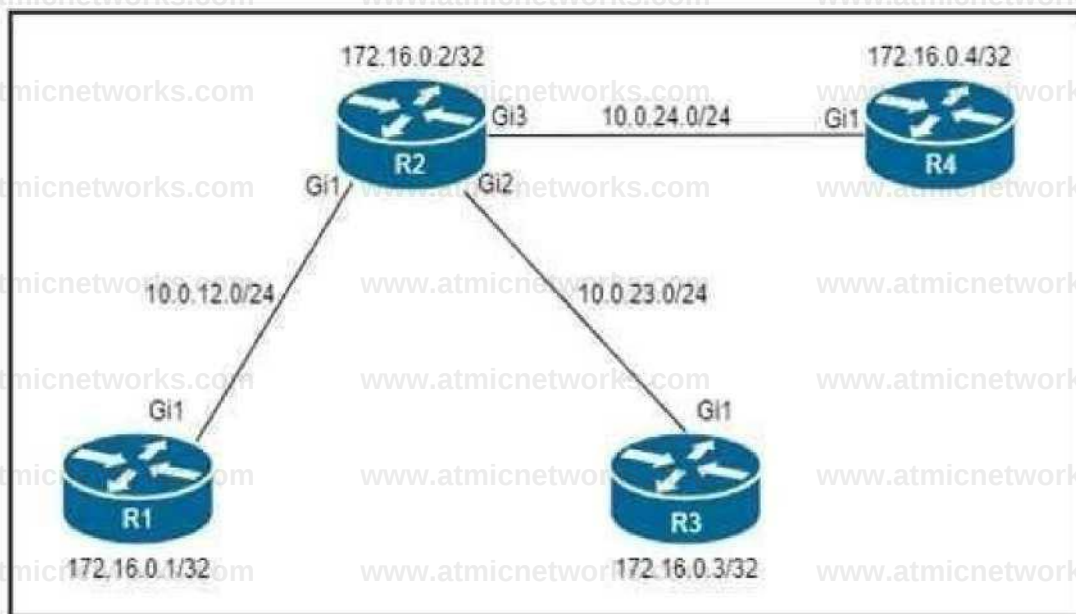
D. Option D

Answer: C

Explanation:

Question: 129

Refer to the exhibit.



Which configuration must be applied to each of the four routers on the network to reduce LDP LIB size and advertise label bindings for the /32 loopback IP space only?

```

config t
ip prefix-list LOOPBACKS seq 5 permit 0.0.0.0 le 32
mpls ldp label
allocate global prefix-list LOOPBACKS
end

```

```

config t
access-list 10 permit 172.16.0.0 0.0.0.7
access-list 20 permit 10.0.0.0 0.0.31.255
no mpls ldp advertise-labels
mpls ldp advertise-labels for 10 to 20
end

```

```

config t
access-list 10 permit 172.16.0.0 0.0.0.7
access-list 20 permit 172.16.0.0 0.0.0.7
no mpls ldp advertise-labels
mpls ldp advertise-labels for 10 to 20
end

```

```

config t
mpls ldp label
allocate global host-routes
end

```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation:

Question: 130

Refer to the exhibit.

```
interface gigabitethernet 0/2
no ip directed-broadcast
```

Which type of DDoS attack will be mitigated by this configuration?

A. SYN flood

B. smurf attack

C. SIP INVITE flood attacks

D. teardrop attack

Answer: B

Explanation:

Question: 131

What Is the primary role of Ansible In a network?

- A. It is used as a debugging tool for connectivity issues between the DMZ and an enterprise intranet.
- B. It Is used to diagnose Layer 11 issues In data centers that span more than one city block.
- C. It is used to deploy IPv6 configuration is networks That are dual slack.
- D. It is used as a network automation provisioning and configuration tool.

Answer: D

Explanation:

Question: 132

Which two features will be used when defining SR-TE explicit path hops if the devices are using IP unnumbered interfaces? (Choose two.)

- A. router ID
- B. labels
- C. node address
- D. next hop address
- E. output interface

Answer: B C

Explanation:

Question: 133

A network team has failed to implement IS-IS multitopology. What is the reason for it?

- A. The router did not support VRFs.
- B. The routing process did not support extended metrics.
- C. The router did not have Cisco Discovery Protocol and Cisco Express Forwarding disabled.
- D. The routing process supported Level 1 only.

Answer: B

Explanation:

Question: 134

Refer to the exhibit.

```
R10(config)#interface G0/1
R10(config-if)#ip address 172.16.0.1 255.255.255.0
R10(config-if)#ip ospf 1 area 0
R10(config-if)#ip ospf multi-area 10
R10(config-if)#ip ospf multi-area 10 cost 5
```

A network engineer is implementing OSPF multiare

a. Which command on interface G0/1 resolves adjacency issues in the new area?

- A. ip ospf network broadcast
- B. ip ospf network point-to-point
- C. ip ospf network non-broadcast
- D. ip ospf network point-to-multipoint

Answer: B

Explanation:

Question: 135

A network engineer is implementing BFD configuration changes on a customer's equipment. How is the bfd interval configuration on the interface disconnected?

- A. The status of the interface changes.
- B. The IPv4 or IPv6 address configuration on the interface changes.
- C. It is automatically disconnected when the BFD-configured subinterface is removed.
- D. It is automatically disconnected when the BFD main interface is removed.

Answer: D

Explanation:

Question: 136

An engineer is trying to implement BGP in a multihomed architecture. What must the engineer configure to influence inbound path selection?

- A. A route map with WEIGHT attribute to control the inbound traffic.
- B. An offset list to set the metric for routes received from neighboring autonomous systems.
- C. An access list to identify traffic and enable it on both of the provider-facing interfaces.
- D. A route map with AS_PATH attribute to control the inbound traffic.

Answer: D

Explanation:

Question: 137

Refer to the exhibit.

```

ml<new ip eapC interface gig Z
tlinibi ttnernatl la us, Lin* protocol »■ up
Internet Addre.a 173.20.1.12/31, area O-O » »»• Steened via interface enable Process ID 1. Router ID 10 299.299
I, Network Type PCIKT TO POINT, Coat I
Topology MT1D      Goat      enabled      shutdown      Topology Hane
0                  1          no          no            Ba a a
enabled by interface config, including secondary ip addresses
Tranent? Delay la 1 ear. State i'vrHT TO POINT
finer intervale configured. Hello 10, Dead <0, Wait IC. Mtranmlt 9

Utshev ip interface gig 2
GlgablXtnarneti la up, line protocol ia Internet addrasa up
18 172 20 1 12/31 MTU la MI* bytea uiansw ip ©apt
interface gig 2 Gigablratheretl la up, line protocol "• Internet Address 172 20 1 11/91 Area presets I# 1. Router ID
10 295 255 2,
tope-ogy MTID      Coat      Disabled      Shutdown      Topology Habe
$                  1          no          ill Attached via Interface mania Network Type POINT
no                Baa a      TO MULTIPOINT Coat 1
anab.ee By interface config including sscendary ip
addressee Ttanasut DeLey m 1 sec. state POINT TO MOLTITIOIKT Timer intervale configured Hello IC, Read 10-
Bait 10, sarranamr

KHahow ip interface gig J
QlvaliitCmamerZ ia up 11 tie protocol la up
Internet aiiuieaa 1# III 20 1 13/31 MTU II ISM bytes

```

While troubleshooting the OSPF adjacency between routers R1 and R2 an engineer noticed that both routers are stuck in the EXCHANGE/EXSTART state. What should the engineer fix to solve the ongoing issue?

- A. match IPv4 addresses
- B. match OSPF areas
- C. match OSPF network types
- D. match MTU values

Answer: D

Explanation:

Question: 138

Refer to the exhibit.

```

Mlihov run I ■ router oeopf router ospf 1
router-Id 172 1« 0 3
network 192 141 0 fl 0 0 *3 255 area 0

```

```
*5Ishow run int aigabttxtthernetl 5B
```

Building configuration

Current configuration ; 245 bytes interface Qigautiathernetl M description LINK TO KB Gil SB

encapsulation dotlQ 58

Ip address 192 149.59 5 255 255 255 0

ip Btu 1600

Ip oapr network point-to-point

ip oapf 1 area 000 2

Which configuration must be implemented on router R8 so that it will establish OSPF adjacency with R5?

A)

```
router ospf 1
network 192.168.58.0 0.0.0.255 area 0.0.0.2
interface GigabitEthernet 1.58
ip mtu 1600
ip ospf network point-to-multipoint
```

B)

```
router ospf 1
network 192.168.60 0 0 0.255 area 2
interface QlgaMEthernti 1.68
ip mtn 1600
```

C)

```
router ospf 1
network 192 168.58 0 0.0.0.2 55 area 0 0 0 2
Interface GloablEtghennel 1.68 Ip ospf network pal r«-t o-point
```

D)

FOUttf OSpt 1

network 192.168.50 0.0 0 255 area 0 0 0.2

interface QlQabi^themit 1.68

lp mtu 1600

lp opt network point-to-point

lp ospf 1 area 0

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation:

Question: 139

Refer to the exhibit. Which additional configuration must an engineer to the edge router to inject a default router into the MP-BGP address family for the internet_Shared_Services dedicated VRF?

A)

```
router bgp 100
  address-family ipv4 unicast
    activate
```

```
router vrf internet_Shared_Services
  address-family ipv4 unicast
    activate
```

B)

```
router bgp 100
  address-family ipv4 unicast
    activate
  address-family ipv4 unicast vrf internet_Shared_Services
    activate
```

```
router vrf internet_Shared_Services
  address-family ipv4 unicast
    activate
```

C)

```
router bgp 100
  address-family ipv4 unicast
    activate
  address-family ipv4 unicast vrf internet_Shared_Services
    activate
```

address-family ipv4 unicast interface no asynchronous
network 0.0.0.0

D)

router bgp 100
and redistribute-family vpnv4
neighbor 1.11.1 activate
neighbor 1.11.1 send-community both
eal h o d d r c s a f a m i l y

address-family ipv4 vrf internet_5 shared \$service no export ChfWUM'on
network UIM

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 140

Refer to the exhibit.

```

mpls traffic-eng tunnels
segment-routing mpls
connected-prefix-sid-map
address-family ipv4
192.168.1.1/32 index 10 range 1
exit-address-family
set-attributes
address-family ipv4
sr-label-preferred
exit-address-family
Interface Loopback1
ip address 192.168.1.1 255.255.255.255
ip router isis 1

int gig0/0
ip address 192.168.1.2 255.255.255.0
ip router isis 1
mpls traffic-eng tunnels
isis network point-to-point

router isis 1
net 50.0000.0000.0000.0001.00
metric-style wide
is-type level-1
segment-routing mpls
segment-routing prefix-sid-map advertise-
local
mpls traffic-eng router-id Loopback1
mpls traffic-eng level-1

```

What type of configuration is it?

- A. It is configuration that requires an explicit Cisco MPLS TE path to be configured for the tunnel to run.
- B. It is configuration that requires OSPF to also be running to have optimized Cisco MPLS TE tunnels.
- C. It is configuration for the head-end router of a Cisco MPLS TE tunnel with segment routing.
- D. It is configuration that requires a dynamic Cisco MPLS TE path to be configured for the tunnel to run.

Answer: C

Explanation:

Question: 141

Refer to the exhibit.

R1

```
ip multicast-routing
ip pirn rp-candidate GigabitEthernetl/O/O
```

```
interface gl/0/0
ip pirn sparse-mode
```

R2

```
ip multicast-routing
ip pirn bar-candidate GigabitEthernetl/O/O
```

```
interface gl/0/0
ip pirn sparse-mode
```

An engineer configured multicast routing on client's network. What is the effect of this multicast implementation?

- A. R2 floods information about R1 throughout the multicast domain.
- B. R2 is unable to share information because the ip pirn autorp listener command is missing.
- C. R1 floods information about R2 throughout the multicast domain.
- D. R2 is elected as the RP for this domain.

Answer: B

Explanation:

Question: 142

Refer to the exhibit.

```
RI(config)t ipv6 unicast-routing RI(config)# ipv6 router ospf 100
RI(conlig-rt)# router-id 1.1.1.1
```

An engineer is configuring router R1 for OSPFv3 as shown. Which additional configuration must be performed so that the three active interfaces on the router will advertise routes and participate in OSPF IPv6 processes?

A)

```
R1 (config)# interface Ethernet1/1
R1 (config-if)# ipv6 ospf 100 area 0
```

```
R1 (config)# interface Ethernet1/2
R1 (config-if)# ipv6 ospf 100 area 10
```

```
R1 (config)# interface Ethernet1/3
R1 (config-if)# ipv6 ospf 100 area 20
```

B)

```
R1 (config)# interface Ethernet1/1
R1 (config-if)# ip ospf hello-interval 1
R1 (config-if)# ip ospf 1 area 0
```

```
R1 (config)# interface Ethernet1/2
R1 (config-if)# ip ospf hello-interval 1
R1 (config-if)# ip ospf 1 area 10
```

```
R1 (config)# interface Ethernet1/3
R1 (config-if)# ip ospf hello-interval 1
R1 (config-if)# ip ospf 1 area 20
```

C)

```
R1(config)# interface Ethernet1/1
R1(config-if)# ip ospf 1 area 0
```

```
R1 (config)# interface Ethernet1/2
R1(config-if)# ip ospf 1 area 10
```

```
R1 (config)# interface Ethernet1/3
R1(config-if)# ip ospf 1 area 20
```

A. Option A

B. Option B

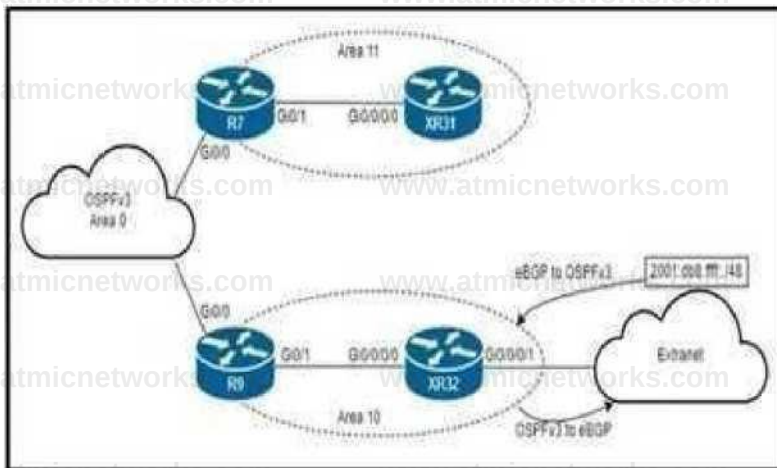
C. Option C

Answer: A

Explanation:

Question: 143

Refer to the exhibit.



An engineer is updating this network to meet these conditions:

- Area 10 will receive inter-area routes and support mutual redistribution of external routes with the extranet.
- The ::/0 route is prohibited in Area 10.
- Area 11 will receive only the ::/0 route from the ABR.
- External route redistribution is not supported in Area 11.
- The ABR in Area 11 will advertise no interarea routes.

Which two configurations must be performed to meet the requirements? (Choose two.)

- A. Configure area 11 as nssa no-summary on R7 and as nssa on XR31.
- B. Configure area 10 as stub on R9 and XR32.
- C. Configure area 11 as stub no-summary on R7 and as stub on XR31.
- D. Configure area 11 as nssa default-information-originate on R7 and as nssa on XR31.
- E. Configure area 10 as nssa on R9 and XR32.

Answer: CE

Explanation:

Question: 144

Refer to the exhibit.

```
configure
policy-map ciscopolicy
  class ciscotest sat precedence 1 exit exit
interface pos 0/2/0/0 service-policy output ciscopolicy counit
```

An engineer needs to implement this QoS policy on customer's network due to ongoing slow network issues. What will be the effect on the network when the engineer implements this configuration?

- A. Traffic that is identified in the ciscotest class map will be remarked from IP precedence 1 to DSCP AF11 when it enters the pos0/2/0/0 interface.
- B. Traffic that is identified in the ciscopolicy class map will be marked with IP precedence 1 when it enters the pos0/2/0/0 interface.
- C. Traffic that is identified in the ciscopolicy class map will be remarked from IP precedence 1 to DSCP AF11 when it exits the pos0/2/0/0 interface.
- D. Traffic that is identified in the ciscotest class map will be marked with IP precedence 1 when it exits the pos0/2/0/0 interface.

Answer: D

7453

Explanation:

Question: 145

While implementing TTL security, an engineer issues the PE(config-router-af)#neighbor 2.2.2.2 ttl-security hops 2 command. After issuing this command, which BGP packets does the PE accept?

- A. from 2.2.2.2, with a TTL of less than 2
- B. to 2.2.2.2, with a TTL of less than 253
- C. from 2.2.2.2, with a TTL of 253 or more
- D. to 2.2.2.2, with a TTL of 2 or more

Answer: C

Explanation:

Question: 146

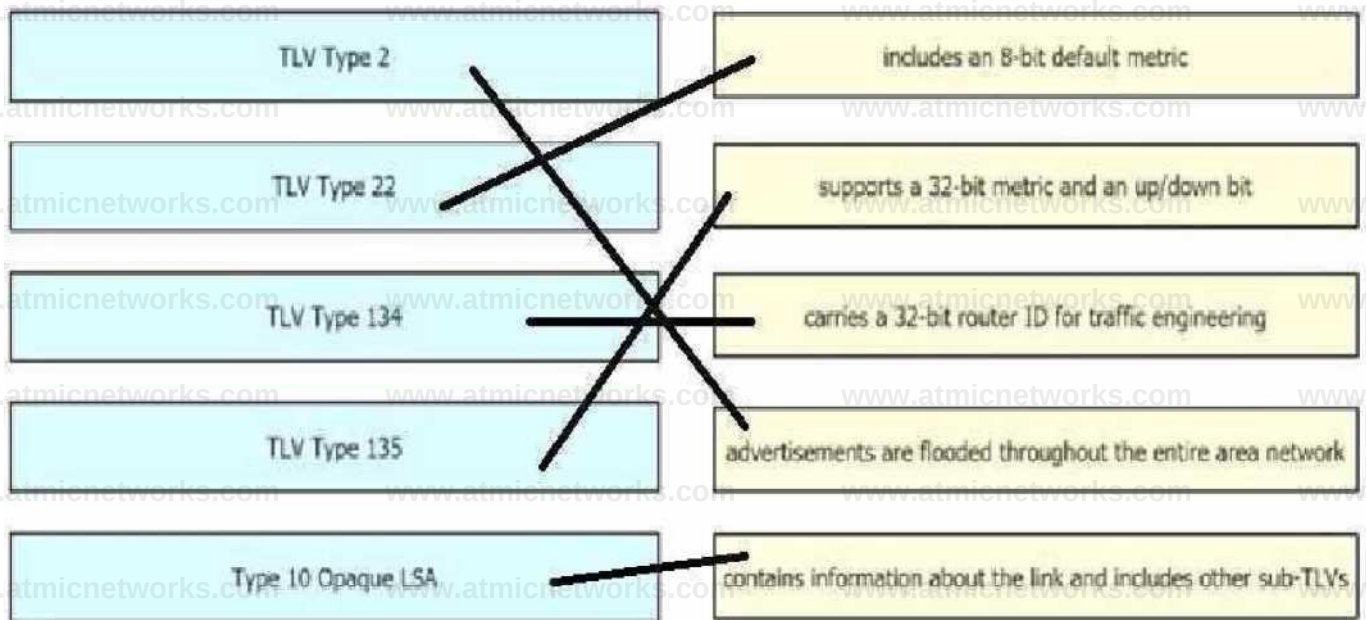
DRAG DROP

Drag and drop the OSPF and IS-IS Cisco MPLS TE extensions from the left to their functional descriptions on the right.

TLV Type 2	includes an 8-bit default metric
TLV Type 22	supports a 32-bit metric and an up/down bit
TLV Type 134	carries a 32-bit router ID for traffic engineering
TLV Type 135	advertisements are flooded throughout the entire area network
Type 10 Opaque LSA	contains information about the link and includes other sub-TLVs

Answer:

Explanation:



Question: 147

A network engineer is configuring a router to send multicast traffic for the 239.10.10.10 group.

Which configuration must an forward the traffic?

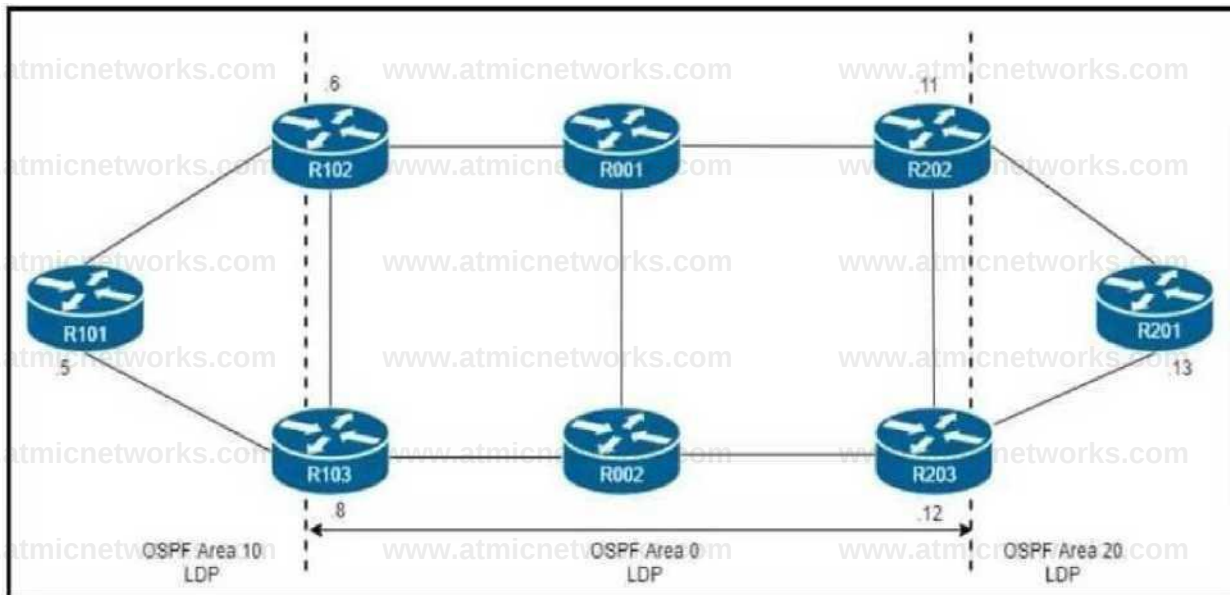
- A. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp max-groups action replace
- B. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp filter
- C. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp access-group 239.10.10.10
- D. Cisco(config)# interface ethernet 1/0 Cisco(config-if)# ip igmp join-group 239.10.10.10

Answer: D

Explanation:

Question: 148

Refer to the exhibit.



R101 is peering with R102 and R103, and R201 is peering with R202 and R203 using iBGP Labeled Unicast address families. The OSPF area 0 border routers are in a full iBGP Labeled Unicast mesh, and VPNv4 routes are exchanged directly between PE routers R101 and R201 through iBGP Which address family-level configuration must be applied on ABR R102 on ABR R102 to support a Unified MPLS routing architecture with partitioned IGP domains?

A)

```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 route-reflector-client
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 route-reflector-client
```

B)

```
router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self all
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 next-hop-self all
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 next-hop-self all
neighbor 172.16.0.12 send-label
```

C)

```
router bgp 65512
address-family ipv4
```

neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self all
neighbor 172.16.0.11 next-hop-self all
neighbor 172.16.0.12 next-hop-self all

D)

router bgp 65512
address-family ipv4
neighbor 172.16.0.5 route-reflector-client
neighbor 172.16.0.5 next-hop-self
neighbor 172.16.0.5 send-label
neighbor 172.16.0.11 next-hop-self
neighbor 172.16.0.11 send-label
neighbor 172.16.0.12 next-hop-self
neighbor 172.16.0.12 send-label

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

Question: 149

BGP has been implemented on a IOS XR router. Which configuration sends BGP IPv4 labels to build inter-domain LSPs?

A. router bgp 65515 address-family ipv4 unicast neighbor 172.16.70.23 send-community extended

B. router bgp 65515 no bgp default ipv4-unicast

C. router bgp 65515 address-family ipv4 unicast neighbor 172.16.70.23 send-community

D. router bgp 65515 neighbor 172.16.70.23 address-family ipv4 labeled-unicast

Answer: D

Explanation:

Question: 150

Which module refers to the network automation using Ansible?

- A. the iosxr_system module to collect facts from remote devices
- B. the iosxr_user module to manage banners for users in the local database
- C. the iosxr_logging module to run debugging for severity levels 2 to 5
- D. the iosxr_command module to issue run commands on remote devices

Answer: D

Explanation:

https://docs.ansible.com/ansible/latest/collections/cisco/iosxr/iosxr_command_module.html#ansible-collections-cisco-iosxr-iosxr-command-module

Question: 151

What is the characteristic of the TI-LFA?

- A. It guarantees a loop-free path for all interfaces in the OSPF- super backbone .
- B. It applies on each area and instance and makes all the interfaces inherit the configuration
- C. It guarantees a loop-free path for all areas configured in OSPF
- D. It applies only on the instance and makes at the interfaces inherit the configuration

Answer: A

Explanation:

Question: 152

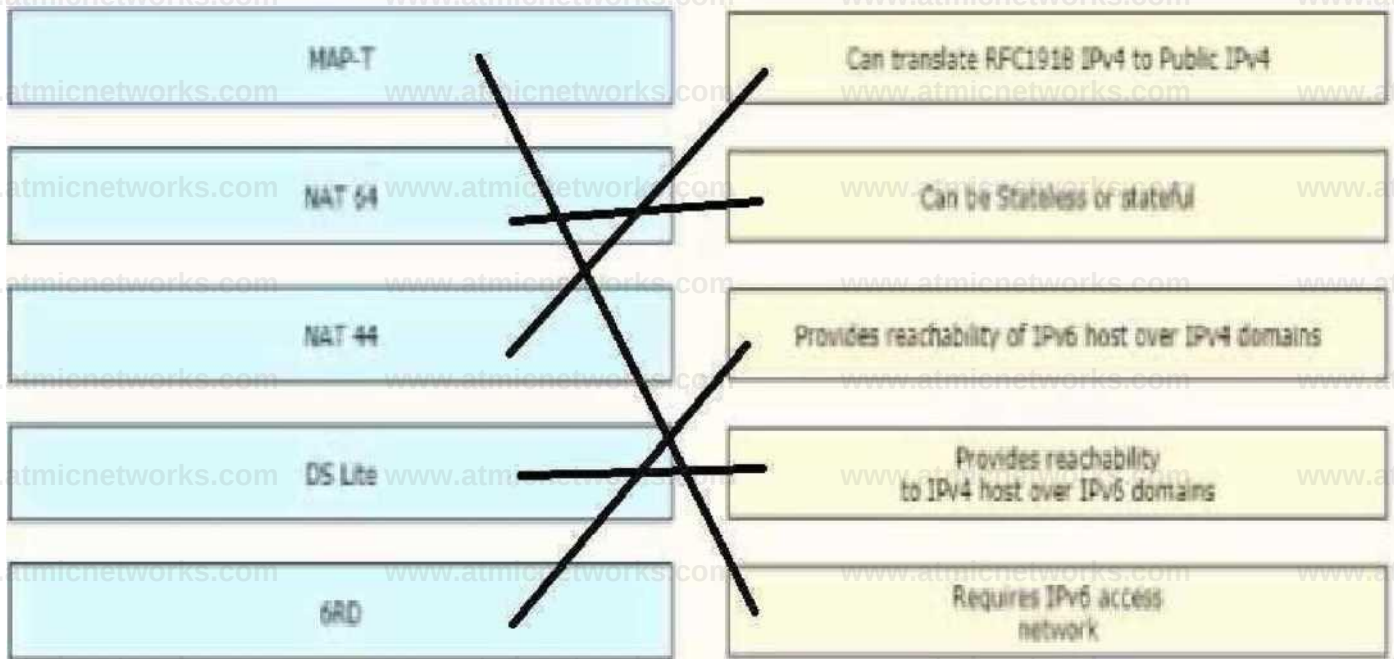
DRAG DROP

Drag and drop the functionalities from the left onto the target fields on the right.



Answer:

Explanation:



Question: 153

DRAG DROP

Drag and drop the descriptions from the left onto the corresponding OS types on the right.



Answer:

Explanation:

IOS XE:

It uses linux-based kernel

It has a separate control plane

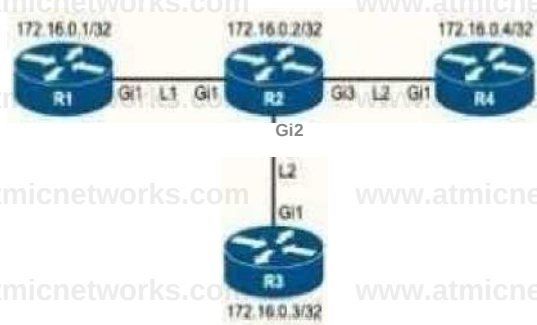
IOS;

It is monolithic

It shares memory space

Question: 154

Refer to the exhibit.



```
mlahov apl* lap durovary as 1*11 Local LDP IdKtxflax
111 1* 0 1 0 Discovery Source#: interface#
ulgabitxtMrnetl <#l wAt/recv laabled interface config
Malle interval MX M. Transport it addr 172. if.0 1 LDP Id 172.If 0 210
Ire IP addr 10 0 12 2; Transport It addr 172.14.0 2 meld time II sec
Proposed local/pear 15/15 see MarAabla via 172 If 0 2/12 Pee word
Mt retired, none la uae
Client# IPv4, eLDP
```

Bl*anew epi# ldp neighbor HI

```
UlakM apt* l* Olioovarr a<t*I Meal
UT MMKlfMtl in i>oi8
Olieevtry *owcm: Laurfaea*:
```

```
GigabxtJCCMmetl Gdpi next/reev
Knabled XGP config
Helle interval 5000 ea Transport IP addr 172 la 0 J
LDP Id 172 If 0 10
See IP addr 10 0 12 1 Transport IP addr 172 if 0 I
Hold ties 15 see Proposed local/peer 15/13 see Macr_atle via 172
10-0-1/32
Paa word Mt required, option 1 in uae
Client# IPv4, aLDP
SigabitXtherMtJ (ldpj mUt/recv
Knabled ISP config
Hallo interval SOX aa. Transport IP addr 172.If.0.2 LDP Id 172.10.0
30
Orc IP addr: 10 0.23 3 Transport IP addr 172.10 0 3
Mid time 15 sec Proposed local/pear 15/13 sac
Median la via 172 10 0 3/12
Pa#ward Mt required, option 1. in uae
Clients IPv4. *LDP
SigabitX UM coati (1^) mit/reev
Knabled ISP config
Mello interval 5000 as Transport IP addr 172 If 0 2
LDP Id 172 14 0 4 0
ItC IP addr 10 0 20 4; Transport IP addr 172 If 0 4
Mid ties If see Proposed local/paar 15/15 fad MacAMla via 172 10
0 4/32
Paa see rd^ Mt required, option 3. tn use
Clients IPv4, aWP
```

An engineer began to configure LDP between R1 and R2, but R1 and R2 cannot yet establish an LDP TCP connection. Which additional task must be completed to finish the implementation?

- A. Configure the mpls ldp neighbor 172.16.0.1 password command on R1
- B. Configure the mpls ldp neighbor 10.0.12.1 password command on R1
- C. Configure the no mpls ldp password option 1 command on R2
- D. Configure the no mpls ldp password option 1 command on R1

Answer: A

Explanation:

Question: 155

Refer to me exhibit.

```
CSR1 ^show flowspec ipv4 detail
```

```
AFI: IPv4
```

```
Flow :Dest:10.6.5 0/2 4,DPort:=80|=44 3
```

```
Actions :Traffic-rate: 0 bps (bgp.1)
```

```
Statistics (packets/bytes)
```

```
Matched : 12/696
```

```
Dropped : 12/696
```

A network operator recently configured BGP FlowSpec for me internal IT network What will be inferred from the configuration deployed on me network?

- A. The policy is configured locally on CSRI and drops all traffic for TCP ports 80 and 443
- B. The policy is learned via BGP FlowSpec and drops all traffic for TCP ports 80 and 443
- C. The policy is warned via BC FlowSpec aid has active traffic
- D. The policy is configured locally on CSR1 and currently has no active traffic

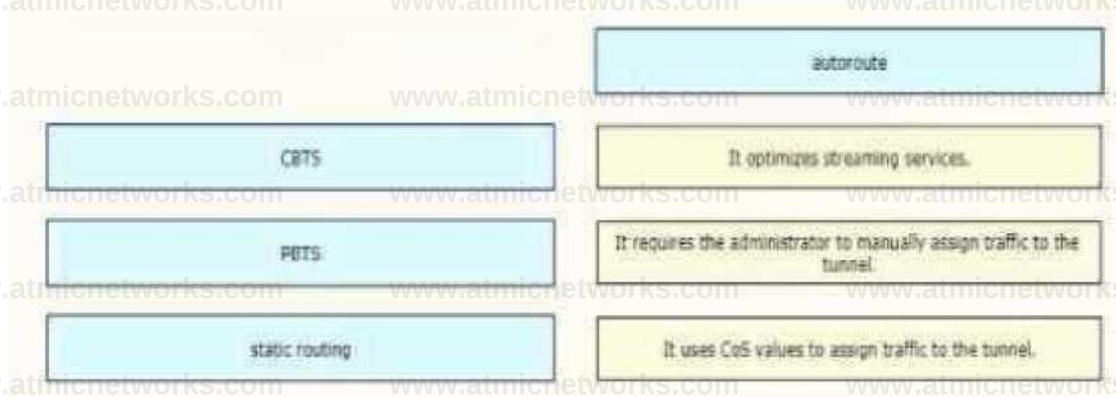
Answer: A

Explanation:

Question: 156

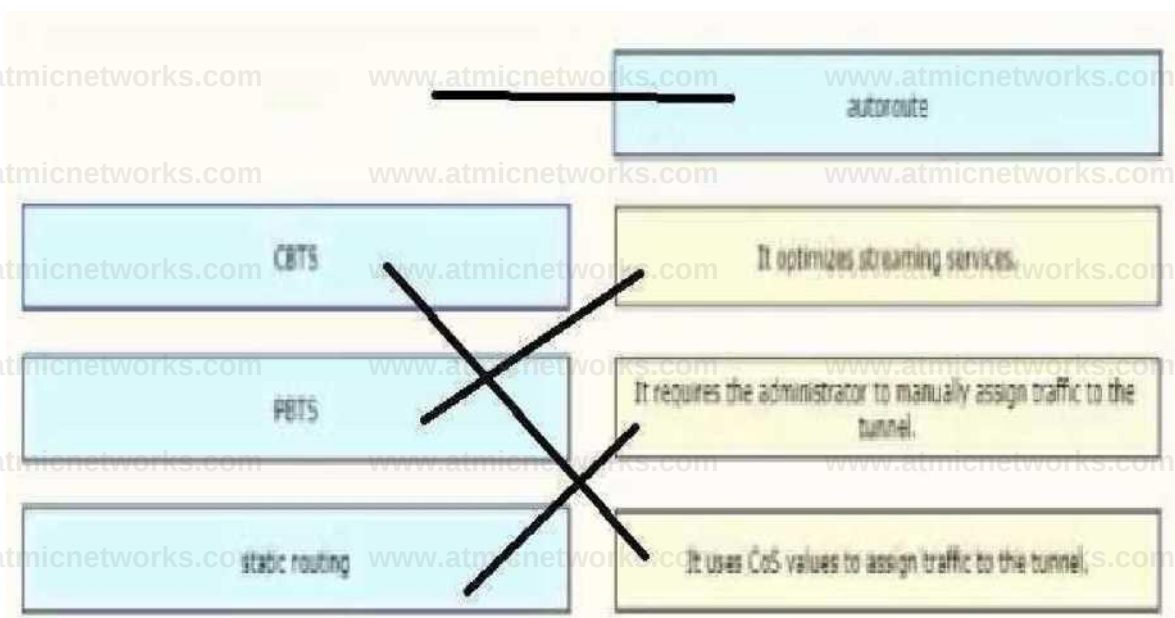
DRAG DROP

Drag and drop the methods of Cisco MPLS TE tunnel traffic assignment from the left onto their characteristics on the right.



Answer:

Explanation:



Question: 157

An network engineer is deploying VRF on ASBR router R1. The interface must have connectivity over an MPLS VPN inter-AS Option AB network. Which configuration must the engineer apply on the router to accomplish this task?

A)

```
R1(config)# tunnel interface 1.0
R1(config-tun)# ip vrf forwarding CISCO
R1(config-if)# mpls ip
```

B)

```
R1(config)# interface ethernet 1/0
```

R1(config-if)#ip address 102.168.1.2 255.255.255.0
R1(config-if)#ip vrf forwarding CISCO

C)

R1(config)# interface ethernet 1/0
R1(config-if)# ip vrf forwarding CISCO

D)

R1(config)# interface ethernet 1/0
R1(config-if)# ip vrf forwarding CISCO

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 158

Refer to the exhibit.

```
RP/0/RP0/fPU0:XR1#do sh bundle
Bundle-Ether11
```

```
status: up
Local links cactive/standby/configureds: 1/2/3
Local bandwidth <effective/available>: 1000000 (1008006) kbps
MAC address (source): 0007.eci4.cc2b (chassis pool)
Inter-chassis link: No
Minimum active links / bandwidth: 1 / 1 kbps
Maximum active links: 1
Wait while timer: 2000 ms
Load balancing:
  Link order signaling: Not configured
  Hash type: Default
  Locality threshold: None
LACP: Operational
  Flap suppression timer: Off
Cisco extensions: Disabled
Non-revertive: Disabled
BLMP: Not configured
IPv4 BFD: Not configured
IPv6 BFD: Not configured
```

Port	Device	State	Port ID	B/w, kbps
610/0/0/0	Local	Standby	0x8800, 0x0003	1000000
Link is Standby due to maximum-active links configuration				
G18/8/0/1	Local	standby	0x8000, 0x0002	1000000
link is Standby due to maximum-active links configuration				
Gi0/0/0/2	Local	Active	0x8000, 0x0001	1000000
Link is Active				

A network operator needs to shut down interface Gi0/0/0/2 for maintenance. What occurs to the interface states of Gi0/0/0/0 and Gi0/0/0/1?

- A. Gi0/0/0/1 and Gi0/0/0/0 become active
- B. Gi0/0/0/1 and Gi0/0/0/0 remains standby
- C. Gi0/0/0/0 becomes active. Gi0/0/0/1 remains standby
- D. Gi0/0/0/1 becomes active Gi0/0/0/0 remains standby

Answer: D

Explanation:

Question: 159

Refer to the exhibit.



A network operator must configure CSR1 interfaces GigabitEthernet2 and GigabitEthernet3 to rewrite VLAN tags 12 and 21 for traffic between R1 and R2 respectively. Which configurator accomplishes this task?

A)

```
#CSR1
```

```
interface GigabitEthernet2
no ip address
service instance 21 ether net
encapsulation dot 1q 21
rewrite ingress tag translate 1-to-1 dotq 12
rewrite egress tag translate 1-to-1 dotq 21
bridge-domain 10
```

```
interface GigabitEthernet3
no ip address
service instance 12 ethemet
encapsulation dot 1q 12
rewrite ingress tag translate 1-IO-1 dotq 21
rewrite egress tag translate 1-to-1 dotq 12
bridge-domain 10
```

B)

#CSR1

```
interface GigabitEthernet2
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate 1-to-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
bridge-domain 10
```

```
!
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
bridge-domain 10
```

C)

#CSR1

interface GigabitEthernet2

```
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate 1-to-1 dot1q 12
rewrite egress tag translate 1-to-1 dot1q 21
bridge-domain 21
```

D)

#CSR1

```
interface GigabitEthernet2
no ip address
service instance 12 ethernet
encapsulation dot1q 12
rewrite ingress tag translate Mo-1 dot1q 21
rewrite egress tag translate 1-to-1 dot1q 12
```

```
■
interface GigabitEthernet3
no ip address
service instance 21 ethernet
encapsulation dot1q 21
rewrite ingress tag translate Mo-1 dot1q 12
rewrite egress tag translate Mo-1 dot1q 21
```

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

Answer: B

Explanation:

Question: 160

The administrator of a small company network notices that intermittent network issues occasionally cause inbound notifications to its SNMP servers to be lost. Which configuration must the administrator apply so that the SNMP servers acknowledge the notifications that they receive?

- A. snmp-server community ciscotest rw 10
- B. snmp-server host tests.cisco.com public snmp-server community ciscotest rw 10
- C. snmp-server enable traps bgp

snmp-server host 192.169.2.1 Informs

- D. snmp-server enable traps snmp

Answer: C

Explanation:

Question: 161

What are two characteristics of MPLS TE tunnels? (Choose two)

- A. They require EIGRP to be running in the core.
- B. They use RSVP to provide bandwidth for the tunnel.
- C. They are run over Ethernet cores only.
- D. The headend and tailend routes of the tunnel must have a BGP relationship
- E. They are unidirectional

Answer: B,E

Explanation:

Question: 162

Refer to the exhibit.



A network engineer is implementing a standard customer route-policy on ASBR1 with these requirements:

- It must accept only customer-assigned prefixes
- It must preserve customer advertised BGP communities
- It must set the local-preference to 110 for all prefixes
- It must attach the ORIGIN-PE and LOCAL-CITY communities to all accepted prefixes.

Which route policy must the engineer implement on ASBR1 to satisfy the requirements?

```

!
ip route 0.0.0.0/0 10.10.10.1
!
route-policy BGP-CUSTOMER-IN($CUSTOMER_PREFIX) if destination in SCUSTOMER.PREFIX then done
else drop endif set local-preference 110 set community ORIGIN-PE set community LOCAL-CITY additive end-policy

route-policy BGP-CUSTOMER-IN($CUSTOMER_PREFIX) if destination in SCUSTOMER.PREFIX then "
pass else
drop endif set local-preference 110 set community ORIGIN-PE set community LOCAL-CITY additive end-policy

route-policy BGP-CUSTOMER-IN(SCUSTOMER.PREFIX) if destination in SCUSTOMER.PREFIX then
done else drop endif set local-preference 110 set community ORIGIN-PE additive set community LOCAL-CITY additive end-policy
• route-policy BGP-CUSTOMER-IN(SCUSTOMER PREFIX) If destination in SCUSTOMER.PREFIX then
pass else
drop endif set local-preference 110 set community ORIGIN-PE additive set community LOCAL-CITY additive end-policy

```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 163

Refer to the exhibit.



An engineer applied a gRPC dial-in configuration on customer's router to provide connection multiplexing and two-way streaming. What does this configuration accomplish in a gRPC?

A. It is the encoding requested by the gRPC server.

B. It is the encoding that is used for dial-in and dial-out.

C. It is used for encoding with the default protocol buffers

D. It is the encoding requested by the gRPC client.

Answer: A

Explanation:

<https://www.ciscolive.com/c/dam/r/ciscolive/emea/docs/2019/pdf/BRKNMS-3537.pdf>

<https://xrdocs.io/telemetry/tutorials/2018-03-01-everything-you-need-to-know-about-pipeline/>

<https://community.cisco.com/t5/service-providers-documents/implementing-grpc-telemetry-on-xr-devices/tac/3393966>

Question: 164

What are two factors to consider when implementing NSR High Availability on an MPLS PE router? (Choose two.)

- A. It consumes more memory and CPU resources than NSF
- B. It operates normally without NSR support on the PE peers.
- C. It requires all PE-CE sessions to support NSR
- D. It requires routing protocol extensions
- E. It cannot sync state information across redundant RPs

Answer: A,B

Explanation:

Question: 165

Which feature will an operator use while implementing MPLS TE on customer's network, to prevent an LSP from using any overseas links?

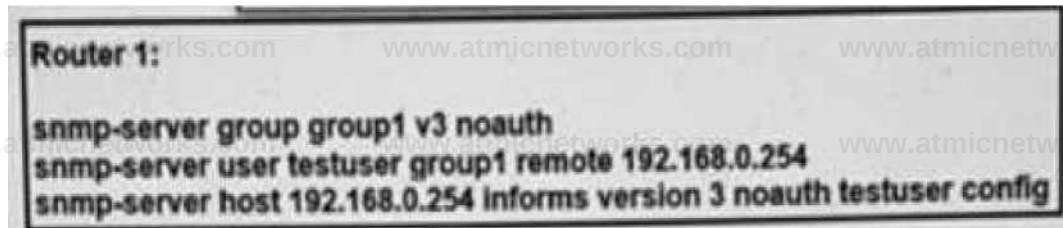
- A. bandwidth
- B. affinity
- C. explicit path
- D. SLRG

Answer: C

Explanation:

Question: 166

Refer to the exhibit.



```
Router 1:
snmp-server group group1 v3 noauth
snmp-server user testuser group1 remote 192.168.0.254
snmp-server host 192.168.0.254 informs version 3 noauth testuser config
```

A network engineer is deploying SNMP configuration on client's routers. Encrypted authentication must be included on router 1 to provide security and protect message confidentially. Which action should the engineer perform on the routers to accomplish this task?

- A. snmp-server host 192.168.0.254 informs version 3 auth testuser config.
- B. snmp-server user testuser group 1 remote 192.168.0.254 v3 auth md5 testpassword
- C. snmp-server group group 1 v3 auth.
- D. snmp-server community public

Answer: B

Explanation:

Question: 167

An engineer needs to implement QOS mechanism on customer's network as some applications going over the internet are slower than others. Which two actions must the engineer perform when implementing traffic shaping on the network in order to accomplish this task? (Choose two)

- A. Configure a queue with sufficient memory to buffer excess packets.
- B. Configure the token values in bytes.

- C. Implement packet remarking for excess traffic.
- D. Implement a scheduling function to handle delayed packets.
- E. Configure a threshold over which excess packets are discarded.

Answer: A,D

Explanation:

Question: 168

Refer to the exhibit.

```
POST
https://apic-ip-address/api/mo/uni.xml
<?xml version="1.0" encoding="UTF-8"?>
<!-- api/policymgr/mo/uni.xml -->
<polUni>
  <infraInfra>
    <!-- Static VLAN range -->
    <fvnsVlanInstP name="inband" allocMode="static">
      <fvnsEncapBlk name="encap" from="vlan-5" to="vlan-10"/>
    </fvnsVlanInstP>
  </infraInfra>
</polUni>
```

What does the script configure?

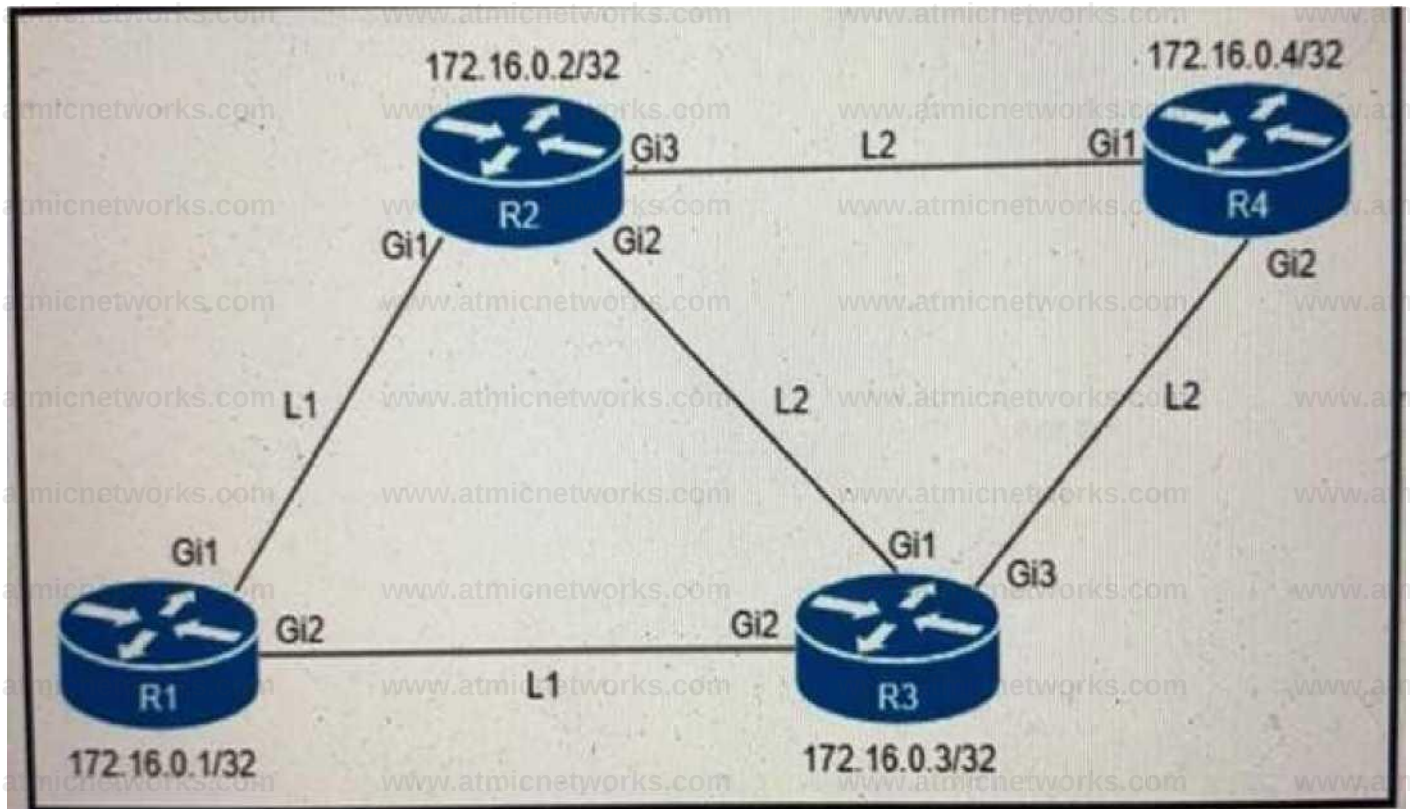
- A. a VLAN namespace
- B. selectors for the in-band management
- C. a physical domain
- D. a static VLAN

Answer: D

Explanation:

Question: 169

Refer to the exhibit.



An engineer must configure router R2 as the new P router in the network. Which configuration must be applied to R2 to enable LDP-IGP Sync on its L2 IS-IS adjacencies?

```

config ( router lsis 1 mpls ldp igp sync Interface GigabitEthernet1 mpls ldp igp sync delay 5
config t Interface range* GigabitEthernet1-3 mpls ldp igp sync delay 5
config t router lsis 1 mpls ldp sync

```

```

* config t router lsis 1 mpls ldp sync Interface GigabitEthernet1 no mpls ldp igp sync

```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 170

Which two actions describe ISP delegation to PCE servers? (Choose two)

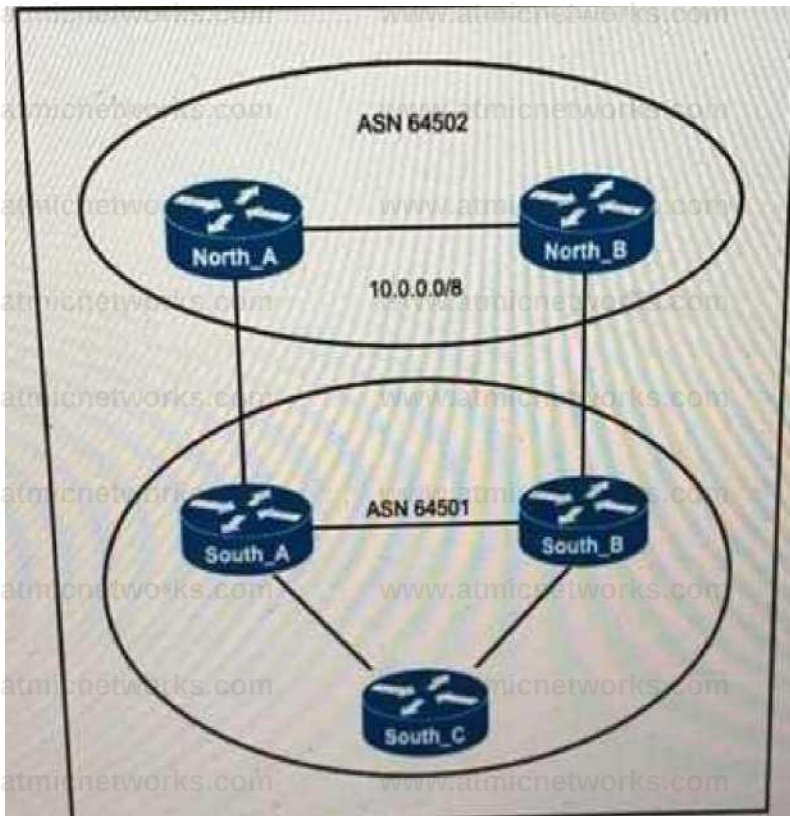
- A. adding a new PCE server with lower precedence than the primary PCE
- B. changing the precedence of any of the PCE servers
- C. removing TE re-optimization timer timeouts
- D. entering the mpls traffic-eng reoptimize command
- E. adding a new PCE server with higher precedence than the primary PCE

Answer: A C

Explanation:

Question: 171

Refer to the exhibit.



ASN 64501 currently reaches the networks under the 10.0.0.0/8 prefix via the North_B router, which is a slow backup link. The administrator of ASN 64502 wants traffic from ASN 64501 to 10.0.0.0/8 to travel via the primary link North_A.

A. Which change to the network configuration accomplishes this task?

- A. Set a higher local preference between North_A and South_A
- B. Advertise the 10.0.0.0/8 prefix through North_B and specific subnets through North_A
- C. Set a Lower Weight value for incoming traffic on North_A
- D. Set a lower MED between North_B and South_B

Answer: D

Explanation:

Question: 172

Refer to the exhibit.

```

R1#show ip ospf int
Loopback0 is up, line protocol is up
  Internet Address 200.0.0.1/24, Area 0, Attached via Interface Enable
  Process ID 1, Router ID 100.0.0.1, network Type LOOPBACK, Cost: 1
Loopback interface la treated as a stub
Loopback0 is up, line protocol is up
  Internet Address 100.0.0.1/24, Area 0, Attached via Interface Enable
  Process ID 1, Router ID 100.0.0.1, network Type LOOPBACK, Cost: 1
Loopback interface la treated as a stub
Serial0/0 is up, line protocol is up
  Interface la unnumbered Using address of Loopback0 (100.0.0.1),
  ID 1, Router ID 100.0.0.1, network Type POINT_TO_POINT, Cost: 84
Process

```

```

R1#show ip ospf database
OSPF Router with ID (100.0.0.2) (Process ID 1)
Router Link States (Area 0)

Link ID      ADV      M     Seq#    Checksum Link count
100.0.0.1    Router   22    0x80000005 0x009008 3

```

```

R1#show ip route
100.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    100.0.0.0/24 is directly connected, Serial0/0
L    100.0.0.2/32 is directly connected, Serial0/0

```

While troubleshooting a connectivity issue on router R2, a network engineer with an employee id:3876.13.497 notices that although it detects three OSPF links from R1, the OSPF prefixes are missing from the routing table. What is the reason for the problem?

- A. The serial interfaces have different MTUs
- B. Both loopback interfaces on R1 are configured as stub
- C. The R2 Serial 1/0 interface is configured with an IP address, but the R1 Serial R1 Serial 1/0 interface is unnumbered.
- D. The subnet masks on the serial interfaces are mismatched.

Answer: C

Explanation:

Question: 173

Which control plane protocol is used between Cisco SD-WAN routers and vSmart controllers?

- A. OTCP

- B. OMP
- C. UDP
- D. BGP

Answer: B

Explanation:

Question: 174

Which statement about TLS is accurate when using RESTCONF to write configurations on network devices'?

- A. It requires certificates for authentication.
- B. It is provided using NGINX acting as a proxy web server
- C. It is used for HTTP and HTTPS requests.
- D. It is not supported on Cisco devices

Answer: A

Explanation:

Question: 175

A network engineer is configuring Flexible NetFlow and enters these commands

```
sampler NetFlowl
mode random one-out-of 100
interface fastethemet 1/0 flow-sampler NetFlowl
```

What are two results of implementing this feature instead of traditional NetFlow? (Choose two.)

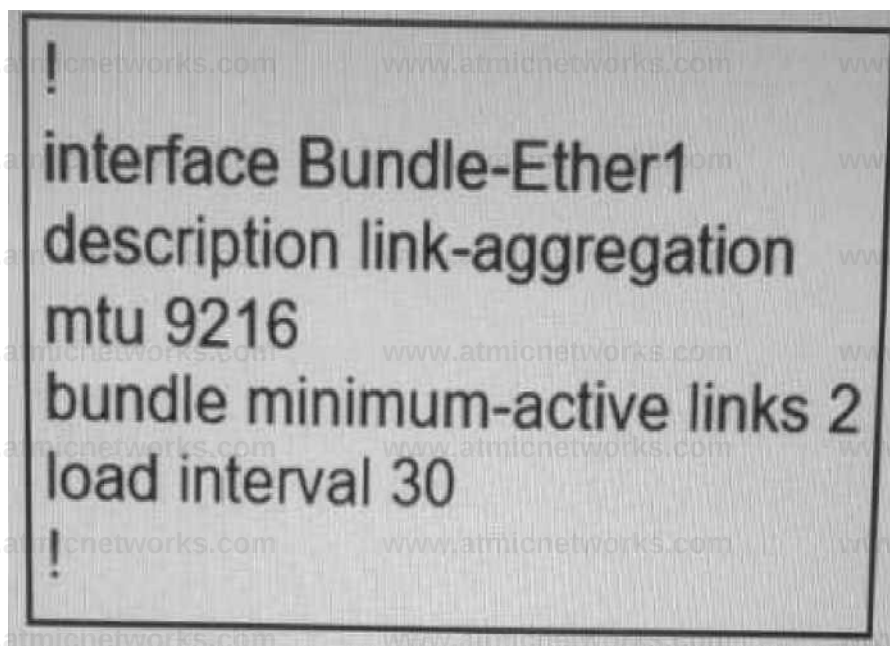
- A. CPU and memory utilization are reduced.
- B. Only the flows of top 100 talkers are exported.
- C. The data export flow is more secure
- D. The number of packets to be analyzed are reduced.
- E. The accuracy of the data to be analyzed is improved.

Answer: A,D

Explanation:

Question: 176

Refer to the exhibit.



Which the link aggregation configuration router is running on Cisco IOS XR software, which LACP interface configuration is needed to add the interface to the bundle?

```
interface TenGigE0/1/0/5 description bundle_1_link bundle
mode active load interval 30
```

```
interface TenGigE0/1/0/6 description bundle_1_link bundle
mode active load interval 30
```

B.

```
interface TenGigE0/1/0/5 description bundle1 Jink bundle id 1
mode active load interval 30
```

```
interface TenGigE0/1/0/6 description bundle_1_link bundle id 1
mode active load interval 30
```

C.

```
interface TenGigE0/1/0/5
description bundle_1_link
id 1 mode active
load interval 30
```

```
interface TenGigE0/1/0/6
description bundle_1_link
id 1 mode active
load interval 30
```

```
interface TenGigE0/1/0/5 description bundle_1_link bundle id 1
load interval 30
```

```
interface TenGigE0/1/0/6 description bundle l link bundle id 1
load interval 30
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

Question: 177

Which type of attack is a Protocol attack?

- A. HTTP flood
- B. TFTP flood
- C. SYN flood
- D. Slowloris

Answer: C

Explanation:

Protocol Attacks

Includes SYN floods, fragmented packet attacks, Ping of Death, Smurf DDoS and more. This type of attack consumes actual server resources,

Question: 178

A company needs to improve the use of the network resources that is used to deploy internet access service to customers on separate backbone and internet access network. Which two major design models should be used to configure MPLS L3VPNs and internet service in the same MPLS backbone? (Choose two.)

- A. Carriage of full internet routes in a VPN, in the case of internet access VPNs
- B. Internet routing through global routing on a PE router.
- C. Internet access routing as another VPN in the ISP network.
- D. Internet access through leaking of internet routed from the global table into the L3VPN VRF
- E. Internet access for global routing via a separate interface in a VRF

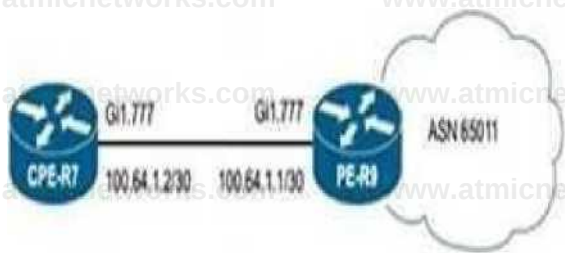
Answer: C, E

Explanation:

<http://etutorials.org/Networking/MPLS+VPN+security/Part+II+Advanced+MPLS+VPN+Security+Issues/Chapter+4.+Secure+MPLS+VPN+Designs/Internet+Access/>

Question: 179

Refer to the exhibit.



KOOliPu m uurfia fiipMtthetmtl.m
lUldlp weflpwitiM
Cunnt OMtlfsnUn ID byUi
iturfu* tt0itw»n*ti.m
ttopciUtlM dotig HI
Ip KUIH 100 4411 US US USUI
Ip i««ii ^roop 1WU-K1 Mt
•fid

KMittaw KNMiliit iim-ia
bUMU IP KMI lilt IffUKl
10 prut up 1» 141 0 0 0 0 MID IM 44 0 0 Ml Ml US p WlMt
10 prut lap uy 100 44 0 0 ULMUS Kto
10 prut lap uy IM.44.0.0 Ml US MJ idw-rply
40 prut odp Pit 112 10.100 I100 H 0 0 II US Ml p imp
so prut up Pit 122.20.200.2 100.44.0.0 o n nun p imp
io prut up iu iu o o o o us us nop itpuu up loo u o o o
10 prut up INM0 0 0 0 US ») p 22 MOM O UI IM US tiuNliM
10 prUt Up 171.14 0 0 0 0 O.UJ p 11 100 (4 0 0 0 « US Ui muNIM
100 duty ip my any

To protect in-band management access to CPE-R7, an engineer wants to allow only SSH management and provisioning traffic from management network 192.168.0.0/16. Which infrastructure ACL change must be applied to router PE-R9 to complete this task?

A)

lpttCltt&ttMdINFRMCI

15 permit top 1W.168W 0.0.255.255 range 49152 65\$» 100.54.0.0 0.31.255.255 eq 443

B)

ip peccosS'ilneiMdidlNFRA'ACi no 10

15 permit top 192.168.0,0 0.0.255.255 eq 2210H4.0.0 0.31.255.255 eq 22

C)

ip wcrnM extended INFRA-ACI

15 permit top 192.168.0.0 0.0.255.255 range 49152 65535100.64.0.0 0.31.255.255 eq 22

D)

ip ecte\$\$-li\$t extended INFRA-ACL

no 10

15 permit top 192.168,0,0 0.0.255.255 tenge 49152 65535100.64,0,0 0.31.255.255 eq 22

A. Option A

B. Option B

C. Option C

D.

Option

D

Answer: B

Explanation:

Question: 180

An engineer implemented LDP protocol on the ISP network. The engineer must ensure that there are no packet loss issues when IGP and LDP protocols are not synchronized. Which configuring must the engineer implement so that the IGP routing protocol will wait until LDP convergence is completed?

A. Disable IP CEF routers running LDP and enable LDP protocol.

B. Configure MPLS LDP IGP synchronization on the network.

C. Configure LDP sessions protection on the network.

D. Disable MPLS LDP IGP synchronization on the network.

Answer: B

Explanation:

Question: 181

What is the function of the FEC field within the OTN signal structure?

- A. It allows the sending devices to apply QoS within the OTN forwarding structure.
- B. It allows source nodes to discard payload errors before transmitting data on the network.
- C. It allows receivers to correct errors upon data arrival.
- D. It allows deep inspection of data payload fields.

Answer: C

Explanation:

Question: 182

Which two routing protocols support Cisco MPLS TE tunnels? (Choose two.)

- A. IS-IS
- B. RIP
- C. BGP
- D. OSPF
- E. EIGRP

Answer: A, D

Explanation:

Question: 183

Which protocol is used for communication between the PCE and PCC?

- A. ICMP
- B. PCEP
- C. CEF
- D. POP

Answer: B

Explanation:

Question: 184

An engineer is developing a configuration script to enable dial-out telemetry streams using gRPC on several new devices. TLS must be disabled on the devices. Which configuration must the engineer apply on the network?

A)

```
telemetry model-driven
destination-group ciscotest
address family ipv4 192.168.1.0 port 57500
encoding self-describing-gpb
protocol grpc no-tls
commit
```

B)

```
telemetry model-driven
destination-group ciscotest
address family ipv4 192.168.1.0 port 57500
encoding self-describing-gpb
protocol grpc
commit
```

C)

```
telemetry model-driven
destination-group ciscotest
address family ipv4 192.168.1.0 port 57500
encoding self-describing-gpb
```

protocol grpc tls-hostname ciscotest.com
commit

D)

telemetry mixUWnvt
destination-group DGroup
address family ip*4172.0.0.0 port 5432
encoding self-describing^pb
protocol tcp commit

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

Answer: A

Explanation:

Question: 185

An engineer is reviewing the BGP configuration. Which routes must be advertised to 10.10.10.1

Refer to the exhibit.

```
router bgp 65001
no synchronization
bgp log-neighbor-changes
neighbor 10.10.10.1 remote-as 4282
neighbor 10.10.10.1 distribute-list 1 out
no auto-summary

ip as-path access-list 1 permit ^$
```

- A. Local routes are permitted, and routes from other ASNs are denied.
- B. All routes whether local or from other ASNs are denied.
- C. Local routes are denied, and routes from other ASNs are permitted.
- D. All routes whether local or from other ASNs are permitted.

Answer: D

Explanation:

Question: 186

Refer to the exhibit.

```
router ospf 1
segment-routing mpls
segment-routing forwarding mpls
```

AN engineer is configuring segment routing on an ISP to simplify traffic engineering and management across network domains. What should the engineer do to complete the implementation of segment routing?

- A. OSPF must be configured with wide area metrics to support routing.
- B. The segment will run without any further configuration.
- C. Area authentication must be enable before segment routing will run.
- D. Area Authentication must be enable before segment routing will run.

Answer: C

Explanation:

Question: 187

How is a telemetry session established for data analytics?

- A. A router initiates a session using the dial-out to a destination.
- B. A destination initiate a session to a router.
- C. The destination initiate a session using the dial-out more to the router.
- D. A router requests the data using Teinet.

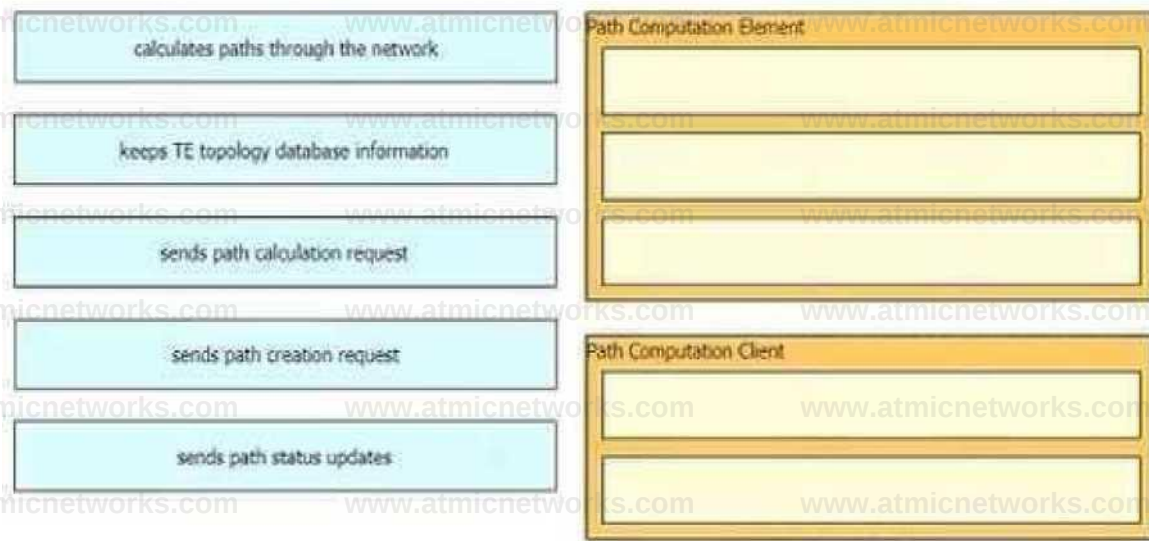
Answer: A

Explanation:

Question: 188

DRAG DROP

Drag and drop the functions from the path computation element protocol roles on the right.



Answer:

Explanation:



- Path computation element (PCE)
 - Computes network paths (topology, paths, etc.)

- Stores TE topology database (synchronized with network)
- May Initiate path creation
- Stateful - stores path database included resources used (synchronized with network)
- Path computation client (PCC)
 - May send path computation requests to PCE
 - May send path state updates to PCE
- Used between head-end router (PCC) and PCE to:
 - Request/receive path from PCE subject to constraints
 - State synchronization between PCE and router
 - Hybrid CSPF

Cisco/fvi?/

Question: 189

Refer to the exhibit.

```

R1# conf t
R1(config)# router isis
R1(config-router)# address-family ipv6
R1(config-router-af)# multi-topology

```

An engineer is configuring multi-topology IS-IS for IPv6 on router R1. Which additional configuration must be applied to complete the task?

A)

```

R1# configure terminal
R1(config)# router isis area 1
R1(config-router)# address-family ipv6
R1(config-router-af)# multi-topology

```

B)

```

R1# configure terminal
R1(config)# router isis area 1
R1 (config-router)# metric-style wide level-2
R1(config-router-af)# multi-topology

```

C)

```

R1# configure terminal
R1(config)# router isis area 1
R1(config-router)# metric-style wide
R1(config-router-af)# multi-topology

```

D)

```

R1# configure terminal
R1(config)# router isis area 1
R1 (config-router)# metric-style wide level-1
R1 (config-router-af)# multi-topology

```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 190

Which two PHY modes are available to implement an IOS XR Gigabit Ethernet interface interface? (Choose two.)

A. SONET

B. MAN

C. WDWM

D. LAN

E. WAN

Answer: DE

Explanation:

https://www.cisco.com/c/en/us/td/docs/routers/crs/software/crs_r4-1/interfaces/command/reference/interfaces_cr41crs_chapter19.html

Question: 191

Refer to the exhibit.

■ pls label range 16 100000 static 100007 1046570 ■pls label protocol Itp

■ pls ldp graceful-restart interface Loopback0

ip address 10.20.20.20 255.255.255.253 no ip directed-broadcast no ip bridge-cache

interface Gi1/1/0 ip address 10.12.0.2 253.255.0.0 no ip directed-broadcast mpls label protocol ldp mpls ip l router ospf 100 log-adjacency-changes net cisco enforce global redistribute connected subnets network 10.20.20.0 0.0.0.0 area 0 network 10.12.0.0 0.0.255.255 area 0

■ pls ldp router-id Loopback0 force

A network administrator implemented MPLS LDP changes on PE-A LSR device. The engineer must ensure there are no LDP peers are fully operational. Which LDP feature must the engineer apply to the existing configuration to eliminate the problem?

- A. Configure MPLS LDP IGP synchronization on the network.
- B. Configure MPLS LDP NSR for all LDP sessions.
- C. Enable LDP session protection under the routing protocol.
- D. Disable IP CEF on routers running LDP and enable LDP.

Answer: B

Explanation:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/msp/configuration/xr-3s/mp-ha-xr-3s-book/mp-nsr-ldp-supp.pdf>

Question: 192

After implement MPLS protocol for multiple VRFs on a single Cisco device, the engineer notices all VRFs on the router still do not have LDP session protection feature enabled. Which configuration must the engineer apply to enable the LDP session protection feature FOR LDP neighbors within each VRF?

- A. Configure LDP session protection globally on the device only.
- B. Configure LDP session protection globally on the device and on each neighbor that requires session protection.
- C. Configure LDP session authentication on the device to enable LDP session protection on each VRF automatically.
- D. Configure LDP session protection within the individual VRFs.

Answer: D

Explanation:

Question: 193

Refer to the exhibit.

```
RP/0/RP0/CPU0:router(config)# router bgp 65534
RP/0/RP0/CPU0:router(config-bgp)# neighbor 192.168.223.7
RP/0/RP0/CPU0:router(config-bgp-nbr)# remote-as 65507
RP/0/RP0/CPU0:router(config-bgp-nbr)#
```

An engineer is securing a customer's network. Which command completes this configuration and the engineer must use to prevent a DoS attack?

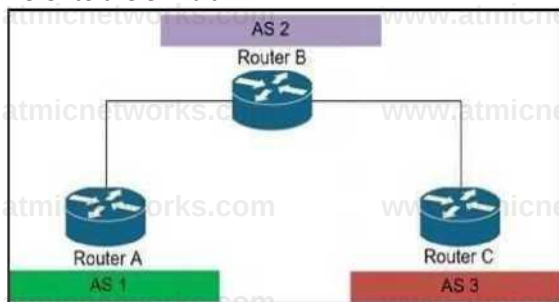
- A. neighbor ebgp-multihop
- B. ebgp-multihop
- C. ttl-security
- D. neighbor-ttl-security

Answer: C

Explanation:

Question: 194

Refer to the exhibit.



An engineer working for private Service Provider with employee id: 3948:11:613 is configuring the BGPsec framework. Which two conditions must the engineer take into account? (Choose two.)

- A. BGPsec uses IPsec tunnel for security.
- B. The BGPsec framework secures the AS path.
- C. In BGPsec, all route advertisements are given an expiry time by the originator of the route.
- D. Private keys are part of the router key pair used to sign route updates.
- E. In BGPsec, route advertisements are not given an expiration time by the originator of the route.

Answer: B, C

Explanation:

<https://tools.ietf.org/html/rfc8374#section-3.2>

Question: 195

Which characteristic describes prefix segment identifier?

- A. It contains the interface address of the device per each link.
- B. It is globally unique.
- C. It is locally unique.
- D. It contains a router to a neighbor.

Answer: B

Explanation:

Question: 196

DRAG DROP

Drag and drop the LDP features from the left onto their usages on the right.



It prevents valid route* from being overwritten with new one* until labels are assigned.

It slows stale label binring* to be used for a period of time while an LDP neighbor is unreachable.

It uses LDP Targeted hellos to protect LDP sessions.

It uses LDP to form neighborship between non-directly connected routers.

Answer:

Explanation:



Question: 197

Refer to the exhibit.

```
router bgp 65515
  aggregate-address 192.168.0.0 255.255.0.0 summary-only as-set
```

An engineer configured BGP summarization on a customer's network. Which route is advertised to BGP peers?

- A. 192.0.0.0/16
- B. 192.168.0.0/16
- C. 192.168.1.0/24
- D. 192.168.0.0/30

Answer: B

Explanation:

Question: 198

Refer to the exhibit.

```
router bgp 100
  address-family ipv4 unicast
  address-family vpnv4 unicast
  !
  neighbor 10.19.20.20
    remote-as 1
    address-family ipv4 unicast
    !
  !
  !
  !
  commit
```

An engineer is trying to implement BGP configuration on a router. Which configuration error prevents the ASBR from establishing a BGP neighborhood to a directly connected BGP speaker?

- A. The routing policy is absent for this Cisco IOS XR eBGP instance.
- B. The IPv4 address family configuration under neighbor configuration-mode must be removed.
- C. The VPNv4 address family interferes with the 8GP IPv4 address family negotiations.
- D. The TCP session parameters are not specified.

Answer: D

Explanation:

https://www.cisco.com/c/en/us/td/docs/routers/xr12000/software/xr12k_r41/routing/configuration

/guide/routing_cg41xr12k_chapter1.html

Question: 199

Refer to the exhibit.

```
interface GigabitEthernet1/0/0 ipv6 enable ip ospf 1 area 1
interface GigabitEthernet2/0/0 ipv6 enable ip ospf 1 area 2
```

An engineer implemented OSPF neighbor relationship on an IOS device. Which configuration must be applied to get the DR/BDR election removed from interfaces running OSPF?

- A. ip ospf network broadcast on interfaces running OSPF
- B. ip ospf network point-to-point on interfaces running OSPF
- C. ip ospf network multipoint-point on interfaces running OSPF
- D. ip ospf network non-broadcast on interfaces running OSPF

Answer: B

Explanation:

Question: 200

After a possible security breach, the network administrator of an ISP must verify the times that several different users logged into the network. Which command must the administrator enter to display the login time of each user that activated a session?

- A. show netconf-yang sessions detail

- B. show netconf-yang datastores
- C. show platform software yang-management process
- D. show netconf-yang sessions

Answer: A

Explanation:

[https://www.cisco.com/c/en/us/td/docs/ios-](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/167/b_167_programmability_cg/configuring_yang_datamodel.html)

[xml/ios/prog/configuration/167/b_167_programmability_cg/configuring_yang_datamodel.html](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/prog/configuration/167/b_167_programmability_cg/configuring_yang_datamodel.html)

Device# **show netconf-yang sessions detail**

R: Global-lock on running datastore
C: Global-lock on candidate datastore
S: Global-lock on startup datastore

```
Number of sessions
session-id
transport username      netconf-ssh
source-host login-      admin
time in-rpcs in-        2001:db8::1
bad-rpcs out-rpc-       2018-10-26T12:37:22+00:00
errors out-              0
notifications            0
global-lock              0
                        0
                        None
```

Question: 201

Refer to the exhibit.

```
RI# show ip bgp summary
Neighbor      V AS      HsgRcvd    MsgSent    Tblver inQ  OutQ      Up/Down    State/PfxRcd
11.11.11.11   4 5400      0           0           000        never     Active
```

R1

```
interface Loopback0
 ip address 2.2.2.2 255.255.255.255
interface Ethernet1/0
 ip address 11.11.11.11 255.255.255.0
router bgp 5400
 neighbor 11.11.11.12 remote-as 5400
 neighbor 11.11.11.12 update-source Loopback0
 ip route 1.1.1.1 255.255.255.255 11.11.11.12
```

R2

```
interface Loopback0
 ip address 1.1.1.1 255.255.255.255
interface Ethernet1/0
 ip address 11.11.11.12 255.255.255.0
router bgp 5400
 neighbor 11.11.11.11 remote-as 5400
 neighbor 11.11.11.11 update-source Loopback0
```

```
ip route 2.2.2.2 255.255.255.255 11.11.11.11
```

Router R1 is reporting that its BGP neighbor adjacency to router R2 is down, but its state is Active as shown. Which configuration must be applied to routers R1 and R2 to fix the problem?

A)

```
R1
router bgp 5400
neighbor 2.2.2.2 remote-as 5400
```

```
R2
router bgp 5400
neighbor 1.1.1.1 remote-as 5400
```

B)

```
R1
router bgp 5400
neighbor 11.11.11.11 remote-as 5400
neighbor 11.11.11.11 update-source Loopback0
```

```
R2
router bgp 5400
neighbor 11.11.11.12 remote-as 5400
neighbor 11.11.11.12 update-source Loopback0
```

C)

```

R1
router bgp 5400
  neighbor 1.1.1.1 remote-as 5400
  neighbor 1.1.1.1 update-source LoopbackO

```

```

R2
router bgp 5400
  neighbor 2.2.2.2 remote-as 5400
  neighbor 2.2.2.2 update-source LoopbackO

```

D)

```

R1
router bgp 5400
  neighbor 2.2.2.2 remote-as 5400
  neighbor 2.2.2.2 update-source LoopbackO

```

```

R2
router bgp 5400
  neighbor 1.1.1.1 remote-as 5400
  neighbor 1.1.1.1 update-source LoopbackO

```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 202

An engineer is configuring path selection on router R1 for two ASNs as shown. Which additional task must the engineer perform on Router 1 so that all outbound traffic utilizes the link between R1 and

Refer to the exhibit.



R3 to reach ASN 4567?

- A. Configure a low weight on the peer to ASN 4567.
- B. Configure a high weight on the peer to ASN 4567.
- C. Configure an AS path prepend on the peer to ASN 4567.
- D. Configure a high med on the peer to ASN 4567.

Answer: B

Explanation:

Question: 203

A network engineer is deploying VPLS configuration between multiple PE routers so that customer's remote offices have end-to-end LAN connectivity. Which additional configuration should the engineer perform on the PE routers to enable the virtual switch instance?

A)

Make Vlan 5 connect to ciscoes

B)

12 ell ciscotest manual

vpnidlQO

neighbor 152.168.2.2 encapsulation mpls neighbor 1)2.168.3.3 encapsulation mpls

C)

interface GigEthernetlrt switchport mode trunk switchport trunk encapsdotfq switchport trunk allow elan MO

D)

interface Vian IM

sconced ell ciscotest

ip address 192.161.1.1 25S.255.255

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_l2_vpns/configuration/xe-3s/mp-l2-vpns-xe-3s-book/mp-vpls.html#GUID-D5B09E97-F785-4BCD-91F7-8E7C7E5F5A04

Question: 204

A network operator needs to implement PIM-SSM multicast configuration on customer's network so that users in different domains are able to access and stream live traffic. Which two actions must the engineer perform on the network

to make the streaming work? (Choose two.)

A. Configure at least one MSDP peer on the network

- B. Enable IGMP version 2 at the interface level.
- C. Enable PIM sparse mode on the device.
- D. Enable IGMP version 3 at the interface level.
- E. Enable PM dense mode on the device.

Answer: A, D

Explanation:

Question: 205

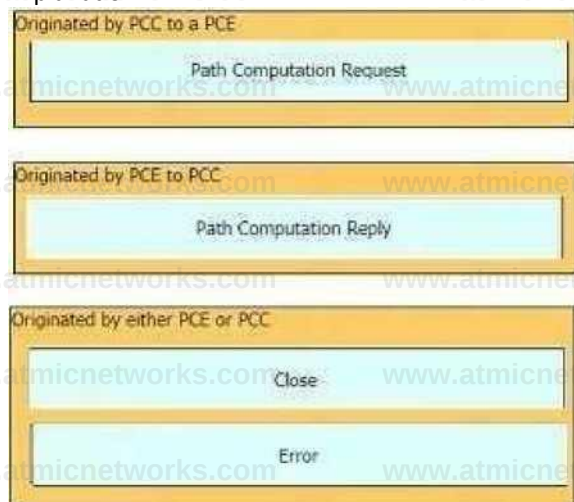
DRAG DROP

Drag and drop the message types from the left onto the target field of the message originator on the right.



Answer:

Explanation:



Question: 206

Refer to the exhibit.

```
Router] config)# ip access-list standard Suppressed
Router(config-std-nad)# permit 10.16.6.0/24
Router] config)# route-map SuppressMap
Router(config-route-map)# match ip address Suppressed
```

An engineer is implementing BGP selective prefix suppression. The router must advertise only 10.16.4.0/24, 10.16.5.0/24. and summarized route 10.16.0.0/21. and suppress 10.16.6.0/24. Which configuration must the engineer apply to the router?

A)

```
Router (config)? router bgp 300
Router(config-router)? aggregate-address 10.16.6.0 255.255.252.0 as-set suppress-map SuppressMap
```

B)

```
Router (config)? router bgp 300
Router(config-router)? aggregate-address 10.16.0.0 255.255.248.0 as-set suppress-map SuppressMap
```

C)

```
Router (config)? router bgp 300
Router(config-router)? aggregate-address 10.16.6.0 255.255.255.0 as-set suppress-map SuppressMap
```

D)

Router (config)# router bgp 300

Routerfconflg^outer)# aggregate-address 10.16.0.0 255.255.255.0 as-set suppress-map unSuppressMap

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

Question: 207

Refer to the exhibit.

```
<fvTenant name="customer">
  <fvCtx name="customervrf"/>
  <fvBD name="bdT">
    <fvRsCtx tnFvCtxName=" customervrf 7">
      <NSubnet Ip="192.168.0.1/24"
scope="public7">
        <fvRsBDToOut tnL3extOutName="l3out17">
          </fvBD>
        </fvRsBDToOut>
      </NSubnet>
    </fvRsCtx>
  </fvBD>
</fvCtx>
</fvTenant>
```

What does this REST API script configure?

A. application profile

B. VRF

C. public community string for SNMP

D. interface with IP address 192.168.0.1

Answer: D

Explanation:

Question: 208

What is the role of NSO in network automation?

- A. It is GUI used to manage wireless devices in a campus infrastructure.
- B. It is a type of REST API used to configure an APIC.
- C. It is a tool that uses CLI only to configure virtual network devices.
- D. It is a tool used to bridge automation to the physical network infrastructure.

Answer: D

Explanation:

<https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/network-services-orchestrator/datasheet-c78-734576.html>

NSO provides a robust bridge linking network automation and orchestration tools with the underlying physical and virtual infrastructure.

Question: 209

Which two tasks must an engineer perform when implementing LDP NSF on the network? (Choose two.)

- A. Disable Cisco Express Forwarding.
- B. Enable NSF for EIGRP.
- C. Enable NSF for the link-state routing protocol that is in use on the network.
- D. Implement direct connections for LDP peers.
- E. Enable NSF for BGP.

Answer: CE

Explanation:

LDP NSF works with LDP sessions between directly connected peers and with peers that are not directly connected (targeted sessions).

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_ha/configuration/15-sy/mp-ha-15-sy-book/mp-ldp-grace-nsfsso.html

Question: 210

Refer to the exhibit.

```
Rt Interface Ethernet1/1
Ip address 172.16.33.1 255.255.255.255
Interface Ethernet1/0
ip address 172.16.32.1 255.255.255.0 router ospf 20
network 172.16.0.0 0.0.255.255 area 0

R2 interlace Eternetn1/1
ip address 172.16.30.1 255.255.255.255
Interface Ethernet1/0
Ip address 172.16.32.2 255.255.255.0
router ospf 20
network 172.16.0.0 0.0.255.255 area 0
distribute-list 1 In
access-list 1 permit 172.16.32.0. 0.0.0.255

82> stow Ip route
172.16. 0.0/16 la variably subnetted, 3 subnets, 2 masks
C 172.16.32.0/24 Is directly connected, Ethorncll/O
C 172.16.30.1/32 Is directly connected, Ethernet1/1
```

A network engineer notices that router R2 is failing to install network 172.16.33.1/32 in the routing table. Which configuration must the engineer apply to R2 to fix the problem?

- A. R2(config)# access-list 1 permit 172.16.33.0 255.0.0.0
- B. R2(config)# access-list 1 permit 172,16,33.0 255,255,255,0
- C. R2(config)# access-list 1 permit 172.16.33.0 0.0.0.255
- D. R2(config)# access-list 1 permit 172,16,33.0 255.255,0,0

Answer: C

Explanation:

Question: 211

A network engineer has configured TE tunnels in the MPLS provider core. Which two steps ensure traffic traverse? (Choose two.)

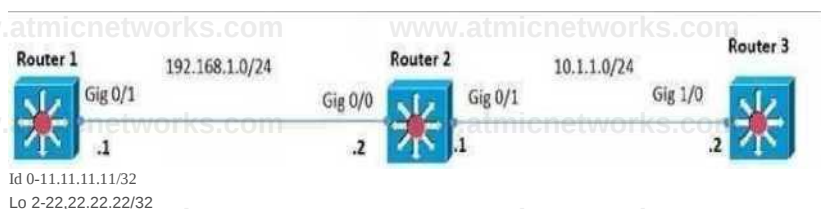
- A. Static routes is the only option for directing traffic into a tunnel.
- B. ECMP between tunnels allows RSVP to function correctly.
- C. Forwarding adjacency features allows a tunnel to be installed in the IGP table as a link.
- D. The IGP metric of a tunnel is configured to prefer a certain path
- E. A tunnel weight is configured in SPF database the same way as a native link.

Answer: C, D

Explanation:

Question: 212

Refer to the exhibit.



Router 1 and router 2 are running IBGP. and router 2 and router 3 are running OSPF Area 0. Router 1 is advertising loopback interlaces Lo0 and Lo2 and router 2 is redistributing BGP into OSPF Area 0. Which configuration must an administrator apply so that router 2 uses a route map to redistribute only the internal route from Lo 2?

A)

Ip prefix-list BGP-to-ospf seq 5 permit 22.22.22.0/24

route-map BGP-To-OSPF permit 10

match Ip address prefix-list BGP-to-ospf

router ospf 1

redistribute bgp 100 metric 100 metric-type 1 subnets route-map BGP-To-OSPF

B)

ip prefix-list BGP-to-ospf seq 5 permit 22.22.22.0/24

**route-map BGP-To-OSPF permit 10
match ip address prefix-list BGP-to-ospf**

**router ospf 1
redistribute bgp 100 route-map BGP-To-OSPF**

C)

ip prefix-list BGP-to-ospf seq 5 permit 22.22.22.22/32

**router bgp 100
bgp redistribute-internal**

**route-map BGP-To-OSPF permit 10
match ip address prefix-list BGP-to-ospf**

**router ospf 1
redistribute bgp 100 metric 100 metric-type 1 subnets route-map BGP-To-OSPF**

D)

ip prefix-list BGP-to-ospf seq 5 permit 22.22.22.0/24

**router bgp 100
bgp redistribute-static**

**route-map BGP-To-OSPF permit 10
match ip address prefix-list BGP-to-ospf**

**router ospf 1
redistribute bgp 100 metric-type 2 route-map BGP-To-OSPF**

A. Option A

B. Option B

C. Option C

D. Option D

Answer: C

Explanation:

Question: 213

A remote operation center is deploying a set of I-BGP and E-BGP connections for multiple IOS-XR platforms using the same template. The I-BGP sessions exchange prefixes with no apparent issues, but the E-BGP sessions do not exchange routes. What causes this issue?

- A. A PASS ALL policy has not been implemented for the I-BGP neighbors.
- B. The next-hop-self command is not implemented on both E-BGP neighbors.
- C. The E-BGP neighbors are not allowed to exchange information due to the customer platforms default policy.
- D. The I-BGP neighbors are mistyped and HELLO packets cannot be exchanged successfully between routers.

Answer: C

Explanation:

Routing Policy Enforcement

External BGP (eBGP) neighbors must have an inbound and outbound policy configured. If no policy is configured, no routes are accepted from the neighbor, nor are any routes advertised to it. This added security measure ensures that routes cannot accidentally be accepted or advertised in the case of a configuration omission error.

https://www.cisco.com/c/en/us/td/docs/routers/asr9000/software/asr9k-r6-2/routing/configuration/guide/b-routing-cg-asr9000-62x/b-routing-cg-asr9000-62x_chapter_010.html

Question: 214

An engineer working for a private telecommunication company with an employee id:3948:613 needs to limit the malicious traffic on their network. Which configuration must the engineer use to implement URPF loose mode on the GigabitEthernet0/1 interface?

A)

```
router(config)# interface gigabitEthernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
```

```
router(config-if)# ip verify unicast source reachable-via any
router(config-if)# ipv6 address 2W1:DB8:1::W
routerfconfig-if)# ipv6 verify unicast source reachable-via any
```

B)

```
router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via any
router(config-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via rx
```

C)

```
router(config)# interface gigabitethernet0/1
router(config-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via rx
routerfconfig-if)# ipv6 address 2001:DB8:1::1/96
router(config-if)# ipv6 verify unicast source reachable-via any
```

D)

```
routerfconfig)# interface gigabitethernet0/1
router(conhg-if)# ip address 192.168.200.1 255.255.255.0
router(config-if)# ip verify unicast source reachable-via rx
router(config-if)# ipv6 address 2001:DB8:1::1/96
routerfconfig-if)# ipv6 verify unicast source reachable-via rx
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation:

“reachable-via any” must be configured for Loose mode on both IPv4 & IPv6.

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_urpf/configuration/xr-3s/sec-data-urpf-xr-3s-book/sec-unicast-rpf-loose-mode.html

Question: 215

Refer to the exhibit.

```
R10(config)#interface G0/1
R10(config-if)#ip address 172.16.0.1 255.255.255.0
R10(config-if)#ip ospf 1 area 0
R10(config-if)#ip ospf multi-area 10
R10(config-if)#ip ospf multi-area 10 cost 5
```

A network engineer is implementing OSPF multiarea.

a. Which command on interface G0/1 resolves adjacency issues in the new area?

- A. `ip ospf network broadcast`
- B. `ip ospf network non-broadcast`
- C. `ip ospf network point-to-multipoint`
- D. `ip ospf network point-to-point`

Answer: D

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_ospf/configuration/xr-16/ios-xr-16-book/ios-multi-area-adj-xr.html

Question: 216

What is a constraint of Cisco MPLS TE tunnel configurations?

- A. Tunnels cannot span multiple OSPF areas.
- B. With ISIS as an IGP, only older-style metrics are used.
- C. Tunnels cannot be configured over IP unnumbered links.

D. QoS-aware tunneling is not supported.

Answer: C

Explanation:

Restrictions for MPLS Traffic Engineering and Enhancements

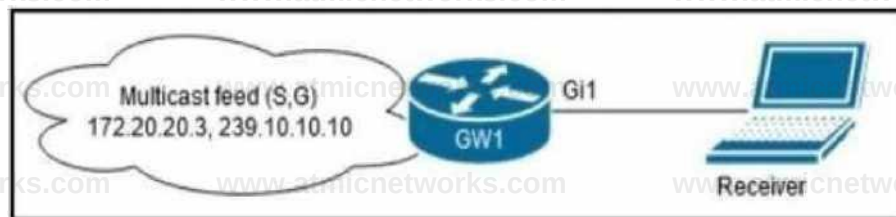
* MPLS traffic engineering supports only a single IGP process/instance. Multiple IGP processes/instances are not supported and MPLS traffic engineering should not be configured in more than one IGP process/instance.

* MPLS traffic engineering does not support ATM MPLS-controlled subinterfaces.

» The MPLS traffic engineering feature does not support routing and signaling of LSPs over unnumbered IP links. Therefore, do not configure the feature over those links.

Question: 217

Refer to the exhibit.



A network administrator is implementing IGMP to enable multicast feed transmission to the receiver. Which configuration must the administrator deploy on GW1 to permit IGMP Joins only to the assigned (S, G) feed?

A)

config

ip igmp access-list 101 permit igmp host 0.0.0.0 host 239.10.10.10

access-list 100 deny igmp any any

Interface GigabitEthernet1 ip igmp access-group 100 ip igmp version 3 end

B)

config t

```
access-list 100 permit igmp host 0.0.0.0 host 230.10.10.10 access-list 100
permit igmp host 172.20.20.3 host 230.10.10.10 access-list 100 deny igmp any
any
interface OigabitEthernetl
Ip igmp access-group 100 ip igmp version 3 end
```

C)

```
config t
acceis4ist 100 permit igmp host 0.0.0.0 host 239.10.10.10
access-list 100 deny igmp any any
interface GlgabitEthernetl
ip igmp access^roup 100
ip igmp version 2
end
```

D)

```
config t
accessdist 100 permit igmp host 0.0.0.0 host 239.10.10.10
accessdist 100 permit igmp host 172.20.20.3 host 239.10.10.10
accessdist 100 deny igmp any any
interface GlgabitEthernetl
ip igmp access*group 100
ip igmp version 2
end
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

How IGMP Checks an Extended Access List

When an IGMP extended access list is referenced in the ip igmp access-group command on an interface, the (S, G) pairs in the permit and deny statements of the extended

access list are matched against the (S, G) pair of the IGMP reports received on the interface. For example, if an IGMP report with (S1, S2 Sn, G) is received, first the group (0.0.0.0, G) is checked against the access list statements. The convention (0.0.0.0, G) means (*, G), which is a wildcard source with a multicast group number. If the group is denied, the entire IGMP report is denied. If the group is permitted, each individual (S, G) pair is checked against the access list. Denied sources are taken out of the IGMP report, thereby denying the sources access to the multicast traffic

Question: 218

A network engineer is implementing a QoS policy for outbound management traffic classification and marking on a CPE device with these requirements:

- Management protocols must be marked with DSCP AF class 2 with low drop probability.
- Monitoring protocols must be marked with DSCP AF class 1 with low drop probability.
- All remaining traffic must be marked with a DSCP value of 0.

Which configuration must the engineer implement to satisfy the requirements? A)

```
policy-map cpe-mgmt-policy
class management set ip dscp af21
class monitoring
set ip dscp af11 class class-default
set ip dscp af0 end
```

B)

```
policy-map cpe-mgmt-policy class management
set ip dscp af23
class monitoring set ip dscp af13
class class-default set ip dscp af0 end
```

C)

policy-map cpe-mgmt-policy class management

set ip dscp af21

class monitoring

set ip dscp af11

class class-default set ip dscp default

end

D)

policy-map cpe-mgmt-policy

class management

set ip dscp af23

class monitoring

set ip dscp af13

class class-default set ip dscp default

end

A. Option A

B. Option B

C. Option C

D. Option D

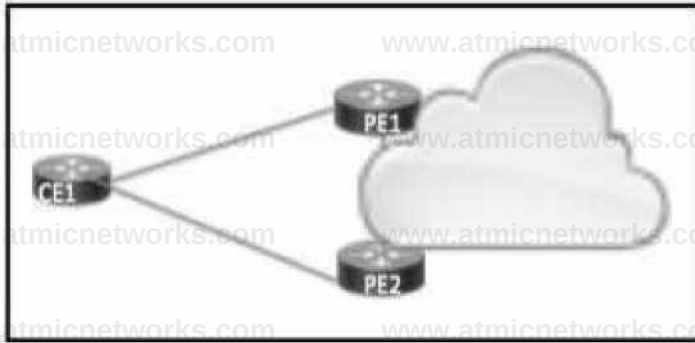
Answer: C

Explanation:

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus1000/sw/4_0/qos/configuration/guide/nexus1000v_qos/qos_6dscp_val.pdf

Question: 219

Refer To the exhibit.



Which BGP attribute should be manipulated to have CE1 use PE1 as the primary path to the Internet?

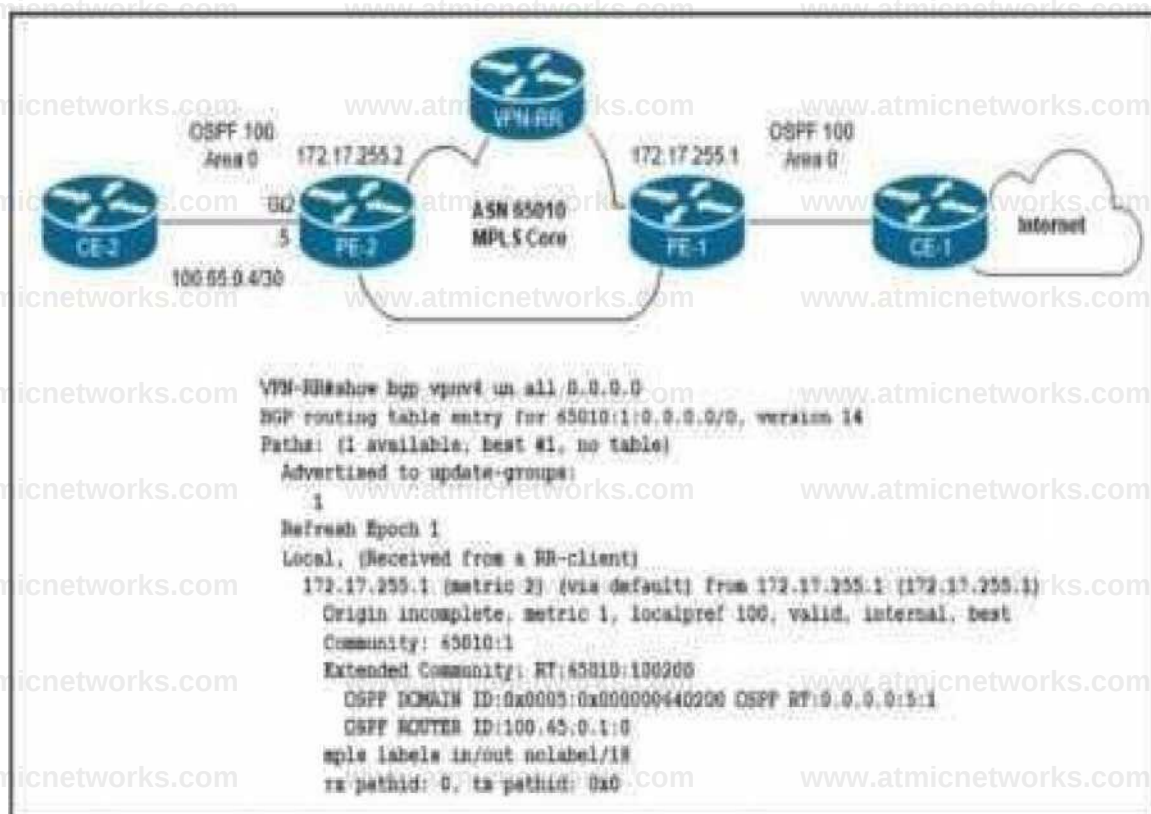
- A. The weight attribute should be manipulated on PE1 on outbound routes advertised to CE1.
- B. The MED should be manipulated on CE1 on inbound routes from PE1.
- C. The local preference attribute should be manipulated on PE2 on inbound routes advertised to CE1.
- D. The origin of all routes should be modified on each router on inbound and outbound routes advertised to CE1.

Answer: B

Explanation:

Question: 220

Refer to the exhibit.



The network engineer who manages ASN 65010 is provisioning a customer VRF named CUSTOMER- ABC on PE-2. The PE-CE routing protocol is OSPF Internet reachability is available via the OSPF 0 0 0.0/0 route advertised by CE-1 to PE-1 In the customer VRF Which configuration must the network engineer Implement on PE-2 so that CE-2 has connectivity to the Internet?

A)

vrf definition CUSTOMER-ABC

rd 65010:1

address-family ipv4

route-target both 65010:1

**router ospf 100 vrf CUSTOMER-ABC network 100.65.0.4
0.0.0.3 area 0 redistribute bgp 65010 subnets default-
information originate**

router bgp 65010

address-family Ipv4 unicast vrf CUSTOMER-ABC

redistribute ospf 100 match Internal external

B)

vrf definition CUSTOMER-ABC rd 65010:2

address-family Ipv4

route-target both 65010:100200

**router ospf 100 vrf CUSTOMER-ABC network 100.65.0.4
0.0.0.3 area 0 redistribute bgp 65010 subnets**

• router bgp 65010

address-family Ipv4 unicast vrf CUSTOMER-ABC

redistribute ospf 100 match internal external

C)

vrf definition CUSTOMER-ABC rd 65010:1

address-family Ipv4

route-target both 6 5010:100 200 i

**router ospf 100 vrf CUSTOMER-ABC network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets default-information originate**

router bgp 65010

address-family ipv4 unicast vrf CUSTOMER-ABC redistribute ospf 100
match Internal external

D)

vrf definition CUSTOMER-ABC rd 65010:2
address-family ipv4 route-target both 65010:1 1

router ospf 100 vrf CUSTOMER-ABC network 100.65.0.4 0.0.0.3 area 0
redistribute bgp 65010 subnets i •

router bgp 65010

address-family ipv4 unicast vrf CUSTOMER-ABC redistribute ospf 100
match internal external

A. Option A

B. Option B

C. Option C

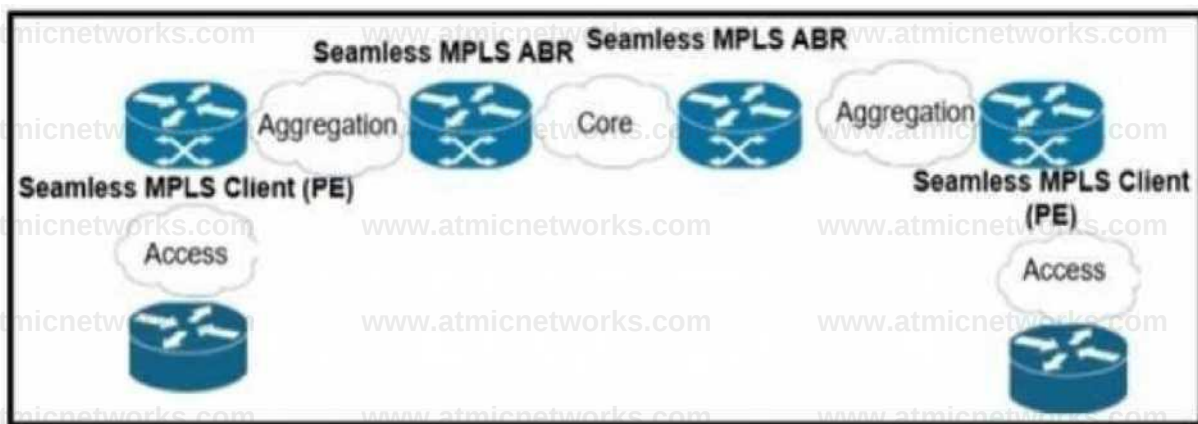
D. Option D

Answer: C

Explanation:

Question: 221

Refer to the exhibit.



A network operator working for a telecommunication company with an employee 3994:37:650 is implementing a cisco Unified MPLS solution. What is the effect of this implementation?

- A. EIGRP is deployed between the PEs and ABRs with RFC 3107.
- B. OSPF is deployed between the PEs and ABRs with RFC 3107.
- C. IS-IS is deployed between the PEs and ABRs with RFC 3107.
- D. BGP is deployed between the PEs and ABRs with RFC 3107.

Answer: D

Explanation:

Carry Label Information in BGP-d (RFC 3107)

It is a prerequisite to have a scalable method in order to exchange prefixes beta *1 segments. You could simply merge the IGP's (Open Shortest Path First (OSPF), Intermediate System-to-Intermediate System (IS-IS), or Enhanced Interior Gateway Routing Protocol (EIGRP) into a single domain. However an IGP is not designed to carry Flaps of prefixes. The protocol of choice for that purpose is BGP. It is a

Question: 222

A network engineer must implement SNMPv2 with these parameters

Enable SNMP community string C1sc0 with read-only permissions.

Enable interface index persistence.

Restrict the SNMP community to only the monitoring server with IP address 198.18.19.100/32.

Provide view-only access to ospfIfEntry and ospfNbrEntry.

Which configuration must the engineer apply?

configure terminal

access-list 5 permit 198.18.19.100 0.0.0.0

snmp-server view BLOCKED_VIEW internet excluded snmp-server view

BLOCKED_VIEW ospfIfEntry included snmp-server view BLOCKED_VIEW

ospfNbrEntry included snmp-server community dsc0 view BLOCKED_VIEW RO 5

snmp ifmib ifindex persist end

configure terminal

access-list 5 permit 198.18.19.100 0.0.0.0

```
snmp-server view BLOCKED_VIEW internet excluded snmp-server view  
BLOCKED_VIEW ospflEntry included snmp-server view BLOCKED_VIEW  
ospfNbrEntry included snmp-server community dscO view BLOCKED_VIEW RW  
5 snmp ifmib ifindex persist end
```

configure terminal

```
access-list 5 permit 198.18.19.100 0.0.0.0
```

```
snmp-server view BLOCKED_VIEW internet included snmp-server view  
BLOCKED_VIEW ospflEntry included snmp-server view BLOCKED_VIEW  
ospfNbrEntry included snmp-server community dscO view BLOCKED_VIEW RO  
snmp ifmib ifindex persist end
```

configure terminal

```
access-list 5 permit 198.18.19.100 0.0.0.0
```

```
snmp-server view BLOCKED_VIEW internet excluded snmp-server view  
BLOCKED_VIEW ospflEntry included snmp-server view BLOCKED_VIEW  
ospfNbrEntry included snmp-server community dscO view BLOCKED_VIEW RO  
snmp ifmib ifindex persist end
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation:

Question: 223

An engineer must extend Layer 2 Between two campus sites connected through an MPLS backbone that encapsulates Layer 2 and Layer 3 data Which action must the engineer perform on the routers to accomplish this task?

A. Configure a EtherChannel for E-LAN.

- B. Configure a pseudowire for E-LINE.
- C. Configure Cisco MPLS TE for use with E-TREE.
- D. Configure QoS for MPLS and E-ACCESS

Answer: B

Explanation:

Question: 224

The engineering team at a large ISP has been alerted a customer network is experiencing high traffic congestion. After a discussion between the ISP and technical personnel at the customer site, the team agrees that traffic to the customer network that exceeds a specific threshold will be dropped. Which task must the engineer perform on the network to implement traffic policing changes?

- A. Configure RSVP to reserve bandwidth on all interfaces when a path is congested.
- B. Enable Cisco Discovery Protocol on the interface sending the packets.
- C. Enable Cisco Express Forwarding on the interfaces sending and receiving the packets.
- D. Set IP precedence values to take effect when traffic exceeds a given threshold.

Answer: D

Explanation:

Question: 225

An engineer is implementing IGMP with SSM on a multicampus network that supports video streaming. Which task must the engineer perform as part of the process?

- A. Configure the network to use IGMPv3.
- B. Configure the network to use bidirectional PIM.
- C. Configure an RP that uses static assignments only.

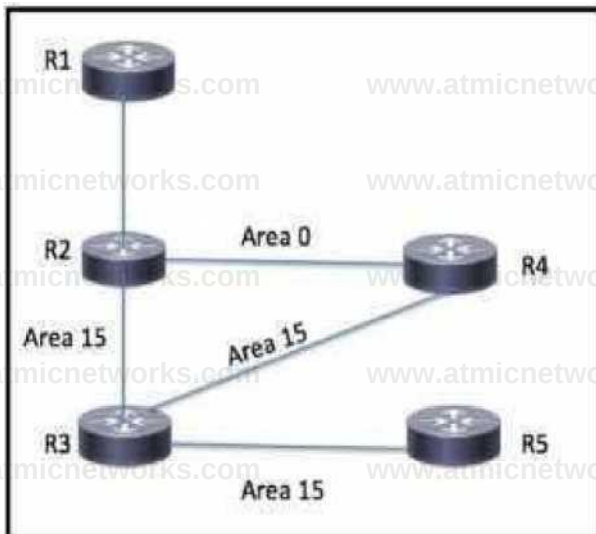
D. Configure the network to use the PIM bsr-candidate

Answer: A

Explanation:

Question: 226

Refer to the exhibit.



An engineer has started to configure a router for OSPF, as shown. Which configuration must an engineer apply on the network so that area 15 traffic from R5 to R1 will prefer the route through R4?

- A. Place the link between R3 and R5 in a stub area to force traffic to use the route through R4.
- B. Increase the cost on the link between R2 and R4, to influence the path over R3 and R4.
- C. Implement a multiarea adjacency on the link between R2 and R4, with the cost manipulated to make the path through R4 preferred.
- D. Implement a sham link on the between R3 and R2 to extend area 0 area 15.

Answer: B

Explanation:

Question: 227

Refer to the exhibit.

```
line vty 0 4 acctM-clus 100 in transport Input ash login local
Lina vty 5 15
  access-claaa 100 in
  transport input ash login
  local
```

An engineer has started to configure a router for secure remote access as shown. All users who require network access need to be authenticated by the SSH Protocol. Which two actions must the engineer implement to complete the SSH configuration? (Choose two.)

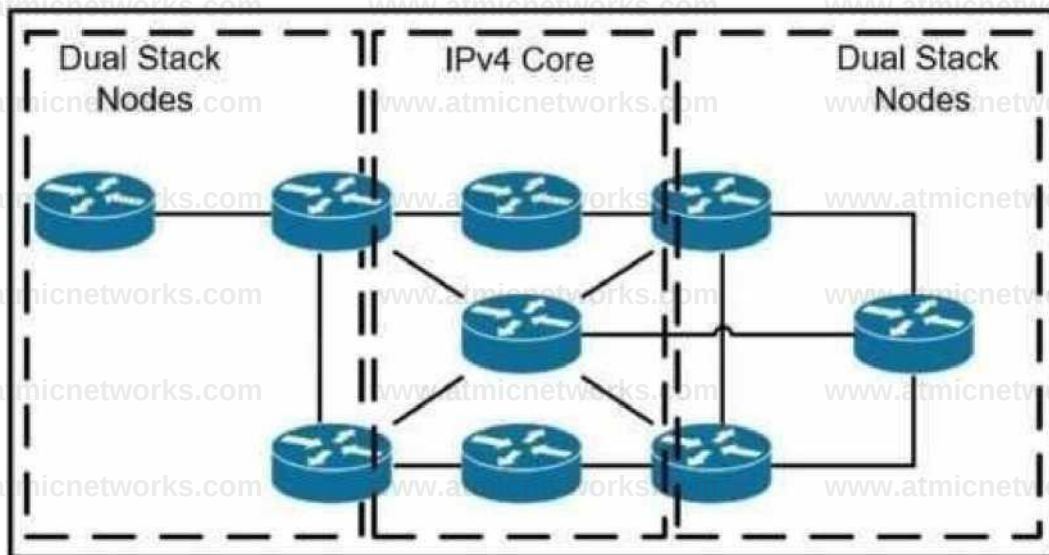
- A. Configure an IP domain name.
- B. Configure service password encryption.
- C. Configure crypto keys
- D. Configure ACL 100 to permit access to port 22.
- E. Configure a password under the vty lines.

Answer: A, C

Explanation:

Question: 228

Refer to the exhibit.



A network operator has two IPv4 and IPv6 dual-stacked network on each side of the IPv4 core network. The operator must be able to provide connectivity between them while using specific assigned IPv6 space provided from the company IP administrator team. Which technology should the network operator use to accomplish this goal?

- A. 6rd
- B. NAT46
- C. DS-Lite
- D. NAT44

Answer: B

Explanation:

Question: 229

Which additional configuration is required for NetFlow to provide traceback information?

- A. Cisco Express Forwarding must be configured for traffic that is egressing from the router to be properly reported.
- B. A classification ACL must be configured to identify which type of traffic will be analyzed.

- C. The BGP routing process must be started for any ingress or egress data to be reported when using NetFlow Version 5.
- D. LLDP must be configured or the device will be unable to locate a NetFlow analyzer.

Answer: B

Explanation:

Traffic Identification and Traceback

At times, you can need to quickly identify and traceback network traffic, especially during incident response or poor network performance. NetFlow and Classification ACLs are the two primary methods to accomplish this with Cisco IOS software. NetFlow can provide visibility into all traffic on the network. Additionally, NetFlow can be implemented with collectors that can provide long-term trending and automated analysis.

Classification ACLs are a component of ACLs and require pre-planning to identify specific traffic and manual intervention during analysis. These sections provide a brief overview of each feature.

Question: 230

What is a characteristic of prefix segment identifier?

- A. It contains a router to a neighbor
- B. It contains the interface address of the device per each link
- C. It is globally unique.
- D. It is locally unique.

Answer: C

Explanation:

Question: 231

An engineer working for a private service provider with employee id: 3994 37 650 is configuring a Cisco device to redistribute OSPF into BGP. Which task enables the device to filter routes?

- A. Configure a distribute list and associate it to the BGP peer interface
- B. Configure a prefix list and associate it to the BGP peer interface

- C. Configure a route map and reference it with the redistribute command
- D. Configure an access list and reference it with the redistribute command

Answer: C

Explanation:

Question: 232

A network engineer is configuring a newly installed PE router at the regional gateway location. The new PE router must use MPLS core routing protocols with the existing P router, and LDP sessions between the two routers must be protected to provide faster MPLS convergence. Which configuration must the engineer perform on the network so that LDP sessions are established?

- A. Enable communication over TCP port 646 for T-LDP hello messages.
- B. Enable RSVP-TE FRR on the LDP interface to protect the LDP session between routers.
- C. Enable LDP session protection on either one of the routers, which allows them to autonegotiate.
- D. Set the LDP session protection timer on each router to the same value.

Answer: C

Explanation:

Question: 233

What do Chef and Puppet have in common?

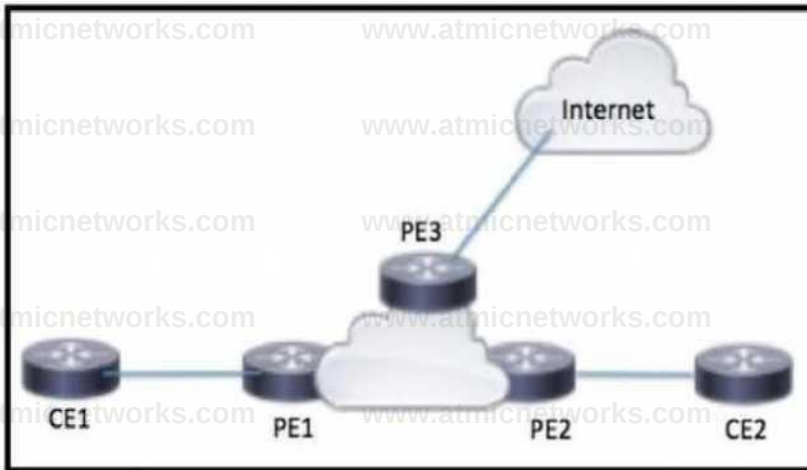
- A. use Ruby
- B. use a master server
- C. require modules to be created from scratch
- D. manage agents referred to as minions

Answer: B

Explanation:

Question: 234

Refer to the exhibit.



CE1 and CE2 require connectivity to the internet through the ISP connected to PE3. What should an engineer configure to complete this task?

- A. PE2 must be configured to serve as a route reflector for PE3 routes learned from the internet. PE2 then shares the routes with CE1 and CE2.
- B. CE1 and CE2 must be configured with a route distinguisher in the PE1 VRF that dynamically imports the route from the internet.
- C. CE1 and CE2 must be configured to use a static default route with a next-hop of PE3 to reach internet routes.
- D. PE1 must be configured with an import route target in the CE1 VRF that matches the export route target for the internet VRF on PE3.

Answer: D

Explanation:

Question: 235

Refer to the exhibit.

```
telemetry model-driven
destination-group ciscotest
address family ipv4 192.168.1.1 port
1025
```

A Cisco engineer is implementing gRPC dial-out on an ASR. Receiver 192.168.1.1 will be assigned one of the subscriptions, and it will manage the ASR. Which command is needed to complete the router configuration?

- A. protocol grpc
- B. protocol all
- C. protocol tcp
- D. protocol any

Answer: C

Explanation:

- Transmission Control Protocol (TCP): used for only dial-out mode

User Datagram Protocol (UDP): used for only dial-out mode.

Question: 236

Refer to the exhibit.

```

Control Plane Interface
Service policy CoPP-normal
Hardware Counters:
class-map: CoPP-normal (match-all)
Match: access-group 100
police :
6000 bps 1000 limit 1000 extended limit
Earl in slot 3 :
0 bytes
5 minute offered rate 0 bps
aggregate-forwarded 0 bytes action: transmit
exceeded 0 bytes action: drop
aggregate-forward 0 bps exceed 0 bps
Earl in slot 5 :
0 bytes
5 minute offered rate 0 bps
aggregate-forwarded 0 bytes action: transmit
exceeded 0 bytes action: drop
aggregate-forward 0 bps exceed 0 bps

```

Which show command shows statistics for the control plane policy and is used to troubleshoot?

- A. show control-plane CoPP
- B. show control-plane
- C. show policy-map control-plane
- D. show policy control-plane

Answer: C

Explanation:

```
Router# show policy-map control-plane
```

```
Control Plane
```

```
Service-policy input:TEST
```

```
Class-map:TEST (match-all)
```

```
20 packets, 11280 bytes
```

```
5 minute offered rate 0 bps, drop rate 0 bps
```

```
Match:access-group 101
```

```
police:
```

```
8000 bps, 1500 limit, 1500 extended limit conformed 15 packets, 6210
```

bytes; action:transmit exceeded 5 packets, 5070 bytes; action:drop violated 0 packets, 0 bytes; action:drop conformed 0 bps, exceed 0 bps, violate 0 bps

Question: 237

A network engineer is configuring RIP as the routing protocol between multiple PEs and CEs. The engineer must avoid advertising the same routes back to their sources. Which action should be performed on the routers to accomplish this task?

- A. Configure a different route distinguisher for each prefix.
- B. Define the site of origin on each interface.
- C. Define VRFs on each device to separate the traffic.
- D. Enable bidirectional forwarding detection on each device.

Answer: B

Explanation:

Although the SoO is set on BGP address family configuration mode not interface mode, but it is applied to the interface based on this reference. "The configuration of the SoO extended community allows MPLS VPN traffic to be filtered on a per-site basis. The SoO extended community is configured in an inbound BGP route map on the PE router and is applied to the interface."

https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3850/software/release/16-12/configuration_guide/mpls/b_1612_mpls_3850_cg/configuring_eigrp_mpls_vpn_pe_ce_site_of_origin.pdf

Question: 238

The network-engineering team of a service provider is integrating several recently acquired networks into a more scalable common Unified MPLS architecture. The new network architecture will support end-to-end VPNv4 and VPNv6 services with these requirements:

- The IGP of the core layer is IS-IS In Area 0.
- The IGP of the aggregation layers is OSPF in Area 0.

- The LDP protocol is used to distribute label bindings within each IGP domain.

Which task must the network engineer perform when implementing this new architecture?

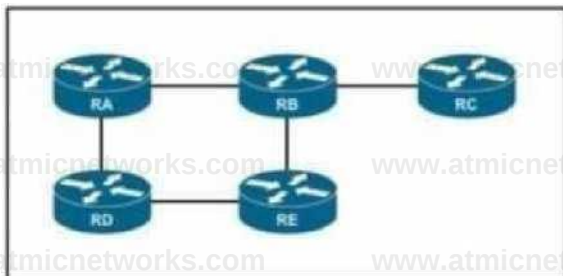
- A. Configure BGP-LU between ABR routers of each IGP domain to carry MPLS label information in NLRI.
- B. Configure a BGP session between the ABR routers of each IGP domain to exchange VPNv4 or VPNv6 prefixes
- C. Configure the ABR in each IGP domain to preserve next-hop information on all VPNv4 and VPNv6 prefixes advertised by the PE.
- D. Configure mutual redistribution of each IGP domain's loopback prefix to provide end-to-end LDP LSP

Answer: A

Explanation:

Question: 239

Refer to the exhibit.



If RC is a stub router, which entry must be injected so that it will send traffic outside the OSPF domain?

- A. virtual link between RB and RC
- B. sham link
- C. more specific route
- D. default route

Explanation:

Question: 240

Refer to the exhibit.

Answer: C

M/O/C/CPW ■M-ltlln ml* IpM 0 0 0 0 Meliaf entry for 0 0 0 0/0
 Hum ria Mp OOMI' •latanoe JO. Mtrlc 0. candidate Mr a* It pata Tap 05000, type eataraal totalled Jan J 00 00 10 000 tar M0110
 Mui 1*0 OMcriptar Heed* 100 *1 10 1, tree IM *5 1» 1 Ka aatarnal Mold a*trtc lo 0
 ■a adnrtlano prate*
 W/O/O/CPM MD*10*Mr re roster oepf root** M*r l
 r*dl*tr Unite bop UMI rm* policy Mt TO OS Ft ar** 0
 apl* traffic oof interface 14M**MOO Interface C19*aitXtMrMtU/0/0/0 M Interior* GlpaMI tXtMrmtO/0/0/0 JIM apli uaffic-eaq renter
 id uaepCweao
 M/O/O/CPM aBO*-IO*M« rpl rente pelicy OW-IO-QMf reel*-pell*y MP-TO-O0M
 If OMtiMtlon le 10 * 0 0/01 Um
 •et Metric-type type-' aedlf Mt Mtrlc type type j Mt «apt Mtrlc IM end policy

Refer to the exhibit. Router BRDR-1 is configured to receive the 0.0.0.0/0 and 172.17.1.0/24 network via BGP and advertise then into OSPF area 0. An engineer has noticed that the OSPF domain is receiving only the 172.17.1.0/24 route and default router 0.0.0.0/0 is still missing. Which configuration must an engineer apply to resolve this problem?

```
fOUIor Otpf 1
dofoulttnifomuton orlglnMo always
•nd

route f wpf 1
TOdrstribute bgp 65001 metric 100 route-policy BGP TO-OSPF
•nd

router ospf 1 default munc 100 •nd
router ospf 1
default-information original*
•nd
```

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

Answer: D

Explanation:

Question: 241

An engineer is implementing a router redistribution within BGP. The route map must be configured to permit all unmatched routes. Which action must the engineer perform to complete this task?

```
include j permit statement as the vw entry
Include at least one e*^at deny statement
```

Remove me me <n deny erev

include < permit statement as the Iasi entry

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 242

Refer to the exhibit.

```
RP/0/0/CPU0:R2#debug isis adjacencies
RP/0/0/CPU0:Apr 2 20:57:00.421 : isis[1010]: RECV P2P IIH (L2)
from GigabitEthernet0/0/0/0 SNPA fa16.3e6e.a7bc: System ID R2,
Holdtime 30, length 1429
RP/0/0/CPU0:Apr 2 20:57:01.761 : isis[1010]: SEND P2P IIH (L1)
on GigabitEthernet0/0/0/0: Holdtime 30s, Length 41
```

Refer to the exhibit. A network operator is attempting to configure an IS-IS adjacency between two routers, but the adjacency cannot be established. To troubleshoot the problem, the operator collects this debugging output. Which interface are misconfigured on these routers?

The peer router interface is configured as Loopback 1 only and the R2 interface is configured as

Loopback 2 only. The R2 interface is configured as Loopback 1 only and the peer router interface is

configured as Loopback 2. The R2 interface is configured as Loopback 2 and the peer router

interface is configured as Loopback 1. The peer router interface is configured as Loopback 1 and

the R2 interface is configured as Loopback 1.

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

Question: 243

An engineer is implementing MPLS to monitor within the MPLS domain. Which must the engineer perform to prevent packets from being forwarded beyond the service provider domain when the LSP is down?

Disable IP reject* only on outbotre interlaces

ifnpiemem the destination address ter the L5P echo request packet m the 12T n y z 8 network

Disable IP re<*rect\$ on al ingress interfaces

Configure a private IF address as the destination address of the he<adend router o* Cisco MPLS TE

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B

Explanation:

Question: 244

An engineer a cisco MPLS tunnel to improve the streaming experience for the clients of a video -on- demand server. Which action must the engineer perform to configure extended discovery to support the MPLS LDP session between the headend and tailend routers?

CorAgure the rtutice banduncnh to handle TCP and UDP trait between tie LDP peer?

Configure a MPLS TE tunnel on both ends of the link.

Configure an access-list on the interface to print TCP and UDP traffic.

Configure a targeted next-hop.

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

Answer: D

Explanation:

Question: 245

What occurs when a high bandwidth multicast stream is sent over an MVPN using Cisco hardware?

The traffic uses the default MDT to transmit the data only for a (S,G) multi-cast route entry.

A data MDT is created to reflect a (S,G) multi-cast route entries.

A data and default MDT are created to flood the multicast stream out of all PIM-enabled interfaces.

A data MDT is created to allow for the best transmission through the core for (S,G) multicast route entries.

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

Answer: D

Explanation:

Question: 246

DRAG DROP

A network engineer is adding 10Gbps link to an existing 2X1Gbps LACP-based LAG to augment its capacity. Network standards require a bundle interface to be take out of service if one of its member links does down, and the new link must be added with minimal impact to the production network. Drag and drop the tasks that the engineer must perform from the left into the sequence on the right. Not all options are used.

Execute the channel-group number mode active command to add the 10Gbps link to the existing bundle.

Execute the channel-group number mode on command to add the 10Gbps link to the existing bundle.

Execute the lacp min-bundle 3 command to set the minimum number of ports threshold.

Validate the network layer of the 10Gbps link.

Execute the channel-group number mode auto command to add the 10Gbps link to the existing bundle.

Validate the physical and data link layers of the 10Gbps link.

step 1

step 2

step 3

step 4

Answer:

Explanation:

Validate the network layer of the 10Gbps link.

Validate the physical and data link layers of the 10Gbps link.

Execute the channel-group number mode active command to add the 10Gbps link to the existing bundle.

Execute the lacp min-bundle 3 command to set the minimum number of ports threshold.

Question: 247

How do intent APIs make it easier for network engineers to deploy and manage networks?

They use the wgiw to we » M>J* •nier'*:# as the entry porni toe control access to re entre dewce

They pu i stored SNMP data from a single network ocawn to mutter momloring toots

They extend the layer 2 rtfrasfrunire and reduct he necessary number of who* conneaicns to layer 3 devices

They streamline repetitive workflows and support more efficient implementation

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 248

Which CLI mode must be used to configure the BGP keychain in Cisco IOS XR software?

A. global configuration mode

B. routing configuration mode

C. BGP neighbor configuration

D. mode BGP address-family configuration mode

Answer: A

Explanation:

Question: 249

Refer to the exhibit.



Router 1 and router 2 are running OSPF Area 0. The router logs on both routers show that the LDP link has flapped.

Which configuration must the engineer apply to the two routers to implement session protection on the link?

Router 1(config)# ip cef distributed
Router 1(config)# mpls ldp session protection global

Router 2(config)# ip cef distributed
Router 2(config)# mpls ldp session protection global

Router 1(config)# ip cef distributed
Router 1(config)# interface GigabitEthernet 0/0
Router 1(config-if)# ip address 192.168.1.1 255.255.255.255
Router 1(config-if)# exit
Router 1(config)# mpls ldp session protection

Router 2(config)# interface GigabitEthernet 0/0
Router 2(config)# ip address 192.168.1.2 255.255.255.255
Router 2(config)# mpls ldp session protection

Router 1(config)# ip cef distributed
Router 1(config)# interface GigabitEthernet 0/0
Router 1(config-if)# ip address 192.168.1.1 255.255.255.255
Router 1(config-if)# exit
Router 1(config)# mpls ldp session protection

Router 2(config)# ip cef distributed
Router 2(config)# interface GigabitEthernet 0/0
Router 2(config-if)# ip address 192.168.1.2 255.255.255.255
Router 2(config-if)# exit
Router 2(config)# mpls ldp session protection

Router 1(config)# ip cef distributed
Router 1(config)# interface GigabitEthernet 0/0
Router 1(config-if)# ip address 192.168.1.1 255.255.255.0
Router 1(config-if)# mpls label protocol ldp
Router 1(config-if)# mpls ip
Router 1(config-if)# exit
Router 1(config)# mpls ldp session protection

Router 2(config)# ip cef distributed
Router 2(config)# interface GigabitEthernet 0/0
Router 2(config-if)# ip address 192.168.1.2 255.255.255.0
Router 2(config-if)# mpls label protocol ldp
Router 2(config-if)# mpls ip
Router 2(config-if)# exit
Router 2(config)# mpls ldp session protection

- A. Option A
- B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Question: 250

Refer to the exhibit.



<pre>RI router laia net 52 0011 0009 0090 9001 09 interface gigabitEthernet0/1 ip address 192.168.0.1 ip router</pre>	<pre>R3 router laia net 52 0922 0009 0090 9001 09 interface gigabitEthernet0/1 ip address 192.168.0.3 ip router</pre>
<pre>R2 router laia net 52 0011 0000 0000 0004 00 interface gigabitEthernet0/1 ip address 192.168.0.2 ip router</pre>	<pre>RO router laia net 52 0011 0000 0000 0004 00 interface gigabitEthernet0/1 ip address 192.168.0.4 ip router</pre>

Which two topology changes happen to the IS-IS routers? (Choose two.)

- A. All four routers are operating as Level 1 routers only.
- B. All four routers are operating as Level 2 routers only.
- C. R1 and R4 are Level 2 neighbours.
- D. R1 and R2 are Level 2 neighbours.
- E. All four routers are operating as Level 1-2 routers.

Answer: D E

Explanation:

Question: 251

Refer to Exhibit.

```
username cisco privilege 15 password 0 cisco
!
ip http server
ip http authentication local
ip http secure-server
!
snmp-server community private RW
!
netconf-yang
netconf-yang cisco-ia snmp-community-string cisco
restconf
```

A network engineer is trying to retrieve SNMP MIBs with RESTCONF on the Cisco switch but fails. End-to-end routing is in place. Which configuration must the engineer implement on the switch to complete?

- A. netconf-yang cisco-ia snmp-community -string Public
- B. snmp-server community cisco RW
- C. snmp-server community public RO
- D. netconf-yang cisco-ia snmp-community-string Private

Answer: B

Explanation:

Reference: <https://www.cisco.com/c/en/us/support/docs/storage-networking/management/200933-YANG-NETCONF-Configuration-Validation.html>

Question: 252

Which feature describes the adjacency SID?

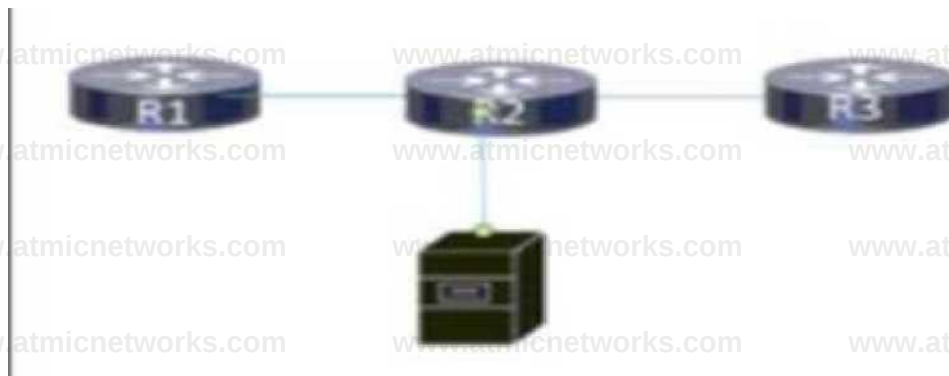
- A. It applies only to point-to-point links.
- B. It applies only to multipoint links
- C. It is locally unique
- D. It is globally unique.

Answer: C

Explanation:

Question: 253

Refer the exhibit.



Users on a network connected to router R3 report slow speeds when they connect to the server connected to R2. After analyzing traffic on the network, a network engineer identified congestion on the link between R2 and R3 as the cause. Which QoS service must the engineer implement to drop traffic on the link when it exceeds a configured threshold?

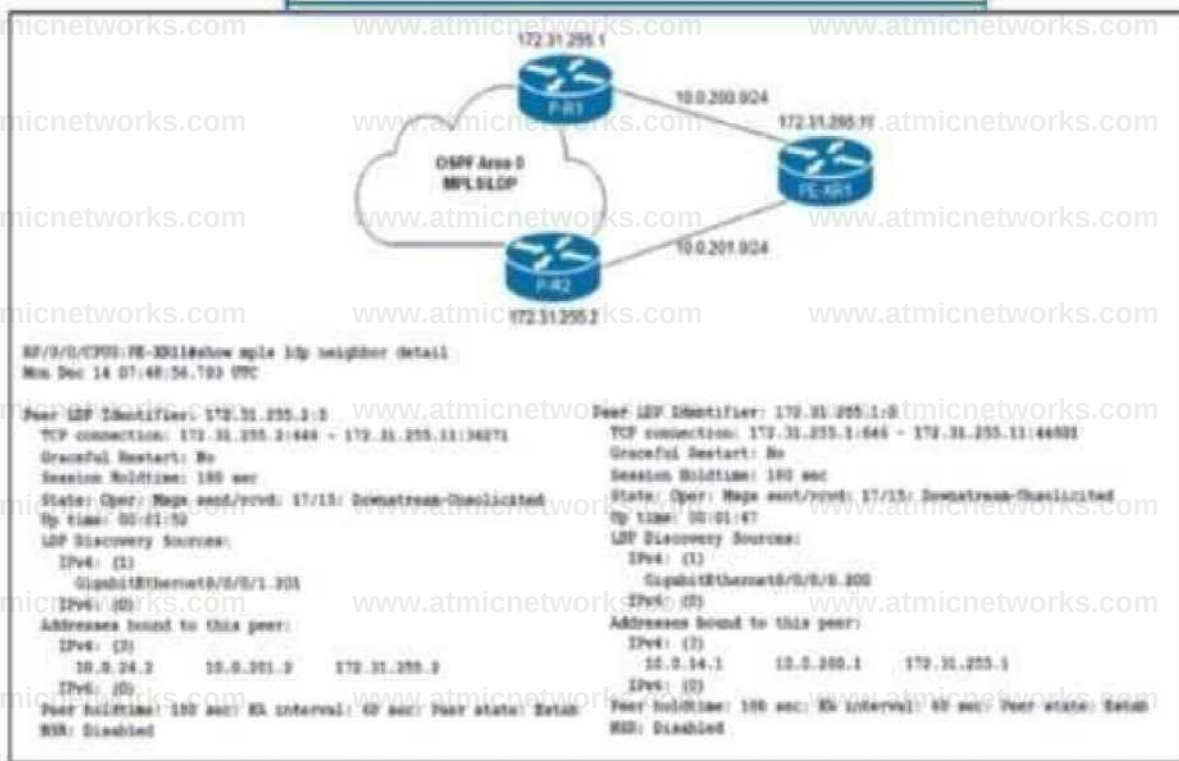
- A. first-in, first-out
- B. traffic shaping
- C. class-based weighted fair queueing
- D. traffic policing

Answer: D

Explanation:

Question: 254

Refer to the exhibit.



Refer to the exhibit. The network team must implement MPLS LDP session protection with two requirements:

Session protection is provided for core loopback IP addresses only.

The LDP session must remain operational for one hour when the WAN link on PE-XR1 fails.

Which configuration must the team implement on PE-XR1?

A. configure terminal

ipv4 access-list LDP-SESSION-PROTECTION

permit ipv4 172.31.255.0 0.0.0.255 any !

mpls ldp

session protection for LDP-SESSION-PROTECTION duration 60 end

B. configure terminal

ipv4 access-list LDP-SESSION-PROTECTION

permit ipv4 172.31.255.0 0.0.0.255 any !

mpls ldp

session protection for LDP-SESSION-PROTECTION duration 3600 end

C. configure terminal

ipv4 access-list LDP-SESSION-PROTECTION

permit ipv4 172.31.255.0 0.0.0.255 any

permit ipv4 10.0.0.0 0.0.255.255 any !

mpls ldp

session protection for LDP-SESSION-PROTECTION duration 60 end

D. configure terminal

ipv4 access-list LDP-SESSION-PROTECTION

permit ipv4 172.31.255.0 0.0.0.255 any

permit ipv4 10.0.0.0 0.0.255.255 any

!

mpls ldp

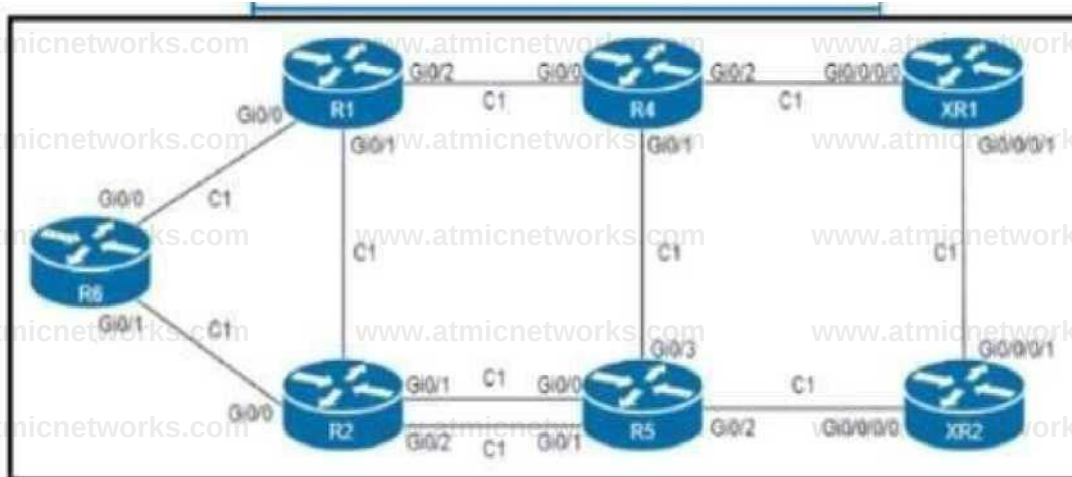
session protection for LDP-SESSION-PROTECTION duration 3600 end

Explanation:

Answer: D

Question: 255

Refer to the exhibit.



Refer to the exhibit. An engineer configured R6 as the headend LSR of an RSVP-TE LSP to router XR2, with the dynamic path signaled as R6-R2-R5-XR2. and set the OSPF cost of all links to 1. MPLS autotunnel backup is enabled on all routers to protect the LSP. Which two NNHOP backup tunnels should the engineer use to complete the implementation? (Choose two.)

- A. The R6 backup tunnel path R6-R1-R4-R5.
- B. The R2 backup tunnel path R2-R5 across the alternate link.
- C. The R2 backup tunnel path R2-R1-R4-XR1-XR2.

D. The R6 backup tunnel path R6-R2-R5

E. The R6 backup tunnel path R6-R1-R2.

Answer: A C

Explanation:

Question: 256

Refer to the exhibit.



```
RTW-Isahov run | s router bgp router hgp <3100 bgp log neighbor
changes neighbor 172.27.20 IM runete-as <MQ1 neighbor 171.27.20 IM
description CX-1 neighbor 172.27.20 IM ebqp-eul t ihp 3 nei^kbor
131 13 13 1 remote-as <3100 neighbor 131.13 13.1 description AGG-PI-
1 I address fMh, ipv4 redistribute static route-map STATIC-TOBO
neighbor 177 2" 70 IM activate neighbor 172.2-.20 130 prefix-list DUfi-
AIX-HinVS out neighbor 172 >- 20 130 route-map FT!! T73T00 Df in
neighbor IM 13.13 1 activate neighbor IM. 13.13.1 send-cannually ex
11 • oddree s • f MI 1 /

AGG-FB-istnov ip route static
Gateway of last resort is not Mt

S l» IM,iW B/3J is slatted. 2 subnets
in.IM.13S >33 is directly connected Pollo

AGG-ni-1 Sabov MT Ipv4 Wlieast IM.It.19.0
BGP routing table entry for IM IS IB 0/24 version 31
Faths (1 available best #1, table default) Advertised to update-
groupe:

Refresh epoch 73 43001
1'7 7' M.1M free 177.27.20 IM {IM IS IS 1)
Origin IGF settle 0. localpref IM. valid, external beet ri pathid. 0. tx
pathid: OiO

RTBH-Isabov ip prefix-List ip pref is-11 st AS43001-FWIXES 1 entries eeq 3 perait IM II IS 0/24 Le 32

RTBH1Sabov ip renBiir.it/ Hit
CMBunity standard list 33 perBit 43100.123
```

Refer to the exhibit. ISP ASN 65100 provides Internet services to router CE-1 and receives customer prefix 198.18.18.0/24 via eBGP. An administrator for the ISP is now provisioning RTBH services to provide on-demand data-plane security for the customer's IP space. Which route-map configuration must the administrator apply to router RTBH-1 to complete the implementation of RTBH services to CE-1?

A. route-map RTBH-CUSTOMER-IN permit 10

description AS65001

match ip address prefix-list AS65001-PREFIXES

match community 99

set local-preference 200

set community no-export additive

set ip next-hop 192.168.255.255

route-map RTBH-CUSTOMER-IN deny 65535

description DEFAULT DENY

B. route-map RTBH-CUSTOMER-IN permit 10

description AS65001

match ip address prefix-list AS65001-PREFIXES

match community 99

set local-preference 200

set community local-as additive

set ip next-hop 192.168.255.255

route-map RTBH-CUSTOMER-IN deny 65535

description DEFAULT DENY

C. route-map RTBH-CUSTOMER-IN permit 10

description AS65001

match ip address prefixlist AS65001-PREFIXES

match community 99

set local-preference 200

set community no-advertise additive

set ip next-hop local-address

route-map RTBH-CUSTOMER-IN deny 65535

description DEFAULT DENY

D. route-map RTBH-CUSTOMER-IN permit 10

description AS65001

match ip address prefix-list AS65001-PREFIXES

match community 99

set local-preference 200

set community no-advertise additive

set ip next-hop 192.168.255.255

route-map RTBH-CUSTOMER-IN deny 65535

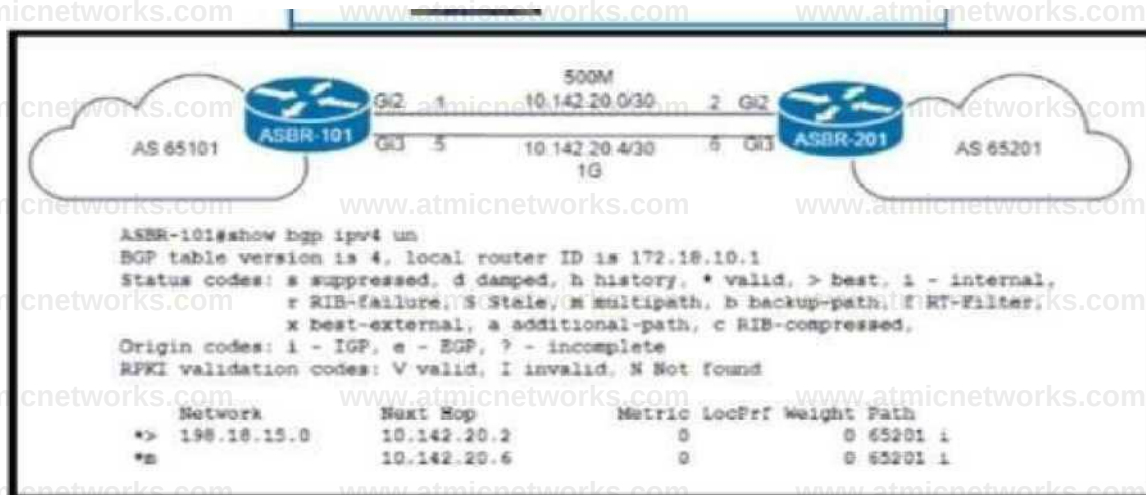
description DEFAULT DENY

Answer: A

Explanation:

Question: 257

Refer to the exhibit.



Refer to the exhibit an engineer working for a private telecommunication company with an employee id: 4065:96:080 upgrades the WAN link between routers ASBR-101 and ASBR-201 to 1Gb by Installing a new physical connection between the Gi3 Interfaces. Which BGP attribute must the engineer configure on ASBR-201 so that the existing WAN link on Gi2 Is maintained as a backup?

onftgure terminal

ip prefix-list ALLOWED_PREFIXES seq 5 permit 198.18.15.0/24

route-map AS65101-OUT permit 10

match ip addrats prefix-list ALLOWED_PREFIXES set as-path prepend 65101 65101

router bgp 65201

address-family Ipv4

neighbor 10.142.20.1 route-map AS65101-OUT out end

configure terminal

ip prefix-list ALLOWED_PREFIXES seq 5 permit 106.18.15.0/24

route-map AS65101-OUT permit 10

match ip address prefix-iist ALLOWED_PREFIXES set as-path prepend 65101 65101

x^onfigure terminal

ip prefix-list ALLCWED_PREFIXES\$ seq 5 permit 108.18.19.0/24

```
route-map ASC5101-OUT permit 10
match ip address prefix-list ALLOWEO_PREFIXES
set metric 100
router bgp 65201
address-family ipv4
neighbor 10.142.20.1 route-map A865101-OUT out end
configure terminal
ip pretn-bst ALLOWED PREFIXES seq 5 permit 198 18.15 0 24
route-map AS65101-OUT permit 10
match Ip address prefix-bet ALLOWED,PREFIXES
set metric 100
router bgp 65201
address-family Ip*4
neighbor 10.142.20 5 route-map AS65101-OUT out end
```

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

Answer: C

Explanation:

Question: 258

A customer has requested that the service provider use a Cisco MPLS TE tunnel to force the E-line service to take a specific route. What is used to send the traffic over the tunnel?

- A. static route
- B. preferred path
- C. forwarding adjacency
- D. autoroute destination

Answer: B

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios/12_2sr/12_2sra/feature/guide/srtunsel.html#wp1057815

Question: 259

An engineer must apply an 802.1ad-compliant configuration to a new switchport with these requirements:

The switchport must tag all traffic when it enters the port.

The switchport is expected to provide the same level of service to traffic from any customer VLAN.

Which configuration must the engineer use?

A. interface GigabitEthernet1/0/1

switchport mode trunk

switchport trunk encapsulation dot1q

encapsulation ISL

bridge-domain 12

B. interface GigabitEthernet1/0/1

ethernet dot1ad uni c-port

service instance 12

encapsulation dot1q

rewrite ingress tag push dot1ad 21 symmetric

bridge-domain 12

C. interface GigabitEthernet1/0/1

ethernet dot1ad uni s-port

service instance 12

encapsulation default

rewrite ingress tag push dot1ad 21 symmetric

bridge-domain 12

D. interface GigabitEthernet1/0/1

ethernet dot1ad nni

service instance 12

encapsulation dot1ad

bridge-domain 12

Answer: C

Explanation:

https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/cether/configuration/xe-3s/asr903/16-12-1/b-ce-xe-16-12-asr900/m_ce_802_1ad_900.html

Question: 260

Refer to the exhibit A network engineer is in the process of implementing IS-IS Area 1 and Area 2 on this network to segregate traffic between different segments of the network The hosts in the two new areas must maintain the ability to communicate with one another In both directions.

Which additional change must be applied?

Area 1 Level 1 Routers R1.R2R3
Area 2 Level 2 Routers R4 RS. RS



- A. Reconfigure either R3 or R4 as a Level 1/Level 2 router.
- B. Reconfigure routers R1, R2, R5, and R6 as Level 1/Level 2 routers.
- C. Reconfigure routers R2 and R5 as Level 1/Level 2 routers.
- D. Reconfigure routers R4, R5 and R6 as Level 1 routers

Answer: A

Explanation:

Question: 261

A network engineer must configure a router for Flexible NetFlow IPFIX export. The IP address of the destination server is 172.17.12.1. The source address must be set to the Loopback0 IPv4 address and exported packets must be set to DSCP CS3. The TTL must be 64 and the transport protocol must be set to UDP with destination port 4739. Which configuration must the engineer apply to the router?

- A. configure terminal

flow exporter EXPORTER-1

destination 172.17.12.1

source Loopback0

dscp 3

ttl 64

export-protocol netflow-v9

transport udp 4739 end

- B. configure terminal flow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0 dscp 24

ttl 64

export-protocol ipfix end

C. configure terminal flow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0

dscp 24

ttl 64

export-protocol netflow-v9 transport udp 4739

end

D. configure terminal flow exporter EXPORTER-1 destination 172.17.12.1 source Loopback0 dscp 3

ttl 64

export-protocol ipfix

end

Answer: B

Explanation:

<https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/fnetflow/configuration/xe-3s/fnf-xe-3s-book/fnf-ipfix-export.html#d27853e197a1635>

Question: 262

Which action does the ingress VTEP perform on traffic between EVPN VXLAN overlays?

- A. routing and tunneling when doing symmetric IRB
- B. routing when doing asymmetric IRB
- C. routing and bridging when doing asymmetric IRB
- D. bridging when doing symmetric IRB

Answer: C

Explanation:

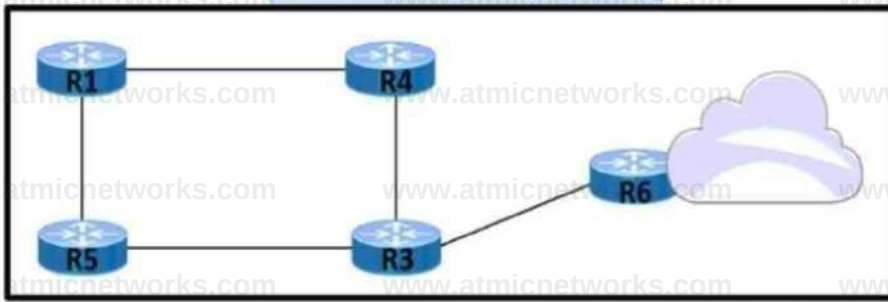
Asymmetric IRB

With **asymmetric IRB**, the **ingress VTEP** performs both **Layer-2 bridging** and **Layer-3 routing lookup**, whereas the egress VTEP performs only Layer-2 bridging lookup.

<https://www.cisco.com/c/en/us/products/collateral/switches/nexus-9000-series-switches/guide- C07-734107.html>

Question: 263

Refer to the exhibit. An organization's network recently experienced several significant outages due to device failures. The network administrator just moved the network devices to a new central data center, and packets are switched using labels. The administrator is now implementing NSF on the network to reduce potential risk factors in the event of another outage. Which task must the administrator perform on each router as part of the process?



- A. Remove route filtering to speed repopulation of the link-state database
- B. Copy the router's existing state information and share the file with its peers to enable BGP soft resets
- C. Implement MPLS to forward packets while the RIB updates after a failover.
- D. Implement Graceful Restart to mitigate the delay in MPLS LDP synchronization when the IGP starts up.

Answer: D

Explanation:

Question: 264

A network administrator is planning a new network with a segment-routing architecture using a distributed control plane. How is routing information distributed on such a network?

- A. Each segment is signalled by an SR controller, but each segment makes its own steering decisions based on SR policy.
- B. Each segment is signalled by MPLS, and each segment makes steering decisions based on the routing policy pushed by BGP.
- C. Each segment is signalled by an SR controller that makes the steering decisions for each node.
- D. Each segment is signalled by a compatible routing protocol and each segment makes its own steering decisions based on SR policy.

Answer: D

Explanation:

<https://www.cisco.com/c/en/us/support/docs/multiprotocol-label-switching-mpls/mpls/215215-segment-routing-overview-and-migration-g.html>

Question: 265

When Cisco IOS XE REST API uses HTTP request methods what is the purpose of a PUT request?

- A. retrieves the specified resource or representation
- B. submits data to be processed to the specified resource
- C. updates the specified resource with new information
- D. creates a new resource

Answer: C

Explanation:

PUT

Updates the specified resource with new information. The data that is included in the PUT operation replaces the previous data

- The PUT operation is used to replace or modify an existing resource. The PUT operation cannot be used to create a new resource.
- The request body of a PUT operation must contain the complete representation of the mandatory attributes of the resource.

Question: 266

```
router(config)# router ospf 11
router(config-if)# passive-interface default
```

Refer to the exhibit. An engineer started to configure a router for OSPF. Which configuration must the engineer perform on the router without changing any interface configuration so that the router establishes an OSPF neighbor relationship with its peer?

- A. router(config)# router ospf 11router(config-if)# no passive-interface ethernet 1/1
- B. router(config)# interface ethernet 1/1router(config-if)# no shutdown
- C. router(config)# interface ethernet 1/1router(config-if)# ip ospf hello-interval

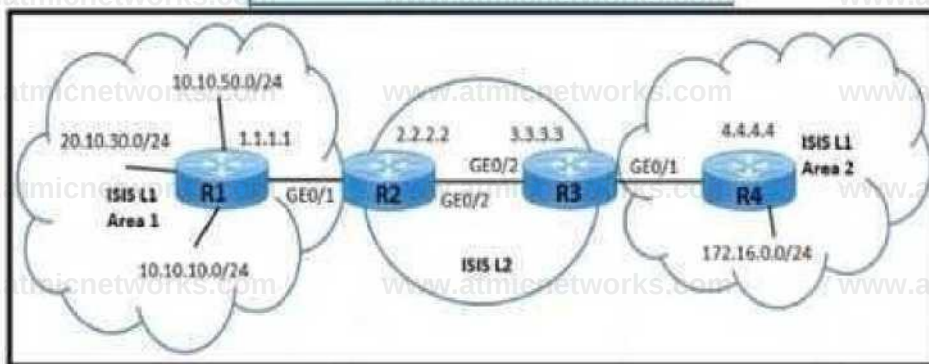
D. router(config)# interface ethernet 1/1router(config-if)# ip ospf priority 0

Answer: A

Explanation:

Question: 267

Refer to the exhibit.



A network engineer must meet these requirements to provide a connects, solution:

The customer connected to Area 2 needs to access the application in Area 1 on the 10.10.10.0/24 subnet

The Customer must not have access to the 20.10.30.0/24 subnet.

The service provider must make sure that the Area 2 routing database limits the number of IP addresses in the routing table

Which two configurations must be implemented to meet the requirements? (Choose two)

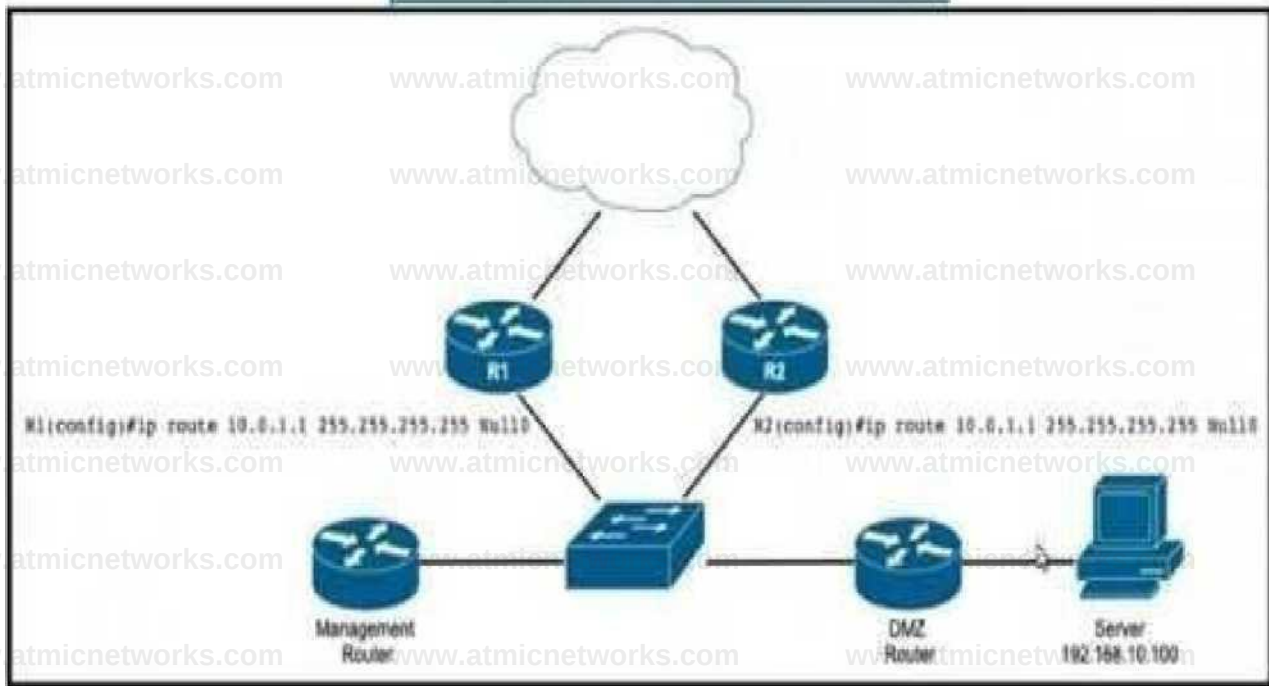
- A. Set a tag value of 200 to match the summary address 10.0.0/16 on R2.
- B. Set a tag value of 200 to match the summary address 10.0.0.0/16 on R3.
- C. Apply the route map for tag 200 and leak Level 2 routes into Level 1 Area 2 on R3
- D. Apply the route map for tag 200 and teak Level 2 routes into Level 1 Area 2 on R4.
- E. Set a tag value of 200 to match the summary address 10.0.0./16 on R1.

Answer: B C

Explanation:

Question: 268

Refer to the exhibit.



rgnr|a«lty^ rouMtfup ttKWnMfgpr
routtF|CDnHg*TMM4*p|* matth tH 777
rout* r(co nfig-rouljf-m*p ^ <l jp mil-hop HJ.OJ.1
routs r^ ar. Jig-rc un-map; D ^>r ^rtgm igp
rwUrjooii^0^DutMntp|l t«4 (QiMij4ly nMVptf

Refer to the exhibit. EIGRP is running across the core to exchange internal routes, and each router

maintains BGP adjacency with the other routers on the network. An operator has configured static routes on the edge routers R1 and R2 for IP address 10.0.1.1, which is used as a black hole route as shown. Which configuration should the operator implement on the management router to create a route map that will redistribute lagged static routes into BGP and create a static route to blackhole traffic with tag 777 that is destined to server at 192.168.10.100?

```

router bgp 100
  redistribute connected

```

Option A: ip route 192.168.10.100 255.255.255.255 tag 777

```

router bgp 100
  route-map tag777
  ip route 192.168.10.100 255.255.255.255 tag 777

```

```

router bgp 100
  redistribute static route-map tag777
  ip route 192.168.10.100 255.255.255.255 tag 777

```

```

ip route 192.168.10.100 255.255.255.255 tag 777

```

```

router bgp 100
  redistribute static route-map tag777
  ip route 192.168.10.100 255.255.255.255 tag 777

```

```

ip route 10.0.1.1 255.255.255.255 tag 777

```

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

Answer: D

Explanation:

Question: 269

A network operator working for a telecommunication company with an employee ID: 4065 96080 is trying to implement BFD configuration on an existing network of Cisco devices. Which task must the engineer perform to enable BFD on the interfaces?

- A. Disable Cisco Express Forwarding on the interfaces
- B. Disable SSO on the interfaces

- C. Remove any static routes that point to the interfaces
- D. Remove the log option from any ACLs on the interfaces.

Answer: D

Explanation:

Question: 270

A network architect decides to expand the scope of the multicast deployment within the company network the network is already using PIM-SM with a static RP that supports a high-bandwidth. videobased training application that s heavily used by the employees, but excessive bandwidth usage is a concern How must the engineer update the network to provide a more efficient multicast implementation'?

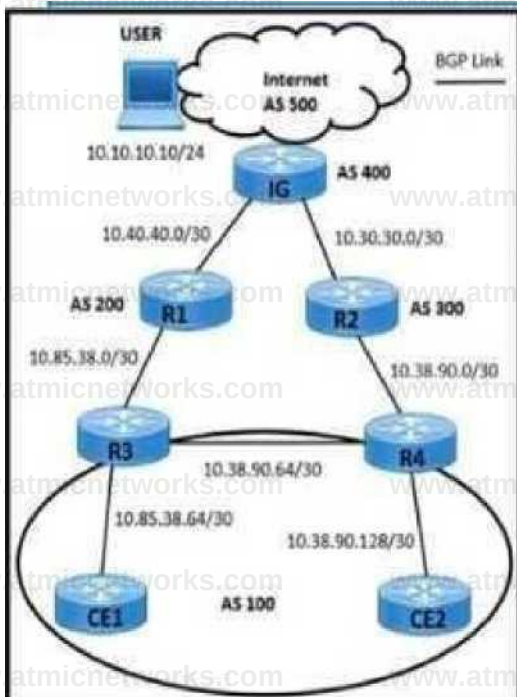
- A. Configure IGMP to manage the multicast hosts on each LAN
- B. implement BSR to support dynamic RP notification.
- C. Deploy ICMP to Improve multicast reachability across the network using static RP.
- D. Implement STP to improve switching performance for multicast data.

Answer: B

Explanation:

Question: 271

Refer to the exhibit.



R3#	R4#
router bgp 100	router bgp 100
no synchronization	no synchronization
bgp log-neighbor-changes	bgp log-neighbor-changes
network 10.38.90.0 mask 255.255.255.252	network 10.38.90.0 mask 255.255.255.252
network 10.38.90.64 mask 255.255.255.252	network 10.38.90.64 mask 255.255.255.252
network 10.38.90.128 mask 255.255.255.252	network 10.38.90.128 mask 255.255.255.252
network 10.85.38.0 mask 255.255.255.252	network 10.85.38.0 mask 255.255.255.252
network 10.85.38.64 mask 255.255.255.252	network 10.85.38.64 mask 255.255.255.252
neighbor 24.38.90.65 remote-as 100	neighbor 10.38.90.1 remote-as 100
neighbor 24.38.90.65 next-hop-self	neighbor 10.38.90.1 ebgp-multi-hop 10
neighbor 10.85.38.1 remote-as 400	neighbor 10.38.90.66 remote-as 100
neighbor 10.85.38.1 ebgp-multi-hop 10	neighbor 10.38.90.66 next-hop-self
neighbor 10.85.38.64 remote-as 100	neighbor 10.38.90.130 remote-as 100
neighbor 10.85.38.64 next-hop-self	neighbor 10.38.90.130 next-hop-self
no auto-summary	no auto-summary

Refer to the exhibit. The USER mat is connecting an application on an Internet connection in AS 100 is facing these issues:

The USER lost the connection to the application during a failure Between IG and R2.

Router R2 configuration a lost due to a power outage.

The application the USER is connecting to a hosted behind CE2.

What action resolves the issues on R3 and R4 routers?

- A. Set R4 as a route reflector for R3 and CE2
- B. Apply high Local Preference on R3 toward R1

- C. Set R3 as a route reflector for R4 and CE1
- D. Apply low Local Preference on R4 toward R2.

Answer: D

Explanation:

Question: 272

After a series of unexpected device failures on the network, a Cisco engineer is deploying NSF on the network devices so that packets continue to be forwarded during switchovers. The network devices reside in the same holding, but they are physically separated into two different data centers. Which task must the engineer perform as part of the deployment?

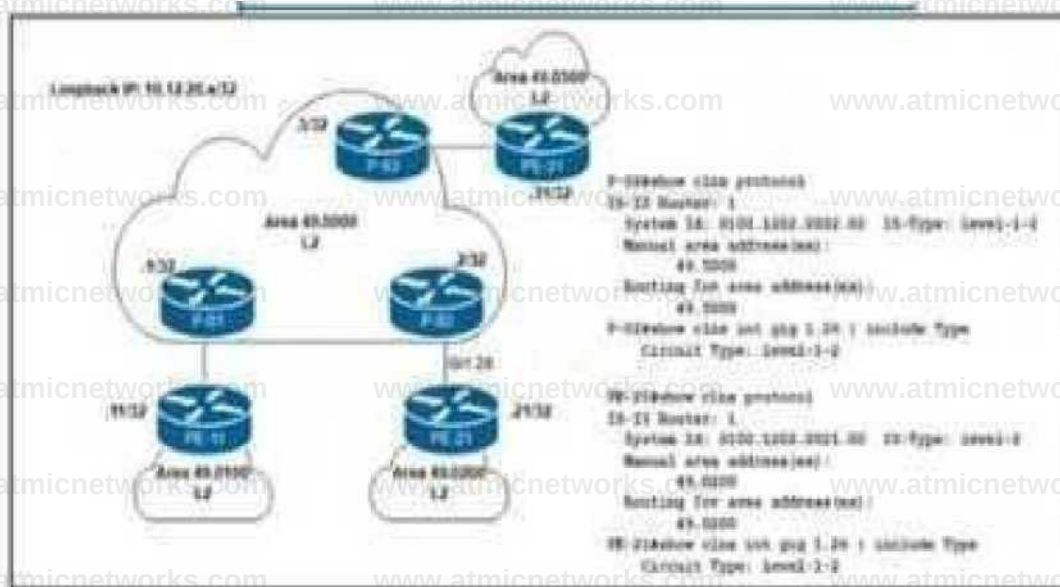
- A. implement OSPF to maintain the link-state database during failover.
- B. implement VRFs and specify the forwarding instances that must remain active during failover.
- C. implement an L2VPN with the failover peer to share state information between the active and standby devices.
- D. implement Cisco Express Forwarding to provide forwarding during failover.

Answer: B

Explanation:

Question: 273

Refer to the exhibit.



Refer to the exhibit. A network engineer notices PE-21 convergence degradation due to the growing LSDB size of Level 2 areas in the network. The engineer decides to migrate router PE-21 from an inter-area design to an intra-area implementation. Inter-area routing must be accomplished via an ATT-bit set by the Level 1/Level 2 router. Which configuration must the engineer implement on PE-21 to complete the migration?

A. configure terminal

router isis 1

no net 49.0200

net 49.5000

is-type level-1-2

end

B. configure terminal

router isis 1

net 49.5000.0100.1202.0021.00

is-type level-1-2

end

C. configure terminal

router isis 1

net 49.5000.0100.1222.0022.00

is-type level-1

end

D. configure terminal

router isis 1

no net 49.0200.0100.1202.0021.00

net 49.5000.0100.1202.0021.00

is-type level-1

end

Answer: D

Explanation:

Question: 274

An engineer is implementing NSR with OSPF on a large campus that requires high availability. Which task must an engineer perform to complete the process with minimal disruption to traffic?

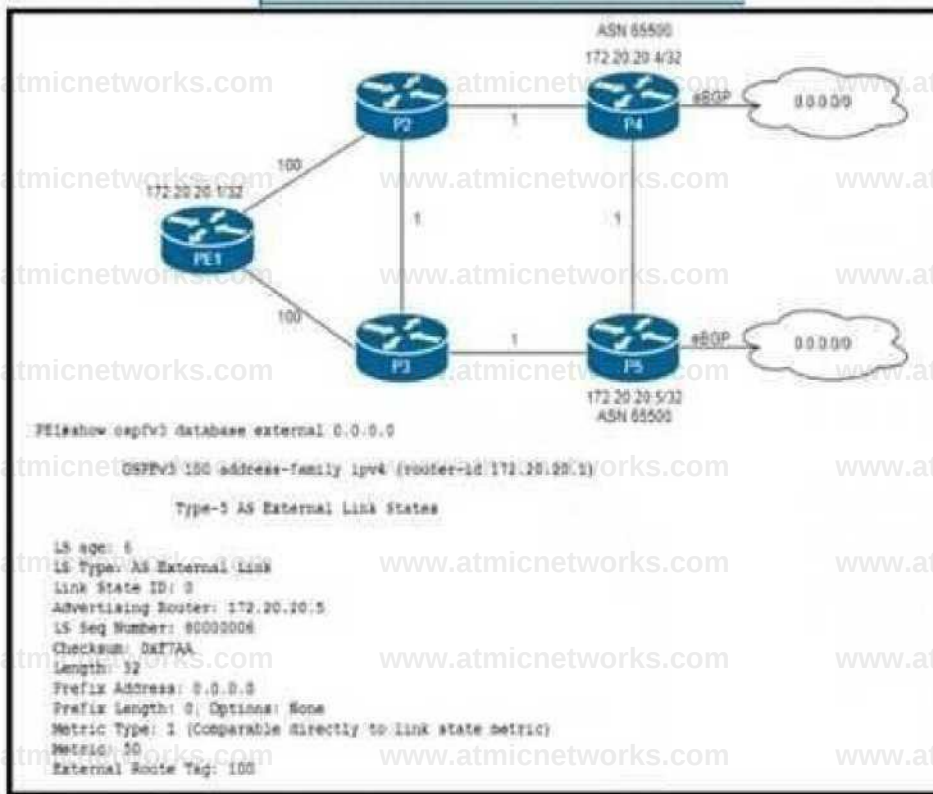
- A. Reset OSPF neighbor sessions to maintain state information during router switchover
- B. Configure the device to repopulate state information using routing updates received from the BDR
- C. Increase the keepalive interval on the OSPF neighbors so that traffic continues to pass during the switchover.
- D. Ensure that the dual RP has synchronized their state information before performing the switchover operation.

Answer: D

Explanation:

Question: 275

Refer to the exhibit.



Refer to the exhibit. Router P4 and P5 receive the 0.0.0.0/0 route from the ISP via eBGP peering. P4 is the primary Internet gateway router, and P5 is its Backup. P5 is already advertising a default route into OSPF domain. Which configuration must be applied to P4 so that it advertises a default route into OSPF and becomes the primary internet gateway for the network?

```

configure terminal
route ospf 100
address-family ipv4 unicast
default-information originate always metric 40 metric-type 1
end

```

```

configure terminal
route ospf 100
address-family ipv4 unicast
default-information originate metric 40 metric-type 2
end

```

```

configure terminal
route ospf 100
address-family ipv4 unicast
default-information originate metric 40 metric-type 1
end

```

```

configure terminal
route ospf 100
address-family ipv4 unicast
default-information originate metric 40 metric-type 1
end

```

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

Answer: C

Explanation:

Question: 276

Refer to the exhibit. After a networking team configured this MPLS topology, the supervisor wants to view MPLS labels to verify the path that packets take from router R1 to router R7. The team already issued an ICMP ping to verify connectivity between the devices. Which task must the team perform to allow the supervisor to view the label switch path?



- A. Configure MPLS TE to display the labels in the stack between the head and tail-end routers
- B. Implement MPLS LDP to assign labels to all the routes in the transit path.
- C. Configure MPLS LDP Sync to sync labels from the routing table to the MPLS forwarding table.
- D. Implement MPLS OAM to display the labels for each hop along the path

Answer: D

Explanation:

Question: 277

Refer to the exhibit.

```
R1# configure terminal
R1(config)# router isis area2
R1(config-router)# metric-style wide level-1
```

An engineer is configuring multipoint-to-multipoint IS-IS for IPv6 on router R1. Which additional configuration must be applied to the router to complete the task?

```
R1# configure terminal
R1(config)# router isis area2
R1(config-router)# metric-style wide level-1
R1(config-router)# address-family ipv6
R1(config-router-af)# multi topology
```

```
R1# configure terminal
R1(config)# router isis area2
R1(config-router)# metric-style wide
```

```

R1 (config-router)# address-family ipv6
R1 (config-router)# multi-topology

R1 configure terminal
R1 (config) * router his areal
R1 (config-router)# metric-style wide level-2
R1 (config-router)# address-family ipv6
R1 (config-router) # multi-topology1

```

```

R1 configure terminal
R1 (config) * router lsis area2
R1 (config-router) address-family ipv6
R1 (config-router) # multi-topology

```

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

Answer: D

Explanation:

Question: 278

Refer to the exhibit.



Refer to the exhibit. An ISP provides shared VoIP Extranet services to a customer in VRF-100 with these settings:

The VoIP services are hosted in the 198.19.100.0/24 space.

The customer has been assigned the 198.18.1.0/29 IP address block.

VRF-100 is assigned import and export route target 65010:100.

Which configuration must the engineer apply to PE-1 to provision VRF-100 and provide access to the shared services?

A. vrf definition VRF-100

rd 172.17.255.1:100

!

address-family ipv4

export map VRF-100-EXPORT

import map VRF-100-IMPORT

exit-address-family

!

route-map VRF-100-EXPORT permit 10

match ip address prefix-list VRF-100-ALLOWED-EXPORT

set extcommunity rt 65010:100 65010:2999

route-map VRF-100-EXPORT permit 20

set extcommunity rt 65010:100 !

route-map VRF-100-IMPORT permit 10

match extcommunity VRF-100-RT SHARED-SERVICES !

ip extcommunity-list standard SHARED-SERVICES permit rt 65010:1999 ip extcommunity-list standard

VRF-100-RT permit rt 65010:100

ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29

B. vrf definition VRF-100

rd 172.17.255.1:100

!

address-family ipv4

export map VRF-100-EXPORT

route-target import 65010:100

route-target import 65010:2999

exit-address-family

!

route-map VRF-100-EXPORT permit 10

match ip address prefix-list VRF-100-ALLOWED-EXPORT

set extcommunity rt 65010:100 65010:1999

route-map VRF-100-EXPORT permit 20

set extcommunity rt 65010:100

ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29

C. vrf definition VRF-100

rd 172.17.255.1:100

!

address-family ipv4

export map VRF-100-EXPORT

route-target import 65010:100

route-target import 65010:1999

exit address-family

```

route-map VRF-100-EXPORT permit 10
    match ip address prefix-list VRF-100-ALLOWED-EXPORT
    set extcommunity rt 65010:100 65010:2999
route-map VRF-100-EXPORT permit 20
    set extcommunity r 65010:100

```

```

ip prefix-list VRF-100-ALLOWED-EXPORT seq 5 permit 198.18.1.0/29

```

D. vrf definition VRF-100

```

rd 172.17.255.1:100

```

```

address-family ipv4
    route-target export 65010:100
    route-target export 65010:1999
    route-target import 65010:100
    route-target import 65010:2999
exit-address-family

```

Answer: D

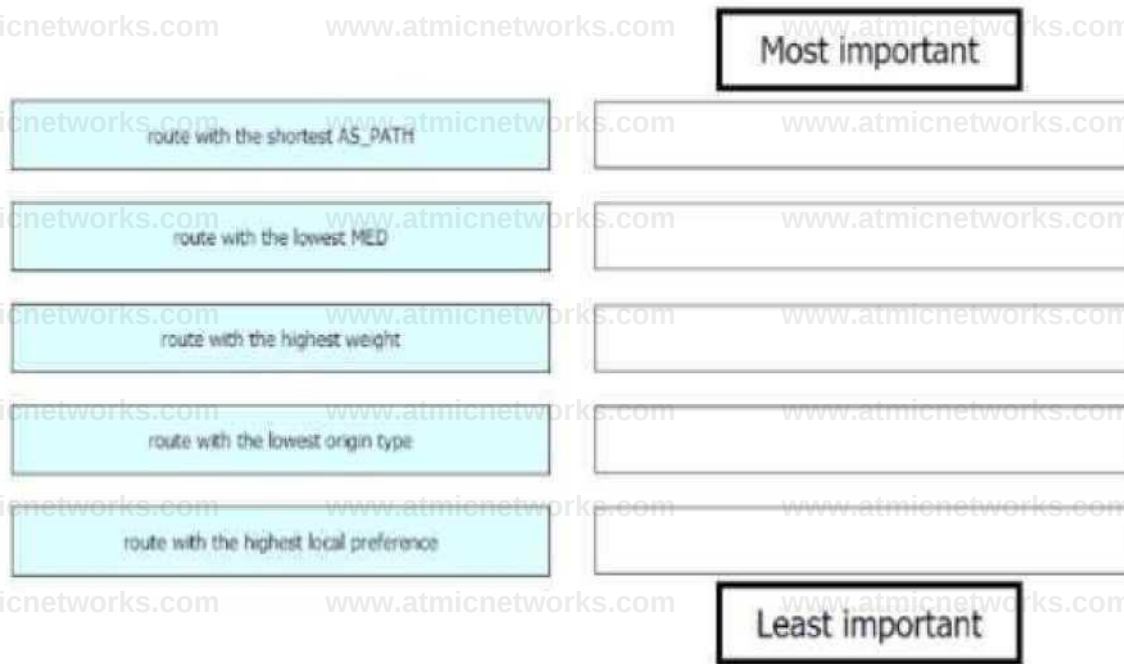
Explanation:

Question: 279

DRAG DROP

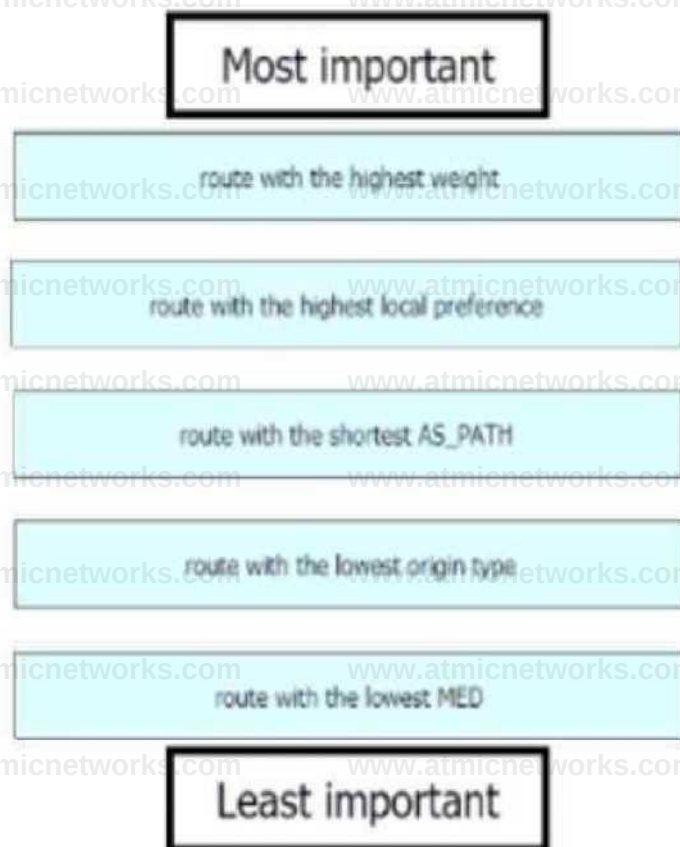
Drag and drop the BGP Best Path Algorithm rules from the left into the corresponding order of importance on the right.

Drag and drop the BGP Best Path Algorithm rules from the left into the corresponding order of importance on the right.



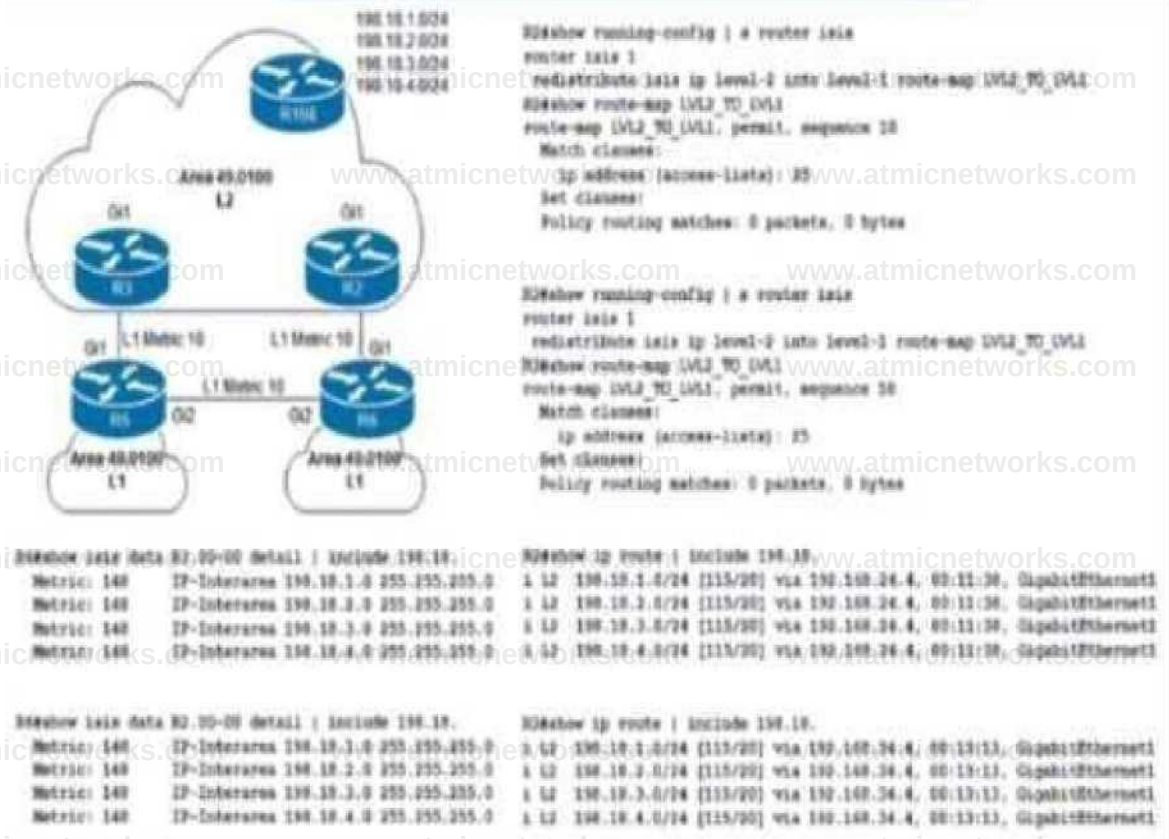
Answer:

Explanation:



Question: 280

Refer to the exhibit.



Routers R2 and R3 are Level 1/Level 2 IS-IS routers that redistribute 198.18.x.x/24 prefixes to routers R5 and R6. In the Level 1 area R2 is to be the preferred router for all redistributed prefixes in the Level 1 area.

a. Which configuration sets this preference?

On R2

configure terminal

route-map LVL2_TO_LVL1 permit 10

set metric 5 end

On R2 configure terminal route-map LVL2_TO_LVL1 permit 10 set metric 25 end

On R3

configure terminal

route-map LVL2_TO_LVL1 permit 10 set metric 5 end

On R3

configure terminal

route-map LVL2_TO_LVL1 permit 10 set metric 25 end

A. Option A

B. Option B

C. Option C

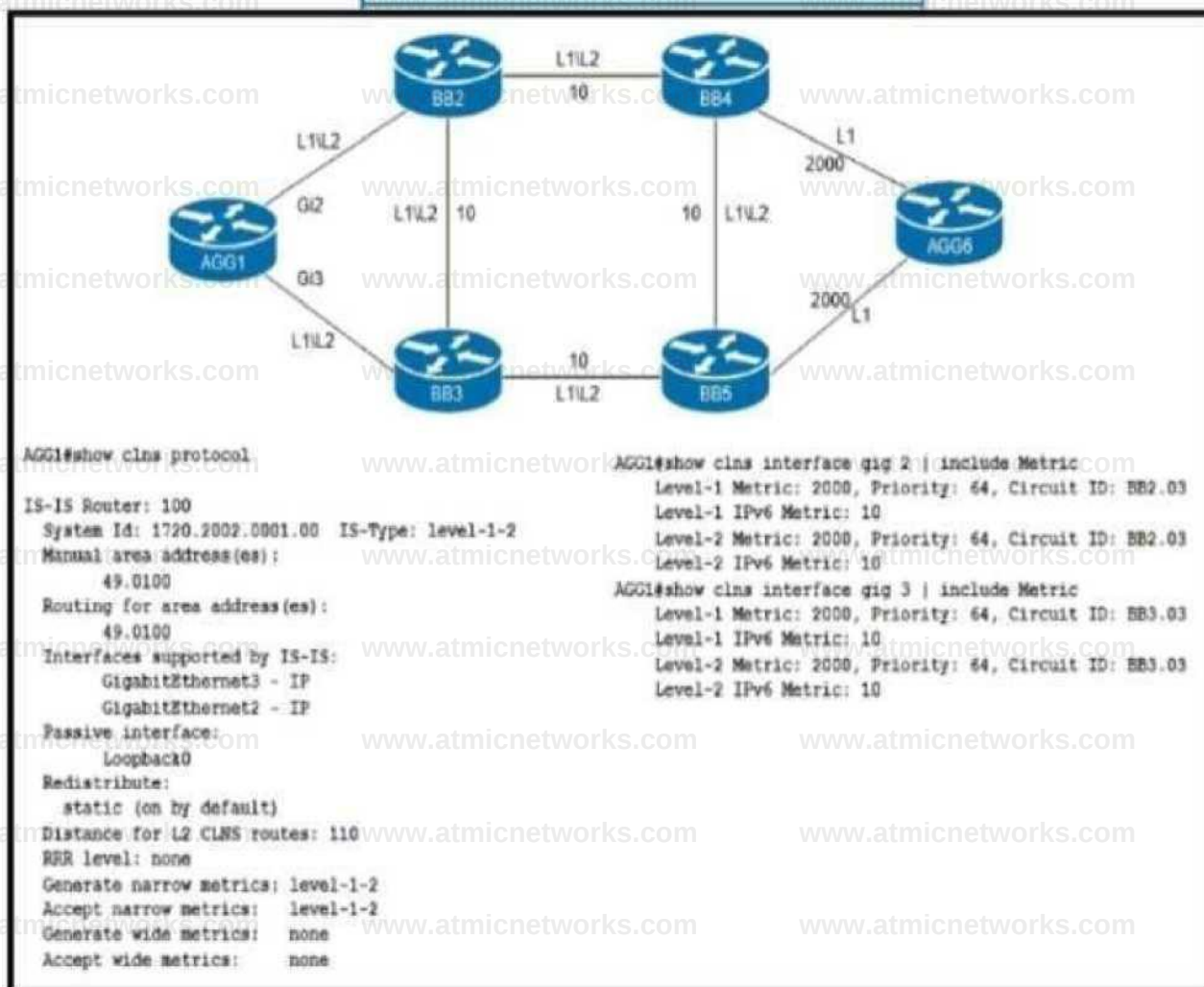
D. Option D

Answer: A

Explanation:

Question: 281

Refer to the exhibit.



Refer to the exhibit. An engineer is configuring IS-IS on ISP network. Which IS-IS configuration must an engineer implement on router AGG1 so that it establishes connectivity to router AGG6 via the BB3 core router?

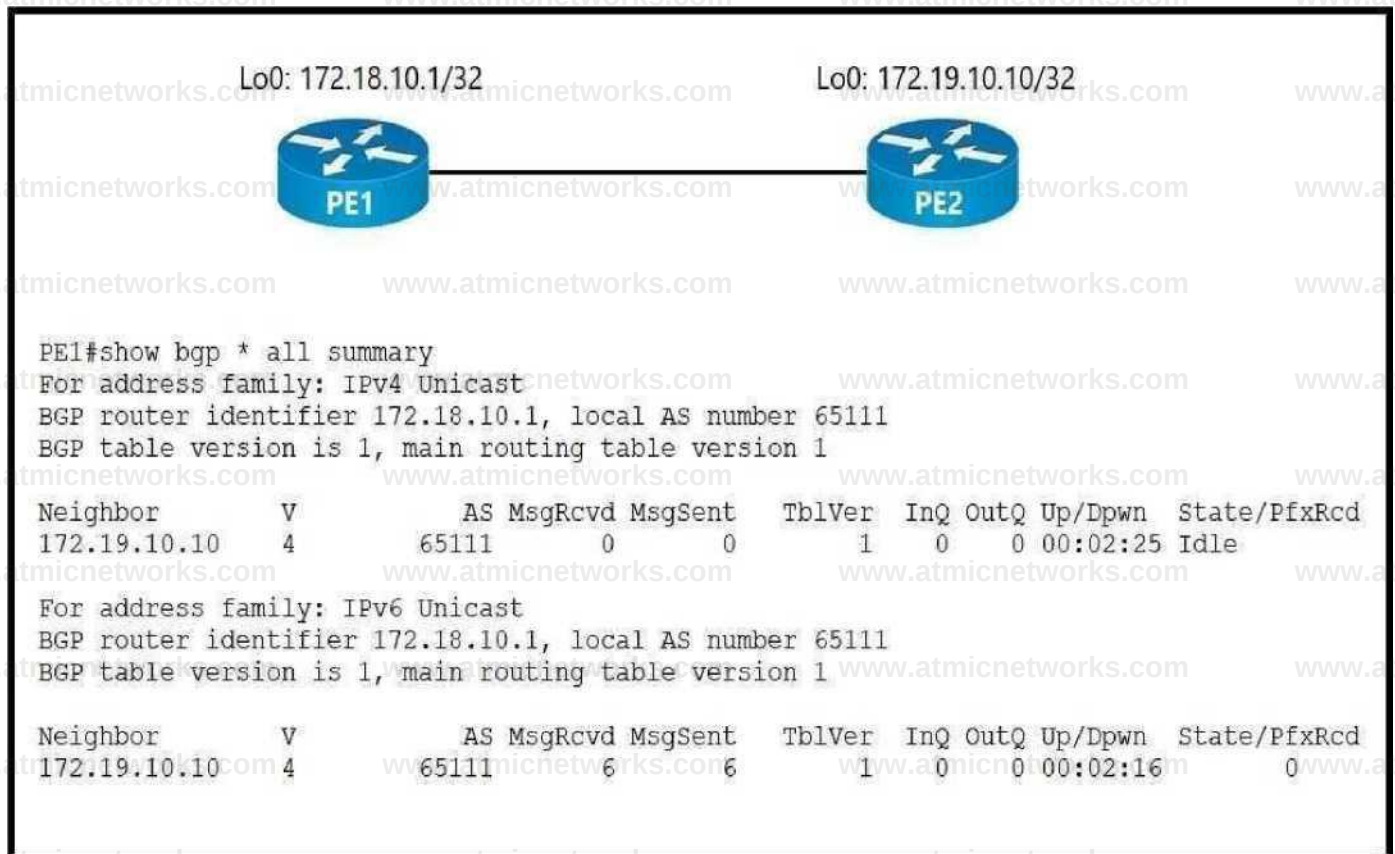
- A. router isis 100 metric-style narrow interface GigabitEthernet 3 isis metric 10 level-2
- B. router isis 100 metric-style wide interface GigabitEthernet 3 isis metric 1500 level-2
- C. router isis 100 metric-style narrow interface GigabitEthernet 3 isis metric 10 level-1
- D. router isis 100 metric-style wide interface GigabitEthernet 3 isis metric 1500 level-1

Answer: C

Explanation:

Question: 282

Refer to the exhibit.



An administrator working for large ISP must connect its two POP sites to provide internet connectivity to its customers. Which configuration must the administrator perform to establish an iBGP session between routers PE1 on POP site 1 and PE2 on POP site 2?

A. PE2#configure terminal

```
PE2(config)#router bgp 65111
```

```
PE2(config-router)#no neighbor 172.18.10.1 shutdown
```

```
PE2(config-router)#end
```

B. PE1#configure terminal

```
PE1(config)#router bgp 65111
```

```
PE1(config-router)#no neighbor 172.19.10.10 shutdown
```

```
PE1(config-router)#end
```

C. PE1#configure terminal


```
PE1(config-router-af)#neighbor 172.19.10.10 activate
```

```
PE1(config-router-af)#end
```

D. PE2#configure terminal

```
PE2(config)#router bgp 65111
```

```
PE2(config-router)#address-family ipv4 unicast
```

```
PE2(config-router-af)#neighbor 172.18.10.1 activate
```

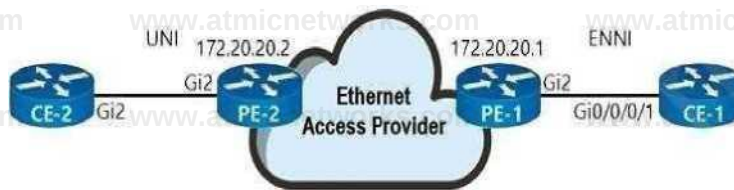
```
PE2(config-router-af)#end
```

Answer: B

Explanation:

Question: 283

Refer to the exhibit.



```
PE-1#show xconnect name ENNI-ID-100150
```

```
Legend: XC ST=Xconnect State S1=Segment1 State S2=Segment2 State
UP=Up DN=Down AD=Admin Down IA=Inactive
SB=Standby HS=Hot Standby RV=Recovering NH=No Hardware
```

XC	ST	Segment 1	SI	segment 2	S2
UP	pri	ac Gi2:150 (Eth VLAN)	UP	mpls 172.20.20.2:100150	UP

```
PE-2#show xconnect name UNI-ID-100150
```

```
Legend: XC ST=Xconnect State S1=Segment1 State S2=Segment2 State
UP=Up DN=Down AD=Admin Down IA=inactive
SB=Standby HS=Hot Standby RV=Recovering NH=No Hardware
```

XC	ST	Segment 1	SI	Segment 2	S2
UP	pri	ac Gi2:10 (Eth VLAN)	UP	mpls 172.20.20.1:100150	UP

```
CE-2#show run interface gigabitEthernet 2.10
interface GigabitEthernet2.10
encapsulation dot1q 10
ip address 100.65.0.2 255.255.255.252
```

```
CE-1#show run interface gigabitEthernet 0/0/0/1.150
interface GigabitEthernet0/0/0/1.150
ip address 100.65.0.1 255.255.255.252
encapsulation dot1ad 150 dot1q 10
```

Refer to the exhibit. An Ethernet access provider is configuring routers PE-1 and PE-2 to provide EAccess EVPL service between UNI and ENNI. ENNI service multiplexing is based on 802.1ad tag 150, and service-multiplexed

UNI is based on 802.1q tag 10. Which EFP configurations must the provider implement on PE-1 and PE-2 to establish end-to-end connectivity between CE-1 and CE-2?

A. On PE-1:

```
interface GigabitEthernet2
```

service instance 100 ethernet

encapsulation dot1ad 150

rewrite ingress tag pop 1 symmetric

On PE-2:

interface GigabitEthernet2

service instance 2 ethernet encapsulation dot1q 10 B. On PE-1:

interface GigabitEthernet2

service instance 100 ethernet encapsulation dot1q 150 rewrite ingress tag pop 1 symmetric

On PE-2:

interface GigabitEthernet2

service instance 2 ethernet

encapsulation dot1q 10

C. On PE-1:

interface GigabitEthernet2

service instance 100 ethernet

encapsulation dot1ad 150 dot1q 10

rewrite ingress tag pop 2 symmetric

On PE-2:

```
interface GigabitEthernet2
service instance 2 ethernet
encapsulation dot1q 10
```

D. On PE-1:

```
interface GigabitEthernet2
service instance 100 ethernet
encapsulation dot1ad 150
rewrite ingress tag pop 1 symmetric
```

On PE-2:

```
interface GigabitEthernet2
service instance 2 ethernet
encapsulation dot1q 10
rewrite ingress tag pop 1 symmetric
```

Answer: C

Explanation:

Question: 284

What are two features of stateful NAT64? (Choose two.)

- A. It uses address overloading.
- B. It provides 1:N translations, so it supports an unlimited number of endpoints.
- C. It requires IPv4-translatable IPv6 address assignments.
- D. It requires the IPv6 hosts to use either DHCPv6-based address assignments or manual address assignments.
- E. It provides 1:1 translation, so it supports a limited number of endpoints.

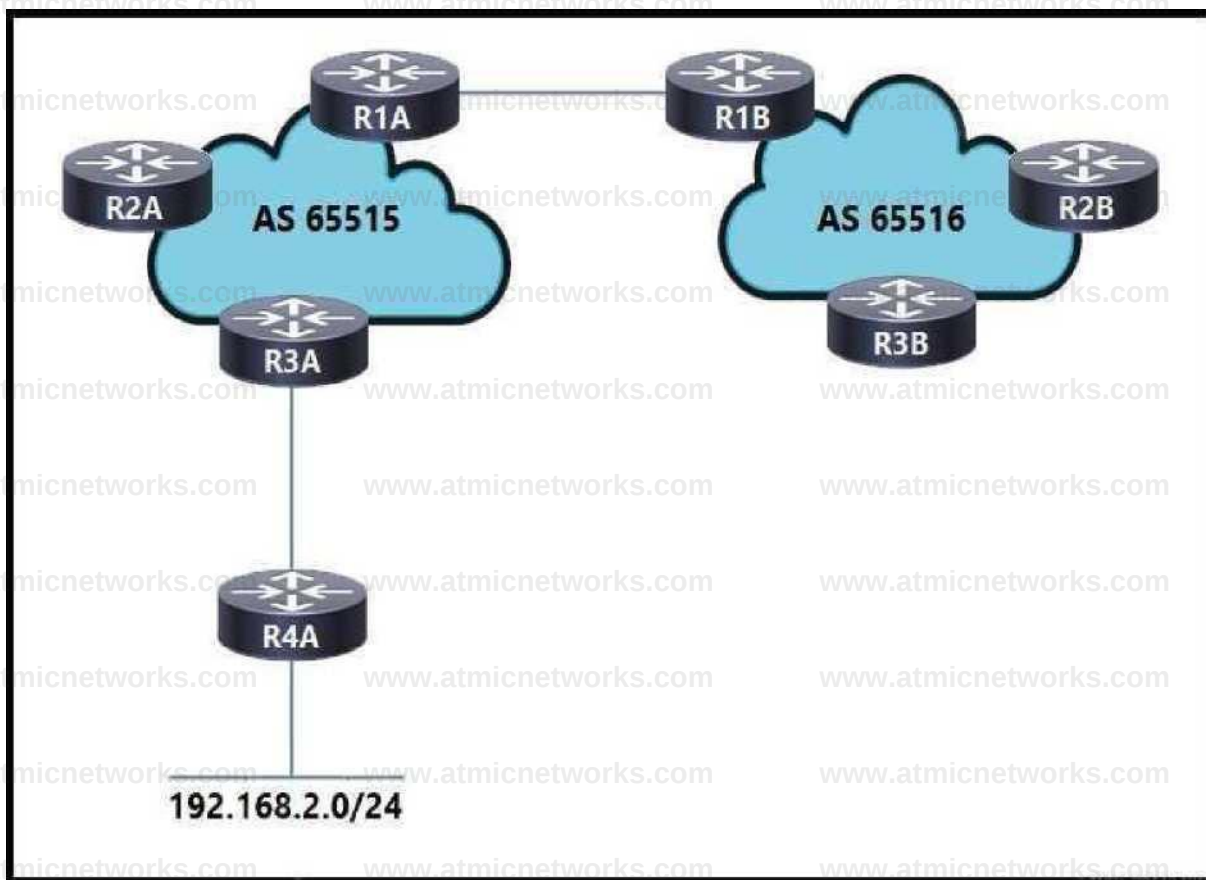
Answer: A, B

Explanation:

Reference: https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_nat/configuration/xenat-xe-16-book/iadnat-stateful-nat64.html

Question: 285

Refer to the exhibit.



Refer to the exhibit. An engineer working for a private telecommunication company with an employee id: 3414:81:713 is implementing this network, in which:

Routers R1A and R1B are eBGP neighbors.

iBGP is configured within AS 65515 and AS 65516.

Network 192.168.2.0/24 is shared with AS 65516.

Router R3A has an iBGP relationship with router R2A only.

Router R2A has an iBGP relationship with routers R1A and R3A.

Which additional task must the engineer perform to complete the configuration?

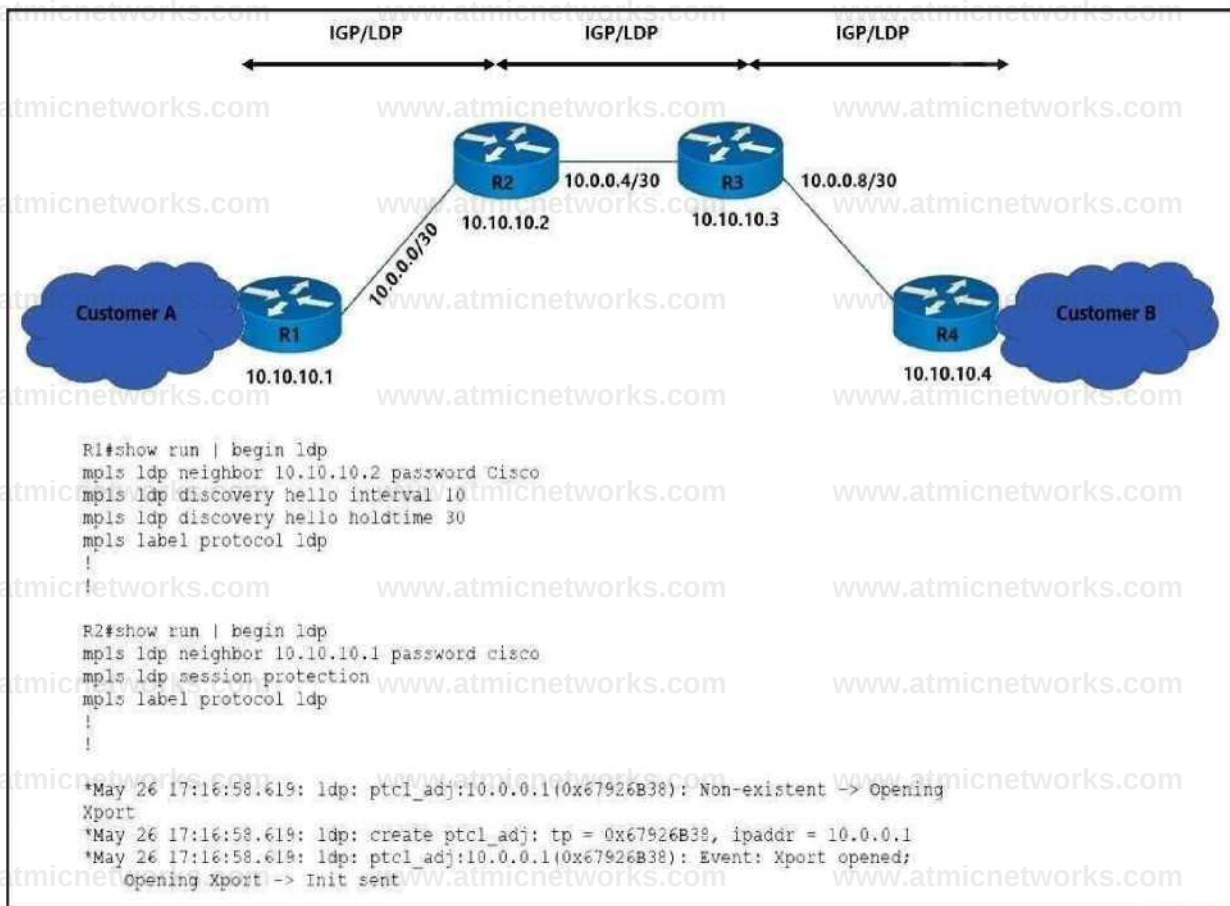
- A. Configure router R2A to use the next-hop-self attribute when advertising the learned route to router R1A.
- B. Configure router R3A to redistribute route 192.168.2.0/24 into the configured IGP to advertise the prefix to router R1A.
- C. Configure router R2A as a route reflector to advertise the iBGP learned prefix from router R3A to R1A.
- D. Configure router R1A with a static route to 192.168.2.0/24 that is redistributed into BGP.

Answer: C

Explanation:

Question: 286

Refer to the exhibit.



Refer to the exhibit. The operations team is implementing an LDP-based configuration in the service provider core network with these requirements:

R1 must establish LDP peering with the loopback IP address as its Router-ID.

Session protection must be enabled on R2.

How must the team update the network configuration to successfully enable LDP peering between R1 and R2?

- A. Change the LDP password on R2 to Cisco.
- B. Configure mpls ldp router-id loopback0 on R1 and R2.
- C. Configure LDP session protection on R1.
- D. Change the discover hello hold time and interval to their default values.

Answer: B

Explanation:

Question: 287

A network engineer is testing an automation platform that interacts with Cisco networking devices via NETCONF over SSH. In accordance with internal security requirements:

NETCONF sessions are permitted only from trusted sources in the 172.16.20.0/24 subnet.

CLI SSH access is permitted from any source.

Which configuration must the engineer apply on R1?

A. configure terminal

```
hostname R1
```

```
ip domain-name mydomain.com
```

```
crypto key generate rsa
```

```
ip ssh version 1
```

```
access-list 1 permit 172.16.20.0 0.0.0.255
```

```
netconf ssh acl 1
```

```
line vty 0 4
```

```
transport input ssh
```

```
end
```

B. configure terminal

```
hostname R1
```

```
ip domain-name mydomain.com
```

```
crypto key generate rsa
```

```
ip ssh version 2
```

```
access-list 1 permit 172.16.20.0 0.0.0.255
```

```
access-list 1 permit any
```

```
netconf ssh
```

```
line vty 0 4
```

```
access-class 1 in
```

transport input ssh

end

C. configure terminal

hostname R1

ip domain-name mydomain.com

crypto key generate rsa

ip ssh version 1

access-list 1 permit 172.16.20.0 0.0.0.255

access-list 2 permit any

netconf ssh

line vty 0 4

access-class 2 in

transport input ssh

end

D. configure terminal

hostname R1

ip domain-name mydomain.com

crypto key generate rsa

ip ssh version 2

access-list 1 permit 172.16.20.0 0.0.0.255

netconf ssh acl 1

line vty 0 4

transport input ssh

end

Answer: D

Explanation:

Question: 288

What is the role of NSO?

- A. Provides public cloud services for customers that need Internet access.
- B. Controls the turn-up of a device.
- C. Provides network monitoring services for Layer 3 devices.
- D. Maintains data storage.

Answer: B

Explanation:

Question: 289

An engineer is moving all of an organization's Cisco IOS XE BGP routers to the address-family identifier format. Which command should be used to perform this upgrade quickly with the minimum service disruption?

- A. vrf upgrade-cli
- B. bgp upgrade-cli
- C. address-family ipv4
- D. ip bgp-community new-format

Answer: B

Explanation:

Question: 290

What is the role of NFVI?

- A. domain name service

- B. intrusion detection
- C. monitor
- D. network address translation

Answer: C

Explanation:

Question: 291

A network engineer is implementing NetFlow to observe traffic patterns on the network. The engineer is planning to review the patterns to help plan future strategies for monitoring and preventing congestion as the network grows. If the captures must include BGP next-hop flows, which configuration must the engineer apply to the router?

- A. ip cef

```
ip flow-export version 5 bgp-nexthop
ip flow-export destination 192.168.1.1 9995
```

```
interface gigabitethernet 1/0/1
```

```
ip flow egress
```

- B. ip cef

```
ip flow-export version 9 bgp-nexthop
ip flow-export destination 192.168.1.1 9996
```

```
interface gigabitethernet 1/0/1
```

```
ip flow ingress
```

C. ip cef

ip flow-export version 5

ip flow-export destination 192.168.1.1 9995

interface gigabitethernet 1/0/1

ip flow ingress

cdp enable

D. no ip cef

ip flow-export version 9

ip flow-export destination 192.168.1.1 9996

interface gigabitethernet 1/0/1

ip flow ingress

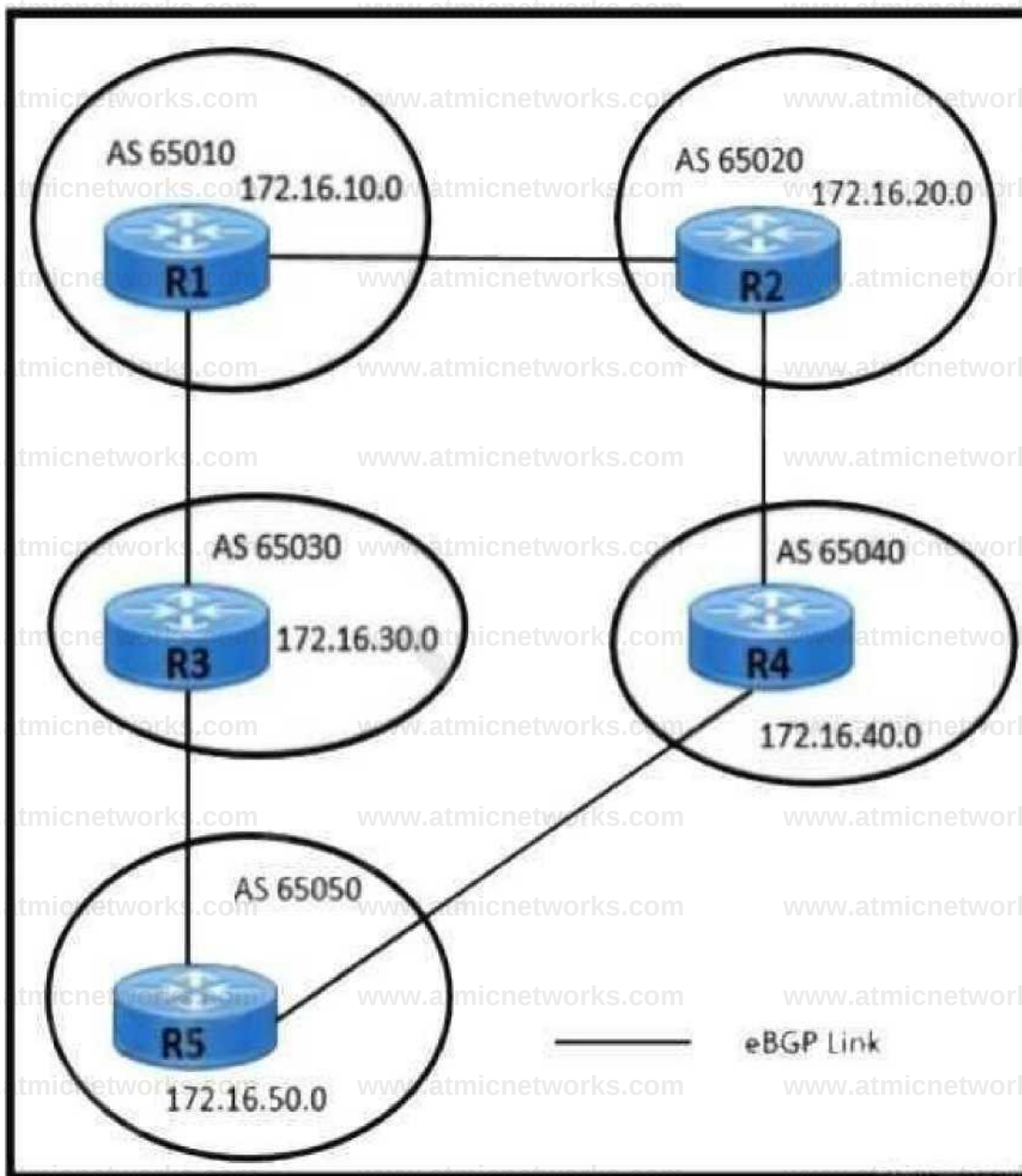
ip flow egress

Answer: B

Explanation:

Question: 292

Refer to the exhibit.



Refer to the exhibit. Users in AS 65010 are connected with the application server in AS 65050 with these requirements:

AS 65010 users are experiencing latency and congestion to connect with application server 172.16.50.10.

AS 65030 must be restricted to become Transient Autonomous System for traffic flow.

Links connected to AS 65020 and AS 65040 are underutilized and must be used efficiently for traffic.

Which two configurations must be implemented to meet these requirements? (Choose two.)

A. Apply the AS-Path route-map policy for traffic received from R3.

B. Configure the route map to prepend the AS-Path attribute for R5-R3 BGP peering.

- C. Apply the MED route-map policy for traffic received from R4.
- D. Configure a higher Local preference for R5-R4 BGP peering.
- E. Configure the route map to set the MED 50 attribute for R5-R4 BGP peering.

Answer: A, C

Explanation:

Question: 293

What is a characteristic of MVPN?

- A. It bypasses the use of MPLS in the service provider core and transmits packets using IP only.
- B. It uses pseudowires to route unicast and broadcast traffic over either a service provider MPLS or IP core.
- C. It allows VRF traffic to use the service provider MPLS VPN to route multicast traffic.
- D. It creates GRE tunnels to route multicast traffic over a service provider IP core.

Answer: C

Explanation:

Question: 294

Refer to the exhibit.

POST http://192.168.1.1 api/changeSelfPassword.json

```
{
  "aaaChangePassword" : {
    "attributes" : {
      "userName" : "ciscotest",
      "oldPassword" : "s@nfr@nc1sc0",
      "newPassword" : "s@nfr@nc1sco"
    }
  }
}
```

Refer to the exhibit. What is the purpose of this JSON script?

- A. It changes the existing password.
- B. It updates a user authentication record.
- C. It deletes a user's authentication record.
- D. It confirms a user's login credentials.

Answer: A

Explanation:

Question: 295

A network administrator must monitor network usage to provide optimal performance to the network end users when the network is under heavy load. The administrator asked the engineer to install a new server to receive SNMP traps at destination 192.168.1.2. Which configuration must the engineer apply so that all traps are sent to the new server?

- A. snmp-server enable traps entity
- snmp-server host 192.168.1.2 public

B. snmp-server enable traps bgp snmp-server host 192.168.1.2 public C. snmp-server enable traps isdn snmp-server host 192.168.1.2 public

D. snmp-server enable traps snmp-server host 192.168.1.2 public

Explanation:

Answer: D

Question: 296

What must a network engineer consider when designing a Cisco MPLS TE solution with OSPF?

- A. The OSPF extensions and RSVP-TE must be enabled on all routers in the network.
- B. OSPF extensions for RSVP-TE are supported in Area 1.
- C. The OSPF extensions and RSVP-TE must be enabled on the egress routers.
- D. OSPF extensions for RSVP-TE are implemented in Type 6, 7, and 8 LSAs.

Answer: A

Explanation:

Question: 297

The network team is planning to implement IPv6 on the company's existing IPv4 network infrastructure. The network currently uses IS-IS to share routes between peers. Which task must the team perform so that IS-IS will run in multitopology mode on the updated IPv6 network?

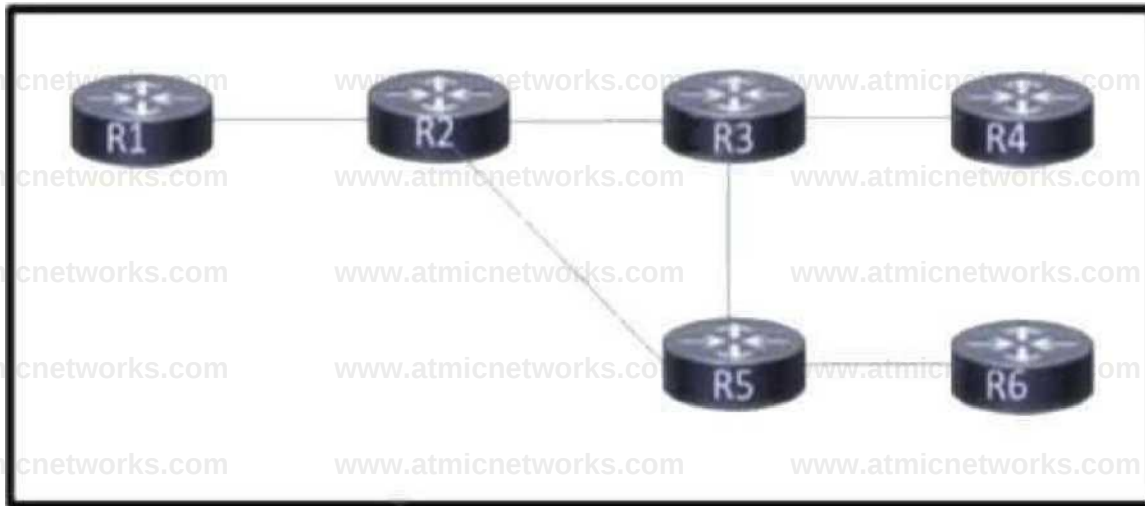
- A. Configure the links between the network routers as point-to-point.
- B. Configure the network routers to use metric-style wide.
- C. Configure the network routers as Level 2 routers.
- D. Configure the IS-IS IPv6 metric on the dual-stack links.

Answer: D

Explanation:

Question: 298

Refer to the exhibit.



Refer to the exhibit. Customers report occasional forwarding issues from hosts connected to R6 to hosts connected to R1. A network engineer has just updated the MPLS configuration on the network, and a targeted LDP session has been established between R1 and R5. Which additional task must the engineer perform so that the team can identify the path from R6 to R1 in case the forwarding issues continue?

- A. Configure an MPLS TE from R4 to R1 that routes through R5.
- B. Implement MPLS OAM within the network.
- C. Implement MPLS VPLS within the network.
- D. Configure MPLS LDP Sync on each router.

Answer: B

Explanation:

Question: 299

Which benefit is provided by FRR?

- A. It provides fast forwarding path failure detection times for all media.

- B. It provides rapid failure detection between forwarding engines.
- C. It provides performance data for the service provider network.
- D. It protects Cisco MPLS TE LSPs from link and node failures.

Answer: D

Explanation:

Reference:

[https://www.cisco.com/c/en/us/td/docs/ios-](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_te_path_protect/configuration/xr-16-11/mp-te-path-protect-xr-16-11-book/mpls-traffic-engineering-fast-reroute-link-and-node-protection.html)

[xml/ios/mp_te_path_protect/configuration/xr-16-11/mp-te-path-protect-xr-16-11-book/mpls-traffic-engineering-fast-reroute-link-and-node-protection.html](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/mp_te_path_protect/configuration/xr-16-11/mp-te-path-protect-xr-16-11-book/mpls-traffic-engineering-fast-reroute-link-and-node-protection.html)

Question: 300

An engineer must implement QoS to prioritize traffic that requires better service throughout the network. The engineer started by configuring a class map to identify the high-priority traffic. Which additional tasks must the engineer perform to implement the new QoS policy?

- A. Attach the class map to a policy map that sets the minimum bandwidth allocated to the classified traffic and designates the action to be taken on the traffic.
- B. Attach the class map to a policy map that designates the action to be taken on the classified traffic and then attach the policy map to an interface using a service policy.
- C. Attach the class map to a policy map within a VRF to segregate the high-priority traffic and then attach the policy map to an interface in another VRF.
- D. Create a route map to manipulate the routes that are entered into the routing table and then

attach the route map to an interface using a service policy.

Answer: B

Explanation:

Question: 301

A service provider requires continuous real-time network monitoring to provide reliable SLAs to its customers. To satisfy this requirement, a network administrator is implementing gRPC dial out on an ASR with TLS. Receiver 192.168.10.2 will be assigned one of the subscriptions, and it will manage the ASR. Which configuration must the engineer apply to the router as part of the configuration process?

A. `snmp-server community public`

`snmp-server enable traps`

`snmp-server host 192.168.10.2 version 2c public.`

B. `telemetry model-driven`

`destination-group DGroup1`

`address family ipv4 192.168.10.2 1 port 10`

`encoding self-describing-gpb`

C. `snmp-server community public`

`snmp-server enable traps`

`snmp-server enable traps snmp authentication`

`snmp-server manager`

`snmp-server manager session-timeout 1000`

D. `telemetry model-driven`

`destination-group ciscotest`

`address family ipv4 192.168.10.2 port 10`

`encoding self-describing-gpb`

`protocol grpc tis-hostname ciscotest.com`

Answer: D

Explanation:

Question: 302

Refer to the exhibit.



Refer to the exhibit. A network operator working for a private telecommunication company with an employee id: 7138: 13:414 just added new users to the network, which resides in VLANs connected to routers R1 and R4. The engineer now must configure the network so that routers R1 and R4 share routes to the VLANs, but routers R2 and R3 are prevented from including the routes in their routing tables. Which configuration must the engineer apply to R4 to begin implementing the request?

A. `pseudowire -class ciscotest`

`encapsulation mpls`

`interface gigabitethernet 1/0/1`

`connect neighbor 192.168.1.1 101 pw-class cisco`

B. `pseudowire -class ciscotest`

`encapsulation mpls`

`interface gigabitethernet 1/0/1`

`xconnect 192.168.1.1 101 pw-class ciscotest`

C. `pseudowire-class ciscotest`

`encapsulation mpls`

`service-policy output ciscotest`

D. `interface serial 2/0/0`

`frame-relay encapsulation`

`ip address 192.168.1.4 255.255.255.0`

`service-policy output ciscotest`

Answer: B

Explanation:

Question: 303

A network administrator is planning a new network with a segment-routing architecture using a distributed control

plane. How is routing information distributed on such a network?

- A. Each segment is signaled by a compatible routing protocol, and each segment makes its own steering decisions based on SR policy.
- B. Each segment is signaled by MPLS, and each segment makes steering decisions based on the routing policy pushed by BGP.
- C. Each segment is signaled by an SR controller, but each segment makes its own steering decisions based on SR policy.
- D. Each segment is signaled by an SR controller that makes the steering decisions for each node.

Answer: D

Explanation:

Question: 304

Refer to the exhibit.

```
EDGE-GW-Itshow bgp ipv4 unicast summary
BGP router identifier 19@.15.45.6, local AS number 65502
BGP table version is 19, main routing table version 19

Neighbor      V      AS  MsgRcvd MsgSent TblVer  InQ  OutQ Up/Down  State/PfxRcd
192.168.26.2  4      65503      0         0        1    0    00:0956      Idle

EDGE-GW-Itshow log
Log Buffer (4096 bytes):
BGP Notification sent
Dec 7 08:02:29.619: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 passive Down BGP Notification sent
Dec 7 08:02:32.695: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 active 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:32.695: IBGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2: FFFF FFFF FFFF
FFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1G02 0601 0400 0100 01.02 0280 0002 0202 0002 0246 0002 0641
0400 00FE 63
Dec 7 08:02:36.556: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 passive 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:36.558: %BGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2: FFFF FFFF FFFF
FFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1C02 0601 0400 0100 0102 0280 0002 0202 0002 0246 0002 0641 0400
00FE 63
Dec 7 08:02:37.812: %BGP-5-NRB_RESET: Neighbor 192.168.26.2 active reset (BGP Notification sent)
Dec 7 08:02:37.812: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 active Down BGP Notification sent
Dec 7 08:02:37.812: %BGP_SESSION-5-ADJCHANGE: neighbor 192.168.26.2 IPv4 Unicast topology base removed from session BGP
Notification sent
Dec 7 08:02:40.883: %BGP-5-NRB_RESET: Neighbor 192.168.26.2 passive reset (BGP Notification sent)
Dec 7 08:02:40.884: %BGP-5-ADJCHANGE: neighbor 192.168.26.2 passive Down BGP Notification sent
Dec 7 08:02:47.822: %BGP-3-NOTIFICATION: sent to neighbor 192.168.26.2 passive 2/2 (peer in wrong AS) 2 bytes FE63
Dec 7 08:02:77.822: ^BGP-4-MSGDUMP: unsupported or mal-formatted message received from 192.168.26.2:
FFF FFFF FFFF FFFF FFFF FFFF FFFF 0039 0104 FE63 00B4 0AFF FF02 1C02 0601 0400 0100 0102 0280 0002 0202 0002 0246
0002 0641 0400 00FE 63
```

Refer to the exhibit. A network support engineer for ASN 65502 receives a technical support ticket from a customer in ASN 65503 who reports that an eBGP session is down. The engineer determines that the peering failed after a recent change to the device at 192.168.26.2. EDGE-GW-1 must establish an eBGP session with the peering router 192.168.26.2. Which configuration establishes this session?

- A. configure terminal

no router bgp 65502

router bgp 65503

neighbor 192.168.26.2 remote-as 65503

address-family ipv4

neighbor 192.168.26.2 activate

end

B. configure terminal

router bgp 65502

address-family ipv4

neighbor 192.168.26.2 activate

end

C. configure terminal

no router bgp 65502

router bgp 65503

neighbor 192.168.26.2 remote-as 65123

address-family ipv4

neighbor 192.168.26.2 activate

end

D. configure terminal

router bgp 65502

no neighbor 192.168.26.2 remote-as 65503

neighbor 192.168.26.2 remote-as 65123

address-family ipv4

neighbor 192.168.26.2 activate

end

Answer: B

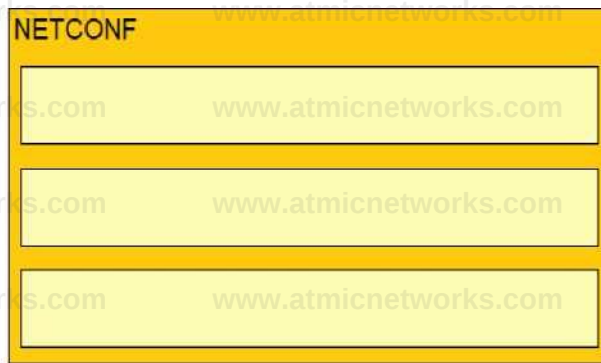
Explanation:

Question: 305

DRAG DROP

Drag and drop the characteristics from the left onto the automation tool on the right.

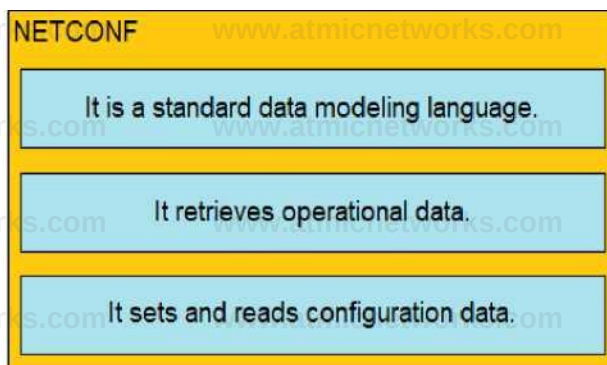
- It is the standard transport protocol for communicating with network devices.
- It is a standard data modeling language.
- It retrieves operational data.
- It develops data models.
- It shapes state data.
- It sets and reads configuration data.



Answer:

Explanation:

- It is the standard transport protocol for communicating with network devices.
- It is a standard data modeling language.
- It retrieves operational data.
- It develops data models.
- It shapes state data.
- It sets and reads configuration data.



Question: 306

Refer to the exhibit.



```
CPE-1#show run int gig 0/0
interface GigabitEthernet0/0
ip address 100.65.15.2 255.255.255.252
negotiation auto
ipv6 address 2001:DB8:0:A000:100:65:15:2/126
service-policy output WAN-OUTPUT
```

end

```
CPE-lfshow run int gig 0/1
interface GigabitEthernet0/1
ip address 192.168.2.1 255.255.255.0
negotiation auto
ipv6 address 2001:DB8:0:A001:192:168:2:1/120
service-policy input LAN-INPUT
end
```

```
CPE-lfshow access-list
Standard IP access list SELF_V4
10 permit 100.65.15.2
IPv6 access list SELF_V6
permit ipv6 host 2001 :DB8:0:A000:100:65:15:2 any sequence 10
```

```
CPE-lfshow policy-map
policy Map WAN-OUTPUT
```

Policy Map LAN-INPUT

Refer to the exhibit. A network engineer configures CPE-1 for QoS with these requirements:

IPv4 and IPv6 traffic originated by the CPE-1 WAN IP address must be marked with DSCP CS3.

IPv4 LAN traffic must be marked with DSCP CS1.

IPv6 LAN traffic must be marked with DSCP default.

Which configuration must the engineer implement on CPE-1?

A. class-map match-any SELF_TRAFFIC

```
match access-group name SELF_V4
```

```
match access-group name SELF_V6
```

```
class-map match-all V4_TRAFFIC
```

```
match protocol ip
```

```
class-map match-all V6_TRAFFIC
```

```
match protocol ipv6 class-map match-all QG_4 match qos-group 4 class-map match-all QG_6 match qos-
group 6 !
```

```
policy-map LAN-INPUT
```

```
class V4_TRAFFIC
```

```
set qos-group 4
```

class V6_TRAFFIC

set qos-group 6 !

policy-map WAN-OUTPUT

class SELF_TRAFFIC

set ip dscp cs3

class QG_4

set ip dscp cs1

class QG_6

set ip dscp default

B. class-map match-all SELF_TRAFFIC match access-group name SELF_V4 match access-group name SELF_V6

class-map match-all V4_TRAFFIC match protocol ip

class-map match-all V6_TRAFFIC match protocol ipv6

class-map match-all QG_4 match qos-group 4

class-map match-all QG_6 match qos-group 6 !

policy-map LAN-INPUT

class V4_TRAFFIC

set qos-group 4

class V6_TRAFFIC

set qos-group 6 !

policy-map WAN-OUTPUT

class SELF_TRAFFIC

set dscp cs3

class QG_4

set ip dscp cs1

class QG_6

set dscp default

C. class-map match-all SELF_TRAFFIC match access-group name SELF_V4 match access-group name SELF_V6

class-map match-all V4_TRAFFIC match protocol ip

class-map match-all V6_TRAFFIC match protocol ipv6

class-map match-all QG_4

match qos-group 4

class-map match-all QG_6 match qos-group 6

!

policy-map LAN-INPUT

class V4_TRAFFIC

set qos-group 4

class V6_TRAFFIC

set qos-group 6

!

policy-map WAN-OUTPUT

class SELF_TRAFFIC

set ip dscp cs3

class QG_4

set ip dscp cs1

class QG_6

set ip dscp default

D. class-map match-any SELF_TRAFFIC match access-group name SELF_V4 match access-group name SELF_V6 class-map match-all V4_TRAFFIC match protocol ip

class-map match-all V6_TRAFFIC

match protocol ipv6

class-map match-all QG_4

class-map match-all QG_6

match qos-group 6

!

policy-map LAN-INPUT

class V4_TRAFFIC

set qos-group 4

class V6_TRAFFIC

set qos-group 6

!

policy-map WAN-OUTPUT

class SELF_TRAFFIC

set dscp cs3

class QG_4

set ip dscp cs1

class QG_6

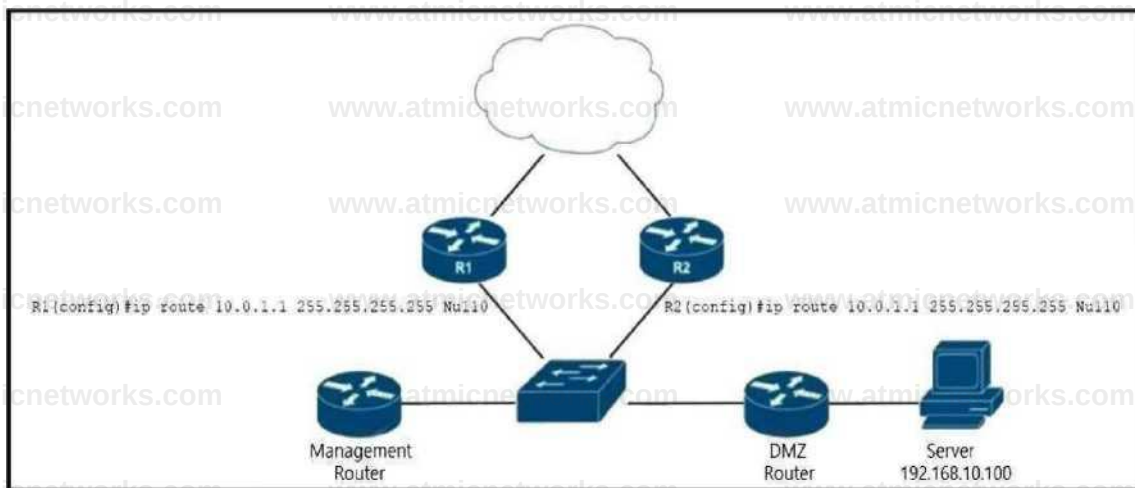
set dscp default

Explanation:

Question: 307

Refer to the exhibit.

Answer: A



```
router(config)# route-map blackhole-trigger
```

```
router(config-route-map)# match tag 777
```

```
router(config-route-map)# set ip next-hop 10.0.1.1
```

```
router(config-route-map)# set origin igp
```

```
router(config-route-map)# set community no-export
```

Refer to the exhibit. EIGRP is running across the core to exchange internal routes, and each router maintains iBGP adjacency with the other routers on the network. An operator has configured static routes on the edge routers R1 and R2 for IP address 10.0.1.1, which is used as a black hole route as shown. Which configuration should the operator implement to the management router to create a route map that will redistribute tagged static routes into BGP and create a static route to blackhole traffic with tag 777 that is destined to the server at 192.168.10.100?

A. `router(config)# router bgp 55100`

```
router(config-router)# redistribute static route-map blackhole-trigger
```

```
router(config)# ip route 10.0.1.1 255.255.255.255 Null0 tag 777
```

B. `router(config)# router bgp 55100`

```
router(config-router)# redistribute static route-map blackhole-trigger
```

```
router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777
```

C. `router(config)# router bgp 55100`

```
router(config-router)# redistribute connected
```

```
router(config)# ip route 192.168.10.100 255.255.255.255 tag 777
```

D. `router(config)# router bgp 55100`

router(config-router)# redistribute connected route-map blackhole-trigger

router(config)# ip route 192.168.10.100 255.255.255.255 Null0 tag 777

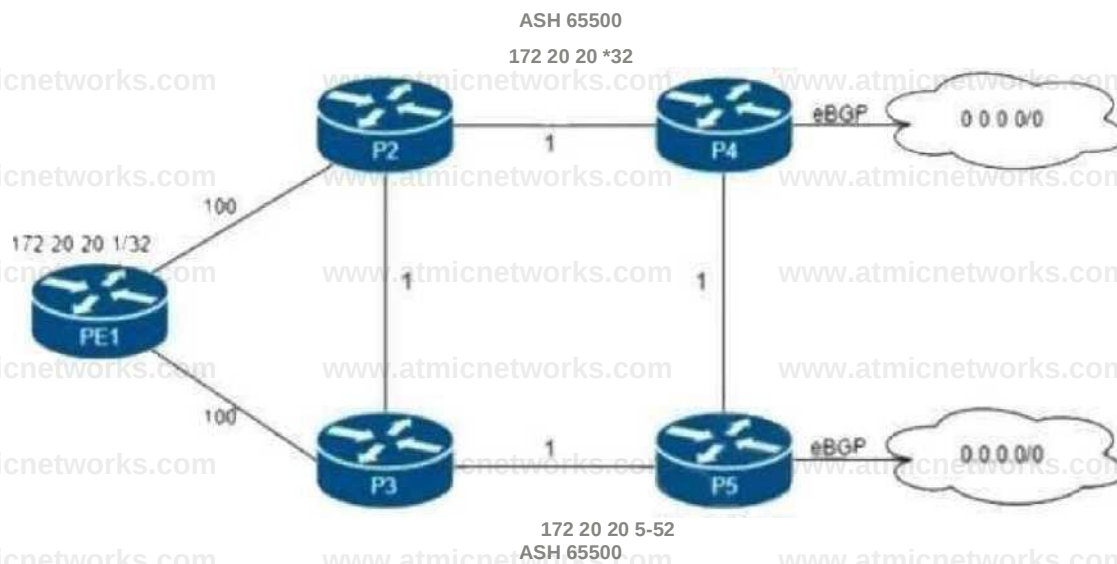
Answer: B

Explanation:

Reference: https://www.cisco.com/c/dam/en_us/about/security/intelligence/blackhole.pdf

Question: 308

Refer to the exhibit.



PE1#show ospfv3 database external 0.0.0.0

OSPFv3 100 address-family ipv4 (router-id 172.20.20.1)

Type-5 AS External Link States

```

LS age: 6
LS Type: AS External Link
Link State ID: 0
Advertising Router: 172.20.20.5
LS Seq Number: 80000006
Checksum: 0xF7AA
Length: 32
Prefix Address: 0.0.0.0
Prefix Length: 0, Options: None
Metric Type: 1 (Comparable directly to link state metric)
Metric: 50
External Route Tag: 100
  
```

Refer to the exhibit. Routers P4 and P5 receive the 0.0.0.0/0 route from the ISP via eBGP peering. P4 is the primary Internet gateway router, and P5 is its backup. P5 is already advertising a default route into the OSPF domain. Which configuration must be applied to P4 so that it advertises a default route into OSPF and becomes the primary Internet gateway for the network?

A. configure terminal

```
router ospfv3 100
```

```
address-family ipv4 unicast
```

```
default-information originate metric 40 metric-type 2
```

```
end
```

B. configure terminal

router ospfv3 100

address-family ipv4 unicast

default-information originate metric 40 metric-type 1

end

C. configure terminal

router ospfv3 100

address-family ipv4 unicast

redistribute bgp 65500 metric 40 metric-type 1

end

D. configure terminal

router ospfv3 100

address-family ipv4 unicast

default-information originate always metric 40 metric-type 1

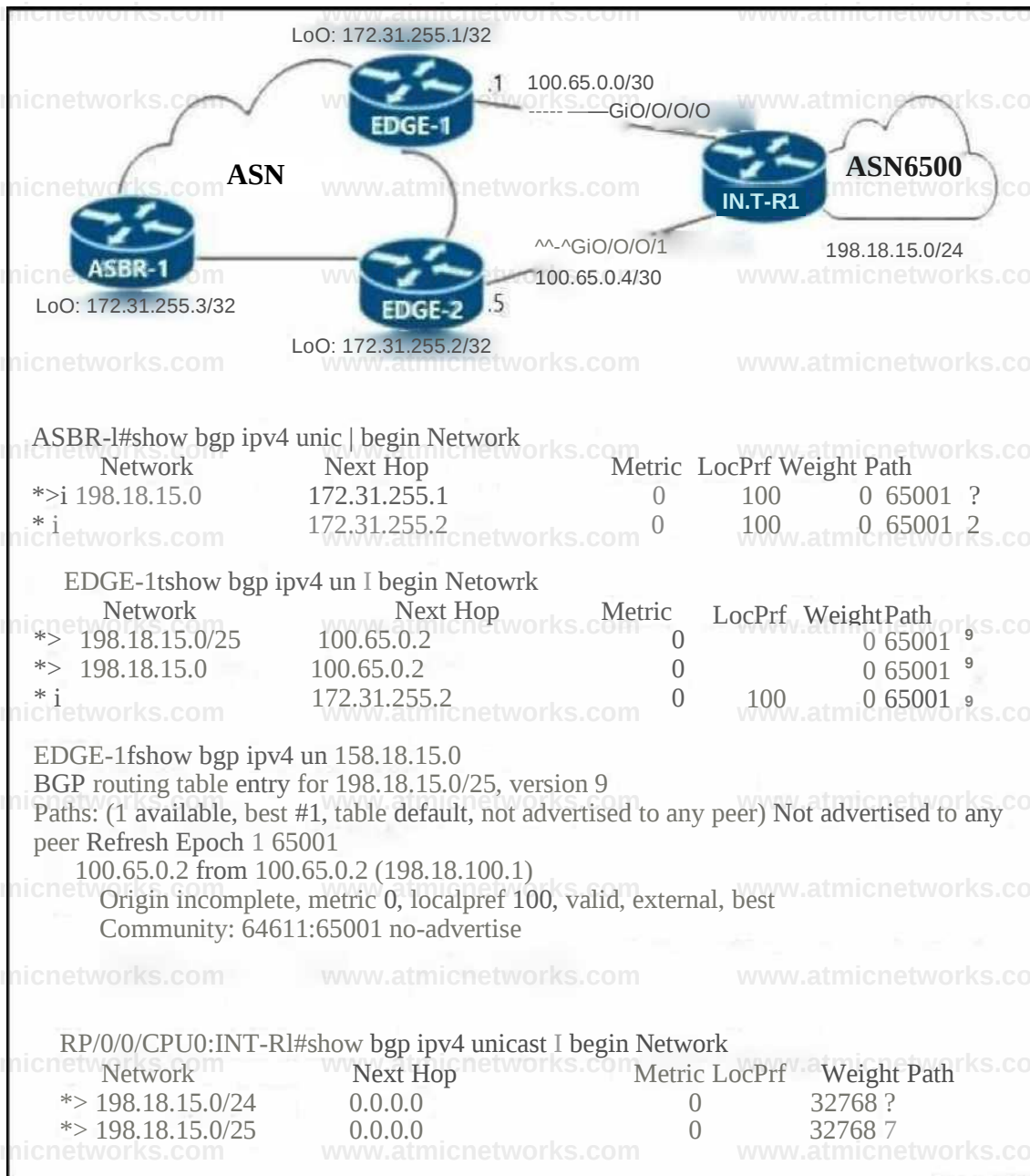
end

Explanation:

Question: 309

Refer to the exhibit.

Answer: A



Refer to the exhibit. The network engineer who manages ASN 65001 is troubleshooting suboptimal routing to the 198.18.15.0/24 prefix. According to the network requirements:

Routing to IP destinations in the 198.18.15.0/25 block must be preferred via the EDGE-1 PE.

Routing to IP destinations in the 198.18.15.128/25 block must be preferred via the EDGE-2 PE.

More specific prefixes of the 198.18.15.0/24 block must not be advertised beyond the boundaries of ASN 64611.

Routing to 198.18.15.0/24 must be redundant in case one of the uplinks on INT-R1 fails.

Which configuration must the network engineer implement on INT-R1 to correct the suboptimal routing and fix the issue?

A. configure terminal

route-policy ASN65001-SPECIFIC-OUT

if destination in (198.18.15.0/25) then

set community (no-export, peeras:65001) done

endif

if destination in (198.18.15.0/24) then

prepend as-path 65001 3

done

endif

drop

end-policy

!

router bgp 65001

neighbor 100.65.0.1

address-family ipv4 unicast

route-policy ASN65001-SPECIFIC-OUT out end

B. configure terminal

route-policy ASN65001-SPECIFIC-OUT

if destination in (198.18.15.0/25) then

set community (internal, peeras:65001) done

endif

if destination in (198.18.15.0/24) then

done

endif

drop

end-policy

!

```
router bgp 65001
```

```
neighbor 100.65.0.1
```

```
address-family ipv4 unicast
```

```
route-policy ASN65001-SPECIFIC-OUT out
```

```
end
```

C. configure terminal

```
route-policy ASN65001-SPECIFIC-OUT
```

```
if destination in (198.18.15.0/25) then
```

```
set community (no-advertise, peeras:65001) done
```

```
endif
```

```
if destination in (198.18.15.128/25) then
```

```
prepend as-path 65001 3
```

```
done
```

```
endif
```

```
drop
```

```
end-policy
```

```
!
```

```
router bgp 65001
```

```
neighbor 100.65.0.1
```

```
address-family ipv4 unicast
```

```
route-policy ASN65001-SPECIFIC-OUT out
```

```
end
```

D. configure terminal

```
route-policy ASN65001-SPECIFIC-OUT
```

```
if destination in (198.18.15.0/25) then
```

```
set community (no-export, peeras:65001)
```

done

endif

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

if destination in (198.18.15.128/25) then

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

prepend as-path 65001 3

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

done

endif

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

drop

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

end-policy !

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

router bgp 65001

neighbor 100.65.0.1

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

address-family ipv4 unicast

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

route-policy ASN65001-SPECIFIC-OUT in

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

end

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

Answer: B

Explanation:

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

Question: 310

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

A network architect plans to implement MPLS OAM to provide additional troubleshooting functionality for the NOC team. After analyzing the configuration on the MPLS P/PE nodes, the architect decides to revise the CoPP policies. Which two actions ensure that the new solution is secure? (Choose two.)

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

A. Allow port 3505 in the outbound direction only.

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

B. Allow the ICMP protocol only.

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

C. Allow the TCP and UDP protocols.

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

D. Allow the UDP protocol only.

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

E. Allow port 3503 in the inbound direction only.

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

Answer: D, E

Explanation:

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

www.atmicnetworks.com

Question: 311

What is a feature of model-driven telemetry?

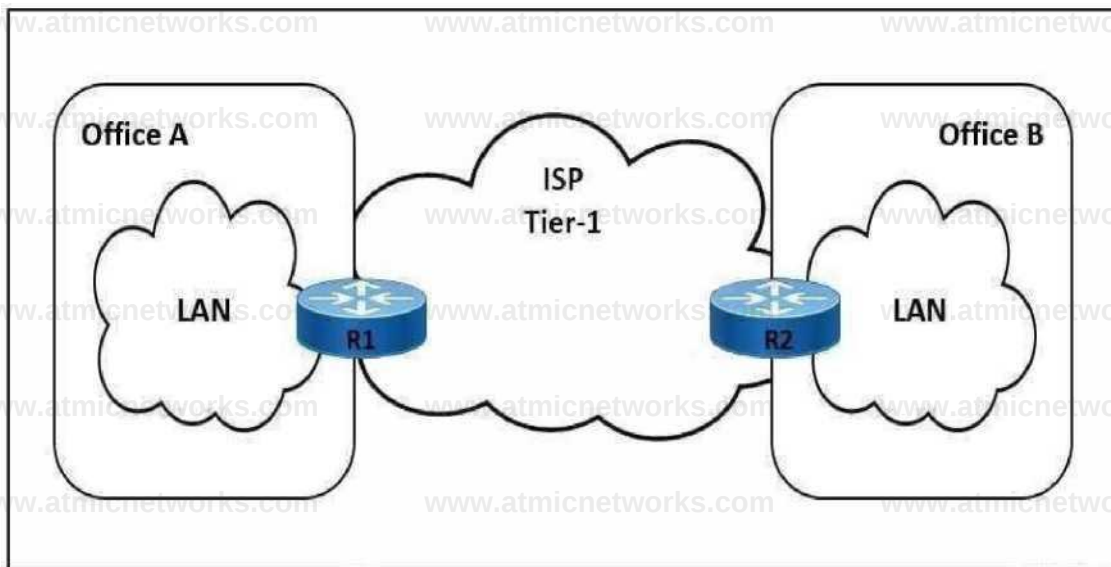
- A. It occasionally streams to multiple servers in the network.
- B. It is less secure because it uses community strings.
- C. It uses the pull model to send requested data to a client when polled.
- D. It uses the push model to stream data to desired destinations.

Answer: D

Explanation:

Question: 312

Refer to the exhibit.



Refer to the exhibit. The link between Office A and Office B is running at 90% load, and occasionally the CPU on router R1 is overloaded. The company implemented QoS for business-critical applications at both offices as a temporary solution. A network engineer must update the R1 configuration to 600 ms to reduce CPU load and limit downtime after connection failure to avoid data loss. Which action meets this requirement?

- A. Configure the fast-hello feature for OSPF with the command `ip ospf dead-interval minimal hellomultiplier 3`.

B. Configure BFD demand mode with the command `bfd-demand timer 150 interval 250 retransmit 5`.

C. Configure BFD non-echo mode with the command `echo interval 250 minimal 300 echo-multiplier 2`.

D. Configure BFD echo mode with the command `bfd interval 150 min_rx 200 multiplier 3`.

Answer: D

Explanation:

Question: 313

Refer to the exhibit.

```
router bgp 65515
  bgp router-id 192.168.1.1 no
  bgp default ipv4-unicast bgp
  log-neighbor-changes neighbor
  192.168.1.2 remote-as 65515
  neighbor 192.168.2.2 remote-as 65515
```

Refer to the exhibit. A network engineer is configuring a new router for iBGP to improve the capacity of a growing network. The router must establish an iBGP peer relationship with its neighbor. The underlay network is already configured with the correct IP addresses. Which step should the engineer apply to complete this task?

A. Implement multicast routing on the router to support BGP hellos.

B. Configure the AS number for the router to share with its iBGP peers.

C. Configure the new router as an iBGP route reflector to support multiple iBGP peers.

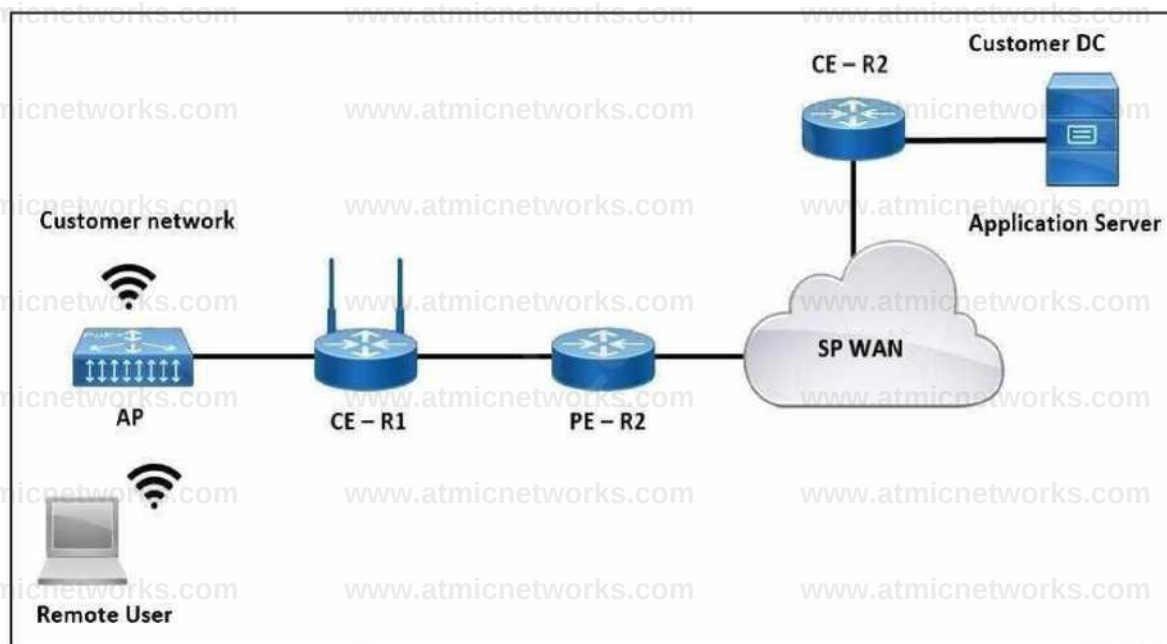
D. Activate the BGP peers under the correct address family on the router.

Answer: D

Explanation:

Question: 314

Refer to the exhibit.



Refer to the exhibit. The application server in the data center hosts voice, video, and data applications over the internet. The data applications run more slowly than the voice and video applications. To ensure that all applications run smoothly, the service provider decided to implement a QoS policy on router PE-R2 to apply traffic shaping. Which two actions must an engineer take to implement the task? (Choose two.)

- A. Configure the scheduling function to handle delayed packets.
- B. Enable packet remarking for priority traffic.
- C. Configure a queue to buffer excess traffic.
- D. Set the token value for secondary traffic.
- E. Set a threshold to discard excess traffic.

Answer: A,C

Explanation:

Question: 315

FRR is configured on a network. What occurs when the headend router on the path is alerted to a link failure over IGP?

- A. LSP attempts fast switching on the backup path until the primary path returns to the active state.

- B. The headend router uses a presignaled LSP to bypass the failure point.
- C. A new backup tunnel is established past the PLR to pass through the protected nodes
- D. Backup tunnel is established and intersects with the primary tunnel at the headend.

Answer: A

Explanation:

Question: 316

How does Inter-AS Option-A function when two PE routers in different autonomous systems are directly connected?

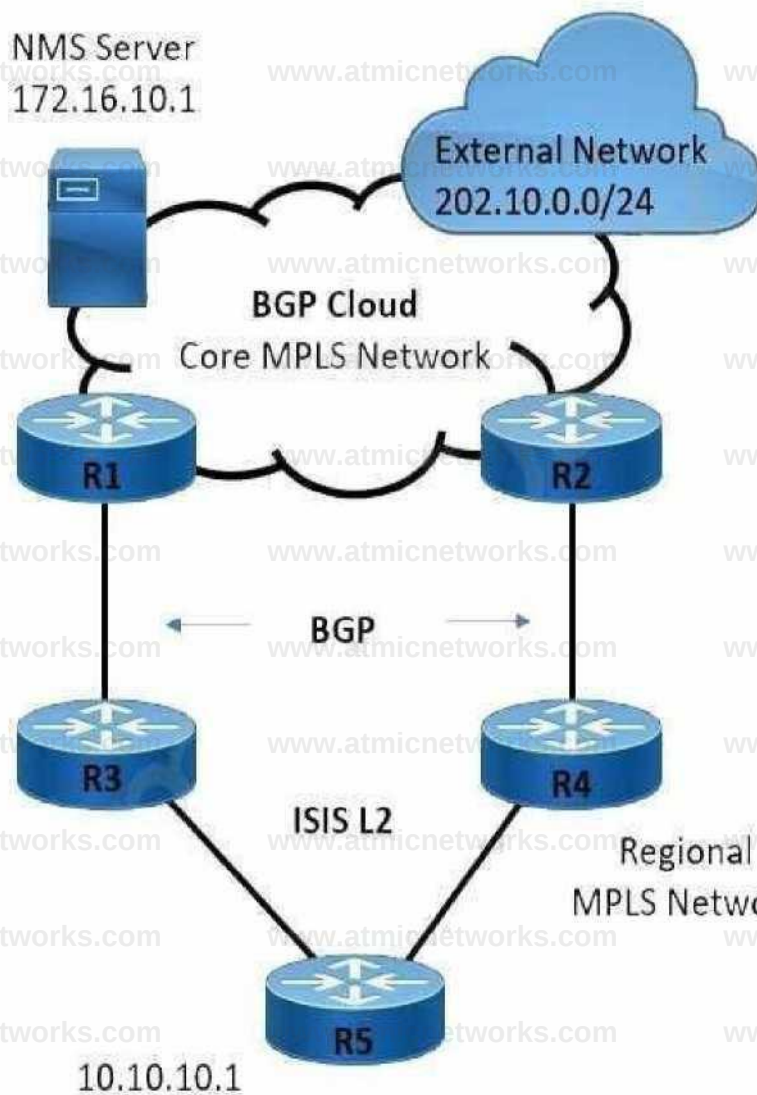
- A. The two routers share all Inter-AS VPNv4 routes and redistribute routes within an IBGP session to provide end-to-end reach.
- B. The two routers establish an MP-EBGP session to share their customers' respective VPNv4 routes.
- C. The two routers treat one another as CE routers and advertise unlabeled IPv4 routes through an EBGp session.
- D. The two routers share VPNv4 routes over a multihop EBGp session and set up an Inter-AS tunnel using one another's label.

Answer: C

Explanation:

Question: 317

Refer to the exhibit.



Refer to the exhibit. A large service provider is migrating device management from Layer 2 VLANbased to Layer 3 IP-based solution. An engineer must configure the ISIS solution with these requirements:

Network management server IP 172.16.10.1 must be advertised from the core MPLS network to the regional domain.

The external network 202.10.0.0/24 must not establish ISIS peering with the R5 router.

The regional network must prevent sending unnecessary hello packets and flooding the routing tables of the R5 router.

Which two ISIS parameters must be implemented to meet these requirements? (Choose two.)

- A. LSP lifetime maximum
- B. advertise-passive-only
- C. overload bit passive
- D. attached bit on ISIS instance

E. passive-interface Loopback0

Answer: A, D

Explanation:

Question: 318

What is a characteristic of data modeling language?

- A. It provides an interface for state data.
- B. It separates configuration and state data.
- C. It ensures devices are individually configured.
- D. It replaces SNMP.

Answer: B

Explanation:

Question: 319

Which function does RSVP perform in a Cisco MPLS TE environment?

- A. It establishes targeted LDP sessions between neighbors that are directly connected.
- B. It signals to LDP protocol along the path that a Cisco MPLS TE will be configured.
- C. It reserves bandwidth for LDP sessions between routers participating in a Cisco MPLS TE.
- D. It reserves the bandwidth along the path between the head-end and tail-end router.

Answer: D

Explanation:

Question: 320

A network operator working for a private outsourcing company with an employee id: 4261:72:778 needs to limit the malicious traffic on their network. Which configuration must the engineer use to implement URPF loose mode on the GigabitEthernet0/1 interface?

A. `router(config)# interface gigabitethernet0/1`

`router(config-if)# ip address 192.168.200.1 255.255.255.0`

`router(config-if)# ip verify unicast source reachable-via any`

`router(config-if)# ipv6 address 2001:DB8:1::1/96`

`router(config-if)# ipv6 verify unicast source reachable-via any`

B. `router(config)# interface gigabitethernet0/1`

`router(config-if)# ip address 192.168.200.1 255.255.255.0`

`router(config-if)# ip verify unicast source reachable-via rx`

`router(config-if)# ipv6 address 2001:DB8:1::1/96`

`router(config-if)# ipv6 verify unicast source reachable-via rx`

C. `router(config)# interface gigabitethernet0/1`

`router(config if)# ip address 192.168.200.1 255.255.255.0`

`router(config-if)# ip verify unicast source reachable-via rx`

`router(config-if)# ipv6 address 2001:DB8:1::1/96`

`router(config-if)# ipv6 verify unicast source reachable-via any`

D. `router(config)# interface gigabitethernet0/1`

`router(config-if)# ip address 192.168.200.1 255.255.255.0`

router(config-if)# ip verify unicast source reachable-via any

router(config-if)# ipv6 address 2001:DB8:1::1/96

router(config-if)# ipv6 verify unicast source reachable-via rx

Answer: A

Explanation:

Question: 321

Which type of attack is an application attack?

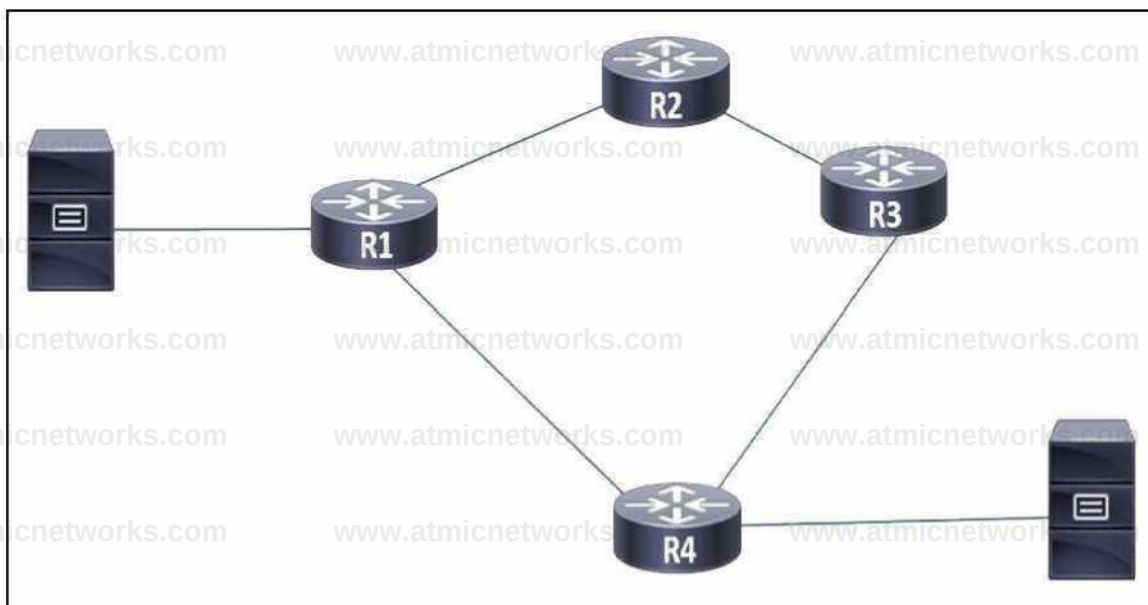
- A. ping of death
- B. ICMP (ping) flood
- C. HTTP flood
- D. SYN flood

Answer: C

Explanation:

Question: 322

Refer to the exhibit.



Refer to the exhibit. A network engineer observed congestion between routers R1 and R4, which are connected on a point-to-point link. Two servers that reside on networks on R1 and R4 generate heavy traffic between them with most traffic going from R4 to R1. To improve overall performance, the engineer wants to drop inbound packets that exceed a configured threshold, without disrupting traffic that passes from R4 to R3. Which action must the engineer take to resolve the issue?

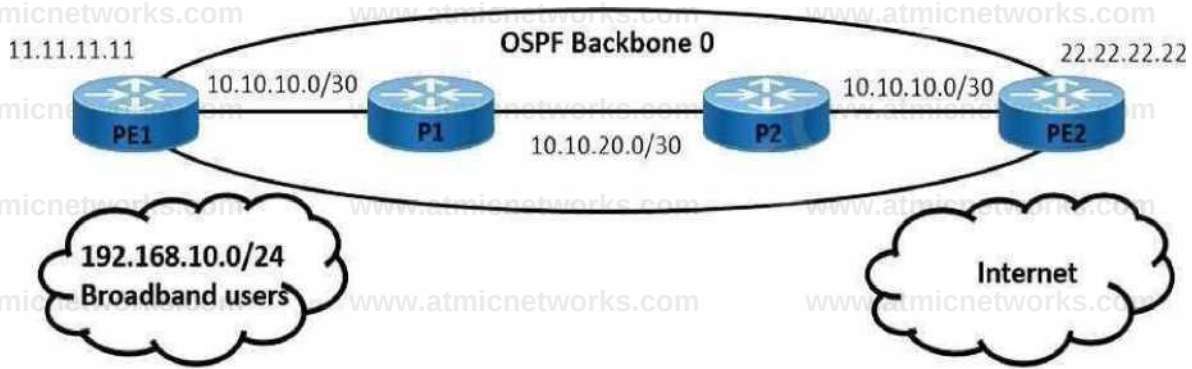
- A. Implement traffic policing to drop packets that exceed the given threshold.
- B. Implement FIFO to queue excess traffic for transmission when bandwidth is available.
- C. Implement traffic shaping to drop excess packets.
- D. Implement a service policy in the outbound direction on each interface on the link to tag traffic exiting each router.

Answer: A

Explanation:

Question: 323

Refer to the exhibit.



```

PE1 (config) $ Policy-map PM10
PE1 (config-pmap) * class CM-10
PE1 (config-pmap-c) # set dscp 4
PE1 (config-pmap-c) t exit
PE1 (config-pmap) ♦ class CM-20
PE1 (config-pmap-c) 4 set dscp 6
PE1 (config-pmap-c) ♦ exit
PE1 (config-pmap) # exit
PE1 (config) 4 interface Ge0/1
PE1 (config-if) 4 switch mode access
PE1 (config-if) ♦ service-policy input PM10

```

Refer to the exhibit A user is performing QoS marking on internet traffic and sending it with IPv4 and IPv6 headers on the provider edge device PE1. IPv4 traffic is classified with DSCP 4 and IPv6 traffic is classified with DSCP 6. Which action must the engineer take to begin implementing a QoS configuration on PE1 for the IPv6 traffic?

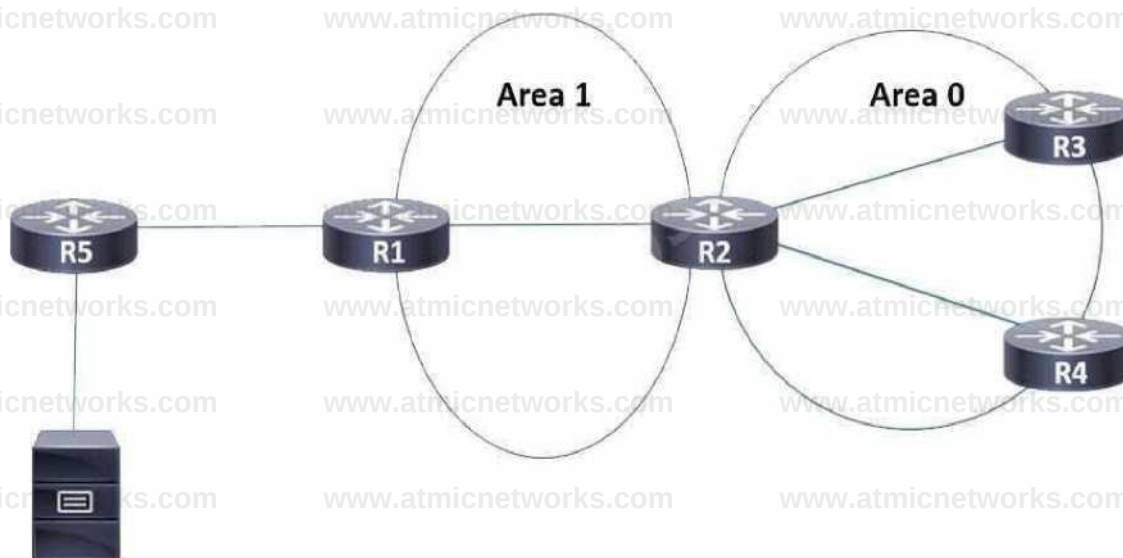
- A. Create an access list that includes any IPv6 traffic and apply it to CM-20.
- B. Create access list IPv6-match and configure match ip dscp 4 and match ip dscp 6 in class maps CM-10 and CM-20.
- C. Configure match ip dscp 4 in class map CM-10 and match ip dscp 6 in class map CM-20.
- D. Create access list IPv6-filter and remove DSCP value 4 and 6 in class maps CM-10 and CM-20.

Answer: A

Explanation:

Question: 324

Refer to the exhibit.



Refer to the exhibit. EIGRP is running between routers R5 and R1, and OSPF is used in the rest of the network. Users in a network attached to router R3 need to access a server connected to R5. Which task must the engineer perform so that only the users attached to R3 are able to access the server, but no other network is shared to OSPF?

- A. Configure redistribution using route maps to filter the routes that are shared
- B. Configure redistribution using an offset list to filter the routes that are shared.
- C. Configure an OSPF virtual link between R1 and R3 to route traffic between the two areas.
- D. Configure R1 as a stub router for EIGRP and OSPF so that only the default route is shared

Answer: A

Explanation:

Question: 325

While an engineer deploys a new Cisco device to redistribute routes from OSPF to BGP, they notice that not all OSPF routes are getting advertised into BGP. Which action must the engineer perform so that the device allows O, OIA, OE1, and OE2 OSPF routes into other protocols?

- A. Configure the device to pass only O and E2 routes through it.
- B. Configure the synchronization keyword in the global BGP configuration.
- C. Configure the keyword nssa in the redistribution entry.

D. Configure the keywords internal and external in the redistribution entry.

Answer: D

Explanation:

Question: 326

A company is expanding its existing office space to a new floor of the building, and the networking team is installing a new set of switches. The new switches are running IGMPv2, and the engineers configured them for VLAN10 only. The rest of the existing network includes numerous Layer 2 switches in multiple other VLANs, all running IGMPv3. Which additional task must the team perform when deploying the new switches so that traffic is switched correctly through the entire network?

- A. Configure the new switches to use IGMPv3 on all VLANs on the network.
- B. Configure all switches on the network to support IGMPv2 and IGMPv3 on all VLANs on the network.
- C. Configure the new switches to use IGMPv3 on VLAN10 only.
- D. Configure all switches on the network to support IGMPv2 and IGMPv3 on VLAN10 only.

Answer: C

Explanation:

Question: 327

Refer to the exhibit.

R2# show mpls ldp neighbor detail

Peer LDP Ident: 10.10.10.1:0; Local LDP Ident 10.10.10.2:0

TCP connection: 10.10.10.1.646 - 10.10.10.2.56531

Password: not required, none, in use

State: Oper; Msgs sent/rcvd: 18/18; Downstream; Last TIB rev sent 28

Up time: 00:01:08; UID: 3; Peer Id 2;

LDP discovery sources:

GigabitEthernet2/0; Src IP addr: 10.0.0.1 holdtime: 15000 ms, hello interval: 5000 ms

Addresses bound to peer LDP Ident:

10.0.0.13 10.10.10.1 10.0.0.1

Peer holdtime: 180000 ms; KA interval: 60000 ms; Peer state: estab

Clients: Dir Adj Client

LDP Session Protection enabled, state: Incomplete duration: 86400 seconds

RI# show mpls ldp neighbor detail

Peer LDP Ident: 10.10.10.2:0; Local LDP Ident 10.10.10.1:0

TCP connection: 10.10.10.2.56531 - 10.10.10.1.646

Password: not required, none, in use

State: Oper; Msgs sent/rcvd: 19/19; Downstream; Last TIB rev sent 30

Up time: 00:02:27; UID: 2; Peer Id 1;

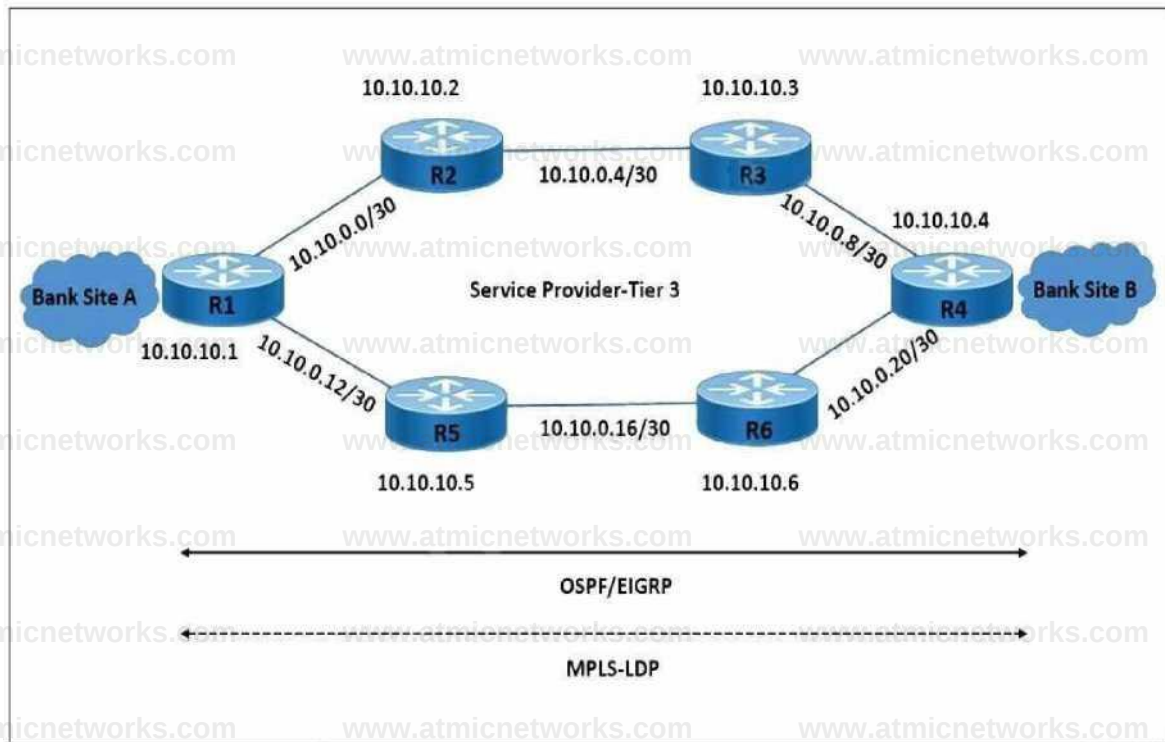
LDP discovery sources:

GigabitEthernet2/0; Src IP addr: 10.0.0.2 holdtime: 15000 ms, hello interval: 5000 ms

Addresses bound to peer LDP Ident:

10.10.10.2 10.0.0.5 10.0.0.2 10.0.0.25

Peer holdtime: 180000 ms; KA interval: 60000 ms; Peer state: estab



Refer to the exhibit. LDP peering between routers R1 and R2 is dropped when the link between R1 and R2 is taken offline. However, LDP peering between R2 and R3 stays up when the link between R2

and R3 is taken offline. Which action allows MPLS traffic forwarding to continue normally if the link between R1 and R2 goes down?

- A. Enable IGP and LDP Synchronization on R1.
- B. Implement LDP Session Protection on R1.
- C. Enable IGP and LDP Synchronization on R2.
- D. Implement LDP Session Protection on R2.

Answer: B

Explanation:

Question: 328

Refer to the exhibit.



Refer to the exhibit. A network administrator implemented MPLS routing between routers R1, R2, R3, and R4. ATOM is configured between R1 and R4 to allow Layer 2 traffic from hosts on RA1 and RA2. A targeted MPLS session is established between R1 and R4. Which additional action must the administrator take on all routers so that LDP synchronization occurs between connected LDP sessions?

- A. Disable the MPLS LDP IGP sync holddown.
- B. Configure OSPF or IS-IS as the routing protocol.
- C. Configure EIGRP as the routing protocol using stub areas only.
- D. Enable MPLS LDP sync delay timers.

Answer: A

Explanation:

Question: 329

Refer to the exhibit.

172.16.0.0/16

```
AS 321,      med420,    external,  rid 10.2.54.12    via 10.2.54.12
AS 51,       med500,    external,  rid 7.4.5.2      via 7.4.5.2
AS 321,      med300,    internal,  rid 10.2.34.5    via 10.2.34.5
```

Refer to the exhibit. Tier 2 ISP A on AS 653 is connected to two Tier 1 ISPs on AS 321 and AS 51 respectively.

The network architect at ISP A is planning traffic flow inside the network to provide predictable network services. Cisco Express Forwarding is disabled on the edge router. How should the architect implement BGP to direct all traffic via the Tier 1 ISP with next-hop 7.4.5.2?

- A. Implement the BGP routing protocol and run the bgp deterministic-med command.
- B. Implement MP-BGP with a 4-byte AS number with the bgp best path compare-routerid command.
- C. Implement the BGP routing protocol and the maximum-paths 2 configuration.
- D. Implement BGP route-reflector functionality with the bgp always-compare-med configuration.

Answer: A

Explanation:

Question: 330

Which two features describe TI-LFA? (Choose two.)

- A. TI-LFA uses PQ or P and Q nodes on the post-convergence path to compute the backup path.
- B. Post-convergence, TI-LFA considers the next-hop neighbor to calculate the backup repair path.
- C. TI-LFA works with point of local repair when the PQ node supports only LDP capability.
- D. Unlike RLFA, TI-LFA works without the PQ node and provides double segment failure protection.
- E. TI-LFA leverages the post-convergence path that carries data traffic after a failure.

Answer: D, E

Explanation:

Question: 331

How does SR policy operate in Segment Routing Traffic Engineering?

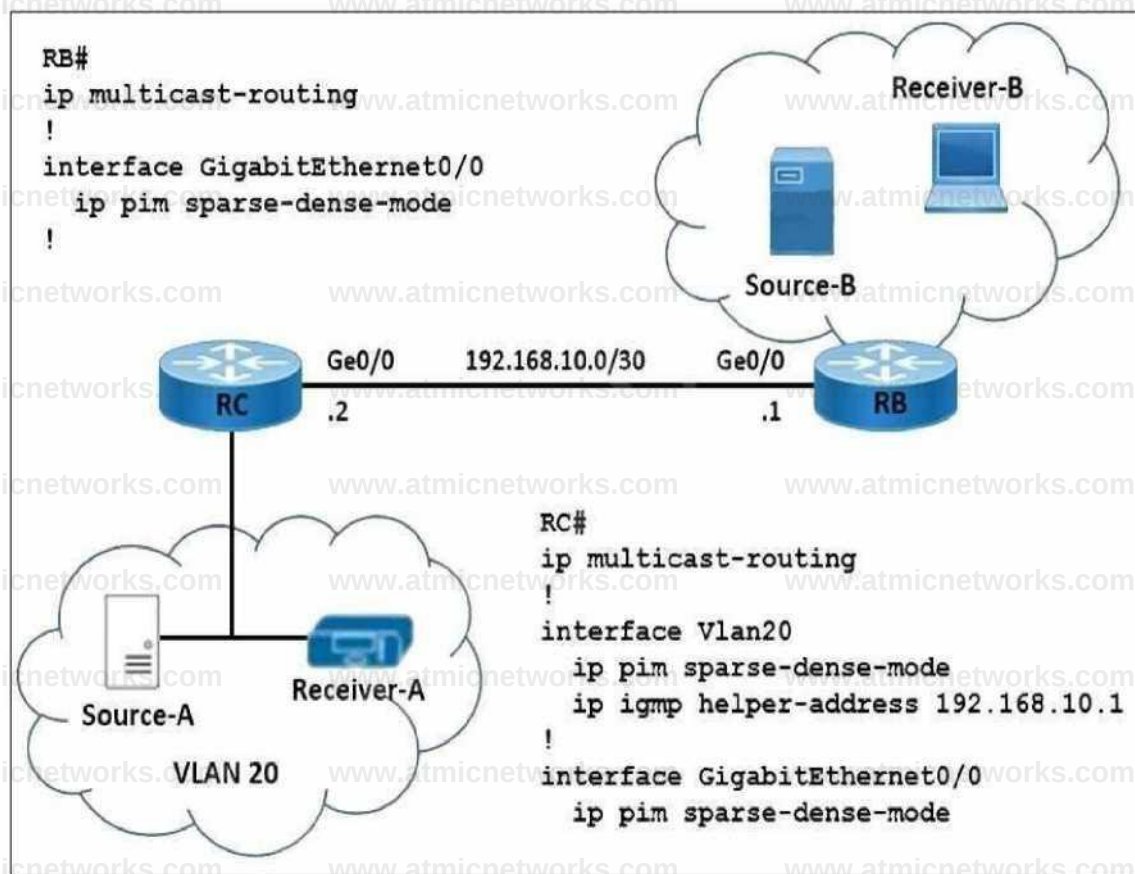
- A. An SR policy for color and endpoint is deactivated at the headend as soon as the headend learns a valid candidate path for the policy.
- B. When "invalidation drop" behavior occurs, the SR policy forwarding entry is removed and the router drops all traffic that is steered into the SR policy.
- C. When a set of SID lists is associated with the SR policy designated path, traffic steering is ECMP-based according to the qualified cost of each SID-list.
- D. An active SR policy installs a BSID-keyed entry in the forwarding table to steer the packets that match the entry to the SR policy SID-list.

Answer: D

Explanation:

Question: 332

Refer to the exhibit.



Refer to the exhibit. A network engineer is implementing multicast Source-A to send a multicast stream for Receiver-A, and multicast Source-B to send a multicast stream for Receiver-B. Router RC forwards the IGMP host a report and leaves messages to IP address 192.168.10.1. How must the multicast features be implemented to prevent RB from receiving multicast flooding from Source-A?

- A. Change the helper-address value to 192.168.10.2 on RC.
- B. Enable ip pim neighbor-filter on RC interface Ge0/0.
- C. Configure PIM-SSM on RB and RC interface Ge 0/0.
- D. Enable ip pim passive on RB interface Ge0/0.

Answer: D

Explanation:

Question: 333

How does an untrusted interface at the boundary of an administrative domain handle incoming packets?

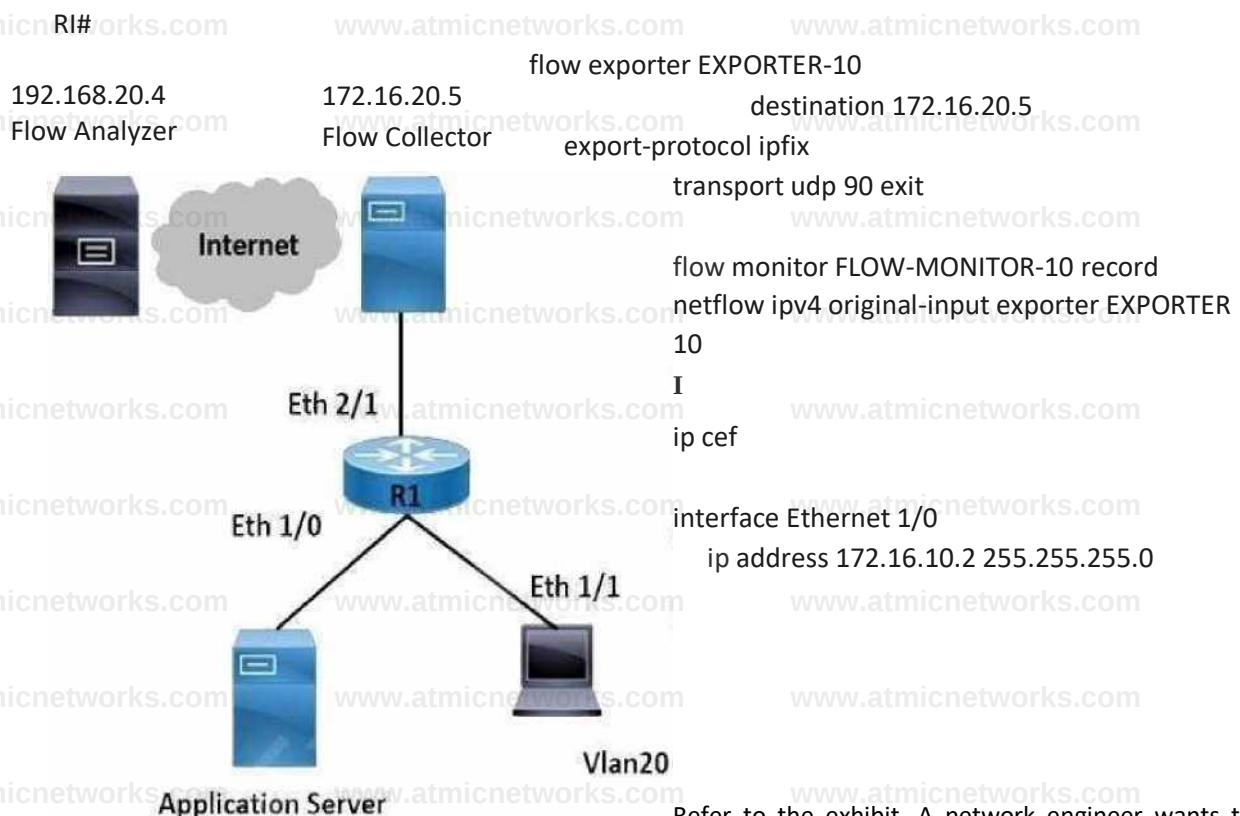
- A. It remarks all values to a CoS of 0.
- B. It forwards only traffic with a DSCP value of 48.
- C. It translates the IP precedence value to the corresponding DSCP value.
- D. It drops all traffic ingress the network.

Answer: A

Explanation:

Question: 334

Refer to the exhibit.



Refer to the exhibit. A network engineer wants to monitor traffic from the application server and send the output to the external monitoring device at 172.16.20.5. Application server traffic should pass through the R1 Eth2/1 interface for further analysis after it is monitored. Which configuration must be applied on the R1 router?

- A. Configure the FLOW-MONITOR-20 command.

- B. Configure the flow exporter EXPORTER-10 destination 192.168.20.4 command.
- C. Configure the ip flow monitor FLOW-MONITOR-10 input command on the Ethernet1/0 interface.
- D. Configure the ip flow monitor FLOW-MONITOR-10 output command on the Ethernet 2/1 interface.

Answer: C

Explanation:

Question: 335

An engineering team must implement Unified MPLS to scale an MPLS network. Devices in the core layer use different IGPs, so the team decided to split the network into different areas. The team plans to keep the MPLS services as they are and introduce greater scalability. Which additional action must the engineers take to implement the Unified MPLS?

- A. Redistribute the IGP prefixes from one IGP into the other routers to ensure end-to-end LSPs.
- B. Configure the ABR routers as route reflectors that redistribute IGP into BGP.
- C. Redistribute the IGP prefixes into another IGP to ensure end-to-end LSPs.
- D. Move the IGP prefixes into IS-IS as the loopback prefixes of the PE routers to distribute the prefixes to other routers to create end-to-end LSPs.

Answer: B

Explanation: