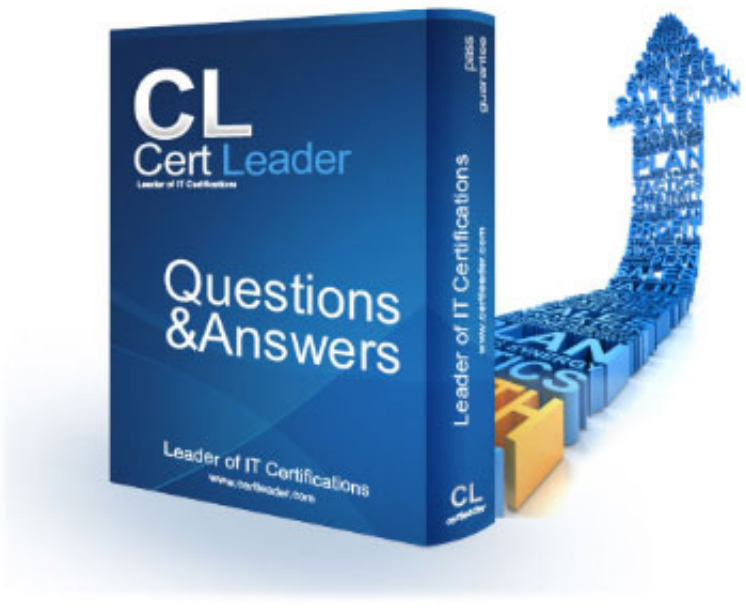
# 642-883 Dumps

# Deploying Cisco Service Provider Network Routing (SPROUTE)

**https://www.certleader.com/642-883-dumps.html**

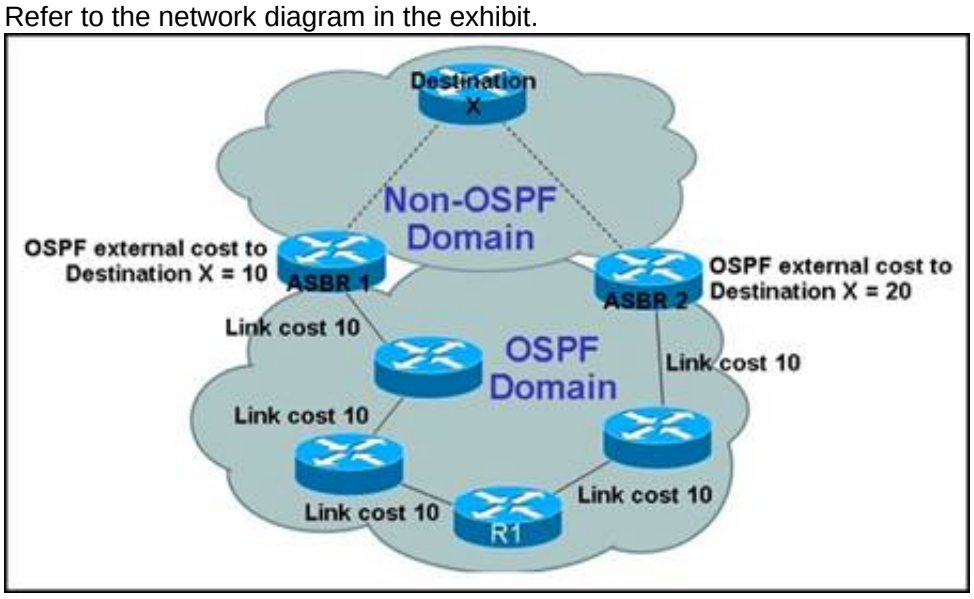


**NEW QUESTION 1**
A service provider is running BGP with clients at the edge of the network. The service provider sees that routing updates from one site are being dropped when the other site receives them. Which feature fixes this issue?

A. EBGP multihop
B. inter-AS peering
C. AS-override
D. allow-AS in

**Answer:** C

**NEW QUESTION 2**
Refer to the network diagram in the exhibit.




If both ASBRs are advertising the external Destination X network as OSPF E2 route, what is the best path for the R1 router to reach Network X?

A. R1 will use the path via ASBR 2 as the best path.
B. R1 will use the path via ASBR 1 as the best path.
C. R1 will load balance between two equal cost paths via ASBR 1 and ASBR 2.
D. R1 will sees two equal costs and will choose the path through the ASBR with the lower OSPF router ID.

**Answer:** B

**NEW QUESTION 3**
In Cisco IOS XE, which option is the default threshold value for slow peer detection?

A. 120 seconds
B. 180 seconds
C. 240 seconds
D. 300 seconds

**Answer:** D

**NEW QUESTION 4**
Which option is the minimum required configuration to enable PIM on a Cisco IOS XR router interface?

A. router pim address-family ipv4interface GigabitEthernet0/0/0/0
B. router piminterface GigabitEthernet0/0/0/0 address-family ipv4enable
C. router pim address-family ipv4interface GigabitEthernet0/0/0/0 enable
D. router piminterface GigabitEthernet0/0/0/0 enable
E. router pim address-family ipv4interface GigabitEthernet0/0/0/0 address-family ipv4enable

**Answer:** D

**NEW QUESTION 5**
When troubleshooting OSPF neighbor errors, which three verification steps should be considered? (Choose three.)

A. Verify if neighboring OSPF interfaces are configured in the same area.
B. Verify if neighboring OSPF interfaces are configured with the same OSPF process ID.
C. Verify if neighboring OSPF interfaces are configured with the same OSPF priority.
D. Verify if neighboring OSPF interfaces are configured with the same hello and dead intervals.
E. Verify if neighboring OSPF interfaces are configured with the same area type.

**Answer:** ADE

**NEW QUESTION 6**
When configuring Cisco IOS XR route policy nesting, which command is used within a route policy to call another route policy?

A. Apply
B. Continue

C. Jump
D. Go to
E. Call

**Answer:** A

**Explanation:**
http://www.cisco.com/en/US/docs/ios_xr_sw/iosxr_r3.7/routing/command/reference/rr37plc y.html
Examples
In the following example, the policy CustomerIn applies the route-policy SetLocalPref to conditionally set the local preference on a route. The parameters 20, 30, 40, and 50 are passed to the parameterized policy SetLocalPref, where the local preference is set to:
•20, if the community 217:20 is present in the route
•30, if the community 217:30 is present in the route
•40, if the community 217:40 is present in the route
•50, if the community 217:50 is present in the route
RP/0/RP0/CPU0:router(config)# route-policy SetLocalPref ($lp0, $lp1, $lp2, $lp3,
$lp4)
RP/0/RP0/CPU0:router(config-rpl)# if community matches-any ($lp0:$lp1)then RP/0/RP0/CPU0:router(config-rpl-elseif)# set local-preference $lp1
RP/0/RP0/CPU0:router(config-rpl-elseif)# elseif community matches-any ($lp0:$lp2) then
RP/0/RP0/CPU0:router(config-rpl-elseif)# set local-preference $lp2 RP/0/RP0/CPU0:router(config-rpl-elseif)# elseif community matches-any ($lp0:$lp3) then
RP/0/RP0/CPU0:router(config-rpl-elseif)# set local-preference $lp3 RP/0/RP0/CPU0:router(config-rpl-elseif)# elseif community matches-any ($lp0:$lp4) then
RP/0/RP0/CPU0:router(config-rpl-elseif)# set local-preference $lp4 RP/0/RP0/CPU0:router(config-rpl-elseif)# endif RP/0/RP0/CPU0:router(config-rpl)# end-policy
RP/0/RP0/CPU0:router(config)# route-policy CustomerIn($cust)
RP/0/RP0/CPU0:router(config-rpl)# apply SetLocalPref ($cust, 20, 30, 40, 50) RP/0/RP0/CPU0:router(config-rpl)# end-policy RP/0/RP0/CPU0:router(config)# route-policy Cust_217 RP/0/RP0/CPU0:router(config-rpl)# apply CustomerIn(217) RP/0/RP0/CPU0:router(config-rpl)# end-policy

**NEW QUESTION 7**
A network engineer must secure every BGP session within the autonomous system by enabling MD5 authentication. Which command implements authentication on network devices that run regular Cisco IOS?

A. password encryptedpassword
B. neighboripv4_addresspasswordpassword
C. service password-encryption
D. key chain md5

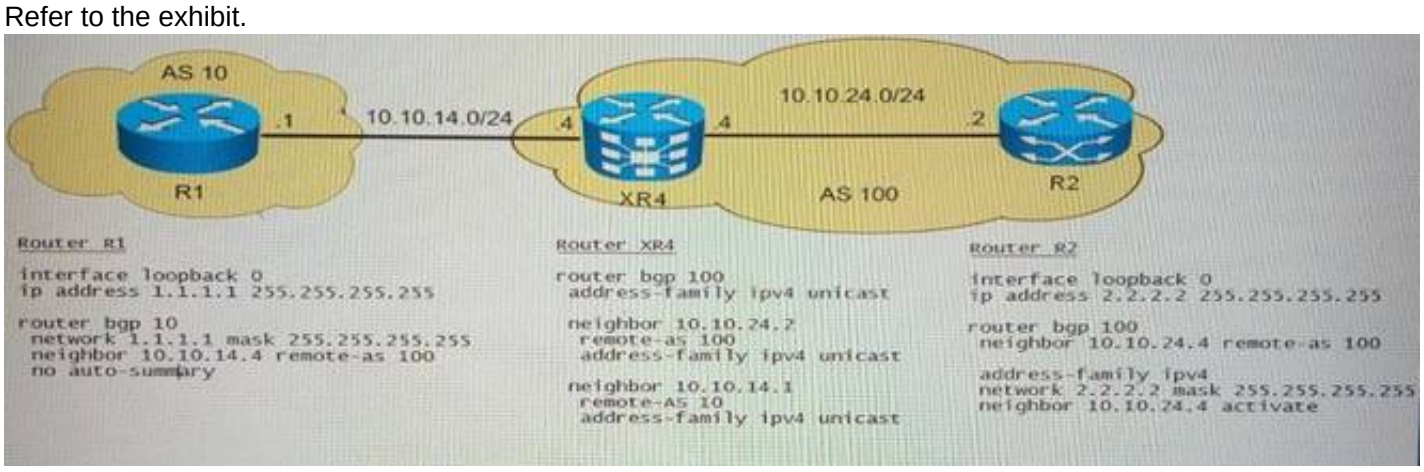
**Answer:** B

**NEW QUESTION 8**
Which two statements regarding OSPFv2 or OSPFv3 authentication are correct? (Choose two.)

A. OSPFv2 supports MD5 authentication.
B. OSPFv2 supports MD5 or SHA authentication.
C. OSPFv2 relies on the native security stack that uses IPsec.
D. OSPFv3 supports MD5 authentication.
E. OSPFv3 supports MD5 or SHA authentication.
F. OSPFv3 relies on the native security stack that uses IPsec.

**Answer:** AF

**NEW QUESTION 9**
Refer to the exhibit.




R2 does not have R1 1.1.1.1/32 subnet in its BGP table. Which issue can be causing this problem?

A. There is no route-reflector configuration in AS 100.
B. IPv4 address-family isnot enabled on R1.
C. R2 does not have next-hop-self for a XR4 iBGP session.
D. XR4 drops any update coming from R1 because there is no RPL policy applied.

**Answer:** D

**NEW QUESTION 10**
Which two options are characteristics of Nonstop Forwarding and Nonstop routing? (Choose two.)

A. NSR is graceful redundancy mechanism.
B. NSR is stateful redundancy mechanism.
C. NSF is stateful redundancy mechanism.

D. NSF is graceful redundancy mechanism.

**Answer:** BD

**NEW QUESTION 10**
Refer to the Cisco IOS XR route policy exhibit.

```
route-policy SetLP
if med eq 10 then
set local-preference 200
endif
if local-preference eq 100 then
set weight 100
endif
if local-preference eq 200 then
set weight 200
endif
end-policy
```

If the original incoming routing update has an MED of 10 and a local preference of 100, how will the routing update be modified?

A. The local preference will be set to 100, the MED will be set to 10, and the weight will be set to 100.
B. The local preference will be set to 100, the MED will be set to 10, and the weight will be set to 200.
C. The local preference will be set to 200, the MED will be set to 10, and the weight will be set to 100.
D. The local preference will be set to 200, the MED will be set to 10, and the weight will be set to 200.

**Answer:** C

**NEW QUESTION 11**
A network engineer cannot connect different routers by eBGP using peer groups. Which two actions establish an adjacency between both routers? (Choose two.)

A. Ensure that the peer group statements match across all routers.
B. Ensure that ebgp-multihop is configured.
C. Ensure that the remote-as statement is configured with the correct peer AS.
D. Configure a weight value that is lower than the default value of 32768.
E. Specify the weight attribute first.

**Answer:** BC

**NEW QUESTION 13**
When configuring Cisco IOS route maps, which command allows the route map processing to jump to another statement instead of exiting?

A. jump
B. next
C. set
D. continue
E. goto

**Answer:** D

**Explanation:**
Match Operations With Continue Clauses
If a match clause does not exist in the route-map entry but a continue clause does, the continue clause will be automatically executed and go to the specified route-map entry. If a match clause exists in a route-map entry, the continue clause is executed only when a successful match occurs. When a successful match occurs and a continue clause exists, the route map executes the set clauses and then goes to the specified route-map entry. If the next route map contains a continue clause, the route map will execute the continue clause if a successful match occurs. If a continue clause does not exist in the next route map, the route map will be evaluated normally. If a continue clause exists in the next route map but a match does not occur, the route map will not continue and will “fall through” to the next sequence number if one exists.
Set Operations With Continue Clauses
Set clauses are saved during the match clause evaluation process and executed after the route-map evaluation is completed. The set clauses are evaluated and executed in the order in which they were configured. Set clauses are only executed after a successful match occurs, unless the route map does not contain a match clause. The continue statement proceeds to the specified route-map entry only after configured set actions are performed. If a set action occurs in the first route map and then the same set action occurs again, with a different value, in a subsequent route map entry, the last set action may override any previous set actions that were configured with the same set command unless the set command permits more than one value. For example, the set as-path pretend command permits more than one autonomous system number to be configured.

**NEW QUESTION 15**
Which option is where BGP graceful restart is negotiated between peers?

A. open message
B. keep-alive message
C. notification message
D. update message

**Answer:** A

**NEW QUESTION 19**
What is function of the RP/0/RSP0/CPU0:PE1(config-ospf)#distance Cisco IOS-XR command?

A. To modify the administrative distance of the OSPF routes
B. To modify the default seed metric of the OSPF external routes
C. To modify the OSPF default reference bandwidth
D. To modify the OSPF cost

**Answer:** A

**Explanation:**
http://www.cisco.com/en/US/docs/ios_xr_sw/iosxr_r3.8/routing/command/reference/rr38osp f.pdf

## distance (OSPF)

To define an administrative distance, use the **distance** command in the appropriate mode. To remove the **distance** command from the configuration file and restore the system to its default condition in which the software removes a distance definition, use the **no** form of this command.

**distance** *weight* [*ip-address wildcard-mask* [*access-list-name*]]

**no distance** *weight ip-address wildcard-mask* [*access-list-name*]

| Syntax Description | | |
|---|---|---|
| | *weight* | Administrative distance. Range is 10 to 255. Used alone, the *weight* argument specifies a default administrative distance that the software uses when no other specification exists for a routing information source. Routes with a distance of 255 are not installed in the routing table. Table 1 lists the default administrative distances. |
| | *ip-address* | (Optional) IP address in four-part, dotted-decimal notation. |
| | *wildcard-mask* | (Optional) Wildcard mask in four-part, dotted decimal format. A bit set to 1 in the *mask* argument instructs the software to ignore the corresponding bit in the address value. |
| | *access-list-name* | (Optional) Name of an IP access list to be applied to incoming routing updates. |

C:\Documents and Settings\user-nwz\Desktop\1.JPG

**NEW QUESTION 20**
Which two unique attributes are used for the loop prevention mechanism when route reflectors are deployed in a network? (Choose two.)

A. local preference
B. originator-ID
C. AS-path
D. next-hop
E. origin
F. cluster-list

**Answer:** BE

**NEW QUESTION 23**
A network engineer is configuring IS-IS in Cisco IOS XR. Where is BFD configured?

A. RP/0/RSP0/CPU0:router(config-isis-if)#
B. RP/0/RSP0/CPU0:router(config)#
C. RP/0/RSP0/CPU0:router(config-bfd)#
D. RP/0/RSP0/CPU0:router(config-isis-if-af)#

**Answer:** A

**NEW QUESTION 24**
For which reason might an enterprise's Internet circuits use private AS BGP peerings?

A. The enterprisewishes to obscure internal routing information from the Internet.
B. The enterprise owns their own IP space.
C. All redundant circuits are through the same provider.
D. The enterprise uses BGP confederations internally.

**Answer:** C

**NEW QUESTION 28**
Which three statements are true regarding the OSPF router ID? (Choose three.)

A. The OSPF routing process chooses a router ID for itself when it starts up.
B. The router-id command is the preferred procedure to set the router ID.
C. If a loopback interface is configured, its address will always be preferred as the router ID over any other methods.
D. After the router ID is set, it does not change, even if the interface that the router is using for the router ID goes dow
E. The router ID changes only if the router reloads or if the OSPF routing process restarts.
F. In OSPF version 3, the OSPF router ID uses a 128-bit number.

**Answer:** ABD

**NEW QUESTION 32**
Which three BGP configuration groupings are supported on Cisco IOS XR Software? (Choose three.)

A. peer-group
B. af-group
C. bgp-group
D. session-group
E. neighbor-group
F. as-group

**Answer:** BDE

**Explanation:**
•Commands relating to a peer group found in Cisco IOS Release 12.2 have been removed from Cisco IOS XR software. Instead, the af-group, session-group, and neighbor-group configuration commands are added to support the neighbor in Cisco IOS XR software:
–The af-group command is used to group address family-specific neighbor commands within an IPv4 or IPv6 address family. Neighbors that have the same address family configuration are able to use the address family group name for their address family- specific configuration. A neighbor inherits the configuration from an address family group by way of the use command. If a neighbor is configured to use an address family group, the neighbor will (by default) inherit the entire configuration from the address family group. However, a neighbor will not inherit all of the configuration from the address family group if items are explicitly configured for the neighbor.
–The session-group command allows you to create a session group from which neighbors can inherit address family-independent configuration. A neighbor inherits the configuration from a session group by way of the use command. If a neighbor is configured to use a session group, the neighbor (by default) inherits the session group's entire configuration. A neighbor does not inherit all the configuration from a session group if a configuration is done directly on that neighbor.
–The neighbor-group command helps you apply the same configuration to one or more neighbors. Neighbor groups can include session groups and address family groups. This additional flexibility can create a complete configuration for a neighbor. Once a neighbor group is configured, each neighbor can inherit the configuration through the use command. If a neighbor is configured to use a neighbor group, the neighbor (by default) inherits the neighbor group's entire BGP configuration.
–However, a neighbor will not inherit all of the configuration from the neighbor group if items are explicitly configured for the neighbor. In addition, some part of the neighbor group's configuration could be hidden if a session group or address family group was also being used.

**NEW QUESTION 36**
An engineer is troubleshooting an OSPF adjacency between the R1 and R2 and is seeing the following debug:
R2#debug ip ospf adj
*May 10 17:48:27.459: OSPF: Rcv pkt from 10.1.2.1, FastEthernet1/0 : Mismatch Authentication type. Input packet specified type 1, we use type 2
Which option describes why the adjacency cannot be established?

A. R1 is configured for plaintext authentication.
B. R1 is not configured for authentication.
C. R2 is not configured for authentication.
D. R2 is configured for plaintext authentication.

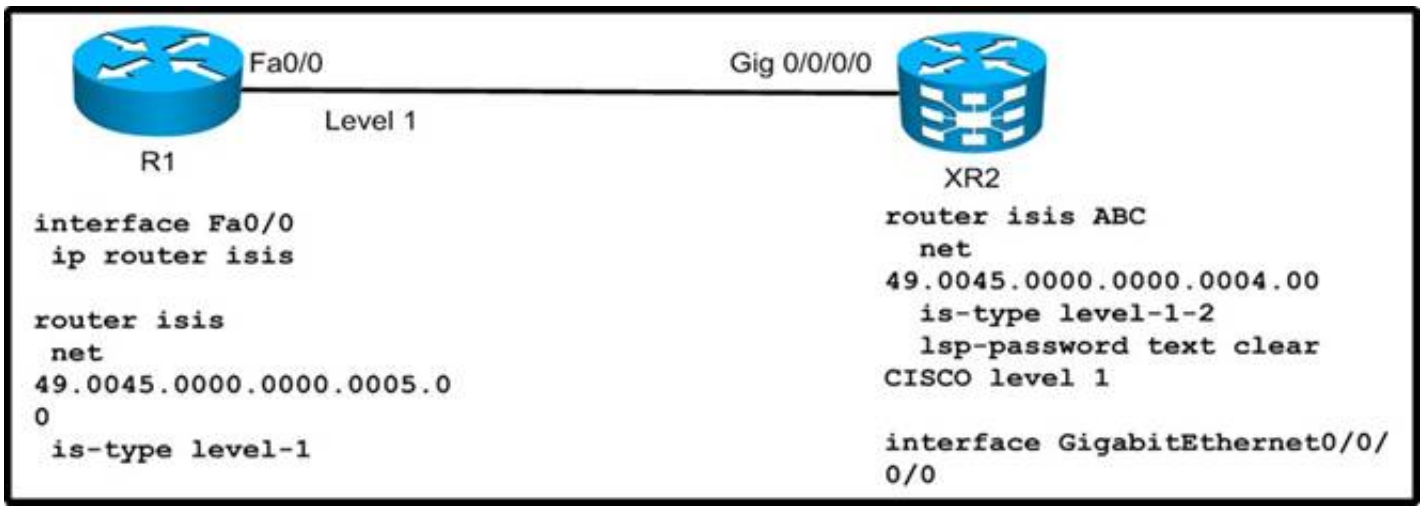
**Answer:** A

**NEW QUESTION 41**
Which option is used by BGP for basic authentication between neighbors?

A. TCP option 19 and MD5 hash
B. TCP option 19 and SHA hash
C. UDP option 19 and MD5 hash
D. UDP option 19 and SHA hash

**Answer:** A

**NEW QUESTION 43**
Refer to the exhibit.




IS-IS adjacency is not established between XR2 and R1. Which action fixes this issue?

A. unify IS-IS process IDs on each router
B. configure on R1 under IS-IS is-type level-1-2
C. configure on R1 under IS-IS area-password CISCO
D. configure on XR2 under IS-IS under Gi0/0/0/0 address-family ipv4 unicast

**Answer:** D

**NEW QUESTION 48**
Which two methods implement high availability in OSPF on Cisco IOS XR? (Choose two.)

A. NSF
B. NSR
C. BFD
D. fast hellos
E. sham-links

**Answer:** AB

**NEW QUESTION 51**
Refer to the BGP and route map configurations exhibit.

```
router bgp 65001
 neighbor 10.1.1.2 remote-as 65023
 neighbor 10.1.1.2 route-map setas out
!
route-map setas permit 10
 match ip address test1
 set as-path prepend 65111 65112
!
route-map setas permit 20
 match ip address test2
 set as-path prepend 65202 65203 65204
!
!end of the route-map configuration
```

When the "setas" route map is applied to the 10.1.1.2 neighbor, the 10.1.1.2 neighbor is not able to receive all the required BGP routes from this router. What could be the problem?

A. The BGP session was cleared using the clear ip bgp command after the route map was applied.
B. The test1 or test2 prefix-list is misconfigured.
C. There is no pass action configured within the route map.
D. The route map is missing the route-map setas permit 30 statement.

**Answer:** D

**NEW QUESTION 53**
On Cisco IOS XR Software, which set of commands is used to enable the gi0/0/0/1 interface for OSPF in area 0?

A. interface gi0/0/0/0ip address 10.1.1.1 255.255.255.0!router ospf 1network 10.1.1.1 0.0.0.0 area 0
B. interface gi0/0/0/0ip address 10.1.1.1 255.255.255.0!router ospf 1network 10.1.1.1 255.255.255.255 area 0
C. router ospf 1 area 0interface GigabitEthernet0/0/0/1
D. interface gi0/0/0/0ip address 10.1.1.1 255.255.255.0ip ospf 1 area 0
E. router ospf 1address-family ipv4 unicastinterface GigabitEthernet0/0/0/1 area 0
F. router ospf 1address-family ipv4 unicast interface GigabitEthernet0/0/0/1 area 0

**Answer:** C

**NEW QUESTION 58**
Which ISP tier, also known as default-free, provides global reachability info?

A. Tier 1 ISP
B. Tier 0 ISP
C. Tier 3 ISP
D. Tier 2 ISP

**Answer:** A

**NEW QUESTION 59**
Which configuration implements the most secured OSPF authentication mode on Cisco IOS XE?

A. interface Gi0/0/0/0ip ospf authentication message-digest ip ospf message-digest-key 1 md5 cisco
B. router ospf 1 area 1authentication message-digest interface GigabitEthernet0/0/0/0 message-digest-key 1 md5 cisco
C. router ospf 1 area 1interface GigabitEthernet0/0/0/0 authentication message-digest message-digest-key 1 md5 cisco
D. router ospf 1area 1 authenticationinterface GigabitEthernet0/0/0/0 ip ospf authentication-key cisco
E. interface Gi0/0/0/0 ip ospf authenticationip ospf authentication-key cisco

**Answer:** A

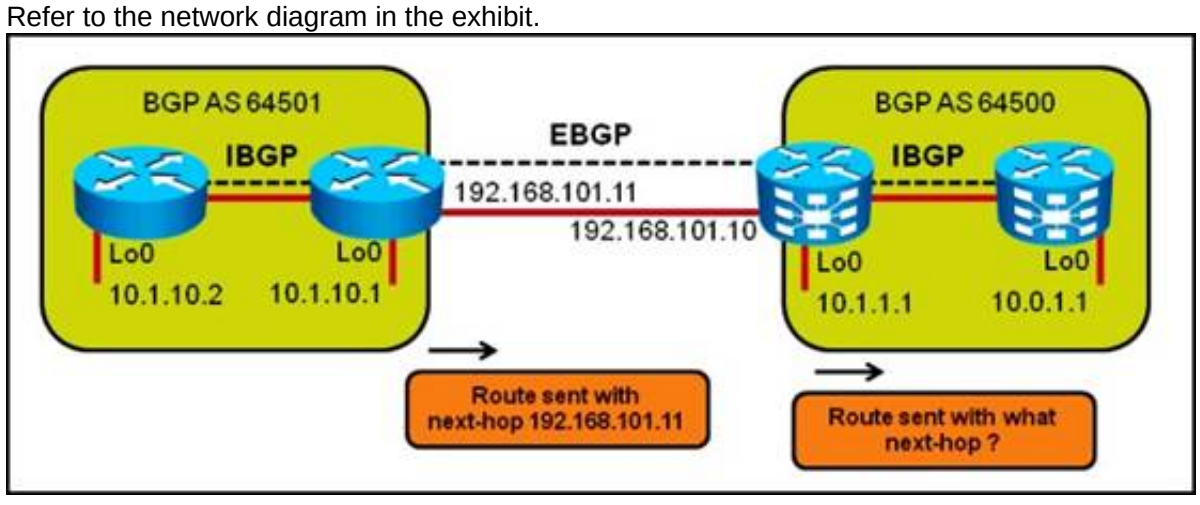
**NEW QUESTION 64**
When monitoring the OSPF operations in the network, you notice that the OSPF process is not load balancing traffic across multiple OSPF links. Which configuration adjustment could be made to enable the OSPF process to load balance traffic across multiple OSPF links?

A. Enable BFD on the OSPF interfaces and on the OSPF routing process.
B. Enable NSR on the OSPF routing process.
C. Enable NSF on the OSPF routing process.
D. Adjust the OSPF cost on the OSPF interfaces.

E. Adjust the OSPF variance parameter.
F. Use the wide-style OSPF metric instead of the narrow-style OSPF metric.

**Answer:** D

**NEW QUESTION 69**
Refer to the network diagram in the exhibit.




Assuming the IBGP session within AS 64500 was established using the loopback 0 interface between the two routers, by default, what will be the next hop of the routes from AS 64501 when the routes appear on the router running IBGP only in AS 64500?

A. 192.168.101.11
B. 192.168.101.10
C. 10.1.1.1
D. 10.0.1.1
E. 10.1.10.1

**Answer:** A

**NEW QUESTION 74**
Which two types of IS-IS routers contain routing entries from routers within the IS-IS domain by default? (Choose two.)

A. L2
B. L1/L2
C. DR
D. L3
E. L1

**Answer:** AB

**NEW QUESTION 77**
When configuring BGP on Cisco IOS XR Software, which address-family is enabled by default?

A. IPv4 unicast
B. IPv6 unicast
C. VPNv4
D. IPv4 unicast and IPv6 unicast
E. IPv4 unicast and IPv6 unicast and VPNv4
F. No address-family is enabled by default.

**Answer:** F

**Explanation:**
http://www.cisco.com/en/US/docs/ios_xr_sw/iosxr_r3.8/routing/command/reference/rr38bg p.pdf
An address family must be explicitly configured in the router configuration mode for the address family to be active in BGP. Similarly, an address family must be configured under the neighbor for the BGP session to be established for that address family. An address family must be configured in router configuration mode before it can be configured under a neighbor.

**NEW QUESTION 79**
You are implementing OSPF as the IGP using a single OSPF area design. The router
memory usage for OSPF is too high. Which two methods can lower the OSPF memory usage? (Choose two.)

A. Enable OSPF synchronization
B. Implement multi-area OSPF
C. Enable OSPF sham links to reduce the number of LSAs
D. Implement route summarization on the ABRs
E. Enable route leaking between Level 1 and Level 2 areas

**Answer:** BD

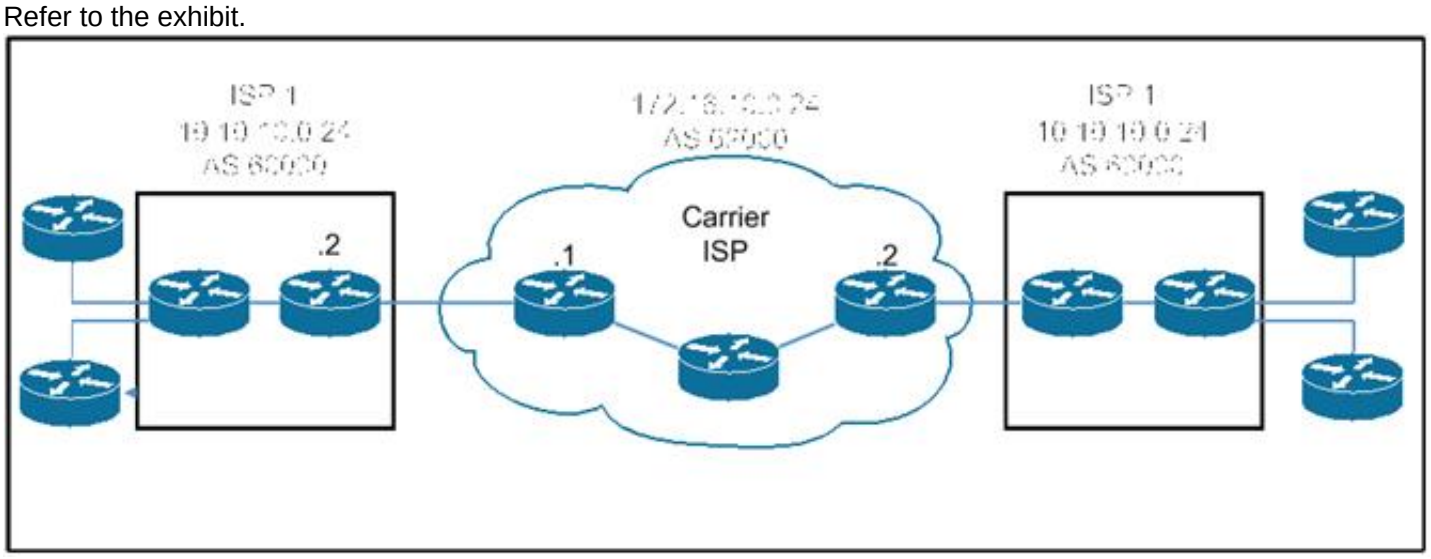
**NEW QUESTION 80**
A Cisco IOS XR router is a member in OSPF 1 and EIGRP 100 domains, and needs to redistribute OSPF learned routes into EIGRP. Which configuration achieves this goal?

A. router eigrp 100address-family ipv4 redistribute ospf 1

B. router eigrp 100redistribute ospf 1 route-policy OS_INTO_EIGroute-policy OS_INTO_EIG set eigrp-metric 100 10 255 1 155
C. router eigrp 100address-family ipv4redistribute ospf 1 route-policy OS_INTO_EIGroute-policy OS_INTO_EIG set eigrp-metric 100 10 255 1 155
D. router eigrp 100default-metric 100 1 255 1 1500redistribute ospf 1

**Answer:** C

**NEW QUESTION 83**
Refer to the exhibit.




Routers B and C in transit AS 200 are the exit points toward AS 100 and AS 300. Router B is running Cisco IOS XR and Router C IOS XE. Internally, AS 200 runs OPSF only for internal routing. Which two methods can an engineer use to ensure proper reachability between AS 100 and AS 300 for the needed routes? (Choose two.)

A. Router B: router ospf 200redistribute bgp 200 tag 20router bgp 200address-family ipv4 unicast redistribute ospf 200 metric-type 2
B. Router B: router ospf 200redistribute bgp 200router bgp 200address-family ipv4 unicast redistribute ospf 200
C. Router C: router ospf 200redistribute bgp 200 metric-type 1 subnets tag 200router bgp 200 address-family ipv4 redistribute ospf 200
D. Router C: router ospf 200redistribute bgp 200 metric-type 1 subnets tag 200router bgp 200 address-family ipv4redistribute ospf 200 match external 2
E. Router C: router ospf 200redistribute bgp 200 metric-type 1 subnets tag 200router bgp 200 address-family ipv4redistribute ospf 200 route-map match-tag match external route-map match-tag deny 10match tag 200

**Answer:** AD

**NEW QUESTION 84**
When using the show bgp ipv6 unicast summary command to verify the IPv6 BGP session status with the IPv6 BGP peers, you noticed the "St/PfxRcd" status for one of the IPv6 BGP peers is in the "Active" state. What does the "Active" state indicate?

A. The IPv6 BGP session has been established with the IPv6 BGP peer.
B. The router is in the process of sending BGP routing updates to the IPv6 BGP peer.
C. The router is in the process of establishing the IPv6 BGP session with the IPv6 BGP peer.
D. The router is exchanging BGP notification messages with its IPv6 BGP peer.

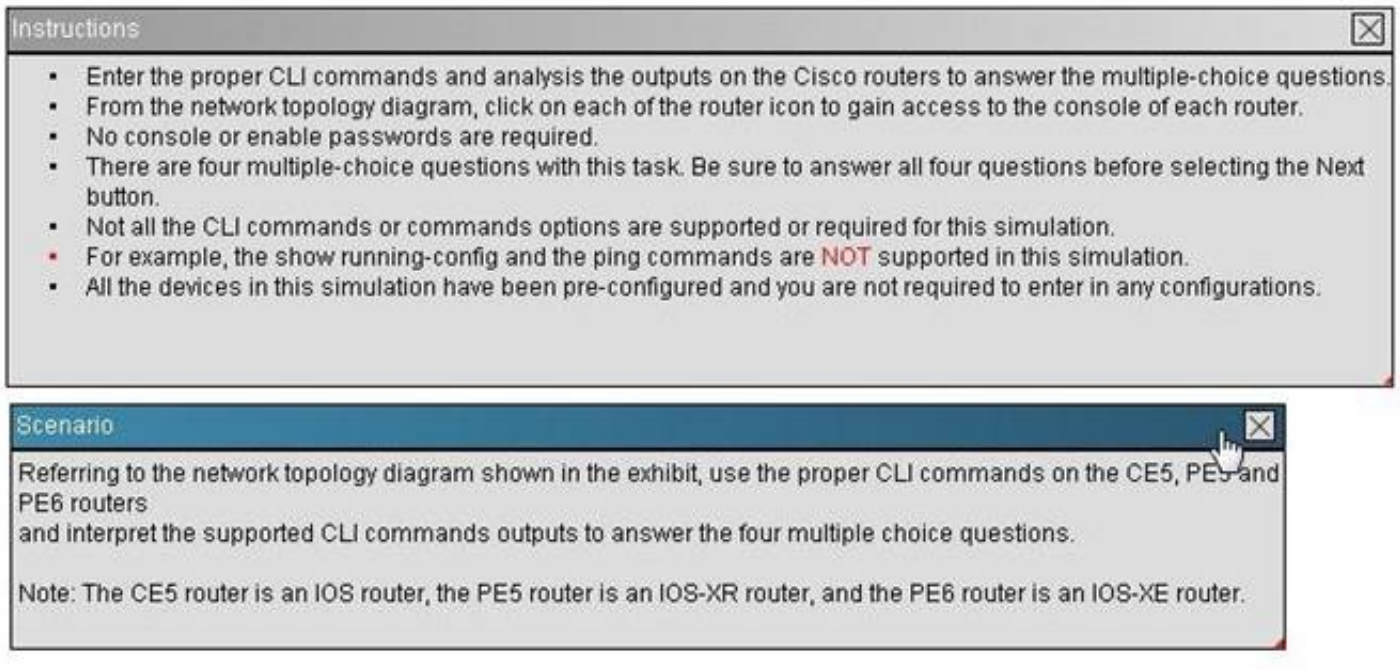
**Answer:** C

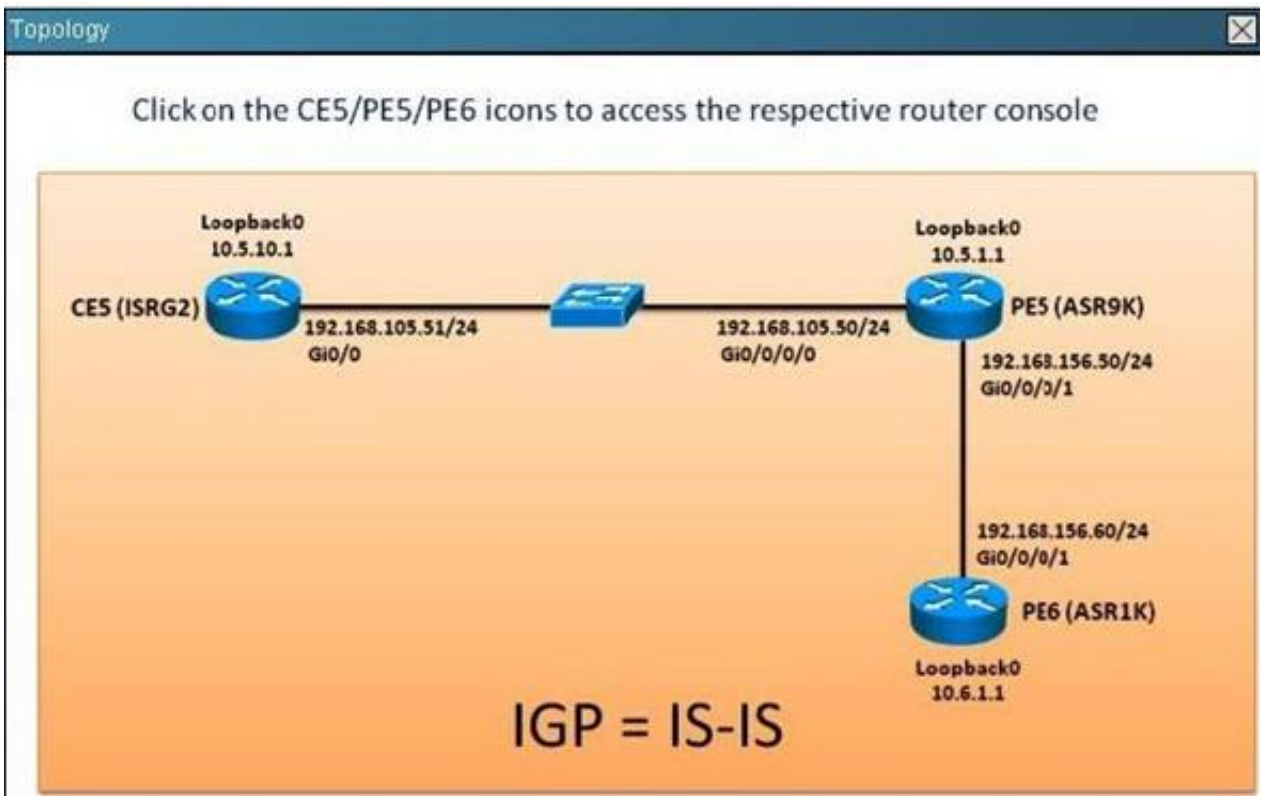
**NEW QUESTION 89**
An engineer is configuring an eBGP peering session. What is the default TTL value?

A. 1
B. 64
C. 127
D. 255

**Answer:** A

**NEW QUESTION 92**
What is the configured IS-IS circuit-type between the CE5 and PE5 routers and between the PE5 and PE6 routers? (Choose two.)




Topology
Click on the CE5/PE5/PE6 icons to access the respective router console
Loopback0
10.5.10.1
CE5 (ISRG2)
192.168.105.51/24
Gi0/0
192.168.105.50/24
Gi0/0/0/0
Loopback0
10.5.1.1
PE5 (ASR9K)
192.168.156.50/24
Gi0/0/0/1
192.168.156.60/24
Gi0/0/0/1
PE6 (ASR1K)
Loopback0
10.6.1.1
IGP = IS-IS


CE5
CE5#

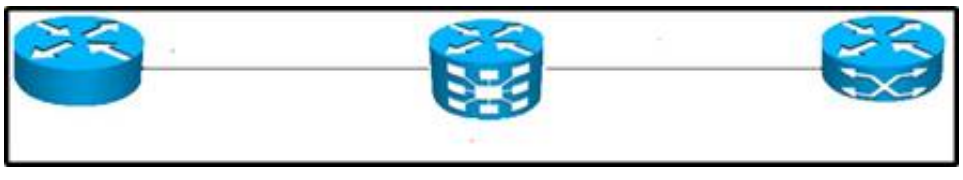

PE5
PE5#


A. Circuittype L1 between CE5 and PE5 4
B. Circuittype L1/L2 between CE5 and PE5
C. Circuittype L2 between CE5 and PE5
D. Circuittype L1 between PE5 and PE6
E. Circuittype L1/L2 between PE5 and PE6
F. Circuittype L2 between PE5 and PE6

**Answer:** AF

**Explanation:**
#show clns neighbor

**NEW QUESTION 97**
Refer to the exhibit.



Which configuration is required on XR2 to enable MD5 IS-IS Authentication between R1 and XR2 using the password CISCO?

A. Router isis ABCinterface GigabitEthernet0/0/0/0 hello-password encrypted CISCO
B. Router isis ABCinterface GigabitEthernet0/0/0/0 hello-password hmac-md5 CISCO
C. Router isis ABClsp-password hmac-md5 CISCO
D. Router isis ABClsp-password encrypted CISCO

**Answer:** B

**NEW QUESTION 102**
Refer to the exhibit.

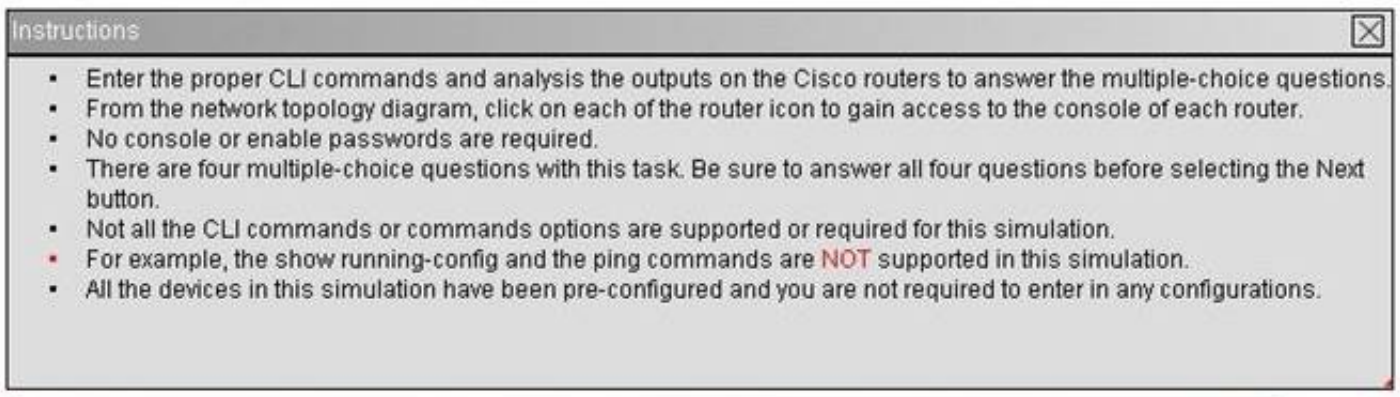
```
Router A
router isis L2_isis
 net 47.0000.0000.0000.0001.00
 metric-style wide
!
interface Ethernet0/0
 ip address 172.16.0.1 255.255.255.252
 ip router isis L2_isis

Router B
router isis L1_isis
 net 47.0001.0000.0000.0001.00
 is-type level-1-2
 metric-style wide
!
interface Ethernet0/1
 ip address 172.16.0.2 255.255.255.252
 ip router isis L1_isis
!
interface Ethernet0/2
 ip address 172.16.0.10 255.255.255.252
 ip router isis L1_isis

Router C
router isis L1_isis
 net 47.0002.0000.0000.0001.00
 is-type level-1
 metric-style wide
!
interface Ethernet0/2
 ip address 172.16.0.9 255.255.255.252
 ip router isis L1_isis
```

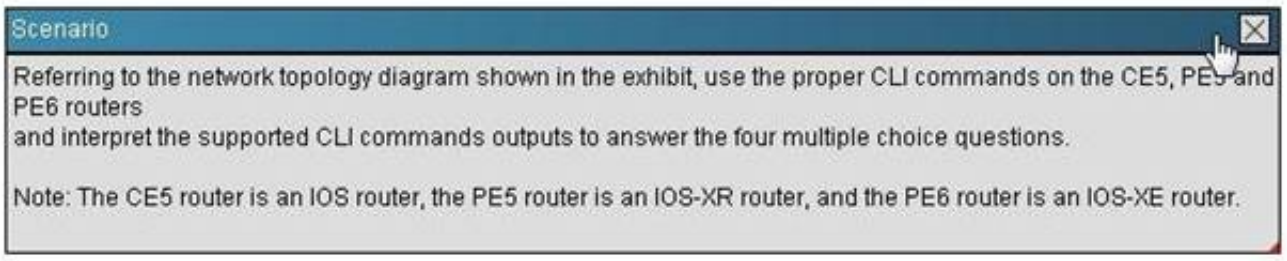
A network engineer is asked to verify a multiarea IP IS-IS configuration before implementing it. Which statement is true?

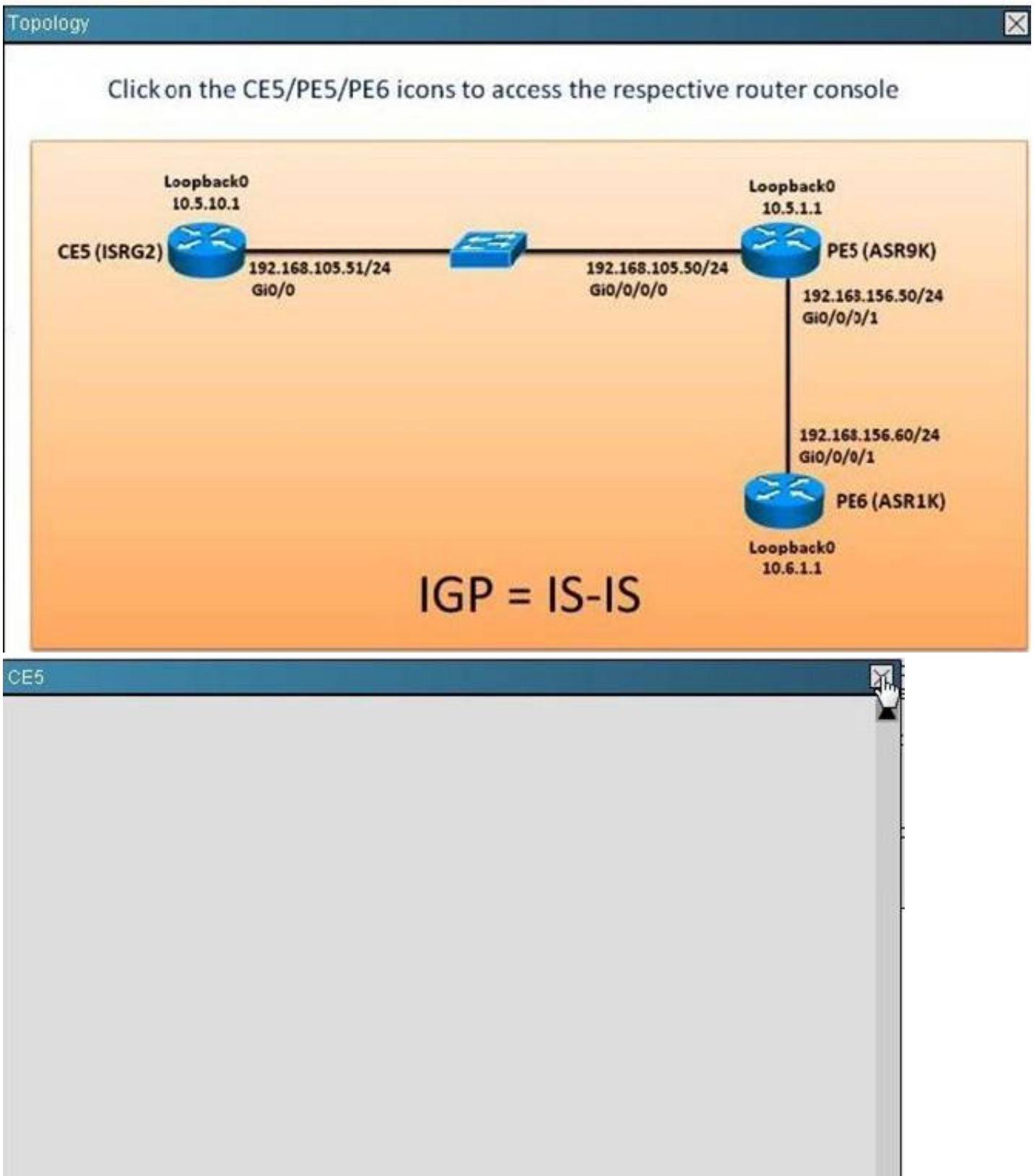
A. IS-type Level 1 must be configured on router B.
B. Area addresses should be common.
C. Wide metrics should be used only for router A.
D. The system ID should be unique.

**Answer:** B

**NEW QUESTION 107**
There are how many IS-IS area(s) defined in this network Scenario?




Topology
Click on the CE5/PE5/PE6 icons to access the respective router console
Loopback0
10.5.10.1
CE5 (ISRG2)
192.168.105.51/24
Gi0/0
192.168.105.50/24
Gi0/0/0/0
Loopback0
10.5.1.1
PE5 (ASR9K)
192.163.156.50/24
Gi0/0/0/1
192.163.156.60/24
Gi0/0/0/1
PE6 (ASR1K)
Loopback0
10.6.1.1
IGP = IS-IS
CE5
CE5#
PE5
PE5#


A. 1
B. 2
C. 3
D. 4

**Answer:** C

**NEW QUESTION 108**
An engineer has two routers multihomed to the Internet via BGP. The first should be the primary path for all outbound traffic and the second should automatically become active in the event the primary goes offline. Which method to configure the routers is the most simple?

A. Set the local-preference to be higher on the primary router.
B. Set the local-preference to be lower on the primary router.
C. Set the MED to be higher on the primary router than the backup.
D. Set the primary router to have a higher weight than the backup.

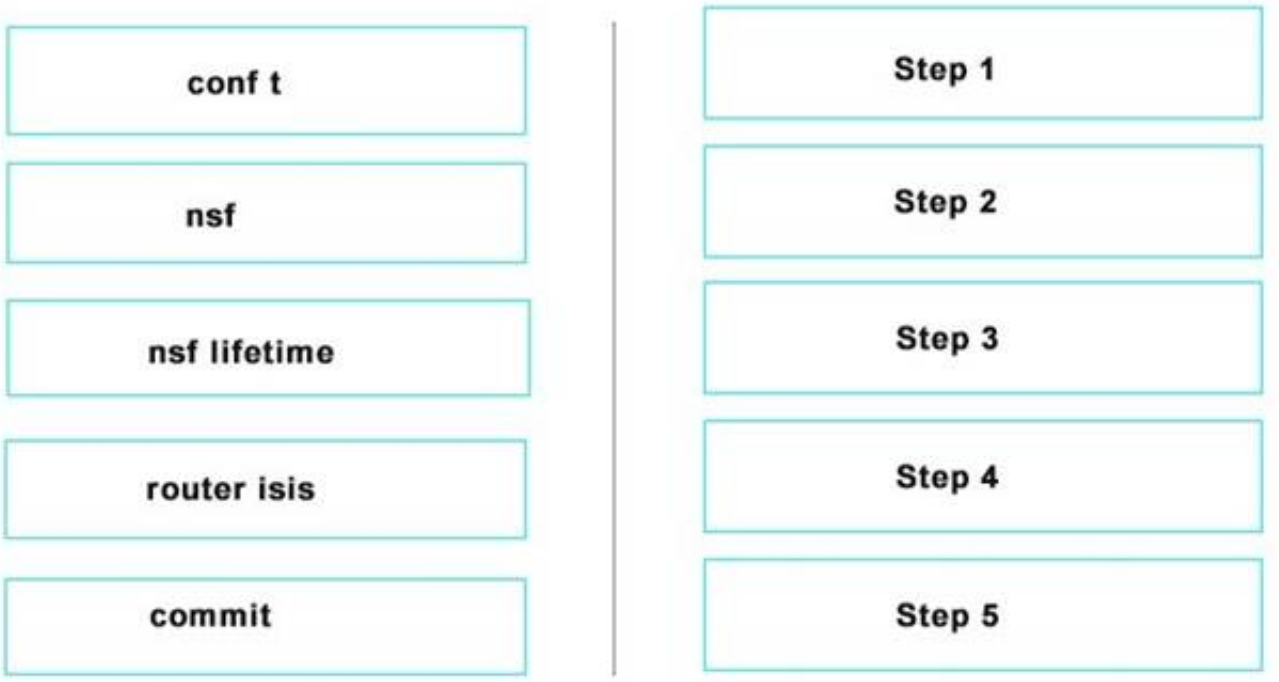
**Answer:** A

**NEW QUESTION 110**
An engineer is using configuration blocks to build policy-based routing. All other traffic must not be affected and the policy must be applied to GigabitEthernet1/0. Which block correctly implements traffic that is destined for 10.10.10.0/24 using a next hop of 192.168.55.1?

A. access-list 110 permit ip any 10.10.10.0 0.0.0.255 route-map PBR permit 10match ip address 110set next-hop 192.168.55.1 interface GigabitEthernet1/0 ip policy route-map PBR
B. access-list 110 permit ip any 10.10.10.0 0.0.0.255 route-map PBR permit 10match ip address 110set next-hop 192.168.55.1 route-map PBR permit 20 interface GigabitEthernet1/0 ip policy route-map PBR
C. access-list 110 permit ip any 10.10.10.0 255.255.255.0 route-map PBR permit 10match ip address 110set next-hop 192.168.55.1interface GigabitEthernet1/0 ip policy route-map PBR
D. access-list 110 permit ip any 10.10.10.0 255.255.255.0 route-map PBR permit 10match ip address 110set next-hop 192.168.55.1 route-map PBR permit 20 interface GigabitEthernet1/0 ip policy route-map PBR

**Answer:** B

**NEW QUESTION 112**
DRAG DROP
Drag and drop the configuration steps on the left into the correct order on the right for nonstop forwarding for IS-IS on Cisco IOS XR.




A. Mastered
B. Not Mastered

**Answer:** A

**Explanation:**
Step 1 – conf t Step 2 – router isis Step 3 - nsf
Step 4 – nsf lifetime Step 5 - commit

**NEW QUESTION 117**
A Cisco IOS XR router must be configured with BFD for OSPF. Which configuration is correct?

A. interface GigabitEthernet0/0/0/0 ip ospf bfd
B. router ospf 1 area 0interface GigabitEthernet0/0/0/0 bfd fast-detect
C. router ospf 1 area 0interface GigabitEthernet0/0/0/0 bfd fast-detect ipv4
D. router ospf 1 bfd all-interfaces

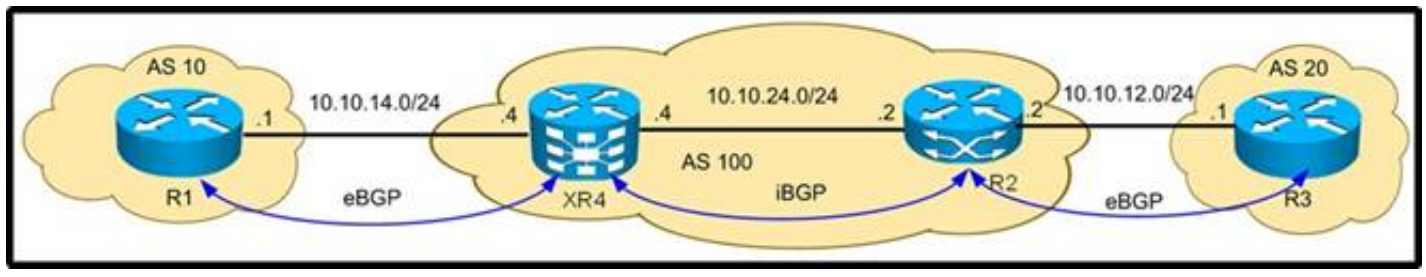
**Answer:** B

**NEW QUESTION 119**
A network engineer wants to set the local preference to 100 for the community set list lowpri-communities. Which option can the engineer use to implement this through RPL?

A. route-policy ch-prefif community neq lowpri-communities thenset local-preference 100endifend-policy
B. route-policy ch-prefif community matches –any lowpri-communities thenset local- preference 100endifend-policy
C. route-policy ch-prefif communitymatches lowpri-communities thenset local-preference 100endifend-policy
D. route-policy ch-prefif community matches eq lowpri-communities thenset local- preference 100endifend-policy

**Answer:** B

**NEW QUESTION 121**
Refer to the exhibit.




XR4 must be configured to advertise only AS 100 local subnets to AS 10. Which configuration on XR4 achieves this goal?

A. as-path-set LOCAL ios-regex ^$route-policy ADVif as-path in LOCAL then pass endif
B. as-path-set LOCAL ios-regex '^100$' route-policy ADVif as-path in LOCAL then pass endif
C. as-path-set LOCAL ios-regex '^$'route-policy ADVif as-path in LOCAL then pass endif
D. as-path-set LOCAL ios-regex ^100$ route-policy ADVif as-path in LOCAL then pass endif

**Answer:** C

**NEW QUESTION 124**
Which option is a mechanism that can be implemented between two eBGP peers to communicate the routes each peer needs from the other?

A. ORF
B. ACL

C. prefix list
D. route map

**Answer:** A

**NEW QUESTION 125**
In Cisco IOS and Cisco IOS XE Software images, when redistributing routes from other routing protocols into OSPF, what is a common reason why some of the routes might not be redistributed into OSPF?

A. The OSPF external metric type (E1 or E2) is not defined.
B. The OSPF seed metric is not defined.
C. The OSPF level (Level 1, Level 2, or Level-1-2) to which the routes will be redistributed into is not defined.
D. The subnets option in the redistribute command is missing.

**Answer:** D

**NEW QUESTION 130**
Which router has the su 10.5.10.0/24 [20/115] entry pointing to NullO in its routing table and why? (Choose two.)

Instructions

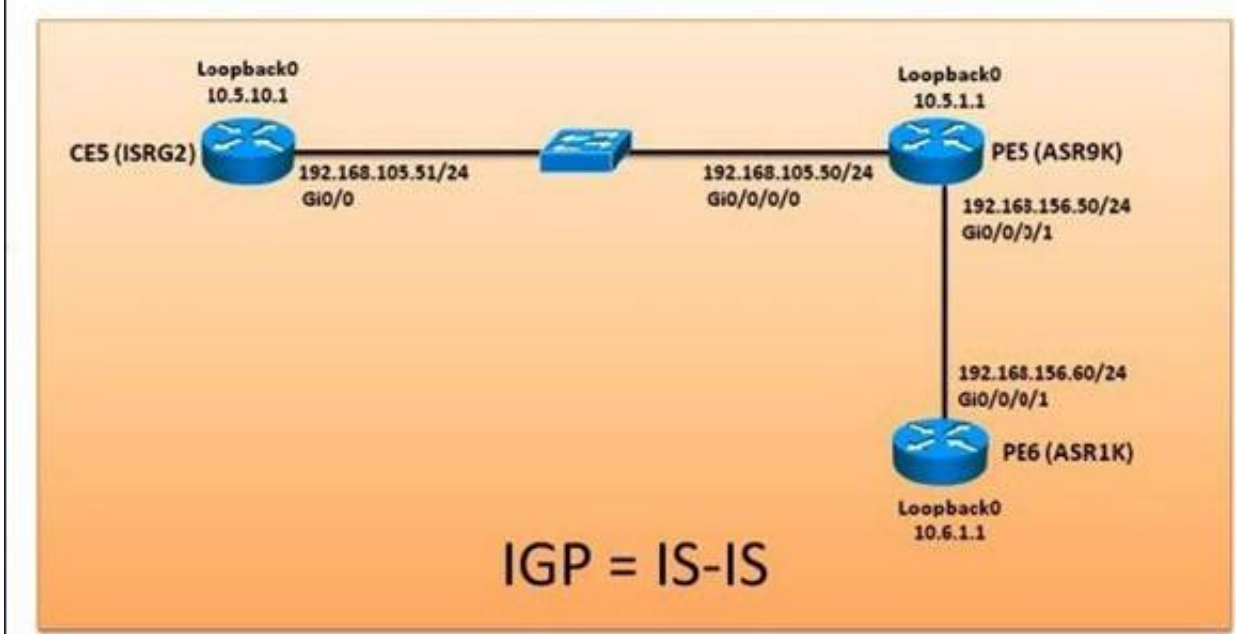
- Enter the proper CLI commands and analysis the outputs on the Cisco routers to answer the multiple-choice questions.
- From the network topology diagram, click on each of the router icon to gain access to the console of each router.
- No console or enable passwords are required.
- There are four multiple-choice questions with this task. Be sure to answer all four questions before selecting the Next button.
- Not all the CLI commands or commands options are supported or required for this simulation.
- For example, the show running-config and the ping commands are NOT supported in this simulation.
- All the devices in this simulation have been pre-configured and you are not required to enter in any configurations.

Scenario

Referring to the network topology diagram shown in the exhibit, use the proper CLI commands on the CE5, PE5 and PE6 routers
and interpret the supported CLI commands outputs to answer the four multiple choice questions.

Note: The CE5 router is an IOS router, the PE5 router is an IOS-XR router, and the PE6 router is an IOS-XE router.

Topology



A. CE5
B. PE5
C. PE6
D. The router is summarizing 10.5.10.1/32 into 10.5.10.0/24
E. The router is suppressing the 10.5.10.0/24 route
F. The L2/L1 IS-IS router is blocking the 10.5.10.0/24 interarea route to the L1-only router

**Answer:** DF

**Explanation:**
# show clns route

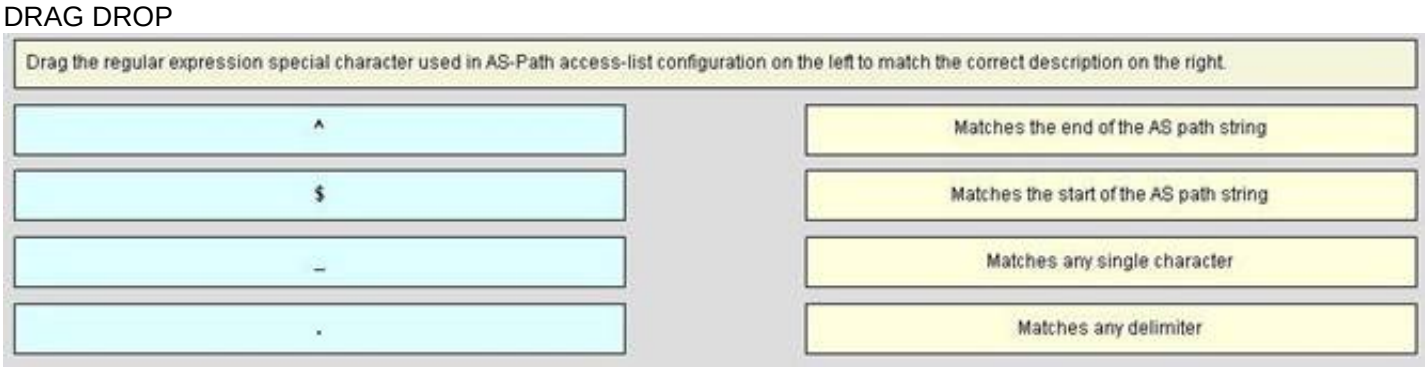
**NEW QUESTION 132**
What is recursive lookup in BGP and how does it work?

A. The router looks up the EBGP route and the EBGP next hop to reach a destination in the remote A
B. Then the router looks up the route to reach the EBGP next hop using the IBGP.
C. The router looks up the IBGP route and the IBGP next hop to reach a destination in the remote A
D. Then the router looks up the route to reach the IBGP next hop using the EBGP.
E. The router looks up the BGP route and the BGP next hop to reach a destination in the remote A
F. Then the router looks up the route to reach the BGP next hop using the IGP.
G. The router looks up the route and the next hop to reach a destination in the remote AS using the IG
H. Then the router looks up the route to reach the next hop using BGP.
I. The router perform three routing lookups to determine the route to reach a destination in the remote A
J. The first lookup is done using EBGP, the second lookup is done using IBGP, and the third lookup is done using the IGP.

**Answer:** C

**Explanation:**
A few different approaches are available to deal with iBGP and synchronization. We may turn on the synchronization option on our routers and wait for the IGP to have a route for the destination before it's advertised to peers. Another option is to simply use a full mesh, so that iBGP convergence isn't an issue.
Clearly that isn't going to happen when a network's core needs to scale: it will implement something like reflectors that cause iBGP's full mesh to be broken.
The real alternative, if you don't enable synchronization, is to use route recursion. A recursive route lookup uses the BGP next-hop attribute to actually make a different route lookup. The IGP can use the destination network instead of the AS-path to determine where it gets sent. Even if the iBGP hasn't converged, the routers will still know how to get to that network, since it will exist in the router it was advertised from, who will know the next-hop.

**NEW QUESTION 135**
DRAG DROP




A. Mastered
B. Not Mastered

**Answer:** A

**Explanation:**
Matches the end of the AS Path String ---$ Matches the Start of the AS Path String ----^
Matches any single character --- . Matched any delimiter ---- -

**NEW QUESTION 140**
In comparing IS-IS with OSPF, a Level-1-2 IS-IS router is similar to which kind of OSPF router?

A. ASBR on a normal OSPF area
B. ASBR on NSSA
C. ABR on totally stubby OSPF area
D. ABR on stubby OSPF area
E. ABR on a normal OSPF area

**Answer:** C

**NEW QUESTION 143**
Which AS path access list is used by a multihomed customer to only announce their own address space to their service providers to prevent the multihomed customer from becoming a transit AS?

A. ip as-path access-list permit.*
B. ip as-path access-list permit^$
C. ip as-path access-list permit _$
D. ip as-path access-list permit _^
E. ip as-path access-list permit local-as ip as-path access-list deny *
F. ip as-path access-list deny.* ip as-path access-list permit *

**Answer:** B

**Explanation:**

| CHAR | USAGE |
|---|---|
| ^ | Start of string |
| $ | End of string |
| [] | Range of characters |
| - | Used to specify range ( i.e. [0-9] ) |
| ( ) | Logical grouping |
| . | Any single character |
| * | Zero or more instances |
| + | One or more instance |
| ? | Zero or one instance |
| _ | Comma, open or close brace, open or close parentheses, start or end of string, or space |

Some commonly used regular expressions include:

| Expression | Meaning |
|---|---|
| .* | Anything |
| **^$** | **Locally originated routes** |
| ^100_ | Learned from AS 100 |
| _100$ | Originated in AS 100 |
| _100_ | Any instance of AS 100 |
| ^[0-9]+$ | Directly connected ASes |

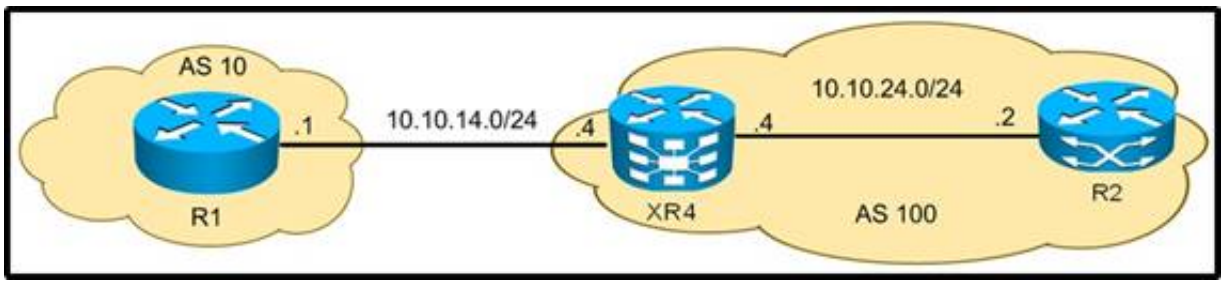
C:\Documents and Settings\user-nwz\Desktop\1.JPG

**NEW QUESTION 148**
A static default route has been inserted into the configuration of a Cisco IOS XE router. Which option advertises the route into the OSPF domain?

A. router ospf 1 network 0.0.0.0 area 0 redistribute static subnets
B. router ospf 1 redistribute static
C. router ospf 1 redistribute static subnets
D. router ospf 1 default-information originate

**Answer:** D

**NEW QUESTION 151**
Refer to the exhibit.




Which configuration is correct for XR4 for an e-BGP session with R1?

A. router bgp 100neighbor 10.10.14.1remote-as 100
B. router bgp 100neighbor 10.10.14.1remote-as 10address-family ipv4 unicast
C. router bgp 100address-family ipv4 unicast neighbor 10.10.14.1remote-as 100address-family ipv4 unicast
D. router bgp 100address-family ipv4 unicast neighbor 10.10.14.1remote-as 100

**Answer:** C

**NEW QUESTION 156**
Which statement best describes the function of a BGP af-group?

A. Allows grouping and reuse of session-templates to simplify address-family configuration tasks.

B. Allows common address family-specific configuration to be grouped together to simplify configuration tasks.
C. Allows common address family-independant configuration to be grouped together to simplify configuration tasks.
D. Allows grouping and reuse of neighbor-templates to simplify address-family configuration tasks.

**Answer:** B

**NEW QUESTION 161**
Which option describes a function of an OSPF virtual link?

A. Create redundant path between an area and the backbone.
B. Provide a backdoor link for traffic to flow through between areas.
C. Connect the two parts of a partitioned backbone through a nonbackbone area.
D. Create a virtual connection between two routers from different areas.

**Answer:** C

**NEW QUESTION 162**
Which option describes the configuration for a Cisco IOS XR OSPF router to give it the highest chances of becoming DR?

A. ip ospf priority 0 under the OSPF interface statement
B. ip ospf priority 0 under the OSPF area statement
C. ip ospf priority 255 under the OSPF interface statement
D. ip ospf priority 255 under the OSPF area statement
E. Leave priority unchanged, but assign a high-numbered IP address on a loopback interface.
F. Leave priority unchanged, but assign a high-numbered IP address on any physical interface.

**Answer:** C

**NEW QUESTION 167**
Which series of commands configures area 1 as an OSPF totally stubby area on a Cisco IOS XR router?

A. router ospfv3 1 router-id 10.10.10.1area 0interface GigabitEthernet 0/0/0/1 area 1stub no-summaryinterface GigabitEthernet 0/0/0/2
B. router ospfv3 1 router-id 10.10.10.1default-information originate area 0interface GigabitEthernet 0/0/0/1 area 1stubinterface GigabitEthernet 0/0/0/2
C. ipv6 prefix-list default permit ::0/0 router ospfv3 1router-id 10.10.10.1default-information originate area 0interface GigabitEthernet 0/0/0/1 distribute-list prefix-list default in area 1interface GigabitEthernet 0/0/0/2
D. router ospfv3 1 router-id 10.10.10.1area 0interface GigabitEthernet 0/0/0/1area 1interface GigabitEthernet 0/0/0/2 no-summarypassive
E. router ospfv3 1 router-id 10.10.10.1area 0interface GigabitEthernet 0/0/0/1 area 1stubinterface GigabitEthernet 0/0/0/2 default-cost 20

**Answer:** A

**NEW QUESTION 168**
Which BGP attribute is a set of generic tags that can be used to signal various routing policies between BGP routers?

A. AS path
B. MED
C. weight
D. communities
E. route tags

**Answer:** D

**Explanation:**
http://www.cisco.com/en/US/tech/tk365/technologies_configuration_example09186a00801 475b2.shtml

**NEW QUESTION 173**
Referring to the partial Cisco IOS-XR BGP configuration exhibit, when trying to commit this configuration, the following error is displayed:
% Failed to commit one or more configuration items during a pseudo-atomic operation. All changes made have been reverted. Please issue 'show configuration failed' from this session to view the errors.

```
router bgp 65111
!
 neighbor 10.1.1.1
  remote-as 65111
  update-source Loopback0
  address-family ipv4 unicast
  !
 !
 neighbor 2001:db8:10:1:1::1
  remote-as 65111
  update-source Loopback0
  address-family ipv6 unicast
!
```

What is wrong with the configuration?

A. IPv6 unicast routing has not been enabled globally using the ipv6 unicast-routing command
B. The configuration is missing the required network command
C. The update-source loopback 0 commands must be configured under the respective neighbor address-family
D. The configuration is missing the address-family ipv4 unicast and address-family ipv6unicast commands under router bgp 65111

**Answer:** D

**NEW QUESTION 174**
For a Cisco IOS XR router, under which BGP configuration group can default-originate be added?

A. session-group
B. af-group
C. neighbor-group
D. peer-session template

**Answer:** B

**NEW QUESTION 176**
What are two ways to advertise networks into BGP? (Choose two.)

A. using the neighbor router BGP command
B. using a route policy in Cisco IOS XR Software or using a route map in Cisco IOS Software or Cisco IOS XE Software
C. using route redistribution into BGP
D. using the network router BGP command
E. enabling an interface to run BGP using the interface router BGP command

**Answer:** CD

**NEW QUESTION 179**
Refer to the show command output in the exhibit.

```
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR

Gateway of last resort is not set

     4.0.0.0/24 is subnetted, 1 subnets
D       4.4.4.0 [90/409600] via 161.108.0.4, 00:49:24, Ethernet0/0
     5.0.0.0/24 is subnetted, 1 subnets
C       5.5.5.0 is directly connected, Loopback0
     162.108.0.0/16 is variably subnetted, 2 subnets, 2 masks
C       162.108.10.0/24 is directly connected, Serial1/0
C       162.108.4.0/22 is directly connected, Serial2/0
C    161.108.0.0/16 is directly connected, Ethernet0/0
Router#
Router#show ip bgp
BGP table version is 6, local router ID is 5.5.5.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
              S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network          Next Hop            Metric LocPrf Weight Path
* i1.1.1.0/24       132.108.10.1             0    100      0 1 i
* i131.108.0.0      132.108.10.1             0    100      0 1 i
*>i161.108.0.0      4.4.4.4                  0    100      0 i
Router#
```

For which reason will this router drop all traffic that is destined to the 1.1.1.0/24 network?

A. The 1.1.1.0/24 route is not synchronized.
B. The BGP next hop for reaching the 1.1.1.0/24 network is not reachable.
C. The metric of the 1.1.1.0/24 route is set to 0.
D. The weight of the 1.1.1.0/24 route is set to 0.
E. The 1.1.1.0/24 route is an incomplete route.
F. The IBGP split-horizon rule is preventing the router to use the IBGP route.

**Answer:** B

**NEW QUESTION 181**
Which three potential issues can cause an OSPF adjacency to not come up? (Choose three.)

A. wrong area configured on OSPF peers
B. wrong authentication key configured on OSPF peers
C. different OSPF instance numbers configured on OSPF peers
D. different OSPF instances and VRFs configured with the command: router ospf<number1> vrf <number2>
E. having the no passive-interface statement configured for the interfaces on which OSPF adjacencies are expected to form
F. Layer 2 connectivity problems on the shared medium of the participating OSPF-enabled routers

**Answer:** ABF

**NEW QUESTION 182**
What is defined by using the Cisco IOS XR policy-global configuration command?

A. the default BGP route policy
B. global variables that can be referenced by any route policy
C. the global default route policy
D. hierarchical route policy
E. nested route policy

**Answer:** B

**Explanation:**
Global Configuration Mode Prompt: (config)
Enter global configuration mode from executive (EXEC) mode by using the configure command. Global configuration commands generally apply to the whole system rather than just one protocol or interface. You can enter all other configuration submodes listed in this section from global configuration mode.
RP/0/RP0/CPU0:router# configure RP/0/RP0/CPU0:router(config)#
Global Parameter Configuration Mode Prompt: (config-rpl-gl)
Enter global parameter configuration mode by using the policy-global command in global configuration mode.
In global parameter configuration mode, you can create or modify a global policy by entering successive commands and then terminating the configuration by entering the end- global command.
For example, to configure global parameters: RP/0/RP0/CPU0:router(config)# policy-global RP/0/RP0/CPU0:router(config-rp-gl)# glbpathtype ebgp RP/0/RP0/CPU0:router(config-rp-gl)# glbtag 100 RP/0/RP0/CPU0:router(config-rp-gl)# end-global

**NEW QUESTION 184**
An EIGRP domain is redistributed into an OSPF NSSA area. On which router would this redistribution occur?

A. stub border router
B. summary router
C. autonomous system boundary router
D. backbone router

**Answer:** C

**NEW QUESTION 186**
Which type of ISP must rely entirely on other ISPs for Internet transit?

A. Tier 3
B. Tier 4
C. Tier 2
D. Tier 1

**Answer:** A

**NEW QUESTION 189**
Refer to the exhibit.

```
router ospf 100
bfd minimum-interval 2
bfd multiplier 20
area 0
interface gigabitEthernet 0/3/0/1
interface gigabitEthernet 0/3/0/2
end
```

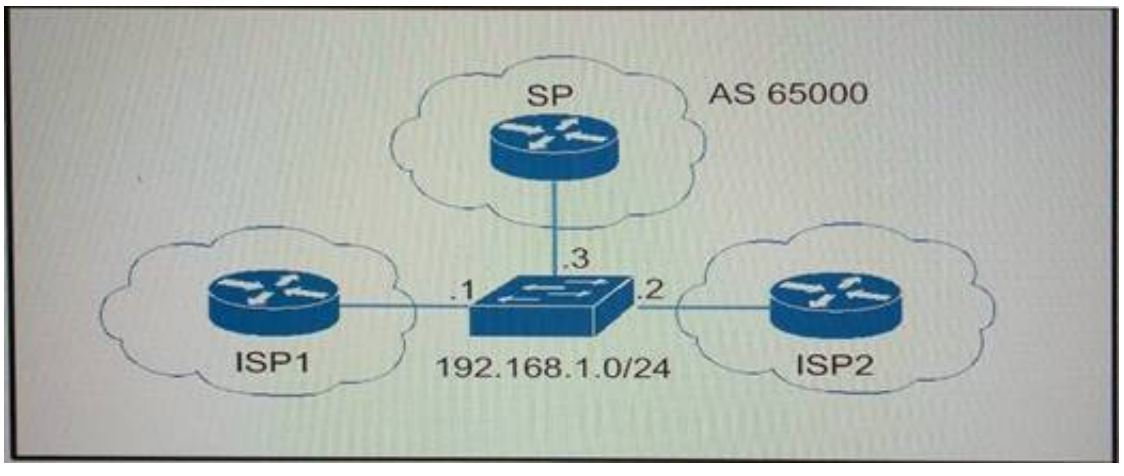
Which Cisco IOS XR configuration is missing to complete the configuration task of enabling BFD with only the OSPF peer over the gi0/3/0/1 interface in area 0?

A. bfd fast-detect also needs to be enabled globally under router ospf 100. RP/0/RSP0/CPU0:P1(config-ospf)#bfd fast-detect
B. bfd fast-detect also needs to be enabled for the OSPF area under area 0. RP/0/RSP0/CPU0:P1(config-ospf-ar)#bfd fast-detect
C. bfd fast-detect also needs to be enabled for the OSPF interface under area 0 interface gi0/3/0/1.RP/0/RSP0/CPU0:P1(config-ospf-ar-if)#bfd fast-detect
D. bfd fast-detect also needs to be enabled globally on the route
E. RP/0/RSP0/CPU0:P1(config#bfd fast-detect
F. bfd fast-detect also needs to be enabled on the gi0/3/0/1 interface under interface gi0/3/0/1.RP/0/RSP0/CPU0:P1(config-if)#bfd fast-detect

**Answer:** C

**Explanation:**
bfd fast-detect
To enable Bidirectional Forwarding Detection (BFD) to detect failures in the path between adjacent forwarding engines, use the bfd fast-detect command in the appropriate configuration mode. To return the software to the default state in which BFD is not enabled, use the no form of this command.
bfd fast-detect [disable | ipv4] no bfd fast-detect

**NEW QUESTION 190**
Refer to the exhibit.




A service provider (AS65000) is interconnected to two upstream providers (ISP 1 neighbor IP 192.168.1.1 and ISP 2 neighbor IP 192.168.1.2) via a single link in a peering exchange. Which option can an engineer use to implement nonproprietary policies to make ISP 1 the preferred link for incoming and outgoing traffic from the local SP?

A. route-map outgoing permit 10set-as –path prepend 65000 65000 65000route-map incoming permit 10set local-preference 1000router bgp 65000neighbor 192.168.1.1 route- map incoming outneighbor 192.168.1.1 route-map outgoing in
B. route-map outgoing permit 10set metric 100route-map incoming permit 10set weight 100router bgp 65000neighbor 192.168.1.1 route-map incoming inneighbor 192.168.1.1 route-map outgoing out
C. route-map outgoing permit 10set-as –path prepend 65000 65000 65000route-map incoming permit 10set local-preference 1000router bgp 65000neighbor 192.168.1.1 route- map incoming inneighbor 192.168.1.2 route-map outgoing out
D. set-as –path prepend 65000 65000 65000route-map incoming permit 10set weight 100router bgp 65000neighbor 192.168.1.1 route-map incoming inneighbor 192.168.1.1 route-map outgoing out

**Answer:** A

**NEW QUESTION 194**
Which RPLs can be used to conditionally advertise a default route based on the prefix 1.1.1.1 being in the routing table?

A. route-policy RPL_Default_Originate if rib-has-route in (1.1.1.1/32)pass else drop endifend-policy
B. route-policy RPL_Default_Originate if rib-has-route in (1.1.1.1/32)drop else pass endifend-policy
C. route-policy RPL_Default_Originate if route in (1.1.1.1/32)pass else drop endifend-policy
D. route-policy RPL_Default_Originate if not rib-has-route in (1.1.1.1/32)pass else drop endifend-policy

**Answer:** A

**NEW QUESTION 198**
Which option is a characteristic of intermediate systems on multiarea IS-IS?

A. Level 2 contains routing information only for the local area.
B. Level 2 contains routing information only for stub areas.
C. Level 1 contains routing information only for the backbone area.
D. Level 1 contains routing information onlyfor the local area.

**Answer:** D

**NEW QUESTION 203**
How can you prevent multihomed customers with connections to two service providers from acting as a transit AS?

A. Enable BGP synchronization on all the customer routers
B. Use MED to influence the inbound traffic from the ISPs
C. Use static routing to the ISPs
D. Use an AS-path access-list to filter the BGP updates to the ISPs
E. Use conditional advertisements when sending BGP updates to the ISPs

**Answer:** D

**NEW QUESTION 208**
What are two consequences of having constant link flaps, resulting in the OSPF neighbor adjacencies going up and down repeatedly? (Choose two.)

A. routes getting into the "Stuck In Active" state
B. constant flooding of LSAs
C. OSPF route dampening to occur
D. many SPF recalculations
E. routing loops may temporarily be introduced into the network

**Answer:** BD

**NEW QUESTION 209**
Which high-availability routing feature requires the neighbor router to support the graceful restart capability?

A. BFD
B. NSR
C. NSF
D. MTR

**Answer:** C

**Explanation:**
On Cisco IOS XR software, NSF minimizes the amount of time a network is unavailable to its users following a route processor (RP) failover. The main objective of NSF is to continue forwarding IP packets and perform a graceful restart following an RP failover.
When a router restarts, all routing peers of that device usually detect that the device went down and then came back up. This transition results in what is called a routing flap, which could spread across multiple routing domains. Routing flaps caused by routing restarts create routing instabilities, which are detrimental to the overall network performance. NSF helps to suppress routing flaps in NSF-aware devices, thus reducing network instability.
NSF allows for the forwarding of data packets to continue along known routes while the routing protocol information is being restored following an RP failover. When the NSF feature is configured, peer networking devices do not experience routing flaps. Data traffic is forwarded through intelligent line cards while the standby RP assumes control from the failed active RP during a failover. The ability of line cards to remain up through a failover and to be kept current with the Forwarding Information Base (FIB) on the active RP is key to NSF operation.
When the Cisco IOS XR router running IS-IS routing performs an RP failover, the router must perform two tasks to resynchronize its link-state database with its IS-IS neighbors. First, it must relearn the available IS-IS neighbors on the network without causing a reset of the neighbor relationship. Second, it must reacquire the contents of the link-state database for the network.
The IS-IS NSF feature offers two options when configuring NSF:
•IETF NSF
•Cisco NSF
If neighbor routers on a network segment are NSF aware, meaning that neighbor routers are running a software version that supports the IETF Internet draft for router restartability, they assist an IETF NSF router that is restarting. With IETF NSF, neighbor routers provide
adjacency and link-state information to help rebuild the routing information following a failover.
In Cisco IOS XR software, Cisco NSF checkpoints (stores persistently) all the state necessary to recover from a restart without requiring any special cooperation from neighboring routers. The state is recovered from the neighboring routers, but only using the standard features of the IS-IS routing protocol. This capability makes Cisco NSF suitable for use in networks in which other routers have not used the IETF standard implementation of NSF

**NEW QUESTION 213**
The Cisco IOS XE Software summary-address router IS-IS configuration command can be used to send a summarized route into which IS-IS hierarchy?

A. Level 1 only
B. Level 2 only
C. Level-1-2 only
D. Level 1 or Level 2 or Level-1-2

**Answer:** D

**Explanation:**
**summary-address (IS-IS)**

To create aggregate addresses for IS-IS, use the **summary-address** command in router configuration mode. To restore the default, use the **no** form of this command.

**summary-address** *address mask* {**level-1** | **level-1-2** | **level-2**}

**no summary-address** *address mask* {**level-1** | **level-1-2** | **level-2**}

**Syntax Description**

| | |
|---|---|
| *address* | Summary address designated for a range of addresses. |
| *mask* | IP subnet mask used for the summary route. |
| **level-1** | Only routes redistributed into Level 1 are summarized with the configured address and mask value. |
| **level-1-2** | Summary routes are applied when redistributing routes into Level 1 and Level 2 IS-IS, and when Level 2 IS-IS advertises Level 1 routes as reachable in its area. |
| **level-2** | Routes learned by Level 1 routing are summarized into the Level 2 backbone with the configured address and mask value. Redistributed routes into Level 2 IS-IS will be summarized also. |

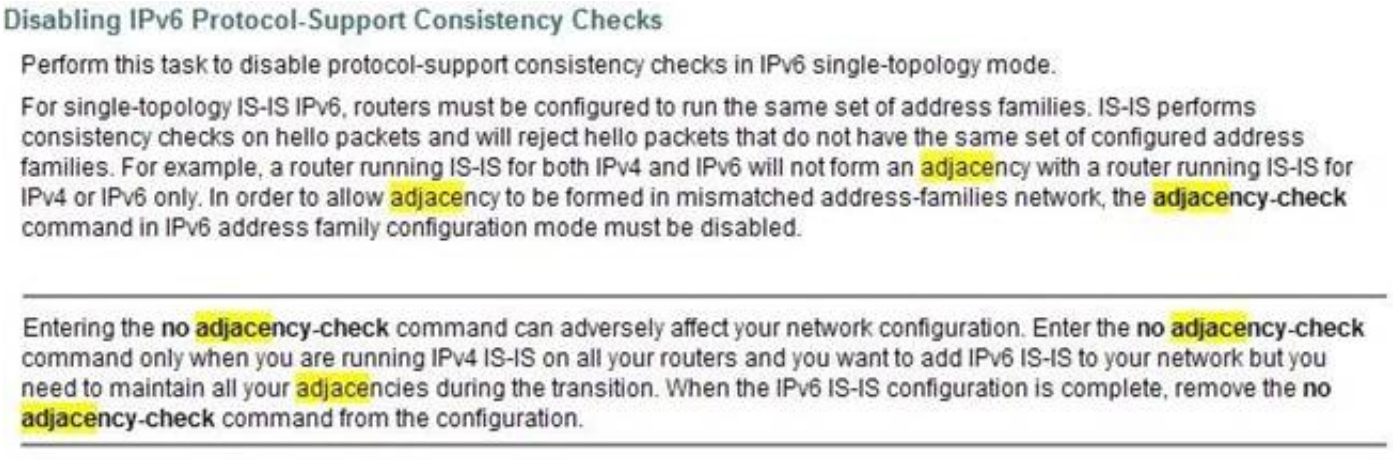
C:\Documents and Settings\user-nwz\Desktop\1.JPG

**NEW QUESTION 216**
In which network environment is IS-IS adjacency check important?

A. in a multitopology environment where there are different instances of IS-IS running on the same router
B. in an IPv4/IPv6 environment and running single-topology IS-IS
C. when a level L1/L2 IS-IS router is neighboring with a Level 1 only or Level 2 only router
D. when IS-IS neighbors are in an NBMA environment like over Frame Relay
E. when IS-IS neighbors are in a broadcast environment like an Ethernet LAN

**Answer:** B

**Explanation:**


Disabling IPv6 Protocol-Support Consistency Checks

Perform this task to disable protocol-support consistency checks in IPv6 single-topology mode.

For single-topology IS-IS IPv6, routers must be configured to run the same set of address families. IS-IS performs consistency checks on hello packets and will reject hello packets that do not have the same set of configured address families. For example, a router running IS-IS for both IPv4 and IPv6 will not form an adjacency with a router running IS-IS for IPv4 or IPv6 only. In order to allow adjacency to be formed in mismatched address-families network, the **adjacency-check** command in IPv6 address family configuration mode must be disabled.

Entering the **no adjacency-check** command can adversely affect your network configuration. Enter the **no adjacency-check** command only when you are running IPv4 IS-IS on all your routers and you want to add IPv6 IS-IS to your network but you need to maintain all your adjacencies during the transition. When the IPv6 IS-IS configuration is complete, remove the **no adjacency-check** command from the configuration.

C:\Documents and Settings\user-nwz\Desktop\1.JPG

**NEW QUESTION 221**

.....

# Thank You for Trying Our Product

* 100% Pass or Money Back

All our products come with a 90-day Money Back Guarantee.

* One year free update

You can enjoy free update one year. 24x7 online support.

* Trusted by Millions

We currently serve more than 30,000,000 customers.

* Shop Securely

All transactions are protected by VeriSign!

## 100% Pass Your 642-883 Exam with Our Prep Materials Via below:

https://www.certleader.com/642-883-dumps.html