New ENARSI Questions 3

Question 1

Refer to the exhibit.

```
ip prefix-list DefaultRouteOnly seq 5 deny 0.0.0.0/0 le 32
ip prefix-list DefaultRouteOnly seq 10 permit 0.0.0.0/0

router eigrp ccnp
 address-family ipv4 unicast autonomous-system 1
  topology base
   distribute-list prefix DefaultRouteOnly out Tunnel0
```

The administrator configured route advertisement to a remote low resources router to use only the default route to reach any network but failed. Which action resolves this issue?

A. Change the direction of the distribute-list command from out to in.
B. Remove the line with the sequence number 10 from the prefix list.
C. Remove the prefix keyword from the distribute-list command.
D. Remove the line with the sequence number 5 from the prefix list.

Answer: D

Question 2

Refer to the exhibits. An engineer filtered messages based on severity to minimize log messages.

Filtered

```
00:00:35: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:36: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:36: %LINK-3-UPPOWN: Interface GigabitEthernet0/2, changed state to up
```

Desired

```
00:00:35: %LINK-3-UPDOWN: Interface Port-channel1, changed state to up
00:00:36: %LINK-3-UPDOWN: Interface GigabitEthernet0/1, changed state to up
00:00:36: %LINK-3-UPDOWN: Interface GigabitEthernet0/2, changed state to up
00:00:37: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:37: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed
state to down
2 *Jun 1 18:46:11: %SYS-6-CONFIG_I: Configured from console by vty2
```

After applying the filter, the engineer noticed that it filtered required messages as well. Which action must the engineer take to resolve the issue?

A. Configure syslog level 2
B. Configure syslog level 3
C. Configure syslog level 4
D. Configure syslog level 5

Answer: D

Question 3

Refer to the exhibit. The engineer configured and connected Router2 to Router1. The link came up but could not establish a Telnet connection to Router1 IPv6 address of 2001:DB8::1. Which configuration allows Router2 to establish a Telnet connection to Router1?


```
ip access list extended EGRESS2
 10 deny ip any any
!
interface GigabitEthernet0/0
 ip address 209.165.201.1 255.255.255.0
 ip access-group EGRESS2 out
 duplex auto
 speed auto
 media-type rj45
 ipv6 address 2001:DB8::1/64
!
line vty 0 4
 no login
 transport input telnet
```

```
ipv6 access-list INGRESS
 permit ipv6 2001:DB8::/64 any sequence 10
 deny ipv6 2001:DB8::/32 any sequence 20
!
interface GigabitEthernet0/0
 ip address 209.165.201.25 255.255.255.0
 duplex auto
 speed auto
 media-type rj45
 ipv6 address autoconfig
 ipv6 nd autoconfig default-route
 ipv6 nd cache expire 60
 ipv6 nd ra suppress
 ipv6 traffic-fiter INGRESS in
 ipv6 nd ra suppress
```

A. IPv6 address on GigabitEthernet0/0
B. permit ICMPv6 on access list INGRESS for Router2 to obtain IPv6 address
C. ipv6 unicast-routing
D. permit ip any any on access list EGRESS2 on Router1

Answer: D

Question 4

A DMVPN single hub topology is using IPsec + mGRE with OSPF. What should be configured on the hub to ensure it will be the designated router?

A. route map to set the metrics of learned routes to 110
B. OSPF priority to 0
C. OSPF priority greater than 1
D. tunnel interface of the hub with ip nhrp ospf dr

Answer: C

Question 5

When configuring Control Plane Policing on a router to protect it from malicious traffic, an engineer observes that the configured routing protocols start flapping on that device. Which action in the Control Plane Policy prevents this problem in a production environment while achieving the security objective?

A. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the output direction
B. Set the conform-action and exceed-action to transmit initially to test the ACLs and transmit rates and apply the Control Plane Policy in the input direction
C. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy m the input direction
D. Set the conform-action to transmit and exceed-action to drop to test the ACLs and transmit rates and apply the Control Plane Policy m the output direction

Answer: B

Question 6

Refer to the exhibit.

```
R1

interface Loopback0
 ip address 172.16.1.1 255.255.255.255
interface FastEthernet0/0
 ip address 192.168.12.1 255.255.255.0
router eigrp 100
 no auto-summary
 network 192.168.12.0
 network 172.16.0.0
 neighbor 192.168.12.2

R2
interface Loopback0
 ip address 172.16.2.2 255.255.255.255
interface FastEthernet0/0
 ip address 192.168.12.2 255.255.255.0
router eigrp 100
 network 192.168.12.0
 network 172.16.0.0
 neighbor 192.168.12.1
 passive-interface FastEthernet0/0
```

R1 and R2 cannot establish an EIGRP adjacency. Which action establishes EIGRP adjacency?

A. Add the no auto-summary command to the R2 configuration so that it matches the R1 configuration
B. Remove the passive-interface command from the R2 configuration so that it matches the R1 configuration
C. Add the passive-interface command to the R1 configuration so that it matches the R2 configuration
D. Remove the current autonomous system number on one of the routers and change to a different value

Answer: B

Question 7

In which two ways does the IPv6 First-Hop Security Binding Table operate? (Choose two)

A. by IPv6 routing protocols to securely build neighborships without the need of authentication
B. by the recovery mechanism to recover the binding table in the event of a device reboot
C. by IPv6 HSRP to make sure neighbors are authenticated before being used as gateways
D. by various IPv6 guard features to validate the data link layer address
E. by storing hashed keys for IPsec tunnels for the built-in IPsec features

Answer: B D

Question 8

An engineer configured policy-based routing for a destination IP address that does not exist in the routing table. How is the packet treated through the policy for configuring the **set ip default next-hop** command?

A. Packets are forwarded to the specific next hop.
B. Packets are forwarded based on the routing table.
C. Packets are not forwarded to the specific next hop.
D. Packets are forwarded based on a static route.

Answer: A

Question 9

What are two MPLS label characteristics? (Choose two)

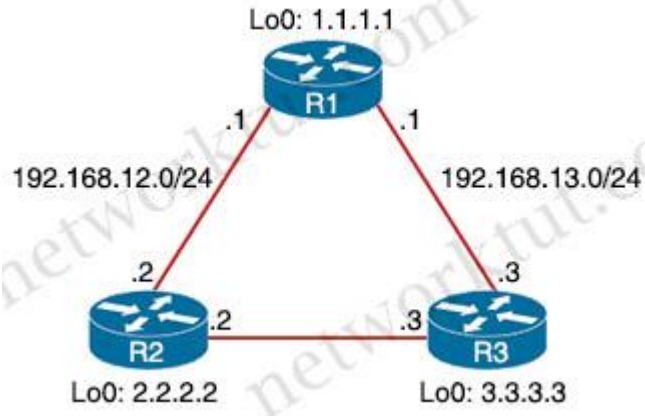
A. A maximum of two labels can be imposed on an MPLS packet.
B. The label edge router swaps labels on the received packets.

C. LDP uses TCP for reliable delivery of information.
D. An MPLS label is a short identifier that identifies a forwarding equivalence class.
E. Labels are imposed in packets after the Layer 3 header.

Answer: C D

Question 10

Refer to the exhibit. R2 has two paths to reach 192.168.13.0/24, but traffic is sent only through R3. Which action allows traffic to use both paths?

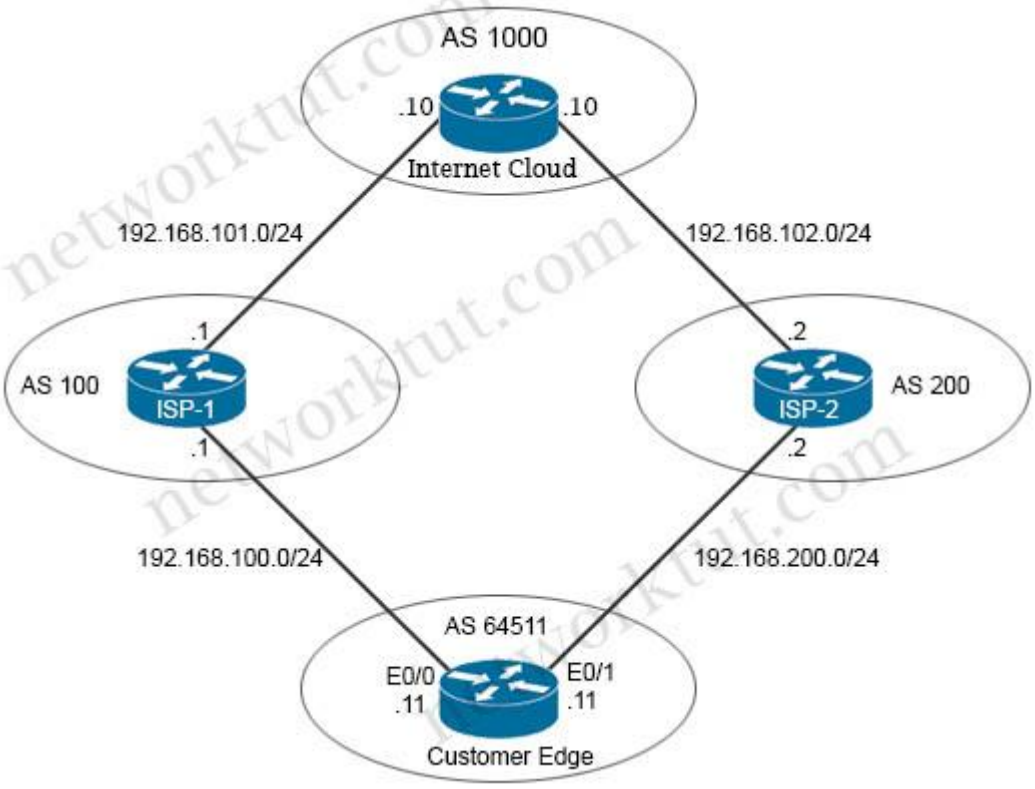


A. Configure the **bandwidth 2000** command under interface FastEthernet0/0 on R2
B. Configure the **delay 1** command under interface FastEthernet0/0 on R2
C. Configure the **variance 2** command under the EIGRP process on R2
D. Configure the **variance 4** command under the EIGRP process on R2

Answer: D

Question 11

Refer to the exhibit.



The network administrator has configured the Customer Edge router (AS 64511) to send only summarized routes toward ISP-1 (AS 100) and ISP-2 (AS 200).

```
router bgp 64511
 network 172.16.20.0 mask 255.255.255.0
 network 172.16.21.0 mask 255.255.255.0
 network 172.16.22.0 mask 255.255.255.0
 network 172.16.23.0 mask 255.255.255.0
 aggregate-address 172.16.20.0 255.255.252.0
```

After this configuration, ISP-1 and ISP-2 continue to receive the specific routes and the summary route. Which configuration resolves the issue?

A. router bgp 64511
aggregate-address 172.16.20.0 255.255.252.0 summary-only

B. router bgp 64511
neighbor 192.168.100.1 summary-only
neighbor 192.168.200.2 summary-only

C. interface E0/0
ip bgp suppress-map BLOCK_SPECIFIC
!
interface E0/1
ip bgp suppress-map BLOCK_SPECIFIC
!
ip prefix-list PL_BLOCK_SPECIFIC
permit 172.16.20.0/22 ge 24
!

route-map BLOCK_SPECIFIC permit 10
match ip address prefix-list PL_BLOCK_SPECIFIC

D. ip prefix-list PL_BLOCK_SPECIFIC
deny 172.16.20.0/22 ge 22
ip prefix-list PL_BLOCK_SPECIFIC
permit 172.16.20.0/22
!
route-map BLOCK_SPECIFIC permit 10
match ip address prefix-list PL_BLOCK_SPECIFIC
!
router bgp 64511
aggregate-address 172.16.20.0 255 255.252.0 suppress-map BLOCK_SPECIFIC

Answer: A

Question 12

Refer to the exhibit.

Configuration output:

```
clock timezone PST -8
clock summer-time PDT recurring
service timestamps debug datetime
service timestamps log datetime
logging buffered 16000 debugging
ntp clock-period 17178272
ntp server 161.181.92.152
```

Debug output:

```
router#show clock
14:12:26:312 PDT Thu Apr 27 2019
router#config t
Enter configuration commands, one per line. End with CNTL/Z.
router(config)#exit

router#
Apr 27 21:12:28: %SYS-5-CONFIG_I: Configured from console by vty0
```

A network administrator configured NTP on a Cisco router to get synchronized time for system and logs from a unified time source. The configuration did not work as desired. Which service must be enabled to resolve the issue?

A. Enter the **service timestamps log datetime clock-period** global command
B. Enter the **service timestamps log datetime synchronize** global command
C. Enter the **service timestamps log datetime console** global command
D. Enter the **service timestamps log datetime localtime** global command

Answer: D

Question 13

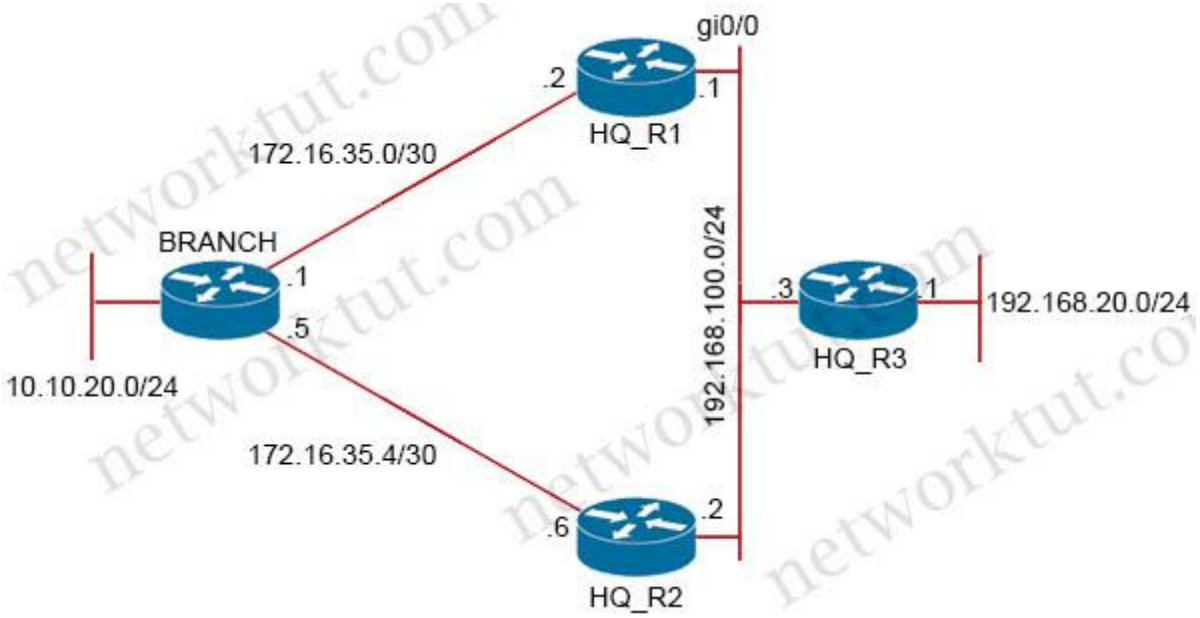
What are two functions of MPLS Layer 3 VPNs? (Choose two)

A. BGP is used for signaling customer VPNv4 routes between PE nodes.
B. It is used for transparent point-to-multipoint connectivity between Ethernet links/sites.
C. LDP and BGP can be used for Pseudowire signaling.
D. A packet with node segment ID is forwarded along with shortest path to destination.
E. Customer traffic is encapsulated in a VPN label when it is forwarded in MPLS network.

Answer: A E

Question 14

Refer to the exhibit.




```
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.2 track 1
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.6 5
!
BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 172.16.35.2
BRANCH(config-ip-sla)# timeout 200
BRANCH(config-ip-sla)# frequency 5
!
BRANCH(config)#ip sla schedule 1 life forever start-time now
!
BRANCH(config)# track 1 ip sla 1 reachability
```

An engineer has successfully set up a floating static route from the BRANCH router to the HQ network using HQ_R1 as the primary default gateway. When the g0/0 goes down on HQ_R1, the branch network cannot reach the HQ network 192.168.20.0/24. Which set of configurations resolves the issue?

A. BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 192.168.100.2

B. BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 192.168.100.1

C. HQ_R3(config)# ip sla responder
HQ_R3(config)# ip sla responder icmp-echo 172.16.35.5

D. HQ_R3(config)# ip sla responder
HQ_R3(config)# ip sla responder icmp-echo 172.16.35.1

Answer: B

Question 15

Refer to the exhibit. Which action restores the routes from neighbors while still filtering 1.1.1.0/24?

```
access-list 1 permit 1.1.1.0 0.0.0.255
!
route-map FILTER1 deny 10
 match ip address 1
!
router eigrp 1
 distribute-list route-map FILTER1 in
```

A. Modify the access list to deny instead of permit it
B. Modify the route map to permit the access list instead of deny it
C. Add a second sequence in the route map permit 20
D. Add a second line in the access list to permit any

Answer: C

Question 16

An engineer configured two routers connected to two different service providers using BGP with default attributes. One of the links is presenting high delay, which causes slowness in the network. Which BGP attribute must the engineer configure to avoid using the high-delay ISP link if the second ISP link is up?

A. WEIGHT
B. MED
C. LOCAL_PREF
D. AS-PATH

Answer: C

Question 17

An engineer configured a DHCP server for Cisco IP phones to download its configuration from a TFTP server, but the IP phones failed to load the configuration. What must be configured to resolve the issue?

A. DHCP option 66
B. BOOTP port 67
C. BOOTP port 68
D. DHCP option 69

Answer: A

Question 18

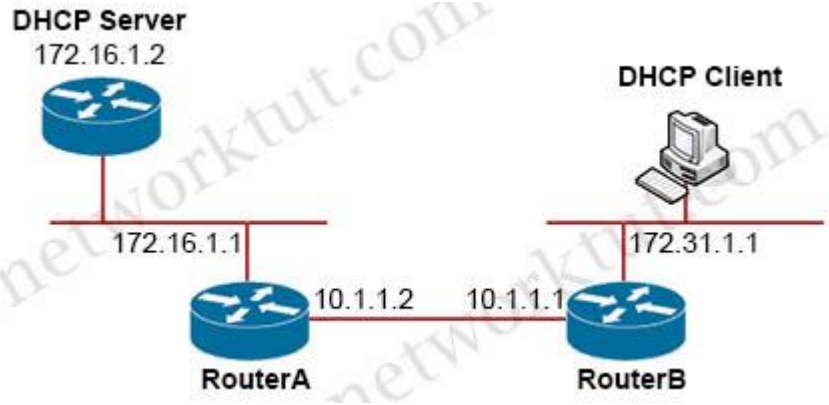
What are two purposes of using IPv4 and VPNv4 address-family configurations in a Layer 3 MPLS VPN? (Choose two)

A. The VPNv4 address is used to advertise the MPLS VPN label.
B. RD is prepended to the IPv4 route to make it unique.
C. MP-BGP is used to allow overlapping IPv4 addresses between customers to advertise through the network.
D. The IPv4 address is needed to tag the MPLS label.
E. The VPNv4 address consists of a 64-bit route distinguisher that is prepended to the IPv4 prefix.

Answer: B E

Question 19

Refer to the exhibit.



The DHCP client is unable to receive an IP address from the DHCP server. RouterB is configured as follows:

```
interface Fastethernet0/0
 description Client DHCP ID 43574645
 ip address 172.31.1.1 255.255.255.0
!
ip route 172.16.1.0 255.255.255.0 10.1.1.2
```

Which command is required on the Fastethernet0/0 interface of RouterB to resolve this issue?

A. RouterB(config-if)#ip helper-address 172.31.1.1
B. RouterB(config-if)#ip helper-address 172.16.1.2
C. RouterB(config-if)#ip helper-address 172.16.1.1
D. RouterB(config-if)#ip helper-address 255.255.255.255

Answer: B

Question 20

Refer to the exhibit.

```
OSPF: Send DBD to 10.100.1.2 on GigabitEthernet0/1 seq 0x9E6 opt 0x52 flag 0x7 len 32
OSPF: Retransmitting DBD to 10.100.1.2 on GigabitEthernet0/1 [10]
OSPF: Send DBD to 10.100.1.2 on GigabitEthernet0/1 seq 0x9E6 opt 0x52 flag 0x7 len 32
OSPF: Retransmitting DBD to 10.100.1.2 on GigabitEthernet0/1 [11]
%OSPF-5-ADJCHG: Process 1, Nbr 10.100.1.2 on GigabitEthernet0/1 from EXSTART to
DOWN, Neighbor Down: Too many retransmissions
```

The OSPF neighbor relationship is not coming up. What must be configured to restore OSPF neighbor adjacency?

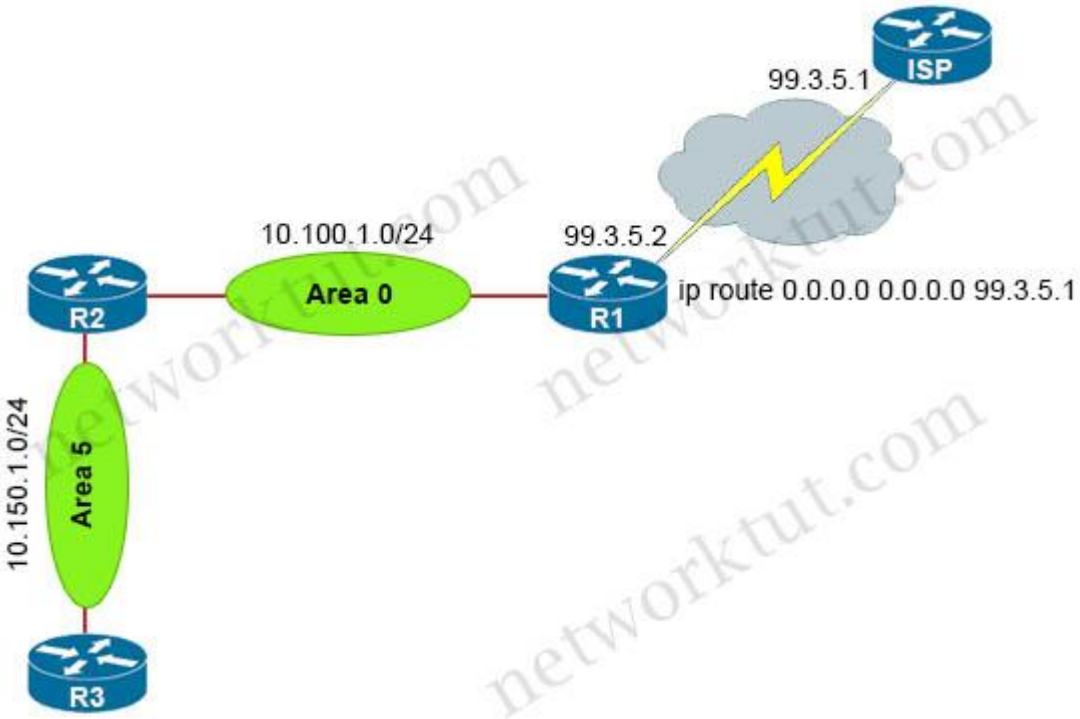
A. matching hello timers
B. matching MTU values

C. use router ID
D. OSPF on the remote router

Answer: B

Question 21

Refer to the exhibit.



A network administrator redistributed the default static route into OSPF toward all internal routers to reach to Internet. Which set of commands restores reachability to the Internet by internal routers?

A. router ospf 1
redistribute static subnets

B. router ospf 1
network 0.0.0.0 0.0.0.0 area 0

C. router ospf 1
redistribute connected 0.0.0.0

D. router ospf 1
default-information originate

Answer: D

Question 22

Refer to the exhibit.

```
ipv6 unicast-routing
!
router ospfv3 4
 router-id 192.168.1.1
!
interface E0/0
 ipv6 enable
 ip address 10.1.1.1 255.255.255.0
 ospfv3 4 area 0 ipv4
 no shut
!
interface Loopback0
 ipv6 enable
 ipv4 172.16.1.1 255.255.255.0
 ospfv3 4 area 0 ipv4
```

The network administrator configured the branch router for IPv6 on the E0/0 interface. The neighboring router is fully configured to meet requirements, but the neighbor relationship is not coming up. Which action fixes the problem on the branch router to bring the IPv6 neighbors up?

A. Enable the IPv4 address family under the **router ospfv3 4** process by using the **address-family ipv4 unicast** command
B. Disable IPv6 on the E0/0 interface using the **no ipv6 enable** command
C. Enable the IPv4 address family under the E0/0 interface by using the **address-family ipv4 unicast** command
D. Disable OSPF for IPv4 using the **no ospfv3 4 area 0 ipv4** command under the E0/0 interface

Answer: A

Question 23

What are two characteristics of VRF instance? (Choose two)

A. All VRFs share customers routing and CEF tables
B. Each VRF has a different set of routing and CEF tables
C. An interface must be associated to one VRF
D. A customer site can be associated to different VRFs
E. It is defined by the VPN membership of a customer site attached to a P device

Answer: B D

Question 24

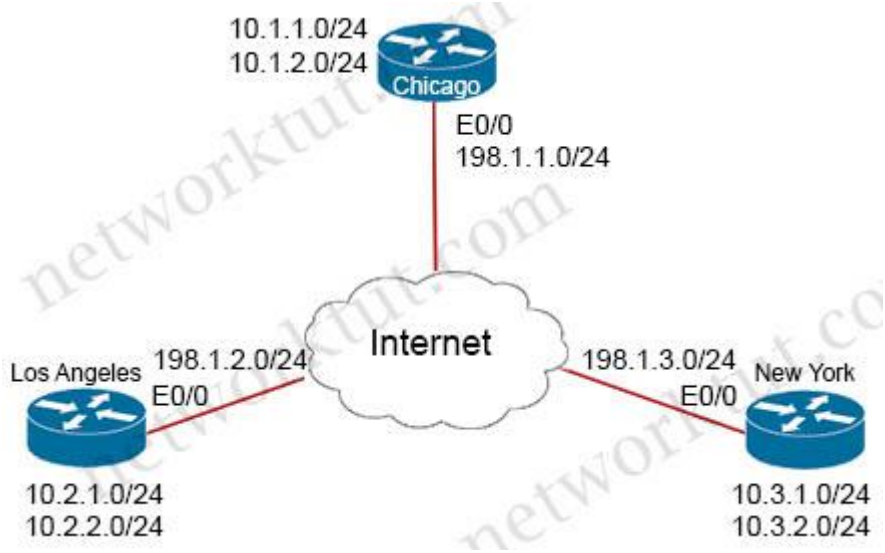
Which two components are needed for a service provider to utilize the L3VPN MPLS application? (Choose two)

A. The P routers must be configured with RSVP
B. The P routers must be configured for MP-iBGP toward the PE routers
C. The P and PE routers must be configured with LDP or RSVP
D. The PE routers must be configured for MP-eBGP to connect to CEs
E. The PE routers must be configured for MP-iBGP with other PE routers

Answer: C E

Question 25

Refer to the exhibit. The Los Angeles and New York routers are receiving routes from Chicago but not from each other. Which configuration fixes the issue?



Chicago

```
interface Tunnel 1
 ip address 192.168.1.1255.255.255.0
 tunnel source E0/0
 tunnel mode gre multipoint
 ip nhrp network-id 1
 ip nhrp map multicast dynamic
 no ip next-hop-self eigrp 111
 tunnel protection ipsec profile IPSec-PROFILE
!
router eigrp 111
 network 192.168.1.0
 network 10.0.0.0
```

A. interface Tunnel1
ip next-hop-self eigrp 111

B. interface Tunnel1
no ip split-horizon eigrp 111

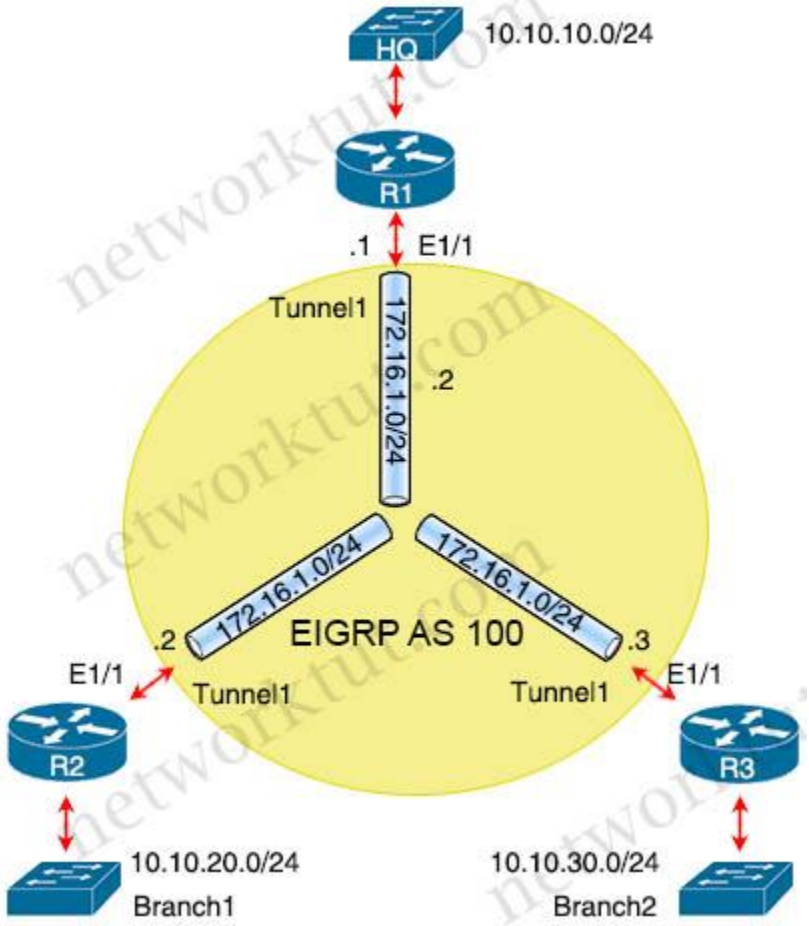
C. interface Tunnel1
tunnel mode ipsec ipv4

D. interface Tunnel1
tunnel protection ipsec profile IPSec-PROFILE

Answer: B

Question 26

Refer to the exhibit.



An engineer sets up a DMVPN connection to connect branch 1 and branch 2 to HQ branch 1 and branch 2 cannot communicate with each other. Which change must be made to resolve this issue?

A. R1(config)#int e1/1
R1(config-if)#no ip split-horizon eigrp 100

B. R1(config)#int tunnel1
R1(config-if)#no ip split-horizon eigrp 100

C. R1(config)#router eigrp 100
R1(config-if)#neighbor 172.16.1.3

D. R1(config)#router eigrp 100
R1(config-if)#neighbor 172.16.1.2

Answer: B

Question 27

What is the minimum time gap required by the local system before putting a BFD control packet on the wire?

A. Required Min RX Interval
B. Required Min Echo RX Interval
C. Detect Mult
D. Desired Min TX Interval

Answer: D

Question 28

Refer to exhibit.

```
ip dhcp excluded-address 172.16.16.1 172.16.16.2
!
ip dhcp pool 0
 network 172.16.16.0 255.255.255.0
 domain-name networktut.com
 dns-server 172.16.16.2
 lease 30

interface Ethernet0/0
 ip address 10.1.1.1255.255.255.252
 ip access-group 100 in

access-list 100 deny udp any any
access-list 100 permit ip any any
```

Which two configurations allow clients to get dynamic ip addresses assigned? (Choose two)

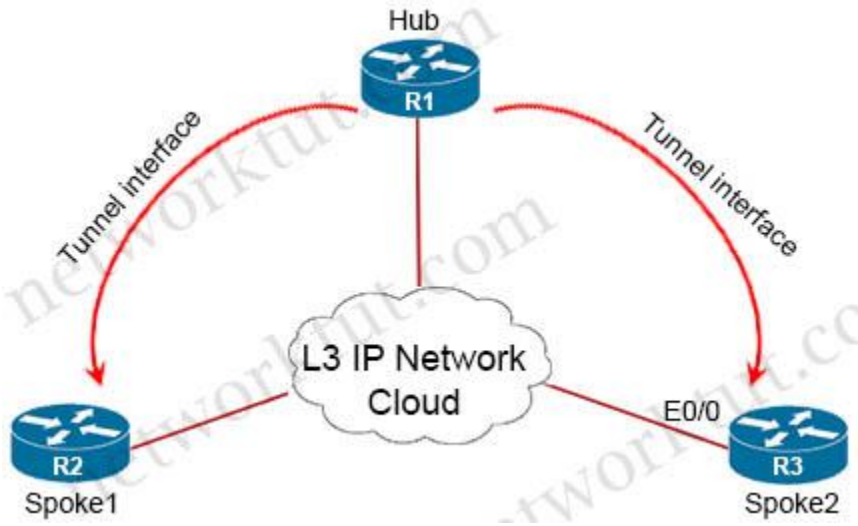
A. Configure access-list 100 permit udp any any eq 68 as the first line
B. Configure access-list 100 permit udp any any eq 86 as the first line
C. Configure access-list 100 permit udp any any eq 61 as the first line

D. Configure access-list 100 permit udp any any eq 67 as the first line
E. Configure access-list 100 permit udp any any eq 69 as the first line

Answer: A D

Question 29

Refer to exhibit.



A network administrator has successfully configured DMVPN topology between a hub and two spoke routers. Which two configuration commands should establish direct communications between spoke 1 and spoke 2 without going through the hub? (Choose two)

A. At the hub router, configure the **ip nhrp shortcut** command
B. At the hub router, configure **ip nhrp redirect** command
C. At the hub router, configure the **ip nhrp spoke-tunnel** command
D. At the spoke routers, configure the **ip nhrp shortcut** command
E. At the spoke routers, configure the **ip nhrp spoke-tunnel** command

Answer: B D

Question 30

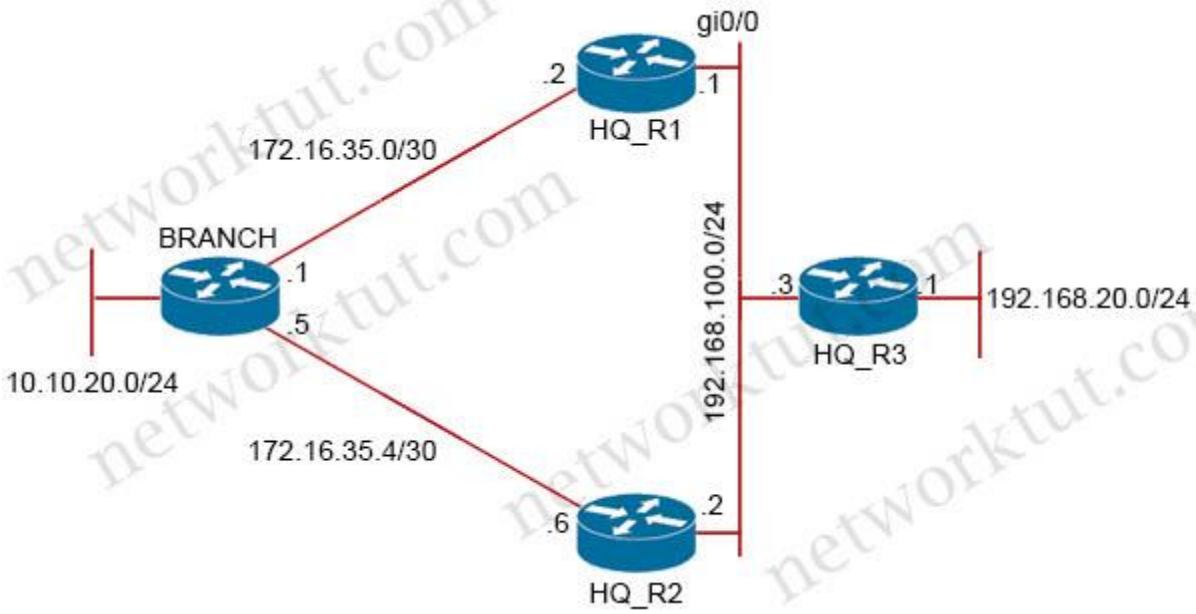
Which IPv6 first-hop security feature helps to minimize denial of service attacks?

A. IPv6 Router Advertisement Guard
B. IPv6 Destination Guard
C. DHCPv6 Guard
D. IPv6 MAC address filtering

Answer: B

Question 31

Refer to the exhibit.




```
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.2 track 1
BRANCH(config)# ip route 0.0.0.0 0.0.0.0 172.16.35.6 5
!
BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 172.16.35.6
BRANCH(config-ip-sla)# timeout 200
BRANCH(config-ip-sla)# frequency 5
!
BRANCH(config)#ip sla schedule 1 life forever start-time now
!
BRANCH(config)# track 1 ip sla 1 reachability
```

Traffic from the branch network should route through HQ_R1 unless the path is unavailable. An engineer tests this functionality by shutting down interface on the BRANCH router toward HQ_R1 router but 192.168.20.0/24 is no longer reachable from the branch router.
Which set of configurations resolves the issue?

A. HQ_R2(config)# ip sla responder
HQ_R2(config)# ip sla responder icmp-echo 172.16.35.5

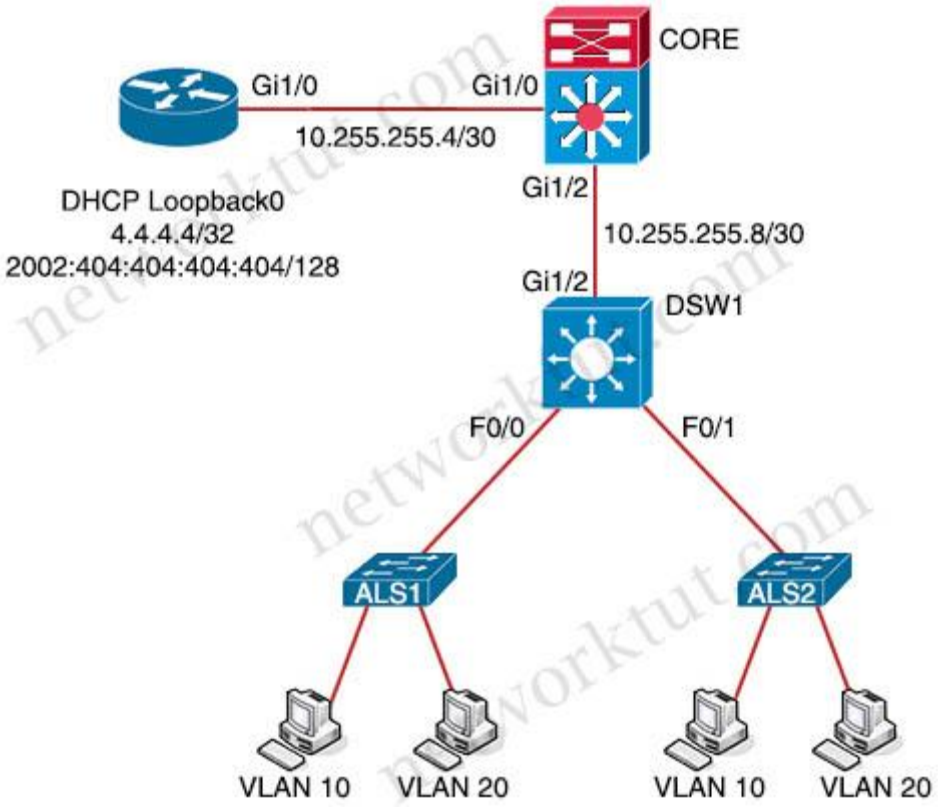
B. BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)# icmp-echo 172.16.35.1

C. HQ_R1(config)# ip sla responder
HQ_R1(config)# ip sla responder icmp-echo 172.16.35.2

D. BRANCH(config)# ip sla 1
BRANCH(config-ip-sla)#icmp-echo 172.16.35.2

Answer: D

Question 32



Refer to the exhibit.

```
DSW1#sh run int f0/0
Building configuration...

Current configuration : 174 bytes
!
interface FastEthernet 0/0
 ip address 10.4.10.1 255.255.255.0
 ip helper-address 4.4.4.4
 duplex auto
 speed auto
 ipv6 address 2002:A04:A01::A04:A01/120
 ipv6 enable
end
```

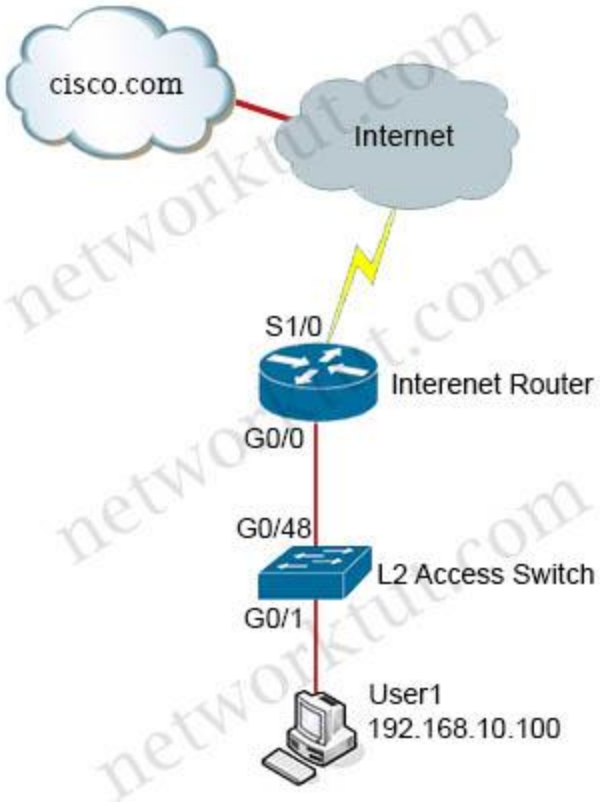
Router DHCP is configured to lease IPv4 and IPv6 addresses to clients on ALS1 and ALS2. Clients on ALS2 receive IPv4 and IPv6 addresses. Clients on ALS1 receive IPv4 addresses. Which configuration on DSW1 allows clients on ALS1 to receive IPv6 addresses?

A. DSW1(dhcp-config)# default-router 2002:A04:A01::A04:A01
B. DSW1(config)#ipv6 route 2002:404:404::404:404/128 FastEthernet 1/0
C. DSW1(config)# ipv6 dhcp relay destination 2002:404:404::404:404 GigabitEthernet 1/2
D. DSW1(config-if)# ipv6 helper address 2002:404:404::404:404

Answer: C

Question 33

A network administrator is tasked to permit http and https traffic only toward the internet from the User1 laptop to adhere to company's security policy. The administrator can still ping to www.cisco.com. Which interface should the access list 101 be applied to resolve this issue?




```
access-list 101 permit tcp 192.168.10.0 0.0.0.255 any eq 80
access-list 101 permit tcp 192.168.10.0 0.0.0.255 any eq 443
access-list 101 deny ip any any log
!
interface Serial1/0
 ip address 200.193.22.94 255.255.255.252
 ip access-group 101 in
```

A. Interface G0/48 in the incoming direction
B. Interface G0/0 in the incoming direction
C. Interface S1/0 in the outgoing direction
D. Interface G0/0 in the outgoing direction

Answer: B

Question 34

Refer to the exhibit.

```
config t

flow record v4_r1
match ipv4 tos
match ipv4 protocol
match ipv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
collect counter bytes long
collect counter packets long
!
flow exporter EXPORTER-1
 destination 172.16.10.2
 transport udp 2055
 exit
!
flow monitor FLOW-MONITOR-1
 exporter EXPORTER-1
 record v4_r1
 exit
!
flow monitor v4_r1
!
ip cef
!

interface Ethernet0/0.1
 ip address 172.16.6.2 255.255.255.0
 ip flow monitor v4_r1 input
```

The remote server is failing to receive the NetFlow data. Which action resolves the issue?

A. Modify the flow transport command **transport udp 2055** to move under flow monitor profile.
B. Modify the interface command to **ip flow monitor FLOW-MONITOR-1 input**.
C. Modify the udp port under flow exporter profile to ip transport udp 4739.
D. Modify the flow record command record v4_M to move under flow exporter profile.

Answer: B

Question 35

An engineer must configure a Cisco router to initiate secure connections from the router to other devices in the network but kept failing. Which two actions resolve the issue? (Choose two)

A. Configure a domain name.
B. Configure a crypto key to be generated.
C. Configure a TACACS+ server and enable it.
D. Configure transport input ssh command on the console.
E. Configure a source port for the SSH connection to initiate.

Answer: A B

Question 36

An engineer is troubleshooting on the console session of a router and turns on multiple debug commands. The console screen is filled with scrolling debug messages that none of the commands can be verified if entered correctly or display any output. Which action allows the engineer to see entered console commands while still continuing the analysis of the debug messages?

A. Configure the no logging console debugging command globally
B. Configure the logging synchronous command
C. Configure the logging synchronous level all command
D. Configure the term no mon command globally

Answer: B

New ENARSI Questions 2

Question 1

An engineer configured SNMP notifications sent to the management server using authentication and encryption data with DES. An error in the response PDU is received as "UNKNOWNUSERNAME, WRONGDIGEST". Which action resolves the issue?

A. Configure correct authentication and privacy passwords using SNMPv3 authNoPriv
B. Configure the correct authentication password using SNMPv3 authPriv
C. Configure the correct authentication password using SNMPv3 authNoPriv
D. Configure correct authentication and privacy passwords using SNMPv3 authPriv

Answer: B or D

Question 2

An engineer configured a cisco router to send reliable and encrypted notifications for any events to the management server. It was noticed that line notifications messages are reliable but not encrypted. Which action resolves the issue?

A. Configure all devices for SNMPv3 traps with priv
B. Configure all devices for SNMPv3 informs with auth
C. Configure all devices for SNMPv3 informs with priv
D. Configure all devices for SNMPv3 traps with auth

Answer: C

Question 3

Refer to the exhibit.

The network administrator must mutually redistribute routes at the Chicago router to the LA and NewYork routers. The configuration of the Chicago router is this:

```
router ospf 1
 redistribute eigrp 100
router eigrp 100
 redistribute ospf 1
```

After the configuration, the LA router receives all the NewYork routes, but NewYork router does not receive any LA routes. Which set of configurations fixes the problem on the Chicago router?

A. router ospf 1
redistribute eigrp 100 subnets

B. router eigrp 100
redistribute ospf 1 metric 10 10 10 10 10

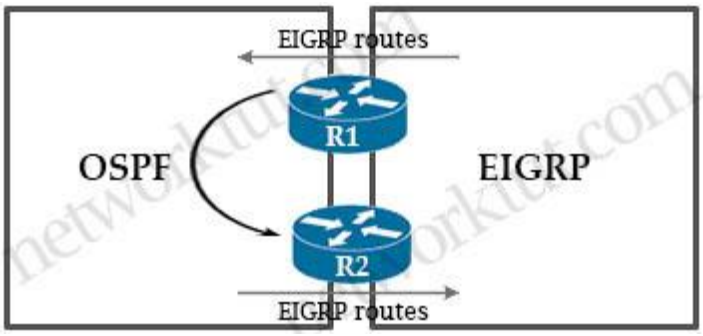
C. router ospf 1
redistribute eigrp 100 metric 20

D. router eigrp 100
redistribute ospf 1 subnets

Answer: B

Question 4

Refer to the exhibit.



A network administrator configured mutual redistribution on R1 and R2 routers, which caused instability in the network. Which action resolves the issue?

A. Set a tag in the route map when redistributing EIGRP into OSPF on R1. and match the same tag on R2 to allow when redistributing OSPF into EIGRP.
B. Set a tag in the route map when redistributing EIGRP into OSPF on R1, and match the same tag on R2 to deny when redistributing OSPF into EIGRP.
C. Apply a prefix list of EIGRP network routes in OSPF domain on R1 to propagate back into the EIGRP routing domain.
D. Advertise summary routes of EIGRP to OSPF and deny specific EIGRP routes when redistributing into OSPF.

Answer: B

Question 5

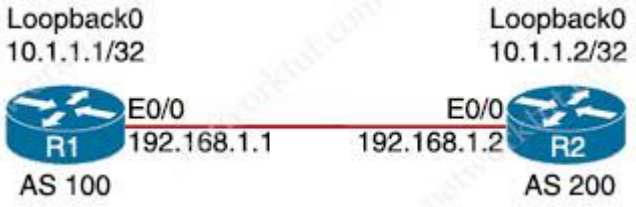
How are MPLS layer 3 VPN services deployed?

A. The RD and RT values must match under the VRF
B. The RD and RT values under a VRF must match on the remote PE router
C. The import and export RT values under a VRF must always be the same
D. The label switch path must be available between the local and remote PE routers

Answer: D

Question 6

Refer to the exhibit.



R1	R2
router bgp 100 neighbor 10.1.1.2 remote-as 200	router bgp 200 neighbor 10.1.1.1 remote-as 100

The neighbor relationship is not coming up. Which two sets of configurations bring the neighbors up? (Choose two)

A. R2
ip route 10.1.1.2 255.255.255.255 192.168.1.2
router bgp 100
neighbor 10.1.1.2 ttl-security hops 1
neighbor 10.1.1.2 update-source loopback 0

B. R1
ip route 10.1.1.2 255.255.255.255 192.168.1.2
router bgp 100
neighbor 10.1.1.2 disable-connected-check
neighbor 10.1.1.2 update-source loopback0

C. R2
ip route 10.1.1.1 255.255.255.255 192.168.1.1
router bgp 200
neighbor 10.1.1.1 disable-connected-check
neighbor 10.1.1.1 update-source loopback0

D. R2
ip route 10.1.1.1 255.255.255.255 192.168.1.1
router bgp 200
neighbor 10.1.1.1 ttl-security hops 1
neighbor 10.1.1.1 update-source loopback 0

Answer: B C

Question 7

What are two functions of IPv6 source guard? (Choose two)

A. It works independent from IPv6 neighbor discovery
B. It denies traffic from unknown sources or unallocated addresses
C. It blocks certain traffic by inspecting DHCP packets for specific sources
D. It uses the populated binding table for allowing legitimate traffic
E. It denies traffic by inspecting neighbor discovery packets for specific patterns

Answer: B D

Question 8

An engineer configured access list NON-CISCO in a policy to infuence routes.

```
route-map PBR, deny, sequence 5
  Match clauses:
    ip address (access-list): NON-CISCO
  Set clauses:
Policy routing matches: 0 packets, 0 bytes
route-map PBR, permit, sequence 10
  Match clauses:
  Set clauses:
    ip next-hop 192.168.1.5
  Policy routing matches: 389202995 packets, 222006352077 bytes
```

What are the two effects of this route map configuration? (Choose two)

A. Packets are dropped by the access list
B. Packets are forwarded using normal route lookup
C. Packets are forwarded to the default gateway
D. Packets are not evaluated by sequence 10
E. Packets are evaluated by sequence 10

Answer: C E

Question 9

Refer to the exhibit. All the serial links between R1, R2, and R3 have the same bandwidth. Users on 192.168.1.0/24 (R1) network report slow responses on network 192.168.3.0/24 (R3). A traceroute is run on the path, it shows that the packet is getting forwarded via R2 to R3 although the link between R1 and R3 are up. What can the network administrator do to fix the slowness.

Note. there is a static route that is making the traffic go the way it currently is.

A. Change the administrative distance of eigrp to 5
B. Remove the static route on R1
C. Add a static route on R1 using the next hop of R3
D. Redistribute the R1 static route to EIGRP

Answer: B

Question 10

Refer to the exhibit.

login block-for 15 attempts 10 within 120
login on-failure log

login on-success log
archive
log config
logging enable
logging size 300
notify syslog
snmp-server enable traps syslog
snmp-server host 172.16.17.1 public syslog

The administrator can see the traps for the failed login attempts, but cannot see the traps of successful login attempts. What command is needed to resolve the issue?

A. Configure logging history 2
B. Configure logging history 3
C. Configure logging history 4
D. Configure logging history 5

Answer: D

Question 11

Refer to the exhibit.

```
R1# show policy-map control-plane
Control plane
 service-plane input: CoPP
 class-map: PERMIT (match-all)
  50 packets, 3811 bytes
  5 minute offered rate 0000 bps
  Match: access-group 100
 class-map: ANY (match-all)
  210 packets, 19104 bytes
  5 minute offered rate 0000 bps, drop rate 0000bps
  Match: access-group 199
   drop
 class-map: class-default (match-any)
  348 packets, 48203 bytes
  5 minute offered rate 0000 bps, drop rate 0000 bps
  Match: any

R1#show access-list 100
Extended IP access list 100
 10 permit udp any any eq 23 (100 matches)
 20 permit tcp any any eq telnet (5 matches)
 30 permit tcp any eq telnet any (10 matches)

R1#show access-list 199
Extended IP access 199
 10 deny tcp any eq telnet any (50 matches)
 50 permit ip any any (1 match)

R1# show run | section line vty
line vty 0 4
 login
```

```
transport input telnet ssh
transport output telnet ssh
```

Which two actions restrict access to router R1 by SSH? (Choose two)

A. Configure **transport input ssh** on line vty and remove sequence 30 from access list 100
B. Configure **transport output ssh** on line vty and remove sequence 10 from access list 199
C. Remove **class-map any** from **service-policy CoPP**
D. Remove sequence 10 from access list 100 and add **sequence 20 deny tcp any any eq telnet** to access list 199
E. Configure **transport output ssh** on line vty and remove sequence 20 from access list 100

Answer: A E

Question 12

What are two functions of LDP? (Choose two)

A. It advertises labels per forwarding equivalence class
B. It is defined in RFC 3038 and 3039
C. It uses forwarding equivalence class
D. It must use resource reservation protocol
E. It requires MPLS traffic engineering

Answer: A C

Question 13

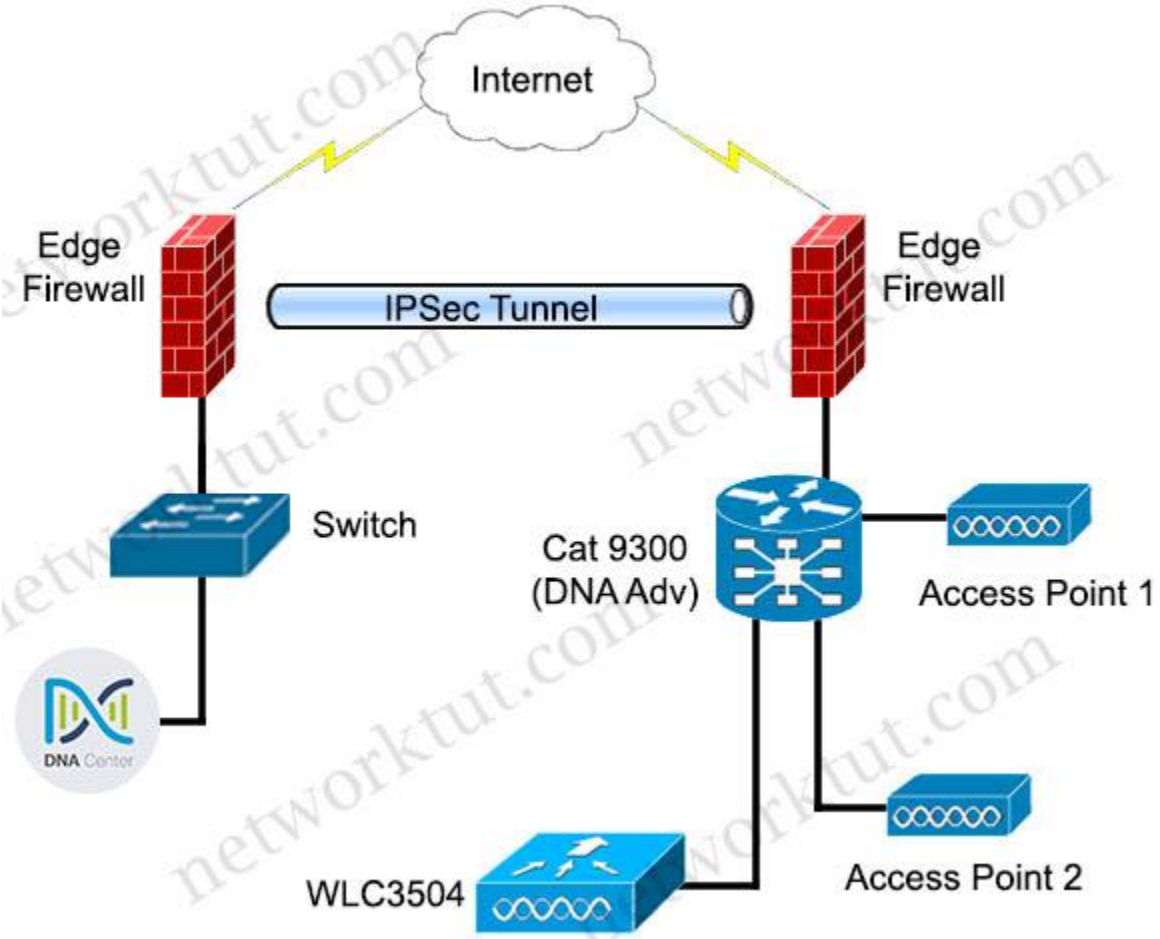
A network administrator is using the DNA Assurance Dashboard panel to troubleshoot an OSPF adjacency that failed between Edge_NYC interface GigabitEthernet1/3 with Neighbor Edge_SNJ. The administrator observes that the neighborship is stuck in exstart state. How does the administrator fix this issue?

A. Configure to match the OSPF interface speed and duplex settings on both routers
B. Configure to match the OSPF interface unique IP address and subnet mask on both routers.
C. Configure to match the OSPF interface network types on both routers
D. Configure to match the OSPF interface MTU settings on both routers

Answer: D

Question 14

Refer to the exhibit.



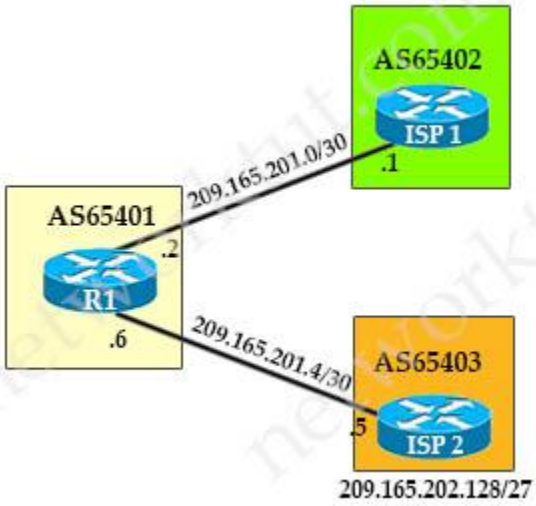
A network is discovering a Cisco catalyst 9300 and a Cisco WLC 3504 in Cisco DNA Center. The 9300 is added successfully but is receiving the error "uncontactable" when the administrator tries to add it in Cisco DNA Center. Which action discovers and resolves the issue?

A. Copy the .cert file from cisco DNA Center on the USB and upload it to the WLC 3504
B. Delete the WLC 3504 from cisco DNA center and add it to cisco DNA center again
C. Add the WLC 3504 under the hierarchy of the catalyst 9300 connected devices
D. Copy the .pem file from the cisco DNA center on the USB and upload it to the WLC 3504

Answer: D

Question 15

Refer to the exhibit.




```
R1
int G0/0
 ip address 209.165.201.2 255.255.255.252
int G0/1
 ip address 209.165.201.6 255.255.255.252
router bgp 65401
 bgp log-neighbor-changes
 redistribute static
 neighbor 209.165.201.1 remote-as 65402
 neighbor 209.165.201.5 remote-as 65403
ip route 209.165.200.224 255.255.255.224 Null0
ip route 209.165.202.128 255.255.255.224 Null0
```

A company with autonomous system number AS65401 has obtained IP address block 209.165.200.224/27 from ARIN. The company needed more IP addresses and was assigned block 209.165.202.128/27 from ISP2. An engineer is ISP1 reports they are receiving ISP2 routes from AS65401. Which configuration on R1 resolves the issue?

A. access-list 10 deny 209.165.202.128 0.0.0.31
access-list 10 permit any
!
router bgp 65401
neighbor 209.165.201.1 distribute-list 10 out

B. access-list 10 deny 209.165.202.128 0.0.0.31
access-list 10 permit any
!
router bgp 65401
neighbor 209.165.201.1 distribute-list 10 in

C. ip route 209.165.200.224 255.255.255.224 209.165.201.1
ip route 209.165.202.128 255.255.255.224 209.165.201.5

D. ip route 0.0.0.0 0.0.0.0 209.165.201.1
ip route 0.0.0.0 0.0.0.0 209.165.201.5

Answer: A

Question 16

Drag drop the sequence of configuring a policy to avoid following packet forwarding based on the normal routing.

Answer:

Step 1 – configure ACLs
Step 2 – configure route map instances
Step 3 – configure match commands
Step 4 – configure set commands
Step 5 – configure PBR on the interface
Step 6 – configure fast switching for PBR

Question 17

There is a picture of "Layer 2 loop symptoms" in DNAC and the config below:

```
interface GigabitEthernet1/0/13
 switchport trunk allowed vlan 30-33
 switchport mode trunk

int GigabitEthernet1/0/23
 switchport trunk allowed vlan 30-33
 switchport mode trunk
```

Refer to the exhibits. An engineer identified a Layer 2 loop using DNAC. Which command fixes the problem in the SF-D9300-1 Switch?

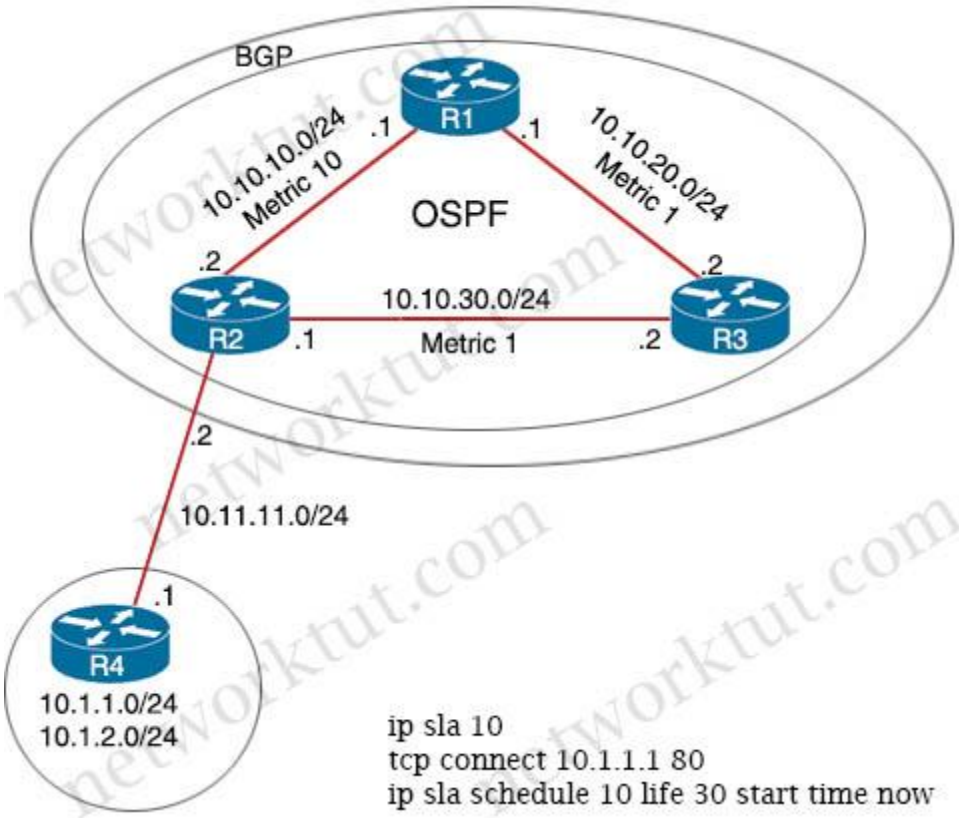
A. spanning-tree loopguard default
B. spanning-tree portfast bpduguard

C. spanning-tree backbonefast
D. no spanning-tree uplink fast

Answer: B

Question 18

Refer to the exhibit.



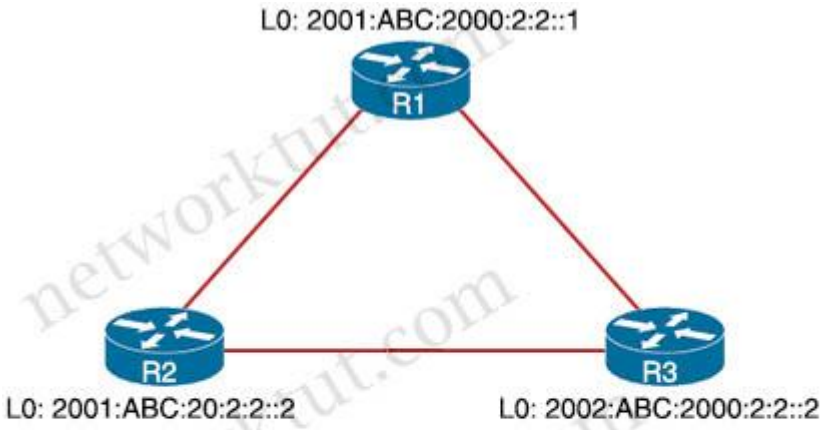
A user has set up an IP SLA probe to test if a non SLA host web server on IP address 10.1.1.1 accepts HTTP sessions prior to deployment. The probe is failing. Which action should the network administrator recommend for the probe to succeed?

A. Re-issue the ip sla schedule command.
B. Add icmp-echo command for the host.
C. Add the control disable option to the tcp connect.
D. Modify the ip sla schedule frequency to forever.

Answer: C

Question 19

Refer to the exhibit.




```
IPv6 access list PERMIT_SSH
 10 deny tcp 2001:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 23
 20 permit tcp 2001:ABC:2000:2:2::/64 host 2000:ABC:20:2:2::2 eq 22
 30 deny tcp 2002:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 22
 40 permit tcp 2000:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 22
 50 permit tcp 2000:ABC:2000::/36 host 2000:ABC:20:2:2::2 eq 23
 60 permit tcp host 2002:ABC:2000:2:2::2 host 2000:ABC:20:2:2::2 eq 22
 70 deny ipv6 any any
```

An IPv6 network was newly deployed in the environment and the help desk reports that R3 cannot SSH to the R2's Loopback interface. Which action resolves the issue?

A. Modify line 10 of the access list to permit instead of deny.
B. Remove line 60 from the access list.
C. Modify line 30 of the access list to permit instead of deny.
D. Remove line 70 from the access list.

Answer: C

Question 20

Refer to the exhibit.

```
  192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.1.0/24 is directly connected, Ethernet0/0
L    192.168.1.1/32 is directly connected, Ethernet0/0
D    192.168.2.0/24 [90/2297856] via 192.166.12.2.00:02:14, Serial1/1
S    192.168.3.0/24 [1/0] via 192.168.12.2
  192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.12.0/24 is directly connected, Serial1/1
L    192.168.12.1/32 is directly connected, Serial1/1
  192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.13.0/24 is directly connected, Serial1/0
L    192.168.13.1/32 is directly connected, Serial1/0
D    192.168.23.0/24 [90/2681856] via 192.168.13.3,00:06:38, Serial1/0
       [90/2681856] via 192.168.12.2, 00:06:38, Serial1/1
D    192.168.24.0/24 [90/2195456] via 192.168.12.2, 00:06:38, Serial1/1
```

All the serial between R1, R2, and R3 D. User on the 192.168.1.0/24 network report slow response times while they access resource on network 192.168.3.0/24. When a traceroute is run on the path. It shows that the packet is getting forwarded via R2 to R3 although the link between R1 and R3 is still up. What must the network administrator to fix the slowness?

A. Change the Administrative Distance of EIGRP to 5
B. Add a static route on R1 using the next hop of R3
C. Remove the static route on R1
D. Redistribute the R1 route to EIGRP

Answer: C

Question 21

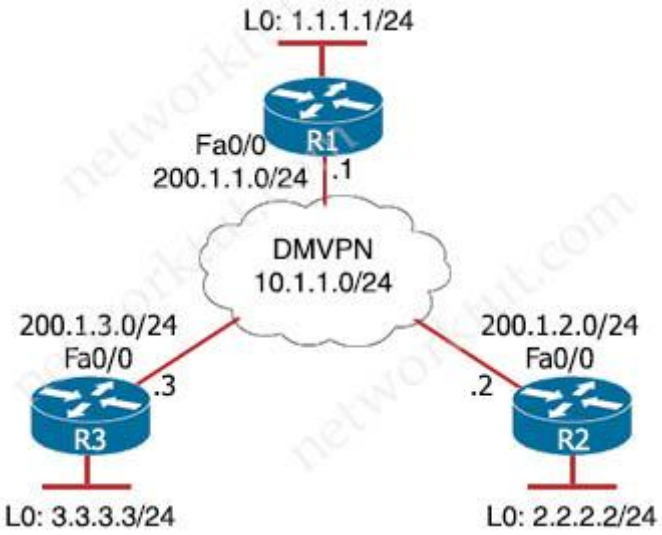
Which feature drops packets if the source address is not found in the snooping table?

A. Binding Table Recovery
B. IPv6 Destination Guard
C. IPv6 Prefix Guard
D. IPv6 Source Guard

Answer: D

Question 22

Refer to the exhibits.



```
R2:
R2(config)# crypto isakmp policy 10
R2(config-isakmp)# hash md5
R2(config-isakmp)# authentication pre-share
R2(config-isakmp)# group 2
R2(config-isakmp)# encryption 3des
R2(config)# crypto ipsec transform-set TSET esp-des esp-md5-hmac
R2(cfg-crypto-trans)# mode transport
R2(config)# crypto ipsec profile TST
R2(ipsec-profile)# set transform-set TSET
R2(config)# interface tunnel 123
R2(config-if)# tunnel protection ipsec profile TST
```

When DMVPN is configured, which configuration allows spoke-to-spoke communication using loopback as tunnel source?

A. Configure crypto isakmp key cisco address 0.0.0.0 on the hub.
B. Configure crypto isakmp key Cisco address 200.1.0.0 255.255.0.0 on the hub.
C. Configure crypto isakmp key cisco address 200.1.0.0 255.255.0.0 on the spokes.
D. Configure crypto isakmp key cisco address 0.0.0.0 on the spokes.

Answer: D

Question 23

Refer to the exhibit.


```
Chicago Router
ip route 192.168.1.0 255.255.255.0 10.1.1.2
ip route 192.168.2.0 255.255.255.0 10.1.1.2
!
router eigrp 100
 redistribute static

LA router
 ip route 0.0.0.0 0.0.0.0 10.1.1.1
```

A user on the 192.168.1.0/24 network can successfully ping 192.168.3.1, but the administrator cannot ping 192.168.3.1 from the LA router. Which set of configurations fixes the issue?

Option A	Option B

Chicago Router router eigrp 100 redistribute static metric 10 10 10 10 10	Chicago Router router eigrp 100 redistribute connected
Option C Chicago Router ip route 192.168.3.0 255.255.255.0 10.1.2.2 ip route 192.168.4.0 255.255.255.0 10.1.2.2	**Option D** LA Router ip route 192.168.3.0 255.255.255.0 10.1.1.1 ip route 192.168.4.0 255.255.255.0 10.1.1.1

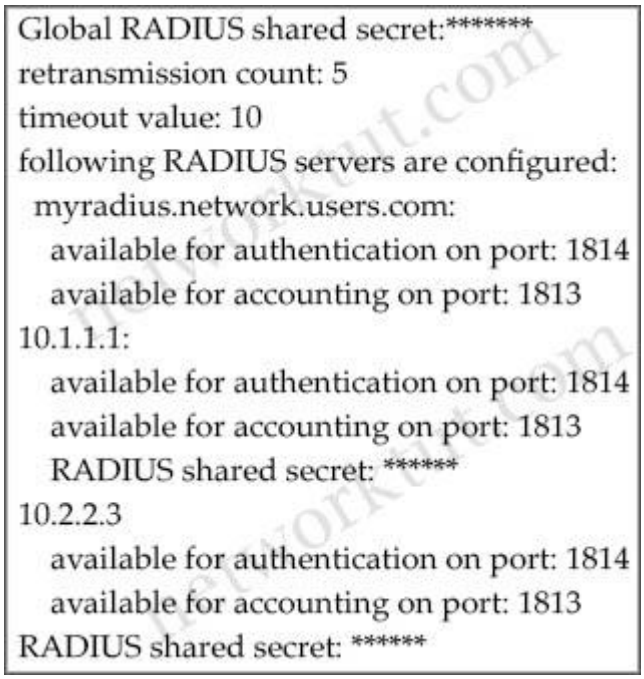
A. Option A
B. Option B
C. Option C
D. Option D

Answer: B

New ENARSI Questions

Question 1

Refer to the exhibit. AAA server 10.1.1.1 is configured with the default authentication and accounting settings, but the switch cannot communicate with the server. Which action resolves this issue?



A. Correct the timeout value
B. Match the authentication port
C. Correct the shared secret
D. Match the accounting port

Answer: B

Question 2

Refer to the exhibit. A company is evaluating multiple network management system tools. Trending graphs generated by SNMP data are returned by the NMS and appear to have multiple gaps. While troubleshooting the issue, an engineer noticed the relevant output. What solves the gaps in the graphs?

```
R1#show policy-map control-plane
  Control Plane
  Class-map: NMS (match-all)
  500461 packets, 24038351 bytes
  5 minute offered rate 1390000 bps, drop rate 0 bps
  police:
    cir 50000 bps, bc 5000 bytes
  conformed 50444 packets, 24031001 bytes; actions:
    transmit
  exceeded 990012 packets, 94030134 bytes; actions:
    drop
  conformed 4000 bps, exceed 0 bps
```

A. Remove the class map NMS from being part of control plane policing
B. Remove the exceed-rate command in the class map
C. Configure the CIR rate to a lower value that accommodates all the NMS tools
D. Separate the NMS class map in multiple class maps based on the specific protocols with appropriate CoPP actions

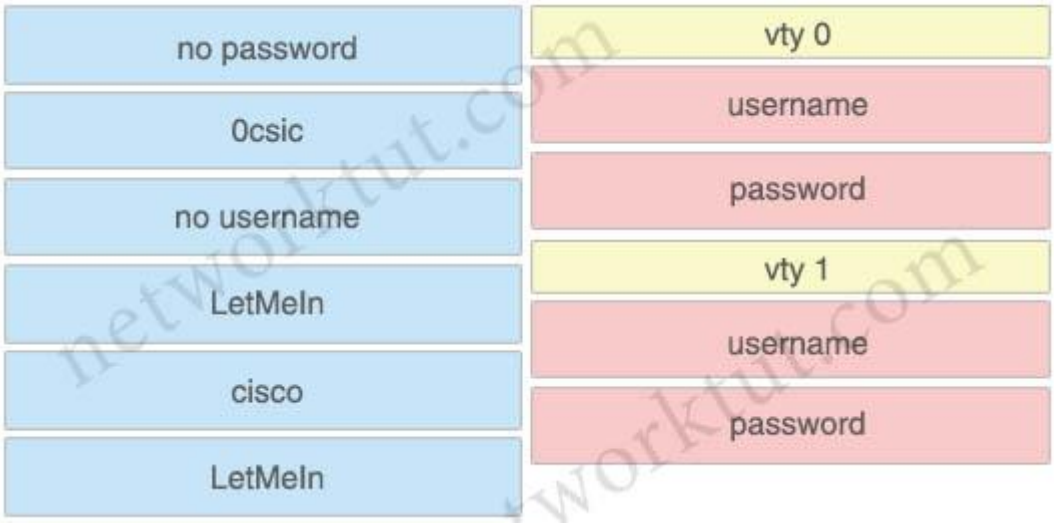
Answer: D

Question 3

Drag and drop the credentials from the left onto the remote login information on the right to resolve a failed login attempt to vtys. Not all credentials are used.

```
aaa new-model
aaa authentication login default none
aaa authentication login telnet local
!
username cisco password 0 Ocsic
!
line vty 0
```

```
 password LetMeIn
 login authentication telnet
 transport input telnet
line vty 1
 password LetMeIn
 transport input telnet
```



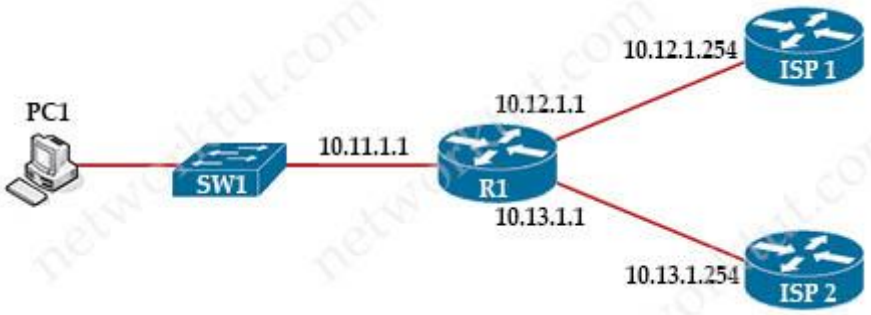
Answer:

vty 0:
+ cisco
+ 0csic

vty 1:
+ no username
+ no password

Question 4

Refer to the exhibit. An engineer is monitoring reachability of the configured default routes to ISP1 and ISP2. The default route from ISP1 is preferred if available. How is this issue resolved?



R1
```
ip sla 100
```

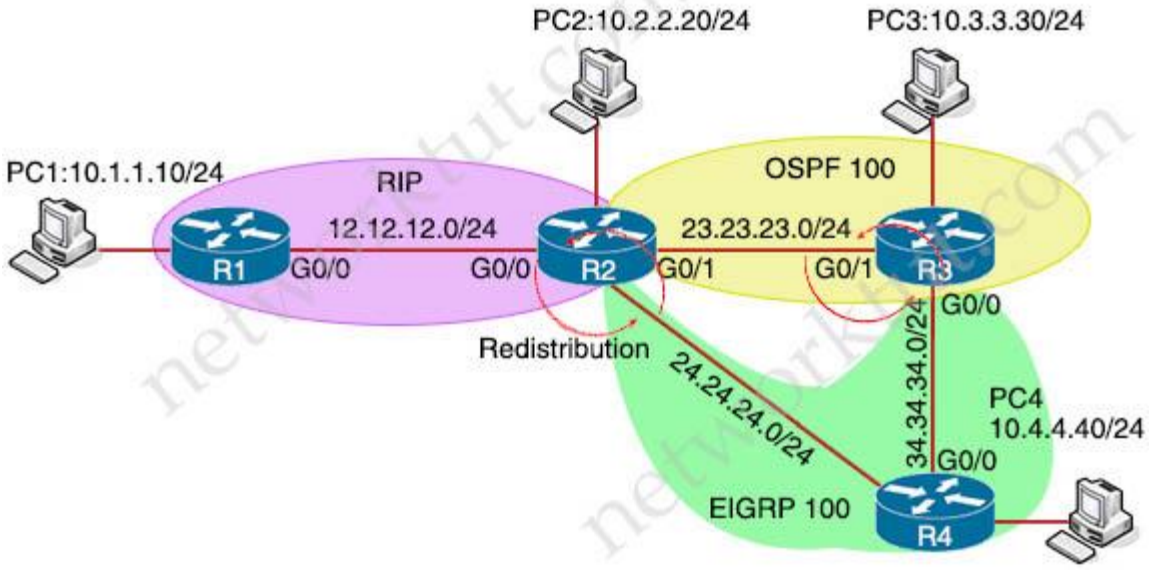
```
 icmp-echo 10.12.1.254
!
track 10 ip sla 100 reachability
!
ip route 0.0.0.0 0.0.0.0 10.12.1.254 track 10
ip route 0.0.0.0 0.0.0.0 10.13.1.254 10
!
R1#show ip route
--Output Omitted--
Gateway of last resort is 10.13.1.254 to network 0.0.0.0

S*   0.0.0.0/0 [10/0] via 10.13.1.254
     10.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C       10.11.1.0/24 is directly connected, GigabitEthernet0/1
L       10.11.1.1/32 is directly connected, GigabitEthernet0/1
C       10.12.1.0/24 is directly connected, GigabitEthernet0/0
L       10.12.1.1/32 is directly connected, GigabitEthernet0/0
C       10.13.1.0/24 is directly connected, GigabitEtheraet0/2
L       10.13.1.1/32 is directly connected, GigabitEthernet0/2
```

A. Use the icmp-echo command to track both default routes
B. Start IP SLA by matching numbers for track and ip sla commands
C. Start IP SLA by defining frequency and scheduling it
D. Use the same AD for both default routes

Answer: C

Question 5

Refer to the exhibit. Redistribution is enabled between the routing protocols, and now PC2 PC3, and PC4 cannot reach PC1. What are the two solutions to fix the problem? (Choose two)



A. Filter RIP and OSPF routes back into OSPF from EIGRP when redistributing into OSPF in R2

B. Filter all routes except EIGRP routes when redistributing into OSPF in R3
C. Filter OSPF routes into RIP from EIGRP when redistributing into RIP in R2
D. Filter all routes except RIP routes when redistributing into EIGRP in R2
E. Filter RIP routes back into RIP when redistributing into RIP in R2

Answer: C E

Question 6

Which label operations are performed by a label edge router?

A. PUSH and PHP
B. SWAP and POP
C. SWAP and PUSH
D. PUSH and POP

Answer: D

Question 7

Refer to the exhibit. The network administrator configured VRF lite for customer A. The technician at the remote site misconfigured VRF on the router. Which configuration will resolve connectivity for both sites of customer A?

```
ip vrf customer_a
 rd 1:1
 route-target export 1:1
 route-target import 1:1
!
interface FastEthernet0.1
 encapsulation dot1Q 2
 ip vrf forwarding customer_a
 ip address 192.168.4.1 255.255.255.0
!
router ospf 1
 log-adj adjacency-changes
!
 router ospf 2 vrf customer_a
 log-adj adjacency-changes
 network 192.168.4.0 0.0.0.255 area 0
!
end
```

A.
ip vrf customer_a
rd 1:2
route-target both 1:1

B.
ip vrf customer_a
rd 1:2
route-target both 1:2

C.
ip vrf customer_a
rd 1:1
router-target import 1:1
router-target export 1:2

D.
ip vrf customer_a
rd 1:1
route-target export 1:2
router-target import 1:2

Answer: A

Question 8

Drag and drop the operations from the left onto the locations where the operations are performed on the right.

Answer:

Label Switch Router:
+ Reads the labels and forwards the packet based on the labels
+ Performs penultimate hop popping

Label Edge Router:
+ Handles traffic between multiple VPNs
+ Assigns labels to unlabelled packets

Question 9

After some changes in the routing policy, it is noticed that the router in AS 45123 is being used as a transit AS router for several service providers. Which configuration ensures that the branch router in AS 45123 advertises only the local networks to all SP neighbors?

A.
```
ip as-path access-list 1 permit ^45123$
!
router bgp 45123
neighbor SP-Neighbors filter-list 1 out
```

B.
```
ip as-path access-list 1 permit ^45123
!
router bgp 45123
neighbor SP-Neighbors filter-list 1 out
```

C.
```
ip as-path access-list 1 permit ^$
!
router bgp 45123
neighbor SP-Neighbors filter-list 1 out
```

D.
```
ip as-path access-list 1 permit
!
router bgp 45123
neighbor SP-Neighbors filter-list 1 out
```

Answer: C

Question 10

Refer to the exhibit. An engineer is trying to get a packet destined for 192.168.32.100 forwarded through 10.1.1.1, but it was forwarded through 10.1.1.2. What action forwards the packets through 10.1.1.1?

```
Router#show ip route
…
D 192.168.32.0/19 [90/25789217] via 10.1.1.1
R 192.168.32.0/24 [120/4] via 10.1.1.2
```

```
O 192.168.32.0/26 [110/229840] via 10.1.1.3
```

A. Configure EIGRP to receive 192.168.32.0 route with lower metric
B. Configure EIGRP to receive 192.168.32.0 route with lower administrative distance
C. Configure EIGRP to receive 192.168.32.0 route with equal or longer prefix than /24
D. Configure EIGRP to receive 192.168.32.0 route with longer prefix than /19

Answer: C

Question 11

Refer to the exhibit. A junior engineer updated a branch router configuration. Immediately after the change, the engineer receives calls from the help desk that branch personnel cannot reach any network destinations. Which configuration restores service and continues to block 10.1.1.100/32?

```
BRANCH-RTR#

router eigrp 100
 network 10.4.31.0 0.0.0.7
 network 10.100.100.1 0.0.0.0
 distribute-list route-map FILTER-IN in FastEthernet0/0
 eigrp router-id 10.100.100.1
!
ip prefix-list 102 seq 10 permit 10.1.1.100/32
!
route-map FILTER-IN deny 10
 match ip address prefix-list 102
```

A. ip prefix-list 102 seq 15 permit 0.0.0.0/32 le 32
B. route-map FILTER-IN permit 20
C. ip prefix-list 102 seq 5 permit 0.0.0.0/32 le 32
D. route-map FILTER-IN deny 5

Answer: B

Question 12

An engineer configured a leak-map command to summarize EIGRP routes and advertise specifically loopback 0 with an IP of 10.1.1.1 255.255.255.252 along with the summary route. After finishing configuration, the customer complained not receiving summary route with specific loopback address. Which two configurations will fix it? (Choose two)

```
router eigrp 1
```

```
!
route_map Leak-Route deny 10
!
interface Serial 0/0
ip summary-address eigrp 1 10.0.0.0 255.0.0.0 leak-map Leak-Route
```

A. Configure route-map Leak-Route permit 10 and match access-list 1
B. Configure access-list 1 permit 10.1.1.1 0.0.0.252
C. Configure access-list 1 and match under route-map Leak-Route
D. Configure route-map Leak-Route permit 20
E. Configure access-list 1 permit 10.1.1.0 0.0.0.3

Answer: A E

Question 13

Refer to the exhibit. An IP SLA is configured to use the backup default route when the primary is down, but it is not working as desired. Which command fixes the issue?

```
R1(config)#ip route 0.0.0.0 0.0.0.0 1.1.1.1
R1(config)#ip route 0.0.0.0 0.0.0.0 2.2.2.2 10
R1(config)#ip sla 1
R1(config)#icmp-echo 1.1.1.1 source-interface FastEthernet0/0
R1(config)#ip sla schedule 1 life forever start-time now
R1(config)#track 1 ip sla 1 reachability
```

A. R1(config)# ip route 0.0.0.0 0.0.0.0 1.1.1.1 track 1
B. R1 (config)# ip route 0.0.0 0 0.0.0 0 2.2.2 2
C. R1 (config)# ip route 0.0.0.0 0.0.0.0 2.2.2.2 10 track 1
D. R1(config)# ip sla track 1

Answer: A

Question 14

What is an advantage of using BFD?

A. It detects local link failure at layer 1 and updates routing table
B. It detects local link failure at layer 3 and updates routing protocols
C. It has sub-second failure detection for layer 1 and layer 2 problems
D. It has sub-second failure detection for layer 1 and layer 3 problems

Answer: C

Question 15

Refer to the exhibit. The ACL is placed on the inbound GigabitEthernet 0/1 interface of the router. Host 192.168.10.10 cannot SSH to host 192.168.100.1 even though the flow is permitted. Which action resolves the issue without opening full access to this router?

```
ip access-list extended FILTER
deny tcp 192.168.10.0 0.0.0.255 192.168.100.0 0.0.0.255 eq 22
deny tcp 192.168.10.0 0.0.0.255 192.168.100.0 0.0.0.255 eq 23
deny tcp 192.168.10.0 0.0.0.255 192.168.100.0 0.0.0.255 eq 80
deny tcp 192.168.10.0 0.0.0.255 192.168.100.0 0.0.0.255 eq 443
permit tcp host 192.168.10.10 host 192.168.100.10 eq ssh
permit ip any any
!
interface GigabitEthernet0/1
ip address 192.168.10.1 255.255.255.0
ip access-group FILTER in
```

A. Temporarily move the permit ip any any line to the beginning of the ACL to see if it the flow works
B. Run the show access-list FILTER command to view if the SSH entry has any hit statistics associated with it
C. Move the SSH entry to the beginning of the ACL
D. Temporarily remove the ACL from the interface to see if the flow works

Answer: C

Question 16

Which component of MPLS VPN is used to extend the IP address so that an engineer is able to identify to which VPN it belongs?

A. RD
B. VPNv4 address family
C. RT
D. LDP

Answer: A

Question 17

Refer to the exhibit. BGP is flapping after the CoPP policy is applied. What are the two solutions to fix the issue? (Choose two)

```
policy-mapp COPP-7600
 class COPP-CRITICAL-7600
 police cir 2000000 bc 62500
 conform-action transmit
 exceed-action transmit
!
class class-default
 police cir 2000000 bc 6250
 conform-action transmit
 exceed-action drop
!
class-map match-all COPP-CRITICAL-7600
 match access-group name COPP-CRITICAL-7600
!
ip access-list extended COPP-CRITICAL-7600
 permit ip any any eq http
 permit ip any any eq https
```

A. Configure BGP in the COPP-CRITICAL-7600 ACL
B. Configure a higher value for CIR under the default class to allow more packets during peak traffic
C. Configure a higher value for CIR under the class COPP-CRITICAL-7600
D. Configure a three-color policer instead of two-color policer under class COPP-CRITICAL-7600
E. Configure IP CEF to CoPP policy and BGP to work

Answer: A B

Question 18

During the maintenance window, an administrator accidentally deleted the telnet-related configuration that permits a Telnet connection from the inside network (Eth 0/0) to the outside of the network between Friday-Sunday night hours only. Which configuration resolves the issue?

A.
```
interface Ethernet0/0
 ip address 10.1.1.1 255.255.255.0
 ip access-group 101 in
!
access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet time-range changewindow
!
time-range changewindow
 periodic 22:00 to 05:00
```

B.
```
interface Ethernet0/0
```

```
 ip address 10.1.1.1 255.255.255.0
 ip access-group 101 in
!
access-list 101 permit tcp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet time-range
changewindow
!
time-range changewindow
 periodic Friday Saturday Sunday 22:00 to 05:00
```

C.

```
interface Ethernet0/0
 ip address 10.1.1.1 255.255.255.0
 ip access-group 101 in
!
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet time-range
changewindow
!
time-range changewindow
 periodic Friday Saturday Sunday 22:00 to 05:00
```

D.

```
interface Ethernet0/0
 ip address 10.1.1.1 255.255.255.0
 ip access-group 101 in
!
access-list 101 permit udp 10.1.1.0 0.0.0.255 172.16.1.0 0.0.0.255 eq telnet time-range
changewindow
!
time-range changewindow
 periodic Friday Saturday Sunday
```

Answer: B

Question 19

Refer to the exhibit. Which action resolve intermittent connectivity observed with the SNMP trap packets?

```
R3#show policy-map control-plane

Service-policy output: R3_CoPP

  Class-map: mgmt (match-all)
    361 packets, 73858 bytes
    5 minute offered rate 0 bps, drop rate 0bps
    Match: access-group 20
    police:
        cir 8000 bps, bc 1500 bytes, be 1500 bytes
        conformed 8 packets, 1506 bytes; actions:
          transmit
        exceeded 353 packets, 72352 bytes; actions:
          drop
        violated 0 packets, 0 bytes; actions:
          drop
        conformed 0 bps, exceed 0 bps, violate 0 bps

  Class-map: class-default (match-any)
    124 packets, 10635 bytes
    5 minute offered rate 0 bps, drop rate 0 bps
    Match: any
R3#show access-lists 120
Extended IP access list 120
    10 permit udp any any eq snmptrap (361 matches)
```

A. Add a new class map to match TCP traffic
B. Add one new entry in the ACL 120 to permit the UDP port 161
C. Increase the CIR of the mgmt class map
D. Decrease the committed burst size of the mgmt class map

Answer: C

Question 20

An engineer configured a company's multiple area OSPF head office router and Site A cisco routers with VRF lite. Each site router is connected to a PE router of an MPLS backbone. After finishing both site router configurations, none of the LSA 3,4 5, and 7 are installed at Site A router.

```
Head Office and Site A:
ip cef
 ip vrf abc
 rd 101:101
!
interface FastEthernet0/0
 ip vrf forwarding abc
 ip address 172.16.16.x 255.255.255.252
!
router ospf 1 vrf abc
 log-adjacency-changes
 network 172.16.16.0 0.0.0.255 area 1
```

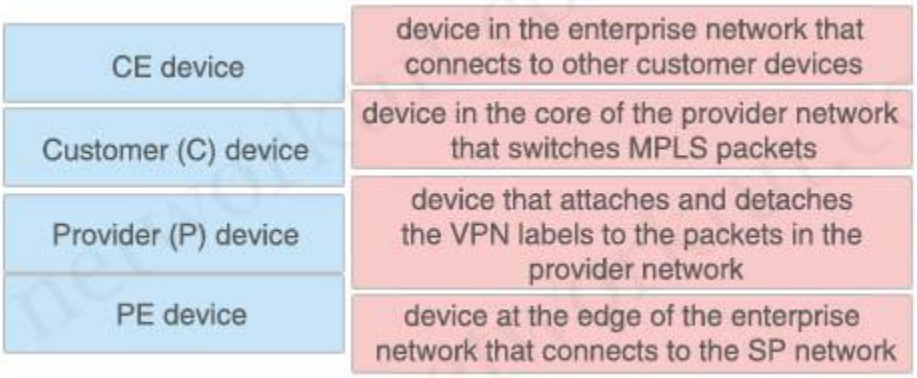
Which configuration resolves this issue?

A. configure **capability vrf-lite** on Site A and its connected PE router under **router ospf 1 vrf abc**
B. configure **capability vrf-lite** on Head Office and its connected PE router under **router ospf 1 vrf abc**
C. configure **capability vrf-lite** on both PE routers connected to Head Office and Site A routers under **router ospf 1 vrf abc**
D. configure **capability vrf-lite** on Head Office and Site A routers under **router ospf 1 vrf abc**

Answer: D

Question 21

Drag and drop the MPLS VPN device types from me left onto the definitions on the right.



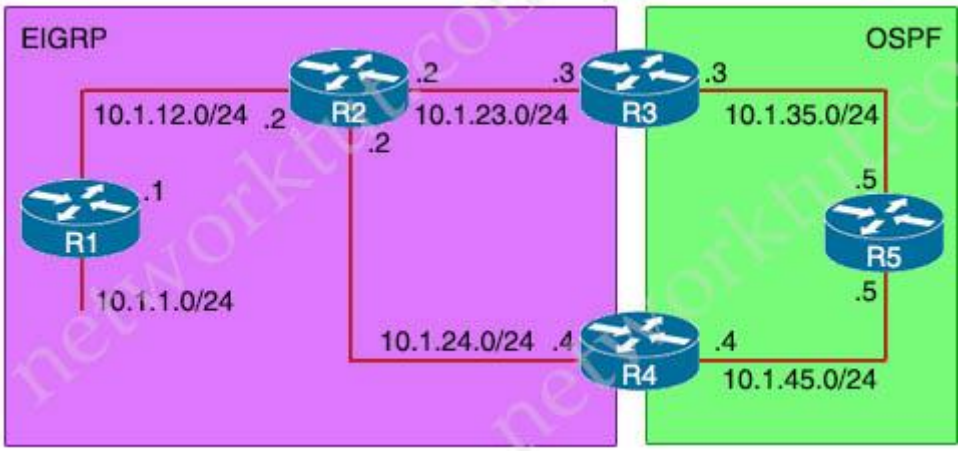
Answer:

+ device in the enterprise network that connects to other customer devices: Customer (C) device
+ device in the core of the provider network that switches MPLS packets: Provider (P) device
+ device that attaches and detaches the VPN labels to the packets in the provider network: PE

device
+ device at the edge of the enterprise network that connects to the SP network: CE device

Question 22

To provide reachability to network 10.1.1.0/24 from R5, the network administrator redistributes EIGRP into OSPF on R3 but notices that R4 is now taking a suboptimal path through R5 to reach 10.1.1.0/24 network. Which action fixes the issue while keeping the reachability from R5 to 10.1.1.0/24 network?




```
R1
router eigrp 1
 redistribute connected
 network 10.1.12.1 0.0.0.0
 default-metric 1000000 10 255 1 1500

R3
router eigrp 1
 network 10.1.23.3 0.0.0.0
!
router ospf 1
 redistribute eigrp 1 subnets
 network 10.1.35.0 0.0.0.0 area 0
```

A. Change the administrative distance of OSPF to 200 on R5
B. Change the administrative distance of the external EIGRP to 90
C. Apply the outbound distribution list on R5 toward R4 in OSPF
D. Redistribute OSPF into EIGRP on R4

Answer: B

Question 23

An engineer is configuring a network and needs packets to be forwarded to an interface for any destination address that is not in the routing table. What should be configured to accomplish this task?

A. set ip next-hop
B. set ip default next-hop
C. set ip next-hop recursive
D. set ip next-hop verify-availability

Answer: B

Question 24

Refer to the exhibit.

```
Device# show dmvpn
Tunnel0, Type:Spoke, NHRP Peers:2,
# Ent  Peer NBMA Addr  Peer Tunnel Add State  UpDn Tm  Attrb
----- --------------  --------------- ----- --------  -----
    1  172.18.16.2     192.168.1.1     UP    01:33:23 S
    1  172.18.46.2     192.168.1.4     UP    00:23:03 D
```

An engineer has configured DMVPN on a spoke router. What is the WAN IP address of another spoke router within the DMVPN network?

A. 192.168.1.1
B. 172.18.16.2
C. 192.168.1.4
D. 172.18.46.2

Answer: D

Question 25

Refer to the exhibit.

```
*Jul 23 09:33:34.530: IF-EvD(GigabitEthernet0/0): reports state transition from DOWN to
DOWN
*Jul 23 09:33:35.525: %LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0, changed state to down
*Jul 23 09:33:35.528: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from
DOWN to DOWN
*Jul 23 09:33:36.215: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from
DOWN to DOWN
*Jul 23 09:33:37.996: %LINK-3-UPDOWN: Interface GigabitEthernet0/0, changed state to up
```

```
*Jul 23 09:33:38.006: IF-EvD(GigabitEthernet0/0): IP Routing reports state transition from DOWN to UP
*Jul 23 09:33:38.998: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
```

R1 is connected with R2 via GigabitEthernet0/0, and R2 cannot ping R1. What action will fix the issue?

A. Fix route dampening configured on the router.
B. Replace the SFP module because it is not supported.
C. Fix IP Event Dampening configured on the interface.
D. Correct the IP SLA probe that failed.

Answer: C

Question 26

Refer to the exhibit.

```
ip dhcp pool 1
 network 200.30.30.0/24
 default-router 200.30.30.100
 lease 40
!
ip dhcp pool 2
 network 200.30.40.0/24
 default-router 200.30.40.100
 lease 40
!
```

The server for the finance department is not reachable consistently on the 200.30.40.0/24 network and after every second month it gets a new IP address. Which two actions must be taken to resolve this issue? (Choose two)

A. Configure the server with a static IP address and default gateway
B. Configure the server to use DHCP on the network with default gateway 200 30.40.100
C. Configure the router to exclude a server IP address
D. Configure the server to use DHCP on the network with default gateway 200 30.30.100
E. Configure the router to exclude a server IP address and default gateway

Answer: A C

Question 27

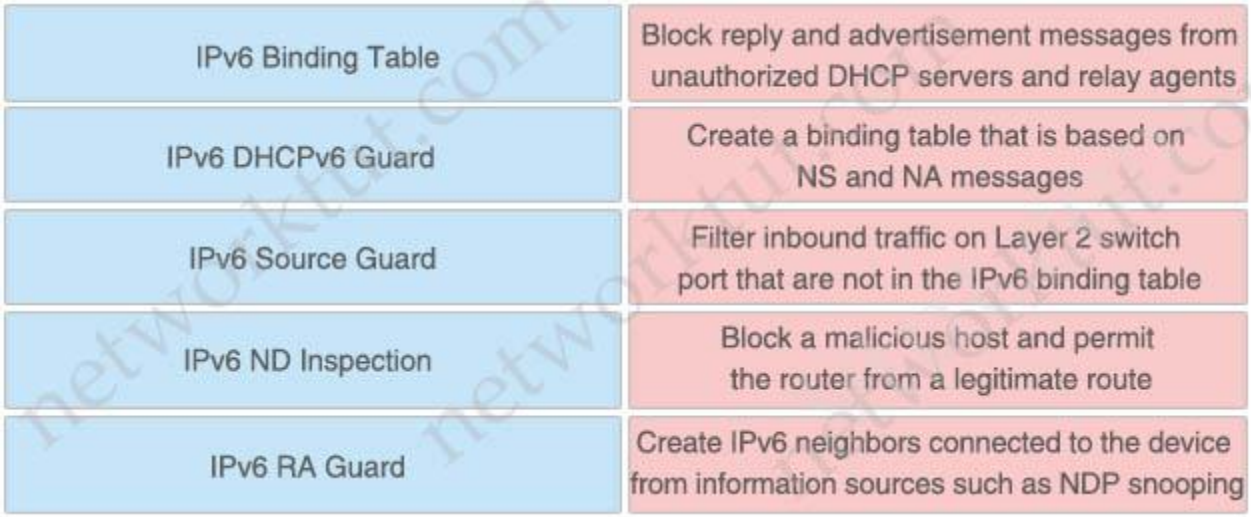
Which protocol does MPLS use to support traffic engineering?

A. Tag Distribution Protocol
B. Label Distribution Protocol
C. Border Gateway Protocol
D. Resource Reservation Protocol

Answer: D

Question 28

Drag and Drop the IPv6 First-Hop Security features from the left onto the definitions on the right.



Answer:

+ Block reply and advertisement messages from unauthorized DHCP servers and relay agents: IPv6 DHCPv6 Guard
+ Create a binding table that is based on NS and NA messages: IPv6 ND Inspection
+ Filter inbound traffic on Layer 2 switch port that are not in the IPv6 binding table: IPv6 Source Guard
+ Block a malicious host and permit the router from a legitimate route: IPv6 RA Guard
+ Create IPv6 neighbors connected to the device from information sources such as NDP snooping: IPv6 Binding Table

Question 29

Refer to the exhibit.

```
R3#show policy-map control-plane
 Control Plane

  Service-policy output: R3_CoPP

   Class-map: SNMP-Out (match-all)
    124 packets, 3345 bytes
    5 minute offered rate 0 bps, drop rate 0bps
    Match: access-group name SNMP
    police:
      cir 8000 bps, bc 1500 bytes, be 1500 bytes
     conformed 0 packets, 0 bytes; actions:
      transmit
     exceeded 0 packets, 0 bytes; actions:
      drop
     conformed 0 bps, exceed 0 bps

   Class-map: class-default (match-any)
    10 packets, 1003 bytes
    5 minute offered rate 0000 bps, drop rate 0000 bps
    Match: any
R1#show access-lists SNMP
Extended IP access list SNMP
   10 permit udp any eq snmp any
```

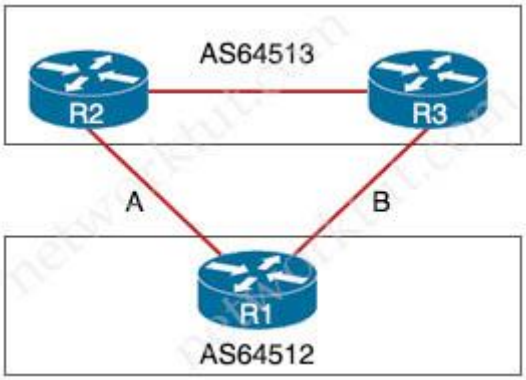
R1 is being monitored using SNMP and monitoring devices are getting only partial information. What action should be taken to resolve this issue?

A. Modify the access list to include snmptrap
B. Modify the CoPP policy to increase the configured exceeded limit for SNMP
C. Modify the CoPP policy to increase the configured CIR limit for SNMP
D. Modify the access list to add a second line to allow udp any any eq snmp

Answer: A

Question 30

Refer to the exhibit.



A network engineer for AS64512 must remove the inbound and outbound traffic from link A during maintenance without closing the BGP session. Traffic should flow via the backup link toward the ASN. Which BGP configuration on R1 accomplishes this goal?

Option A

```
route-map link-a-in permit 10
 set weight 200
route-map link-a-out permit 10
 set as-path prepend 64512
route-map link-b-in permit 10
 set weight 100
route-map link-b-out permit 10
```

Option B

```
route-map link-a-in permit 10
 set weight 200
route-map link-a-out permit 10
route-map link-b-in permit 10
 set weight 100
route-map link-b-out permit 10
 set as-path prepend 64512
```

Option C

```
route-map link-a-in permit 10
 set local-preference 200
route-map link-a-out permit 10
route-map link-b-in permit 10
route-map link-b-out permit 10
 set as-path prepend 64512
```

Option D

```
route-map link-a-in permit 10
route-map link-a-out permit 10
 set as-path prepend 64512
route-map link-b-in permit 10
 set local-preference 200
route-map link-b-out permit 10
```

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

Answer: D

Question 31

Refer to the exhibit. A client is concerned that passwords are visible when running this **show archive log config all**.

```
MASS-RTR#show running-oonfig
!
hostname MASS-RTR
!
aaa new-model
!
aaa authentication login default local
aaa authorization exec default local
aaa authorization commands 15 default local
!
username admin privilege 15 password 7 02362448281l5F3348
username cisco privilege 15 password 7 0607072C394A5B
archive
 log oonfig
  logging enable
  logging size 1000
!
interface GigabitEthernet0/0
 ip address dhcp
 duplex auto
 speed auto
!
line vty 0 4
!

MASS-RTR#show archive log config all
idx   sess          user@line       Logged command
  1      1       console@console   |interface GigabitEthernet0/0
  2      1       console@console   | no shutdown
  3      1       console@console   | ip address dhcp
  4      2         admin@vty0      | username cisco privilege 15 password cisco
  5      2         admin@vty0      |!config: USER TABLE MODIFIED
```

Which router configuration is needed to resolve this issue?

A. MASS-RTR(config-archive-log-cfg)#hidekeys
B. MASS-RTR(config-archive-log-cfg)#password encryption aes
C. MASS-RTR(config)#service password-encryption
D. MASS-RTR(config)#aaa authentication arap

Answer: A

Question 32

Which IGPs are supported by the MPLS LDP autoconfiguration feature?

A. ISIS and RIPv2
B. RIPv2 and OSPF
C. OSPF and ISIS
D. OSPF and EIGRP

Answer: C

Question 33

What does the PE router convert the IPv4 prefix to within an MPLS VPN?

A. 48-bit route combining the IP and PE router-id
B. VPN-IPv4 prefix combined with the 64-bit route distinguisher
C. eBGP path association between the PE and CE sessions
D. prefix that combines the ASN, PE router-id, and IP prefix

Answer: B

Question 34

Refer to the exhibit.

```
Router#show access-lists
Standard IP access list 1
    10 permit 192.168.2.2 (1 match)
Router#
Router#show route-map
route-map RM-OSPF-DL, deny, sequence 10
  Match clauses:
    ip address (access-lists): 1
  Set clauses:
  Policy routing matches: 0 packets, 0 bytes
Router#
Router#show running-config | section ospf
router ospf 1
  network 192.168.1.1 0.0.0.0 area 0
  network 192.168.12.0 0.0.0.255 area 0
  distribute-list route-map RM-OSPF-DL in
Router#
```

Which two actions should be taken to access the server? (Choose two)

A. Modify the access list to add a second line of permit ip any any
B. Modify the access list to deny the route to 192.168.2.2
C. Modify distribute list seq 10 to permit the route to 192.168.2.2
D. Add a sequence 20 in the route map to permit access list 1
E. Add a floating static route to reach to 192.168.2.2 with administrative distance higher than OSPF

Answer: B E (maybe this question is missing some information)

Question 35

Refer to the exhibit.

```
R1
ip prefix-list ccnp1 seq 5 permit 10.1.48.0/24 le 24
ip prefix-list ccnp2 seq 5 permit 10.1.80.0/24 le 32
ip prefix-list ccnp3 seq 5 permit 10.1.64.0/24 le 24

route-map ospf-to-eigrp permit 10
 match ip address prefix-list ccnp1
 set tag 30
route-map ospf-to-eigrp permit 20
 match ip address prefix-list ccnp2
 set tag 20
route-map ospf-to-eigrp permit 30
 match ip address prefix-list ccnp3
 set tag 10
```

An engineer wanted to set a tag of 30 to route 10.1.80.65/32 but it failed. How is the issue fixed?

A. Modify route-map ospf-to-eigrp permit 30 and match prefix-list ccnp2.
B. Modify route-map ospf-to-eigrp permit 10 and match prefix-list ccnp2.
C. Modify prefix-list ccnp3 to add 10.1.64.0/20 le 24
D. Modify prefix-list ccnp3 to add 10.1.64.0/20 ge 32

Answer: B

Question 36

What does IPv6 Source Guard utilize to determine if IPv6 source addresses should be forwarded?

A. Binding Table
B. ACLS
C. ACE
D. DHCP

Answer: A

Question 37

An engineer needs dynamic routing between two routers and is unable to establish OSPF adjacency. The output of the **show ip ospf neighbor** command shows that the neighbor state is EXSTART/EXCHANGE. Which action should be taken to resolve this issue?

A. match the passwords
B. match the hello timers
C. match the MTUs
D. match the network types

Answer: C

Question 38

Refer to the exhibit.

Option A

```
ipv6 access-list inbound
 permit tcp any any established
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound out
```

Option B

```
ipv6 access-list inbound
 permit tcp any any syn
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound out
```

Option C

```
ipv6 access-list inbound
 permit tcp any any established
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound in
```

Option D

```
ipv6 access-list inbound
 permit tcp any any syn
 deny ipv6 any any log
!
interface gi0/0
 ipv6 traffic-filter inbound in
```

A network administrator configured an IPv6 access list to allow TCP return frame only, but it is not working as expected. Which changes resolve this issue?

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

Answer: C

Question 39

Refer to the exhibit.

```
Router#show running-config
Building configuration…
!
<output omitted>
!
hostname R1
!
ip domain-name networktut.com
!
crypto key generate rsa modulus 2048
!
username admin privilege 15 secret cisco123
!
access-list 1 permit 10.1.1.0 0.0.0.255
access-list 1 deny any log
!
line vty 0 15
access-list 1 in
login local
!
<output omitted>
!
end
```

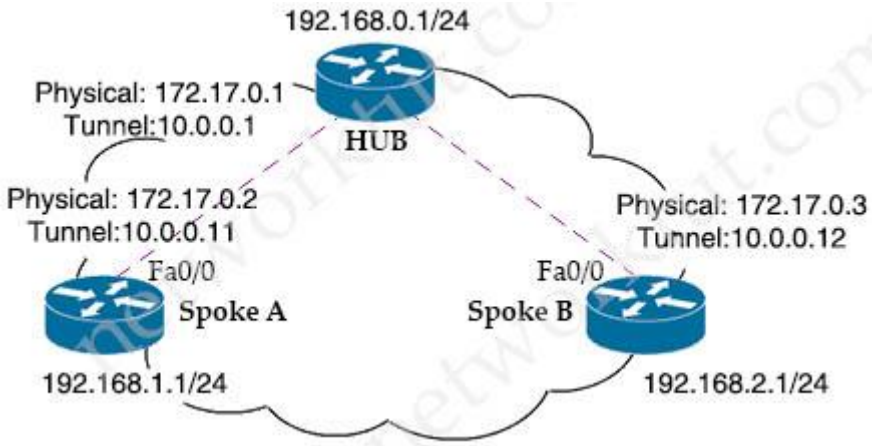
A user cannot SSH to the router. What action must be taken to resolve this issue?

A. Configure transport input ssh
B. Configure transport output ssh
C. Configure ip ssh version 2
D. Configure ip ssh source-interface loopback0

Answer: A

Question 40

Refer to the exhibit. Which interface configuration must be configured on the HUB router to enable DMVPN with mGRE mode?



Option A	**Option B**
interface Tunnel0 description mGRE – DMVPN Tunnel ip address 10.1.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 172.17.0.1 ip nhrp map 10.0.0.11 172.17.0.2 ip nhrp map 10.0.0.12 172.17.0.3 tunnel mode gre	interface Tunnel0 description mGRE – DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 10.0.0.1 tunnel mode gre multipoint
Option C	**Option D**
interface Tunnel0 description mGRE – DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp network-id 1 tunnel source 172.17.0.1 tunnel mode gre multipoint	interface Tunnel0 description mGRE – DMVPN Tunnel ip address 10.0.0.1 255.255.255.0 ip nhrp map multicast dynamic ip nhrp network-id 1 tunnel source 10.0.0.1 tunnel destination 172.17.0.2 tunnel mode gre multipoint

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

Answer: C

Question 41

Refer to the exhibit.

```
interface Ethernet0/0
```

```
 ip address 10.1.1.1 255.255.255.0
 ip access-group 101 in
!
time-range Office-hour
 periodic weekdays 08:00 to 17:00
!
access-list 101 permit tcp 10.0.0.0 0.0.0.0 172.16.1.0 0.0.0.255 eq ssh time-
range Office-hour
```

An IT staff member comes into the office during normal office hours and cannot access devices through SSH. Which action should be taken to resolve this issue?

A. Modify the access list to use the correct IP address
B. Configure the correct time range
C. Modify the access list to correct the subnet mask
D. Configure the access list in the outbound direction

Answer: A

Question 42

Refer to the exhibit.

R1#**show run | begin line** line con 0 exec-timeout 0 0 privilege level 15 logging synchronous transport preferred telnet transport output none stopbits 0 4 ! line vty 0 4 login transport preferred telnet transport input none transport output telnet R1# R1#**ssh -l cisco 192.168.12.2** %ssh connections not permitted from this terminal R1#

Option A	**Option B**
R1(config)#line console 0 R1(config-line)#transport preferred ssh	R1(config)#line vty 0 R1(config-line)#transport output ssh
Option C	**Option D**

R1(config)#line vty 0 R1(config-line)#transport output ssh R1(config-line)#transport preferred ssh	R1(config)#line console 0 R1(config-line)#transport output ssh

An engineer receives this error message when trying to access another router m-band from the serial interface connected to the console of R1. Which configuration is needed on R1 to resolve this issue?

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

Answer: D

OSPF & EIGRP Questions

https://www.networktut.com/ospf-eigrp-questions

Question 1

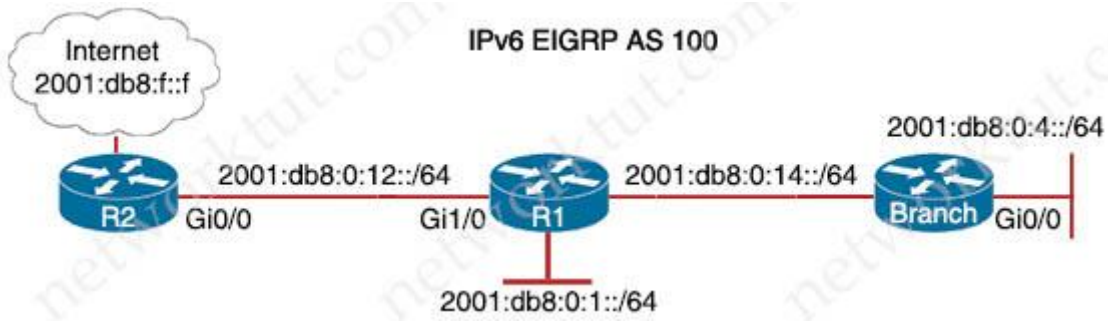
Which configuration adds an IPv4 interface to an OSPFv3 process in OSPFv3 address family configuration?

A.
router ospfv3 1
address-family ipv4
B. Router(config-router)#ospfv3 1 ipv4 area 0
C. Router(config-if)#ospfv3 1 ipv4 area 0
D.
router ospfv3 1
address-family ipv4 unicast

Answer: C

Question 2

Refer to the exhibit. User in the branch network of 2001:db8:0:4 report they cannot access the internet. Which command is issued in IPv6 router EIGRP 100 configuration mode to solve this issue?



R1#**show ipv6 eigrp topology**	Branch#**show ipv6 eigrp topology**
EIGRP-IPv6 Topology Table for AS(100)/ID(10.1.12.1) Codes: P – Passive, A – Active, U – Update, Q – Query, R – Rely, r – reply Status, s – sia Status P 2001:DB8:0:4::/64, 1 successors, FD is 28416 via FE80::C828:DFF:FEF4:1C (28416/2816), FastEthernet3/0 P 2001:DB8:0:1::/64, 1 successors, FD is 2816 via Connected, GigabitEthernet0/0 P ::/0, 1 successors, FD is 2816 via FE80::C821:17FF:FE04:8 (2816/256), GigabitEthernet1/0 P 2001:DB8:0:14::/64, 1 successors, FD is 28160 via Connected, FastEthernet3/0 P 2001:DB8:0:12::/64, 1 successors, FD is 2816 via Connected, GigabitEthernet0/0	EIGRP-IPv6 Topology Table for AS(100)/ID(4.4.4.4) Codes: P – Passive, A – Active, U – Update, Q – Query, R – Rely, r – reply Status, s – sia Status P 2001:DB8:0:4::/64, 1 successors, FD is 2816 via Connected, GigabitEthernet0/0 P 2001:DB8:0:1::/64, 1 successors, FD is 28416 via FE80:C820:17FF:FE04:54 (28416/2816), FastEthernet1/0 P 2001:DB8:0:14::/64, 1 successors, FD is 28160 via Connected, FastEthernet1/0 P 2001:DB8:0:12::/64, 1 successors, FD is 28416 via FE80:C820:17FF:FE04:54 (28416/2816), FastEthernet1/0

A. Issue the eigrp stub command on R1
B. Issue the no eigrp stub command on R1
C. Issue the eigrp stub command on R2
D. Issue the no eigrp stub command on R2

Answer: B

Question 3

Refer to the exhibit. An engineer configuration a static route on a router, but when the engineer checks the route to the destination, a different next hop is chosen. What is the reason for this?

```
Router#show running-config | include ip route
ip route 192.168.2.2 255.255.255.255 209.165.200.225 130
Router#show ip route
```

```
---output omitted---
Gateway of last resort is not set

   192.168.1.0/32 is subnetted, 1 subnets
C    192.168.1.1 is directly connected, Loopback0
   192.168.2.0/32 is subnetted, 1 subnets
O    192.168.2.2 [110/11] via 192.168.12.2,00:33:32, Ethernet0/0
   192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.12.0/24 is directly connected, Ethernet0/0
L    192.168.12.1/32 is directly connected, Ethernet0/0
   209.165.200.0/24 is variably subnetted, 2 subnets, 2 masks
C    209.165.200.0/24 is directly connected, Ethernet0/1
        209.165.200.226/32 is directly connected, Ethernet0/1
```

A. The configured AD for the static route is higher than the AD of OSPF
B. The metric of the OSPF route is lower than the metric of the static route
C. Dynamic routing protocol always have priority over static routes
D. The syntax of the static route is not valid do the route is not considered

Answer: A

Question 4

Refer to the exhibit. An engineer is trying to generate a summary route in OSPF for network 10.0.0.0/8, but the summary route does not show up in the routing table. Why is the summary route missing?

```
Router#show ip route
Gateway of last resort is not set

       192.168.1.0/32 is subnetted, 1 subnets
O              192.168.1.1[110/11] via 192.168.12.1,13:32:22, Ethernet0/0
       192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C              192.168.2.0/24 is directly connected, Loopback0
L              192.168.2.2/32 is directly connected, Loopback0
       192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
C              192.168.3.0/24 is directly connected, Ethernet0/1
L              192.168.3.1/32 is directly connected, Ethernet0/1
       192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C              192.168.12.0/24 is directly connected, Ethernet0/0
L              192.168.12.2/32 is directly connected, Ethernet0/0
Router#show running-config | section ospf
router ospf 1
 summary-address 10.0.0.0 255.0.0.0
 redistribute static subnets
 network 192.168.3.0 0.0.0. 255 area 0
 network 192.168.12.0 0.0.0. 255 area 0
Router#
```

A. The summary route is not visible on this router, but it is visible on other OSPF routers in the same area
B. The summary-address command is used only for summary prefixes between areas
C. The summary route is visible only in the OSPF database not in the routing table
D. There is no route for a subnet inside 10.0.0.0/8, so the summary route is not generated

Answer: D

Question 5

Refer to the exhibit. Which option describes why the EIGRP neighbors of this router are not learning routes that are received from OSPF?

```
router eigrp 1
redistribute ospf 100
network 10.10.10.0 0.0.0.255
auto-summary
!
router ospf 100
network 172.16.0.0 0.0.255.255 area 100
redistribute eigrp 1
```

A. The subnet defined in OSPF is not part of area 0
B. Default metrics are not configured under EIGRP
C. There is no overlap in the subnets advertised
D. The routing protocols do not have the same AS number

Answer: B

BGP Questions

https://www.networktut.com/bgp-questions

Question 1

Refer to the exhibit. R2 is a route reflector, and R1 and R3 are route reflector clients. The router R2 learns the route to 172.16.25.0/24 from R1, but it does not advertise to R3. What is the reason the route is not advertised?

```
R2#show ip bgp
BGP table version is 4, local router ID is 209.65.200.225
Status codes: s suppressed, d damped, h history, * valid, > best, i -
internal,
              r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete
RPKI validation codes: V valid, I invalid, N Not found

    Network            Next Hop         Metric LocPrf Weight Path
* i 172.16.25.0/24     209.165.200.225       0    100      0    ?
R3#show ip bgp summary
BGP router identifier 192.168.3.3, local AS number 65000
BGP table version is 4, main routing table version 4

Neighbor        V    AS MsgRcvd MsgSent   TblVer  InQ OutQ Up/Down
State/PfxRcd
```

```
192.168.2.2     4 65000       8       7        4    0    0 01:00:18         0
```

A. Route reflector setup requires full BGP mesh between the routers
B. In route reflector setup only classification prefix are advertised from one client to another
C. In route reflector setup only classful prefix are advertised to other clients
D. R2 does not have a route to the next hop, so R2 does not advertise the prefix to the clients

Answer: D

Question 2

Refer to the exhibit. Which control plan policy limits BGP traffic that is destined to the CPU to 1 Mbps and ignores BGP traffic that is higher rate?

```
Cat3850-Stack-2#show policy-map

Policy Map LIMIT_BGP
 Class BGP
  drop

Policy Map SHAPE_BGP
 Class BGP
  Average Rate Traffic Shaping
  cir 10000000 (bps)

Policy Map POLICE_BGP
 Class BGP
  police cir 1000k bc 1500
   conform-action transmit
   exceed-action transmit

Policy Map COPP
 Class BGP
  police cir 1000k bc 1500
   conform-action transmit
   exceed-action drop
```

A. policy-map SHAPE_BGP
B. policy-map LIMIT_BGP
C. policy-map POLICE_BGP
D. policy-map COPP

Answer: D

Question 3

Refer to the exhibit. A router receiving BGP routing updates from multiple neighbors for routers in AS 690. What is the reason that the router still sends traffic that is destined to AS 690 to a neighbor other than 10.222.10.1?

```
!
```

```
neighbor 10.222.1.1 route-map SET-WEIGHT in
neighbor 10.222.1.1 remote-as 1
!
ip as-path access-list 200 permit ^690$
ip as-path access-list 200 permit ^1800$
!
route-map SET-WEIGHT permit 10
 match as-path 200
 set local-preference 250
 set weight 200
```

A. The local preference value in another neighbor statement is higher than 250
B. The local preference value should be set to the same value as the weight in the route map
C. The route map is applied in the wrong direction
D. The weight value in another statement is higher than 200

Answer: D

Question 4

Refer to the exhibit. What is the result if applying this configuration?

```
R1#show policy-map control-plane
Control Plane
  Service-policy input: CoPP-BGP

    Class-map: BGP (match-all)
     2716 packets, 193843 bytes
     5 minute offered rate 0000 bps, drop rate 0000 bps
     Match: access-group name BGP
     drop

    Class-map: class-default (match-any)
     5212 packets, 64484847 bytes
     5 minute offered rate 0000 bps, drop rate 0000 bps
     Match: any
```

A. The router can form BGP neighborships with any other device.
B. The router can form BGP neighborships with any device that matched by the access list named “BGP”
C. The router cannot form BGP neighborships with any other device
D. The router cannot form BGP neighborships with any device that is matched by the access list named “BGP”

Answer: D

Question 5

Refer to the exhibit, in which circumstance does the BGP neighbor remain in the idle condition?

```
R200#show ip bgp summary

BGP router identifier 10.1.1.1, local AS number 65000
BGP table version is 26, main routing table version 26
1 network entries using 132 bytes of memory
1 path entries using 52 bytes of memory
2/1 BGP path/bestpath attribute entries using 296 bytes of memory
0 BGP route-map cache entries using 0 bytes of memory
0 BGP filter-list cache entries using 0 bytes of memory
Bitfield cache entries: current 1 (at peak 2) using 28 bytes of memory
BGP using 508 total bytes of memory
BGP activity 24/23 prefixes, 24/23 paths, scan interval 60 secs
Neighbor  V AS    MsgRcvd MsgSent TblVer InQ OutQ Up/Down  State/PfxRcd
192.0.2.2 4 65100 20335   20329   0      0   0    00:02:04 Idle(PfxCt)

R200#
```

A. if prefixes are not received from the BGP peer
B. if prefixes reach the maximum limit
C. if a prefix list is applied on the inbound direction
D. if prefixes exceed the maximum limit

Answer: D

Route-map Questions

https://www.networktut.com/route-map-questions

Question 1

R2 has a locally originated prefix 192.168.130.0/24 and has these configurations:

```
ip prefix-list test seq 5 permit 192.168.130.0/24
route-map OUT permit 10
match ip address prefix-list test
set as-path prepend 65000
```

What is the result when the route-map OUT command is applied toward an eBGP neighbor R1 (1.1.1.1) by using the “neighbor 1.1.1.1 route-map OUT out” command?

A. R1 sees 192.168.130.0/24 as two hops away instead of one AS hop away
B. R1 does not forward traffic that is destined for 192.168.130.0/24
C. Network 192.168.130.0/24 is not allowed in the R1 table
D. R1 does not accept any route other than 192.168.130.0/24

Answer: A

Question 2

Refer to the exhibit. An engineer is trying to block the route to 192.168.2.2 from the routing table by using the configuration that is shown. The route is still present in the routing table as an OSPF route. Which action blocks the route?

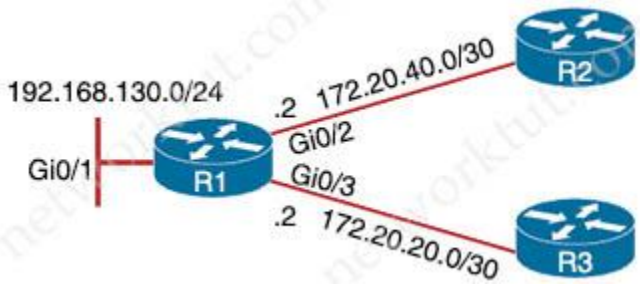
```
Router#show access-lists
Standard IP access list 1
    10 permit 192.168.2.2 (1 match)
Router#
Router#show route-map
route-map RM-OSPF-DL, permit, sequence 10
  Match clauses:
    ip address (access-lists): 1
  Set clauses:
  Policy routing matches: 0 packets, 0 bytes
Router#
Router#show running-config | section ospf
router ospf 1
network 192.168.1.1 0.0.0.0 area 0
network 192.168.12.0 0.0.0.255 area 0
distribute-list route-map RM-OSPF-DL in
Router#
```

A. Add this statement to the route map "route-map RM-OSPF-DL deny 20"
B. Use a prefix list instead of an access list in the route map
C. Change sequence 10 in the route-map command from permit to deny
D. Use an extended access list instead of a standard access list

Answer: C

Question 3

Refer to the exhibit. Which configuration configures a policy on R1 to forward any traffic that is sourced from the 192.168.130.0/24 network to 17.20.20.0/30 network?



A. access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/2
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.20.2

B. access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/2
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.20.1

C. access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/1
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.40.2

D. access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/1
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.40.1

E. access-list 1 permit 192.168.130.0 0.0.0.255
!
interface Gi0/1
ip policy route-map test
!
route-map test permit 10
match ip address 1
set ip next-hop 172.20.20.1

Answer: E

Redistribution Questions

https://www.networktut.com/redistribution-questions

Question 1

Refer to the exhibit. Which statement about R1 is true?

```
R1 (config)#route-map ADD permit 20
```

```
R1 (config-route-map)#set tag 1
R1 (config)#router ospf 1
R1 (config-router)#redistribute rip subnets route-map ADD
```

A. OSPF redistributes RIP routes only if they have a tag of one
B. RIP learned routes are distributed to OSPF with a tag value of one
C. R1 adds one to the metric for RIP learned routes before redistributing to OSPF
D. RIP routes are redistributed to OSPF without any changes

Answer: B

Question 2

Refer to the exhibit. Which routes from OSPF process 5 are redistributed into EIGRP?

```
router eigrp 1
redistribute ospf 5 match external route-map OSPF-TO-EIGRP
metric 10000 2000 255 1 1500
route-map OSPF-TO-EIGRP
match ip address TO-OSPF
```

A. E1 and E2 subnets matching access list TO-OSPF
B. E1 and E2 subnets matching prefix list TO-OSPF
C. only E2 subnets matching access list TO-OSPF
D. only E1 subnets matching prefix list TO-OSPF

Answer: A

Question 3

Refer to Exhibit. Which statement about redistribution from BGP into OSPF process 10 is true?

```
router ospf 10
 router-id 192.168.1.1
 log-adjacency-changes
 redistribute bgp 1 subnets route-map BGP-TO-OSPF
!
route-map BGP-TO-OSPF deny 10
 match ip address 50
route-map BGP-TO-OSPF permit 20
!
access-list 50 permit 172.16.1.0 0.0.0.255
```

A. Network 172.16.1.0/24 is not redistributed into OSPF
B. Network 10.10 10.0/24 is not redistributed into OSPF

C. Network 172.16.1.0/24 is redistributed with administrative distance of 1
D. Network 10.10.10.0/24 is redistributed with administrative distance of 20

Answer: A

Question 4

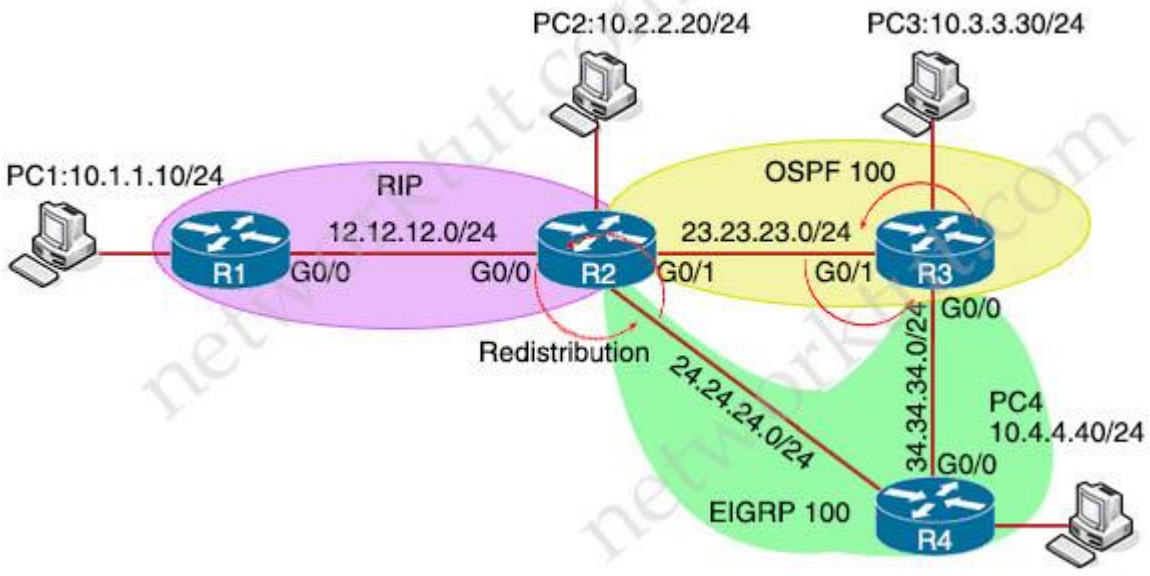
Which two statements about redistributing EIGRP into OSPF are true? (Choose two)

A The redistributed EIGRP routes appear as type 3 LSAs in the OSPF database
B. The redistributed EIGRP routes appear as type 5 LSAs in the OSPF database
C. The administrative distance of the redistributed routes is 170
D. The redistributed EIGRP routes appear as OSPF external type 1
E. The redistributed EIGRP routes as placed into an OSPF area whose area ID matches the EIGRP autonomous system number
F. The redistributed EIGRP routes appear as OSPF external type 2 routes in the routing table

Answer: B F

Question 5

Refer to the exhibit. After redistribution is enabled between the routing protocols, PC2, PC3, and PC4 cannot reach PC1.
Which action can the engineer take to solve the issue so that all the PCs are reachable?



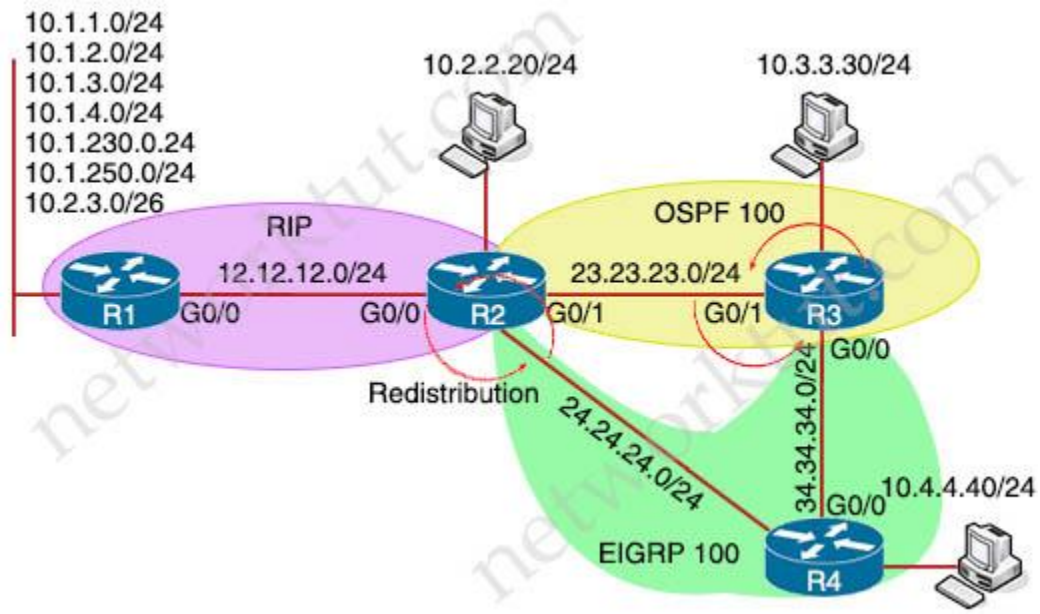
A. Filter the prefix 10.1.1.0/24 when redistributed from OSPF to EIGRP.
B. Set the administrative distance 100 under the process on R2.

C. Filter the prefix 10.1.1.0/24 when redistributed from RIP to EIGRP.
D. Redistribute the directly connected interfaces on R2.

Answer: A

Question 6

Refer to the exhibit. Which subnet is redistributed from EIGRP to OSPF routing protocols?




```
R3
router ospf 100
 redistribute eigrp 100 subnets route-map OSPF-TAG-1

ip prefix-list OSPF-TAG-PRF seq 5 deny 10.1.0.0/16 le 24
!
ip prefix-list OSPF-TAG-PRF-1 seq 5 permit 10.2.0.0/18 le 24
!
route-map OSPF-TAG-1 deny 5
 match ip address prefix-list OSPF-TAG-PRF
 set tag 40
!
route-map OSPF-TAG-1 permit 10
 match ip address prefix-list OSPF-TAG-PRF-1
 set tag 80
!
```

A. 10.2.2.0/24
B. 10.1.4.0/24
C. 10.1.2.0/24
D. 10.2.3.0/26

Answer: A

Question 7

Refer to the exhibit. An engineer is trying to redistribute OSPF to BGP, but not all of the routes are redistributed. What is the reason for this issue?

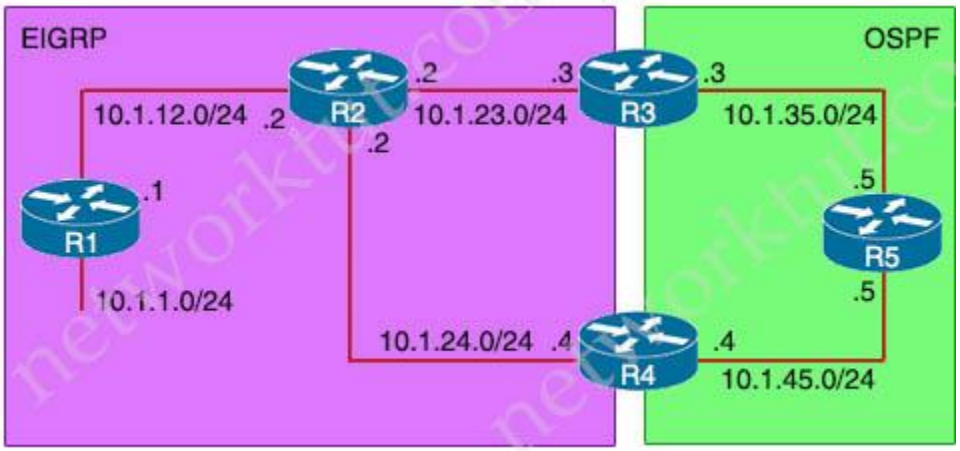
```
O E2      10.0.0.0 [110/20] via 192.168.12.2, 00:00:33, Ethernet0/0
O   192.168.3.0/24 [110/20] via 192.168.12.2, 00:00:43, Ethernet0/0
Router#
Router#show ip bgp
--output omitted--
    Network            Next Hop         Metric LocPrf Weight Path
*>  192.168.1.1/32     0.0.0.0               0         32768  ?
*>  192.168.3.0        192.168.12.2         20         32768  ?
*>  192.168.12.0       0.0.0.0               0         32768  ?
Router#show running-config | section router bgp
router bgp 65000
 bgp log-neighbor-changes
 redistribute ospf 1
Router#
```

A. By default, only internal OSPF routes are redistributed into BGP
B. By default, only internal routers and external type 1 routes are redistributed into BGP
C. BGP convergence is slow, so the route will eventually be present in the BGP table
D. Only classful networks are redistributed from OSPF to BGP

Answer: A

Question 8

Refer to the exhibit The output of the trace from R5 shows a loop in the network.



R1 router eigrp 1 redistribute connected network 10.1.12.1 0.0.0.0	R5#traceroute 10.1.1.1 Type escape sequence to abort.

—————————— R3 router ospf 1 redistribute eigrp 1 network 10.1.35.3 0.0.0.0 area 0 —————————— R4 router eigrp 1 redistribute ospf 1 metric 2000000 1 255 1 1500 ! router ospf 1 network 10.1.45.4 0.0.0.0 area 0	Tracing the route to 10.1.1.1 1 10.1.35.3 80 msec 44 msec 20 msec 2 10.1.23.2 44 msec 104 msec 64 msec 3 10.1.24.4 44 msec 64 msec 40 msec 4 10.1.45.5 24 msec 40 msec 20 msec 5 10.1.35.3 92 msec 144 msec 147 msec 6 10.1.23.2 103 msec 77 msec 88 msec —output omitted—

Which configuration prevents this loop?

Option A R3 router ospf 1 redistribute eigrp 1 subnets route-map SET-TAG ! route-map SET-TAG permit 10 set tag 1 R4 router eigrp 1 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG ! route-map FILTER-TAG deny 10 match tag 1 ! route-map FILTER-TAG permit 20	**Option B** R3 router eigrp 1 redistribute ospf 1 subnets route-map SET-TAG ! route-map SET-TAG permit 10 set tag 1 R4 router eigrp 1 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG network 10.1.24.4 0.0.0.0 ! route-map FILTER-TAG deny 10 match tag 1 ! route-map FILTER-TAG permit 20
Option C R3 router ospf 1 redistribute eigrp 1 subnets route-map SET-TAG ! route-map SET-TAG permit 10 set tag 1 R4 router eigrp 1 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG ! route-map FILTER-TAG permit 10	**Option D** R3 router ospf 1 redistribute eigrp 1 subnets route-map SET-TAG ! route-map SET-TAG deny 10 set tag 1 R4 router eigrp 1 redistribute ospf 1 metric 2000000 1 255 1 1500 route-map FILTER-TAG ! route-map FILTER-TAG deny 10

match tag 1	match tag 1

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

Answer: A

MPLS Questions

https://www.networktut.com/mpls-questions

Question 1

Which transport layer protocol is used to form LDP sessions?

A. UDP
B. SCTP
C. TCP
D. RDP

Answer: C

Question 2

Which statement about MPLS LDP router ID is true?

A. The force keyword changes the router ID to the specific address causing any impact
B. The loopback with the highest IP address is selected as the router ID
C. If not configured, the operational physical interface is chosen as the router ID even if a loopback is configured
D. If MPLS LDP router ID must match the IGP router ID

Answer: B

Question 3

Which command allows traffic to load-balance in an MPLS Layer 3 VPN configuration?

A. Multi-paths eibgp 2
B. Maximum-paths ibgp 2

C. Multi-paths 2
D. Maximum-paths 2

Answer: D

Question 4

Refer to the exhibit. What does the imp-null tag represent in the MPLS VPN cloud?

```
Router#show tag-switching tdp bindings
(...)
tib entry: 10.10.10.1/32, rev 31
  local binding: tag: 18
  remote binding: tsr: 10.10.10.1:0, tag:imp-null
  remote binding: tsr: 10.10.10.2:0, tag:18
  remote binding: tsr: 10.10.10.6:0, tag:21
tib entry: 10.10.10.2/32, rev 22
  local binding: tag: 17
  remote binding: tsr: 10.10.10.2:0, tag:imp-null
  remote binding: tsr: 10.10.10.1:0, tag:19
  remote binding: tsr: 10.10.10.6:0, tag:22
```

A. Include the EXP bit
B. Exclude the EXP bit
C. Impose the label
D. Pop the label

Answer: D

Question 5

Which list defines the contents of an MPLS label?

A. 20-bit label; 3-bit traffic class; 1 -bit bottom stack; 8-bit TTL
B. 32-bit label; 3-bit flow label; 1-bit bottom stack; 8-bit hop limit
C. 20-bit label; 3-bit flow label; 1-bit bottom stack; 8-bit hop limit
D. 32-bit label; 3-bit traffic class; 1 -bit bottom stack; 8-bit TTL

Answer: A

Question 6

What statement about route distinguishes in an MPLS network is true?

A. Route distinguishers make a unique VPNv4 address across the MPLS network
B. Route distinguishers allow multiple instances of a routing table to coexist within the edge

router
C. Route distinguishers are used for label bindings
D. Route distinguishers define which prefixes are imported and exported on the edge router

Answer: A

VRF-Lite Questions

https://www.networktut.com/vrf-lite-questions

Question 1

What is the output of the following command:

```
show ip vrf
```

A. Shows default RD values
B. Displays IP routing table information associated with a VRF
C. Shows routing protocol information associated with a VRF
D. Displays the ARP table (static and dynamic entries) in the specified VRF

Answer: A

Question 2

Which protocol does VRF-Lite support?

A. IS-IS
B. ODR
C. EIGRP
D. IGRP

Answer: C

Question 3

Which two statements about VRF-Lite configurations are true? (Choose two)

A. They support the exchange of MPLS labels
B. Different customers can have overlapping IP addresses on different VPNs
C. They support a maximum of 512.000 routes
D. Each customer has its own dedicated TCAM resources

E. Each customer has its own private routing table
F. They support IS-IS

Answer: B E

Question 4

What is the role of a route distinguisher via a VRF-Lite setup implementation?

A. It extends the IP address to identify which VRF instance it belongs to
B. It manages the import and export of routes between two or more VRF instances
C. It enables multicast distribution for VRF-Lite setups to enhance EGP routing protocol capabilities
D. It enables multicast distribution for VRF-Lite setups to enhance IGP routing protocol capabilities

Answer: A

Question 5

Which command displays the IP routing table information that is associated with VRF-Lite?

A. show ip vrf
B. show ip route vrf
C. show run vrf
D. show ip protocols vrf

Answer: B

Question 6

Which configuration enables the VRF that is labeled “inet” on FastEthernet0/0?

A. R1(config)# ip vrf Inet
R1(config-vrf)#ip vrf FastEthernet0/0

B. R1 (conflg)#ip vrf Inet FastEthernet0/0

C. R1(config)# ip vrf Inet
R1(config-vrf)#interface FastEthernet0/0
R1(config-if)#ip vrf forwarding Inet

D. R1 (config)#router ospf 1 vrf Inet
R1 (config-router)#ip vrf forwarding FastEthernet0/0

Answer: C

DMVPN Questions

https://www.networktut.com/dmvpn-questions

Question 1

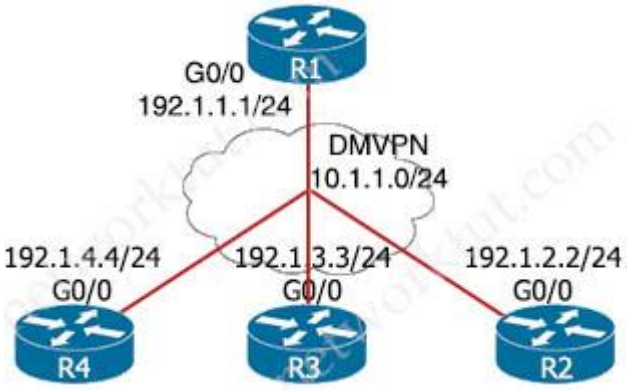
Which protocol is used to determine the NBMA address on the other end of a tunnel when mGRE is used?

A. NHRP
B. IPsec
C. MP-BGP
D. OSPF

Answer: A

Question 2

Refer to the exhibits. Phase-3 tunnels cannot be established between spoke-to-spoke in DMWN. Which two commands are missing? (Choose two)



On R2:	On R3:	On R4:
R2(config)#interface tunnel 1 R2(config-if)#ip address 10.1.1.2 255.255 255.0 R2(config-if)#tunnel source FasEthernet0/0 R2(config-if)#tunnel mode gre multipoint R2(config-if)#ip nhrp network-	R3(config)#interface tunnel 1 R3(config-if)#ip address 10.1.1.3 255.255.255.0 R3(config-if)#tunnel source FastEthernet0/0 R3(config-if)#tunnel mode gre multipoint R3(config-if)#ip nhrp network-	R4(config)#interface tunnel 1 R4(config-if)#ip address 10.1.1.4 255.255.255 0 R4(config-ff)#tunnel source FastEthernet0/0 R4(config-if)#tunnel mode gre multipoint R4(config-if)#ip nhrp network-

id 222 R2(config-if)#ip nhrp nhs 10.1.1.1 R2(config-if)#ip nhrp map 10.1.1.1 192.1.1.1	id 333 R3(config-if)#ip nhrp nhs 10.1.1.1 R3(config-if)#ip nhrp map 10.1.1.1 192.1.1.1	id 444 R4(config-if)#ip nhrp nhs 10.1.1.1 R4(config-if)#ip nhrp map 10.1.1.1 192.1.1.1

A. The ip nhrp redirect command is missing on the spoke routers.
B. The ip nhrp shortcut command is missing on the spoke routers.
C. The ip redirect commands is missing on the hub router.
D. The ip shortcut commands is missing on the hub router.
E. The ip nhrp command is missing on the hub router.

Answer: B C

Question 3

Refer to the following output:

```
Router#show ip nhrp detail
10.1.1.2/8 via 10.2.1.2, Tunnel1 created 00:00:12, expire 01:59:47
Type: dynamic, Flags: authoritative unique nat registered used
NBMA address: 10.12.1.2
```

What does the authoritative flag mean in regards to the NHRP information?

A. It was obtained directly from the next-hop server
B. Data packets are process switches for this mapping entry
C. NHRP mapping is for networks that are local to this router
D. The mapping entry was created in response to an NHRP registration request
E. The NHRP mapping entry cannot be overwritten

Answer: A

Question 4

Which Cisco VPN technology can use multipoint tunnel, resulting in a single GRE tunnel interface on the hub, to support multiple connections from multiple spoke devices?

A. DMVPN
B. GETVPN
C. Cisco Easy VPN
D. FlexVPN

Answer: A

Question 5

Which protocol is used in a DMVPN network to map physical IP addresses to logical IP addresses?

A. BGP
B. LLDP
C. EIGRP
D. NHRP

Answer: D

Question 6

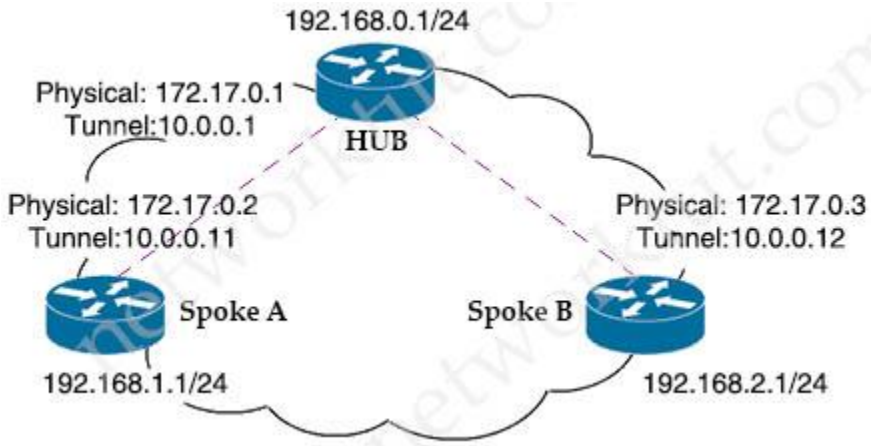
Which two methods use IPsec to provide secure connectivity from the branch office to the headquarters office? (Choose two)

A. DMVPN
B. MPLS VPN
C. Virtual Tunnel Interface (VTI)
D. SSL VPN
E. PPPoE

Answer: A C

Question 7

Refer to the exhibit. Which interface configuration must be configured on the spoke A to enable a dynamic DMVPN tunnel with the spoke B router?



A. interface Tunnel0
description mGRE – DMVPN Tunnel
ip address 10.0.0.11 255.255.255.0
ip nhrp map multicast dynamic
ip nhrp network-id 1
tunnel source 10.0.0.1
tunnel destination FastEthernet0/0
tunnel mode gre multipoint

B. interface Tunnel0
ip address 10.1.0.11 255.255.255.0
ip nhrp network-id 1
tunnel source 1.1.1.10
ip nhrp map 10.0.0.11 172.17.0.2
tunnel mode gre

C. interface Tunnel0
ip address 10.0.0.11 255.255.255.0
ip nhrp map multicast static
ip nhrp network-id 1
tunnel source 10.0.0.1
tunnel mode gre multipoint

D. interface Tunnel0
ip address 10.0.0.11 255.255.255.0
ip nhrp network-id 1
tunnel source FastEthernet0/0
tunnel mode gre multipoint
ip nhrp nhs 10.0.0.1
ip nhrp map 10.0.0.1 172.17.0.1

Answer: D

Question 8

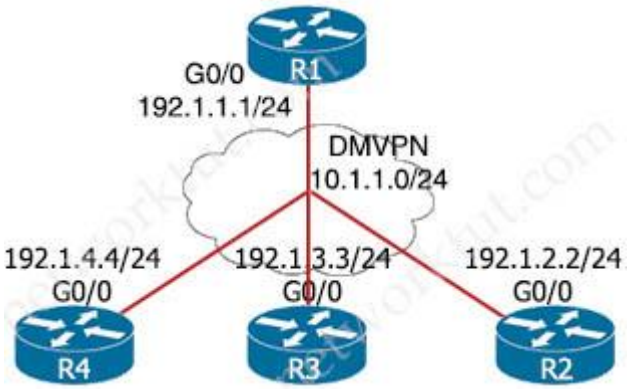
Which security feature can protect DMVPN tunnels?

A. IPsec
B. TACACS+
C. RTBH
D. RADIUS

Answer: A

Question 9

Refer to the exhibit. After applying IPsec, the engineer observed that the DMVPN tunnel went down, and both spoke-to-spoke and hub were not establishing. Which two actions resolved the issue? (Choose two)



R2:	**R3:**
R2(config)#crypto isakmp policy 10 R2(config-isakmp)#hash md5 R2(config-isakmp)#authentication pre-share R2(config-isakmp)#group 2 R2(config-isakmp)#encryption 3des R2(config)#crypto isakmp key cisco address 10.1.1.1 R2(config)#crypto ipsec transform-set TSET esp-des esp-md5-hmac R2(cfg-crypto-trans)#mode transport R2(config)#crypto ipsec profile TST R2(ipsec-profile)#set transform-set TSET R2(config)#interface tunnel 123 E2(config-if)#tunnel protection ipsec profile TST	R3(config)#crypto isakmp policy 10 R3(config-isakmp)#hash md5 R3(config-isakmp)#authentication pre-share R3(config-isakmp)#group 2 R3(config-isakmp)#encryption 3des R3(config)#crypto isakmp key cisco address 10.1.1.1 R3(config)#crypto ipsec transform-set TSET esp-des esp-md5-hmac R3(cfg-crypto-trans)#mode tunnel R3(config)#crypto ipsec profile TST R3(ipsec-profile)#set transform-set TSET R3(config)#interface tunnel 123 R3(config-if)#tunnel protection ipsec profile TST

A. Configure the crypto isakmp key cisco address 0.0.0.0 on R2 and R3
B. Remove the crypto isakmp key cisco address 10.1.1.1 on R2 and R3

C. Change the mode from mode transport to mode tunnel on R2
D. Configure the mode from mode tunnel to mode transport on R3

Answer: A B

AAA Questions

https://www.networktut.com/aaa-questions

Question 1

Refer to the exhibit. An engineer is trying to configure local authentication on the console line, but the device is trying to authenticate using TACACS+. Which action produces the desired configuration?

```
R1#show running-config | include aaa
aaa new-model
aaa authentication login default group tacacs+ local
aaa authentication login Console local
R1#show running-config | section line
line con 0
logging synchronous
R1#
```

A. Add the aaa authentication login default group tacacs+ local-case command to the global configuration
B. Add the login authentication Console command to the line configuration
C. Replace the capital "C" with a lowercase "c" in the aaa authentication login Console local command
D. Add the aaa authentication login default none command to the global configuration

Answer: B

Question 2

Refer to the exhibit. Why is user authentication being rejected?

```
TAC+: TCP/IP open to 171.68.118.101/49 failed —
Destination unreachable; gateway or host down
AAA/AUTHEN (2546660185): status = ERROR
AAA/AUTHEN/START (2546660185): Method=LOCAL
AAA/AUTHEN (2546660185): status = FAIL
```

```
As1 CHAP: Unable to validate Response. Username chapuser: Authentication failure
```

A. The TACACS+ server expects “user” but the NT client sends “domain\user”
B. The TACACS+ server refuses the user because the user is set up for CHAP
C. The TACACS+ server is down and the user is in the local database
D. The TACACS+ server is down and the user is not in the local database

Answer: D

NTP Questions

https://www.networktut.com/ntp-questions

Question 1

Refer to the exhibit. An administrator noticed that after a change was made on R1, the timestamps on the system logs did not match the clock. What is the reasons for this error?

```
service timestamps debug datetime msec
service timestamps log datetime
clock timezone MST -7 0
clock summer-time MST recurring
ntp authentication-key 1 md5 00101AOB015218120622474707lE 7
ntp server 10.10.10.10

R1#show clock
*06:13:44.045 MST Sun Dec 30 2018
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#logging host 10.10.10.20
R1(config)#end
R1#
*Dec 30 13:15:26: %SYS-S-CONFIG_I: Configured from console by console
R1#
*Dec 30 13:1S:28: %SYS-6-LOGGINGHOST_STARTSTOP: Logging to host 10.10.10.20 port 514 started – CLI initiated
```

A. The keyword localtime is not defined on the timestamp service command
B. The NTP server is in an different time zone
C. An authentication error with the NTP server results in an incorrect timestamp
D. The system clock is set incorrectly to summer-time hours

Answer: A

Question 2

Refer to the exhibit An engineer is troubleshooting BGP on a device but discovers that the clock on the device does not correspond to the time stamp of the log entries.
Which action ensures consistency between the two times?

```
*Feb 28 12:41:57: %BGP-5-ADJCHANGE: neighbor 192.168.2.2 Down User reset
*Feb 28 12:41:57: %BGP_SESSION-5-ADJCHANGE : neighbor 192.168.2.2 IPv4 Unicast topology base removed from session User reset
*Feb 28 12:41:57: %BGP-5-ADJCHANGE: neighbor 192.168.2.2 Up
R1#show clock
*13:42:00.506 CET Feb 28 2019
```

A. Configure the logging clock synchronize command in global configuration mode
B. Configure the service timestamps log uptime command in global configuration mode
C. Configure the service timestamps log datetime localtime command in global configuration mode
D. Make sure that the clock on the device is synchronized with an NTP server

Answer: C

Question 3

A network engineer is investigating a flapping (up/down) interface issue on a core switch that is synchronized to an NTP server. Log output does not show the time of the flap.

Which command allows on the switch the time of the flap according to the dock on the device?

A. clock calendar-valid
B. service timestamps log datetime localtime show-timezone
C. service timestamps log uptime
D. dock summer-time mst recurring 2 Sunday mar 2:00 1 Sunday nov 2:00

Answer: B

Access-list Questions

https://www.networktut.com/access-list-questions

Question 1

Refer to the exhibit. During troubleshooting it was discovered that the device is not reachable using a secure web browser. What is needed to fix the problem?

```
access-list 100 deny tcp any any eq 465
access-list 100 deny tcp any eq 465 any
```

```
access-list 100 permit tcp any any eq 80
access-list 100 permit tcp any eq 80 any
access-list 100 permit udp any any eq 443
access-list 100 permit udp any eq 443 any
```

A. permit tcp port 465
B. permit tcp port 443
C. permit udp port 465
D. permit tcp port 22

Answer: B

Question 2

Refer to the exhibit. Which configuration denies Telnet traffic to router 2 from 198A:0:200C::1/64?

A. ipv6 access-list Deny_Telnet
sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64
!
int Gi0/0
ipv6 access-map Deny_Telnet in
!

B. ipv6 access-list Deny_Telnet
sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64
!
int Gi0/0
ipv6 traffic-filter Deny_Telnet in
!

C. ipv6 access-list Deny_Telnet
sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64 eq telnet
!
int Gi0/0
ipv6 access-map Deny_Telnet in
!

D. ipv6 access-list Deny_Telnet
sequence 10 deny tcp host 198A:0:200C::1/64 host 201A:0:205C::1/64 eq telnet
!

int Gi0/0
ipv6 traffic-filter Deny_Telnet in

Answer: D

Control Plane Questions

https://www.networktut.com/control-plane-questions

Question 1

While troubleshooting connectivity issues to a router, these details are noticed:

– standard pings to all router interfaces, including loopbacks, are successful.
– Data traffic is unaffected.
– SNMP connectivity is intermittent.
– SSH is either or disconnects frequently.

Which command must be configured first to troubleshoot this issue?

A. Show policy-map control-plane
B. Show policy-map
C. Show interface inc drop
D. Show ip route

Answer: A

Question 2

Refer to the exhibit. An engineer is trying to connect to a device with SSH but cannot connect. The engineer connects by using the console and find the displayed output when troubleshooting. Which command must be used in configuration mode to enable SSH on the device?

R1#**show ip ssh**
SSH Disabled — version 1.99
% Please create RSA keys to enable SSH (and of at least 768 bits for SSH v2).
Authentication timeout: 120 secs; Authentication retries: 3
Minimum expected Diffie Hellman key size: 1024 bits
IOS Keys in SECSH format (ssh-rsa, base64 encoded): NONE
R1#

A. crypto key generate rsa
B. ip ssh enable
C. no ip ssh disable
D. ip ssh version 2

Answer: A

Question 3

Which option is the best for protecting CPU utilization on a device?

A. fragmentation
B. COPP
C. ICMP redirects
D. ICMP unreachable messages

Answer: B

Question 4

An engineer is trying to copy an IOS file from one router to another router by using TFTP. Which two actions are needed to allow the file to copy? (Choose two)

A. Configure the TFTP authentication on the source router with the "tftp-server authentication local" command.
B. Configure a user on the source router with the username tftp password tftp command.
C. Enable the TFTP server on the source router with the tftp-server flash:<filename> command.
D. TFTP is not supported in recent IOS versions, so an alternative method must be used.
E. Copy the file to the destination router with the copy tftp: flash: command

Answer: C E

IPv6 Questions

https://www.networktut.com/ipv6-questions

Question 1

Which is statement about IPv6 inspection is true?

A. It learns and secures bindings for stateless autoconfiguration addresses in Layer 3 neighbor tables
B. It learns and secures bindings for stateful autoconfiguration addresses in Layer 3 neighbor tables
C. It learns and secures bindings for stateful autoconfiguration addresses in Layer 2 neighbor tables
D. It learns and secures binding for stateless autoconfiguration addresses in Layer 2 neighbor tables

Answer: D

Question 2

Which statement about IPv6 RA Guard is true?

A. It does not offer protection in environments where IPv6 traffic is tunneled
B. It cannot be configured on a switch port interface in the ingress direction
C. Packets that are dropped by IPv6 RA Guard cannot be spanned
D. It is not supported in hardware when TCAM is programmed

Answer: A

IP SLA Questions

https://www.networktut.com/ip-sla-questions

Question 1

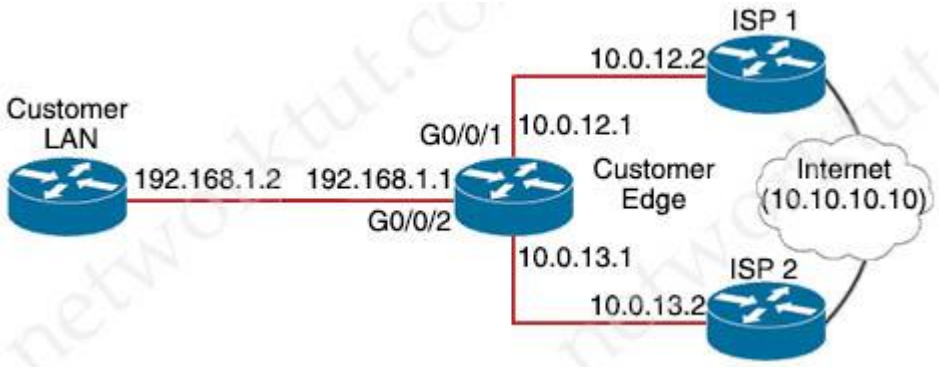
Which command is used to check IP SLA when an interface is suspected to receive lots of traffic with options?

A. show track
B. show threshold
C. show timer
D. show delay

Answer: A

Question 2

Refer to the exhibit. ISP 1 and ISP 2 directly connect to the internet. A customer is tracking both ISP links to achieve redundancy and cannot see the Cisco IP SLA tracking output on the router console. Which command is missing from the IP SLA configuration?



A. Start-time now
B. Start-time 00:00
C. Start-time 0
D. Start-time immediately

Answer: A

Question 3

A network engineer needs to verify IP SLA operations on an interface that shows on indication of excessive traffic. Which command should the engineer use to complete this action?

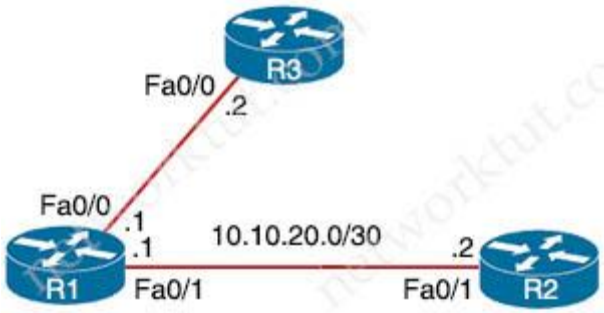
A. show frequency
B. show track
C. show reachability
D. show threshold

Answer: B

Question 4

Refer to the exhibit. An IP SLA was configured on router R1 that allows the default route to be modified in the event that Fa0/0 losses reachability with the router R3 Fa0/0 interface. The route has changed to flow through route R2.

Which debug command is used to troubleshoot this issue?



A. debug ip flow
B. debug ip sla error
C. debug ip routing
D. debug ip packet

Answer: C

SNMP Questions

https://www.networktut.com/snmp-questions

Question 1

Which SNMP verification command shows the encryption and authentication protocols that are used in SNMPv3?

A. show snmp group
B. show snmp user
C. show snmp
D. show snmp view

Answer: B

Question 2

Refer to the exhibit. Network operations cannot read or write an configuration on the device with this configuration from the operation subnet. Which two configuration fix the issue? (Choose two)

```
snmp-server community ciscotest 1
snmp-server host 192.168.1.128 ciscotest
snmp-server enable traps bgp
```

A. Configure SNMP rw permission in addition to community ciscotest
B. Modify access list 1 and allow operations subnet in the access list
C. Modify SNMP rw permission in addition to version 1
D. Configure SNMP rw permission in addition to version 1
E. Configure SNMP rw permission in addition to community ciscotest 1

Answer: A B

DHCP Questions

https://www.networktut.com/dhcp-questions

Question 1

Users were moved from the local DHCP server to the remote corporate DHCP server. After the move, none of the users were able to use the network. Which two issues will prevent this setup from working property? (Choose two)

A. Auto-QoS is blocking DHCP traffic
B. The DHCP server IP address configuration is missing locally
C. 802.1X is blocking DHCP traffic
D. The broadcast domain is too large for proper DHCP propagation
E. The route to the new DHCP server is missing

Answer: B E

Question 2

Refer to the exhibit. Users report that IP addresses cannot be acquired from the DHCP server. The DHCP server is configured as shown. About 300 total nonconcurrent users are using this DHCP server, but none of them are active for more than two hours per day.

Which action fixes the issue within the current resources?

```
R1#show running-config | section dhcp
ip dhcp excluded-address 192.168.1.1 192.168.1.49
ip dhcp pool DHCP
 network 192.168.1.0 255.255.255.0
 default-router 192.168.1.1
 dns-server 8.8.8.8
 lease 0 12
```

A. Configure the DHCP lease time to a bigger value
B. Add the network 192.168.2.0 255.255.255.0 command to the DHCP pool
C. Modify the subnet mask to the network 192.168.1.0 255.255.254.0 command in the DHCP

pool
D. Configure the DHCP lease time to a smaller value

Answer: D

DNA Center Questions

https://www.networktut.com/dna-center-questions

Question 1

An engineer configured the wrong default gateway for the Cisco DNA center enterprise interface during the install. Which command must the engineer run to correct the configuration?

A. Sudo update config install
B. Sudo maglev reinstall
C. Sudo magiev-config update
D. Sudo maglev install config update

Answer: C

Question 2

When provisioning a device in Cisco DNA Center, the engineer sees the error message "Cannot select the device. Not compatible with template.". What is the reason for the error?

A The software version of the template is different from the software version of the device
B. The changes to the template were not committed
C. The template has an incorrect configuration
D. The tag that was used to filter the templates does not match the device tag

Answer: D

Question 3

While working with software images, an engineer observes that Cisco DNA Center cannot upload its software image directly from the device. Why is the image not uploading?

A. The device has lost connectivity to Cisco DNA Center
B. The software image for the device is in bundle mode

C. The software image for the device is in install mode
D. The device must be resynced to Cisco DNA Center

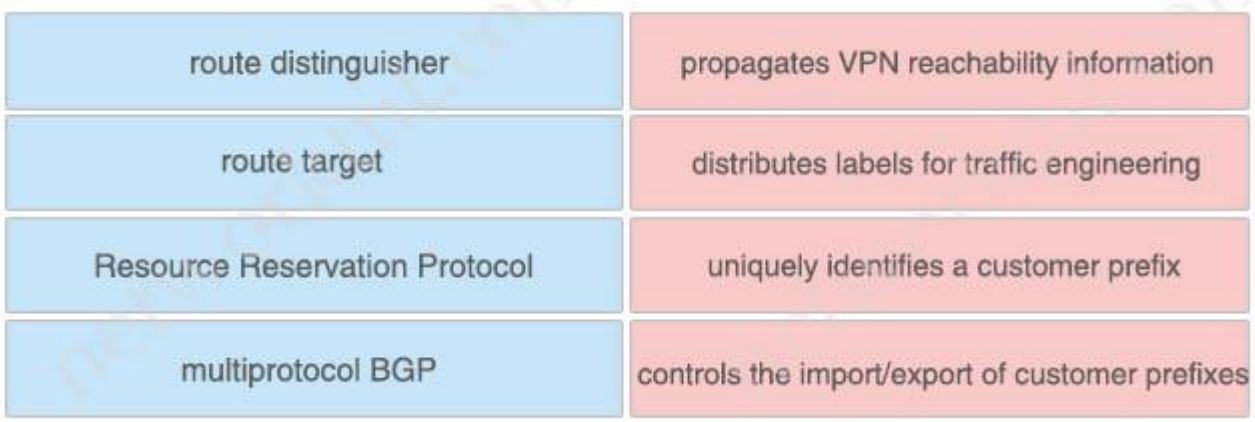
Answer: C

Drag Drop Questions

https://www.networktut.com/drag-drop-questions

Question 1

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

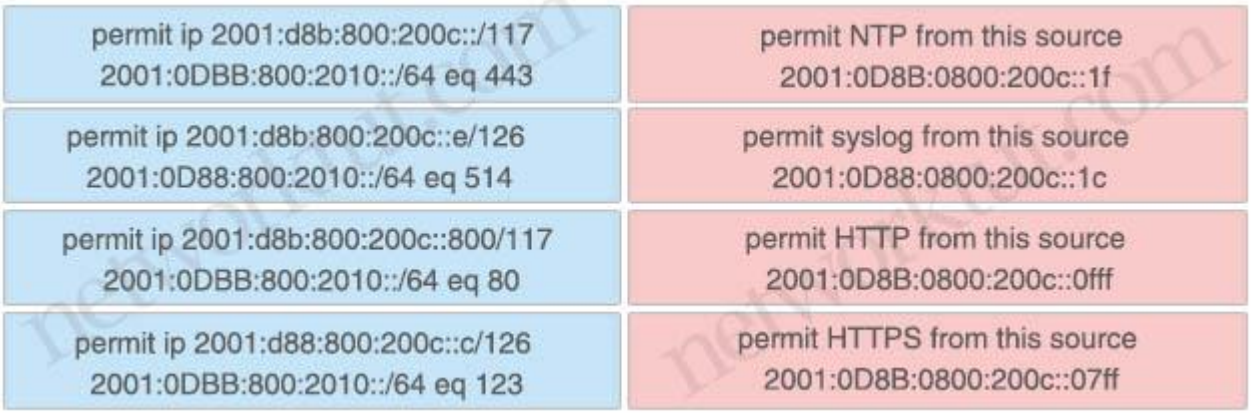


Answer:

+ propagates VPN reachability information: multiprotocol BGP
+ distributes labels for traffic engineering: Resource Reservation Protocol
+ uniquely identifies a customer prefix: route distinguisher
+ controls the import/export of customer prefixes: route target

Question 2

Drag and drop the address from the left onto the correct IPv6 filter purposes on the right.

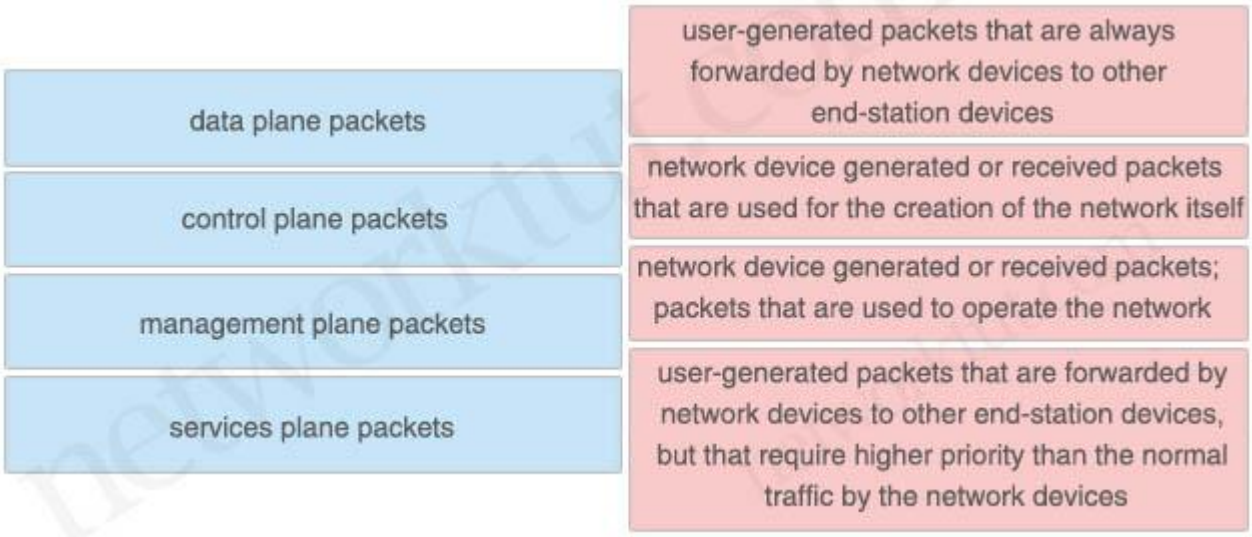


Answer:

+ permit NTP from this source 2001:0D88:0800:200c::1f – **permit ip 2001:d88:800:200c::c/126 2001:0DBB:800:2010::/64 eq 123**
+ permit syslog from this source 2001:0D88:0800:200c::1c – **permit ip 2001:D88:800:200c::e/126 2001:0DBB:800:2010::/64 eq 514**
+ permit HTTP from this source 2001:0D8B:0800:200c::0fff – **permit ip 2001:d8b:800:200c::800/117 2001:0DBB:800:2010::/64 eq 80**
+ permit HTTPS from this source 2001:0D8B:0800:200c::07ff – **permit ip 2001:d8b:800:200c::/117 2001:0DBB:800:2010::/64 eq 443**

Question 3

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

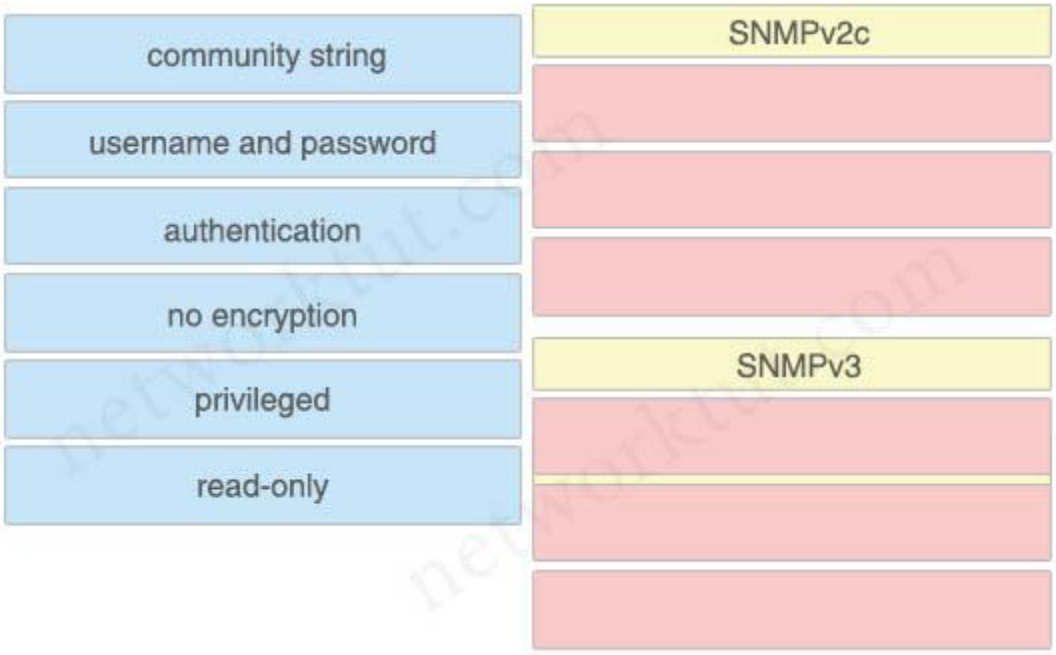


Answer:

+ user-generated packets that are always forwarded by network devices to other end-station devices: **data plane packets**
+ network device generated or received packets that are used for the creation of the network itself: **control plane packets**
+ network device generated or received packets; packets that are used to operate the network: **management plane packets**
+ user-generated packets that are forwarded by network devices to other end-station devices, but that require higher priority than the normal traffic by the network devices: **services plane packets**

Question 4

Drag and drop the SNMP attributes in Cisco IOS devices from the onto the correct SNMPv2c or SNMPv3 categories on the right.



Answer:

SNMPv2c:
+ community string
+ no encryption
+ read-only

SNMPv3:
+ username and password
+ authentication
+ privileged

Question 5

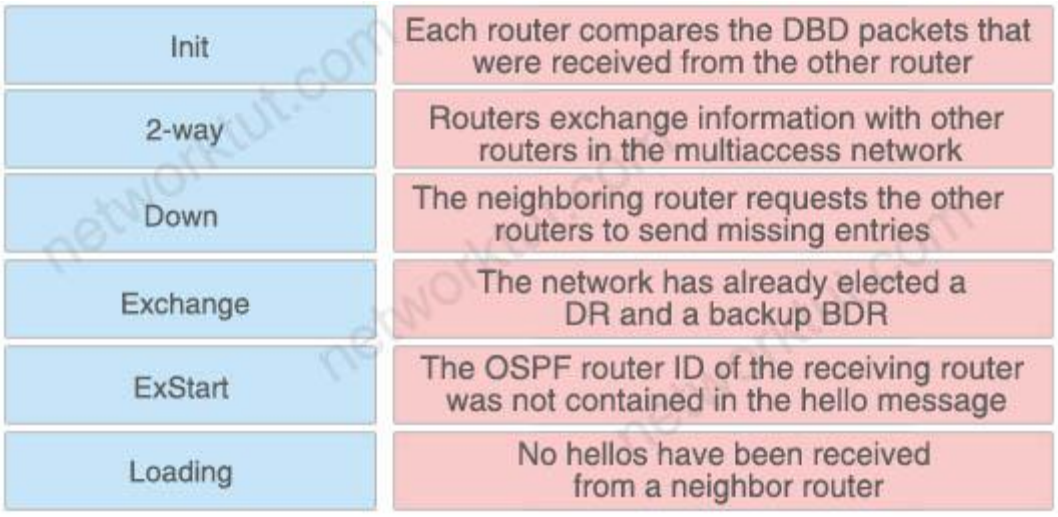
Drag and drop the MPLS terms from the left onto the correct definitions on the right.

Answer:

+ device that forwards traffic based on labels: P
+ path that the labeled packet takes: LSP
+ device that is unaware of MPLS labeling: CE
+ device that removes and adds the MPLS labeling: PE

Question 6

Drag and drop the OSPF adjacency states from the left onto the correct descriptions on the right



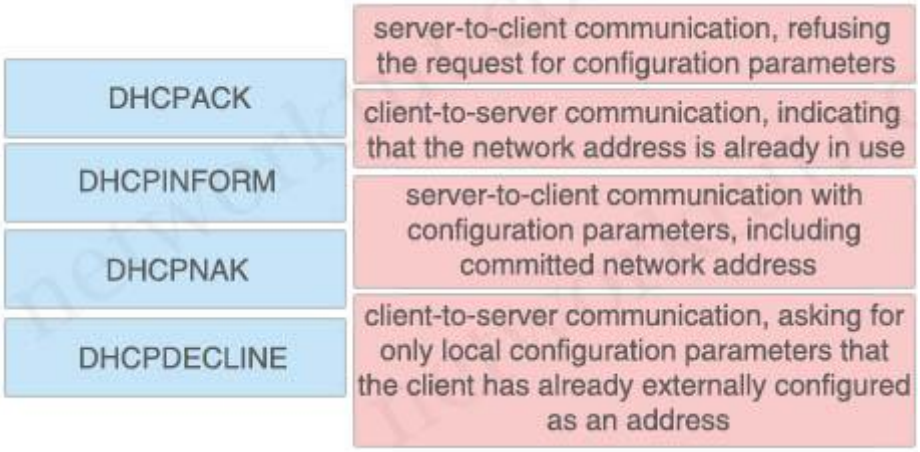
Answer:

+ Each router compares the DBD packets that were received from the other router: Exchange
+ Routers exchange information with other routers in the multiaccess network: 2-way

+ The neighboring router requests the other routers to send missing entries: Loading
+ The network has already elected a DR and a backup BDR: Exstart
+ The OSPF router ID of the receiving router was not contained in the hello message: Init
+ No hellos have been received from a neighbor router: Down

Question 7

Drag and drop the DHCP messages from the left onto the correct uses on the right.



Answer:

+ server-to-client communication, refusing the request for configuration parameters: DHCPNAK
+ client-to-server communication, indicating that the network address is already in use: DHCPDECLINE
+ server-to-client communication with configuration parameters, including committed network address: DHCPACK
+ client-to-server communication, asking for only local configuration parameters that the client has already externally configured as an address: DHCPINFORM

Miscellaneous Questions

https://www.networktut.com/miscellaneous-questions

Question 1

What is a prerequisite for configuring BFD?

A. All routers in the path between two BFD endpoints must have BFD enabled
B. Jumbo frame support must be configured on the router that is using BFD
C. Cisco Express Forwarding must be enabled on all participating BFD endpoints
D. To use BFD with BGP, the timers 3 9 command must first be configured in the BGP routing process

Answer: C

Question 2

Which two protocols can cause TCP starvation? (Choose two)

A. TFTP
B. SNMP
C. SMTP
D. HTTPS
E. FTP

Answer: A B

Question 3

Which method changes the forwarding decision that a router makes without first changing the routing table or influencing the IP data plane?

A. Policy-based routing
B. Nonbroadcast multi-access
C. Packet switching
D. Forwarding information base

Answer: A

Question 4

Which attribute eliminates LFAs that belong to protected paths in situations where links in a network are connected through a common fiber?

A. Interface-dispoint
B. Shared risk link group-disjoint
C. Linecard-disjoint
D. Lowest-repair-path-metric

Answer: B

Question 5

Refer to the exhibit. An administrator that is connected to the console does not see debug messages when remote users log in. Which action ensures that debug messages are displayed for remote loggings?

```
R1(config)#do show running-config | section line|username
username cisco secret 5 $l$^e/o$I3G5cXODxpYMSJ70PzEyoO
line con 0
logging synchronous
line vty 0 4
login local
transport input telnet
R1(config)# logging console 7
R1(config)# do debug aaa authentication
R1(config)#
```

A. Enter the transport input ssh configuration command
B. Enter the terminal monitor exec command
C. Enter the logging console debugging configuration command
D. Enter the aaa new-model configuration command

Answer: D

Refer to the exhibit. Why is the remote NetFlow server failing to receive the NetFlow data?

```
config t

flow record v4_r1
match ipv4 tos
match ipv4 protocol
match ipv4 source address
match ipv4 destination address
match transport source-port
match transport destination-port
collect counter bytes long
collect counter packets long
!
flow exporter EXPORTER-1
 destination 172.16.10.2
 transport udp 90
 exit
!
flow monitor FLOW-MONITOR-1
 record v4_r1
 exit
!
ip cef
```

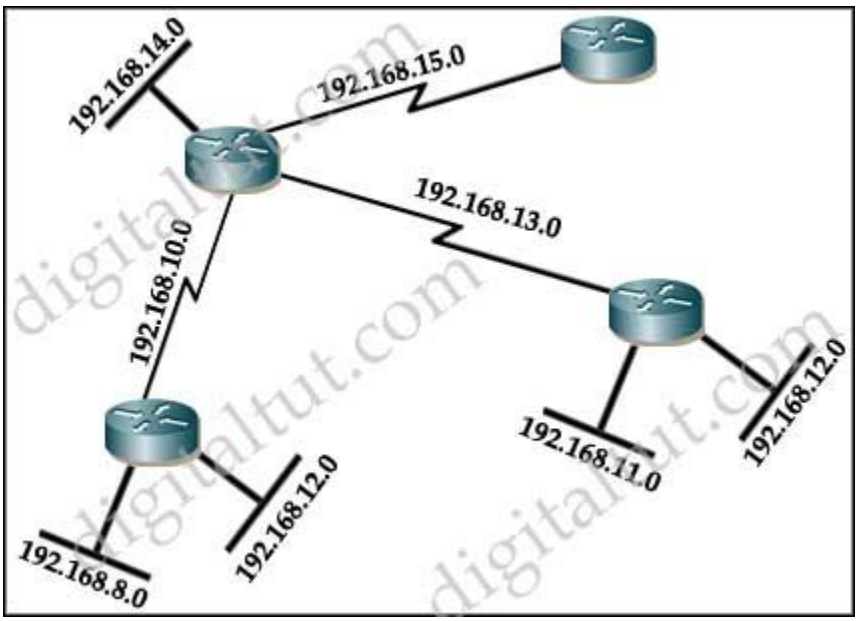
```
!

interface Ethernet0/0.1
 ip address 172.16.6.2 255.255.255.0
 ip flow monitor FLOW-MONITOR-1 input
```

A. The flow exporter is configured but is not used.
B. The flow monitor is applied in the wrong direction.
C. The flow monitor is applied to the wrong interface.
D. The destination of the flow exporter is not reachable.

Answer: A

Question 7

Given the network diagram, which address would successfully summarize only the networks seen?



A. 192.168.0.0/24
B. 192.168.8.0/20
C. 192.168.8.0/21
D. 192.168.12.0/20
E. 192.168.16.0/21
F. These networks cannot be summarized.

Answer: C