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VCEplus.com

Exam Code: 400-101

Exam Name: CCIE Routing and Switching Written Exam v5.0

Exam A

QUESTION 1
Refer to the exhibit.

```
Switch#show spanning-tree

VLAN0001

   Spanning tree enabled protocol ieee

   Root ID    Priority    32769
      Address     001a.6d4b.c500
      This bridge is the root
      Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

   Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
      Address     001a.6d4b.c500
      Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
      Aging Time 15

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- -----------------
Fa0/1            Desg FWD 19        128.1    P2p
```


If you change the Spanning Tree Protocol from pvst to rapid-pvst, what is the effect on the interface Fa0/1 port state?

A. It transitions to the listening state, and then the forwarding state.
B. It transitions to the learning state and then the forwarding state.
C. It transitions to the blocking state, then the learning state, and then the forwarding state.
D. It transitions to the blocking state and then the forwarding state.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 2
Refer to the exhibit.

```
interface GigabitEthernet0/0/0
 ip address 192.168.1.1 255.255.255.0
!
ip ssh version 2
!
ip access-list extended protect-ssh
  permit ip any any eq 22
!
line vty 0 4
 access-class protect-ssh in
 transport input ssh
```


Which configuration is missing that would enable SSH access on a router that is running Cisco IOS XE Software?

A. int Gig0/0/0
   management-interface
B. class-map ssh-class
   match access-group protect-ssh
   policy-map control-plane-in
   class ssh-class
   police 80000 conform transmit exceed drop
   control-plane
   service-policy input control-plane-in
C. control-plane host
   management-interface GigabitEthernet0/0/0 allow ssh
D. interface Gig0/0/0
   ip access-group protect-ssh in

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 3
Which two options are causes of out-of-order packets? (Choose two.)

A. a routing loop
B. a router in the packet flow path that is intermittently dropping packets
C. high latency
D. packets in a flow traversing multiple paths through the network
E. some packets in a flow being process-switched and others being interrupt-switched on a transit router

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 4
A TCP/IP host is able to transmit small amounts of data (typically less than 1500 bytes), but attempts to transmit larger amounts of data hang and then time out. What is the cause of this problem?

A. A link is flapping between two intermediate devices.
B. The processor of an intermediate router is averaging 90 percent utilization.
C. A port on the switch that is connected to the TCP/IP host is duplicating traffic and sending it to a port that has a sniffer attached.
D. There is a PMTUD failure in the network path.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 5
Refer to the exhibit.

```
Internet Protocol Version 4, Src: 10.149.4.110 (10.149.4.110), Dst: 192.168.3.1 (192.168.3.1)
    Version: 4
    Header length: 20 bytes
    Differentiated Services Field: 0x00 (DSCP 0x00: Default; ECN: 0x00: Not-ECT (Not ECN-Capable Transport))
    Total Length: 60
    Identification: 0x64ac (25772)
    Flags: 0x00
    Fragment offset: 0
    Time to live: 1
    Protocol: ICMP (1)
    Header checksum: 0x8269 [correct]
    Source: 10.149.4.110 (10.149.4.110)
    Destination: 192.168.3.1 (192.168.3.1)
Internet Control Message Protocol
    Type: 8 (Echo (ping) request)
    Code: 0
    Checksum: 0x4d3d [correct]
    Identifier (BE): 1 (0x0001)
    Identifier (LE): 256 (0x0100)
    Sequence number (BE): 30 (0x001e)
    Sequence number (LE): 7680 (0x1e00)
    Data (32 bytes)

0000  61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70   abcdefghijklmnop
0010  71 72 73 74 75 76 77 61 62 63 64 65 66 67 68 69   qrstuvwabcdefghi
        Data: 6162636465666768696a6b6c6d6e6f70717273747576776 1...
        [Length: 32]
```


ICMP Echo requests from host A are not reaching the intended destination on host B. What is the problem?

A. The ICMP payload is malformed.
B. The ICMP Identifier (BE) is invalid.
C. The negotiation of the connection failed.
D. The packet is dropped at the next hop.
E. The link is congested.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 6
Refer to the exhibit.

```
R101#show ip cache flow
[...]
SrcIf          SrcIPaddress    DstIf          DstIPaddress    Pr SrcP DstP  Pkts
Et0/0          10.0.0.1        Et0/0          15.0.0.2        01 0000 0800  2603
```

Which statement is true?

A. It is impossible for the destination interface to equal the source interface.
B. NAT on a stick is performed on interface Et0/0.
C. There is a potential routing loop.
D. This output represents a UDP flow or a TCP flow.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 7
Which three conditions can cause excessive unicast flooding? (Choose three.)

A. Asymmetric routing
B. Repeated TCNs
C. The use of HSRP
D. Frames sent to FFFF.FFFF.FFFF
E. MAC forwarding table overflow
F. The use of Unicast Reverse Path Forwarding

Correct Answer: ABE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 8
Which congestion-avoidance or congestion-management technique can cause global synchronization?

A. Tail drop
B. Random early detection
C. Weighted random early detection
D. Weighted fair queuing

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 9
Which two options are reasons for TCP starvation? (Choose two.)

A. The use of tail drop
B. The use of WRED
C. Mixing TCP and UDP traffic in the same traffic class
D. The use of TCP congestion control

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 10
Which type of port would have root guard enabled on it?

A. A root port
B. An alternate port
C. A blocked port

D. A designated port

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 11
Refer to the exhibit.

```
DOT1X-SP-5-SECURITY_VIOLATION: Security violation on interface GigabitEthernet4/8,
New MAC address 0080.ad00.c2e4 is seen on the interface in Single host mode
%PM-SP-4-ERR_DISABLE: security-violation error detected on Gi4/8, putting Gi4/8 in
err-disable state
```

Which action will solve the error state of this interface when connecting a host behind a Cisco IP phone?

A. Configure dot1x-port control auto on this interface
B. Enable errdisable recovery for security violation errors
C. Enable port security on this interface
D. Configure multidomain authentication on this interface

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 12
Refer to the exhibit.

```
switch#show spanning-tree detail

 MST0 is executing the mstp compatible Spanning Tree protocol
  Bridge Identifier has priority 32768, sysid 0, address f4ac.c1c4.2b80
  Configured hello time 2, max age 20, forward delay 15, transmit hold-count 6
  Current root has priority 24576, address 0019.07aa.9ac0
  Root port is 56 (Port-channel1), cost of root path is 0
  Topology change flag not set, detected flag not set
  Number of topology changes 296 last change occurred 00:01:17 ago
          from GigabitEthernet0/15
```

While troubleshooting high CPU utilization on one of your Cisco Catalyst switches, you find that the issue is due to excessive flooding that is caused by STP. What can you do to prevent this issue from happening again?

A. Disable STP completely on the switch.
B. Change the STP version to RSTP.
C. Configure PortFast on port-channel 1.
D. Configure UplinkFast on the switch.
E. Configure PortFast on interface Gi0/15.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 13
Refer to the exhibit.

```
%C4K_L3HWFORWARDING-2-FWDCAMFULL: L3 routing table is full. Switching to software forwarding
```

While troubleshooting high CPU utilization of a Cisco Catalyst 4500 Series Switch, you notice the error message that is shown in the exhibit in the log file.

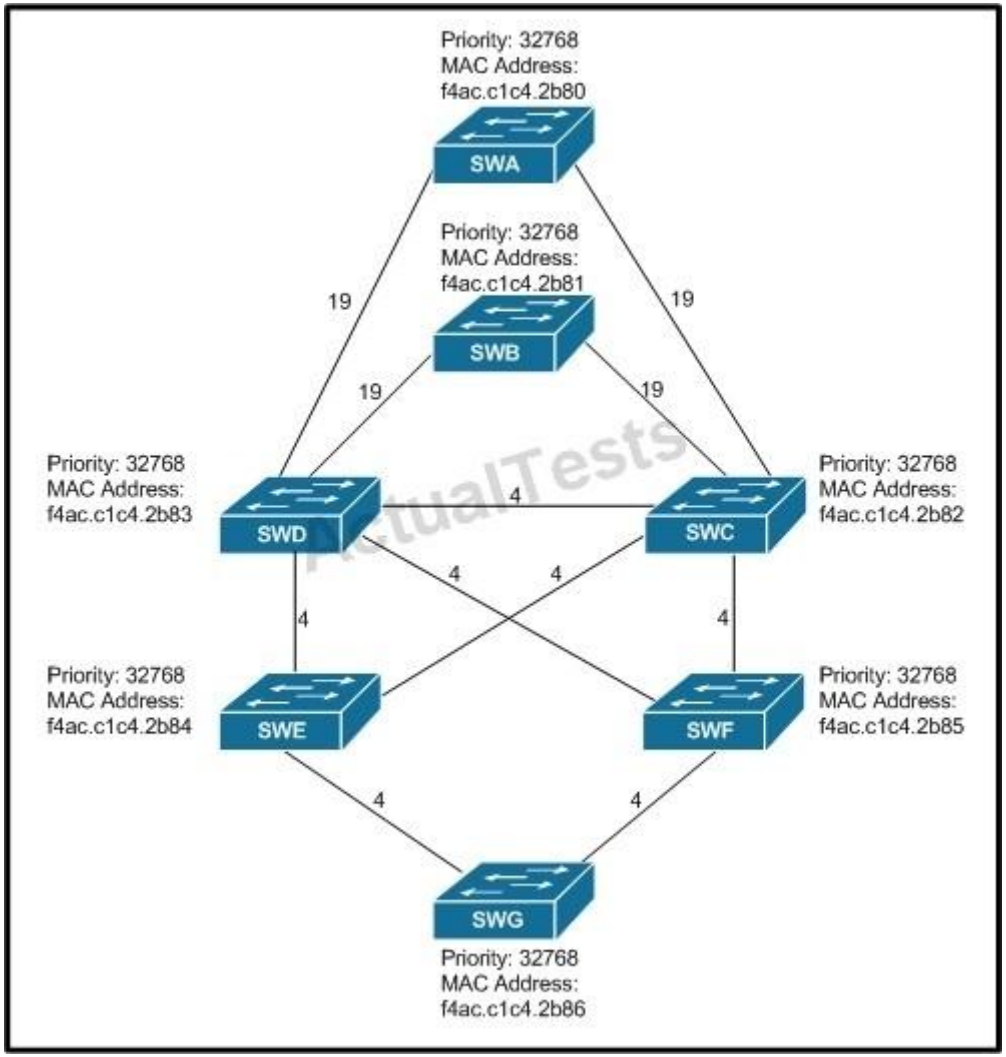
What can be the cause of this issue, and how can it be prevented?

A. The hardware routing table is full. Redistribute from BGP into IGP.
B. The software routing table is full. Redistribute from BGP into IGP.
C. The hardware routing table is full. Reduce the number of routes in the routing table.
D. The software routing table is full. Reduce the number of routes in the routing table.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 14
Refer to the exhibit.



All switches have default bridge priorities, and originate BPDUs with MAC addresses as indicated. The numbers shown are STP link metrics. Which two ports are forwarding traffic after STP converges? (Choose two.)

A. The port connecting switch SWD with switch SWE
B. The port connecting switch SWG with switch SWF
C. The port connecting switch SWC with switch SWE

D. The port connecting switch SWB with switch SWC

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 15
Refer to the exhibit.

```
Switch# show ip igmp snooping mrouter
Vlan    ports
----    -----
  10    Gi2/0/1(dynamic), Router
  20    Gi2/0/1(dynamic), Router
```


Which three statements about the output are true? (Choose three.)

A. An mrouter port can be learned by receiving a PIM hello packet from a multicast router.
B. This switch is configured as a multicast router.
C. Gi2/0/1 is a trunk link that connects to a multicast router.
D. An mrouter port is learned when a multicast data stream is received on that port from a multicast router.
E. This switch is not configured as a multicast router. It is configured only for IGMP snooping.
F. IGMP reports are received only on Gi2/0/1 and are never transmitted out Gi2/0/1 for VLANs 10 and 20.

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 16
Refer to the exhibit.

```
Switch#show int fastEthernet0/1 switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: dynamic auto
Operational Mode: static access
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: native
Negotiation of Trunking: On
Access Mode VLAN: 2 (VLAN0002)
Trunking Native Mode VLAN: 3 (VLAN0003)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk Native VLAN tagging: enabled
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL

Protected: false
Unknown unicast blocked: disabled
Unknown multicast blocked: disabled
Appliance trust: none
```

If a port is configured as shown and receives an untagged frame, of which VLAN will the untagged frame be a member?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 17
Refer to the exhibit.

```
Switch#show interfaces switchport backup detail

Switch Backup Interface Pairs:

Active Interface        Backup Interface        State
------------------------------------------------------------------------
FastEthernet0/1         FastEthernet0/2         Active Up/Backup Standby

Interface Pair   : Fa0/1, Fa0/2
Preemption Mode  : off
Bandwidth : 100000 Kbit (Fa0/1), 10000 Kbit (Fa0/2)
Mac Address Move Update Vlan : auto
```

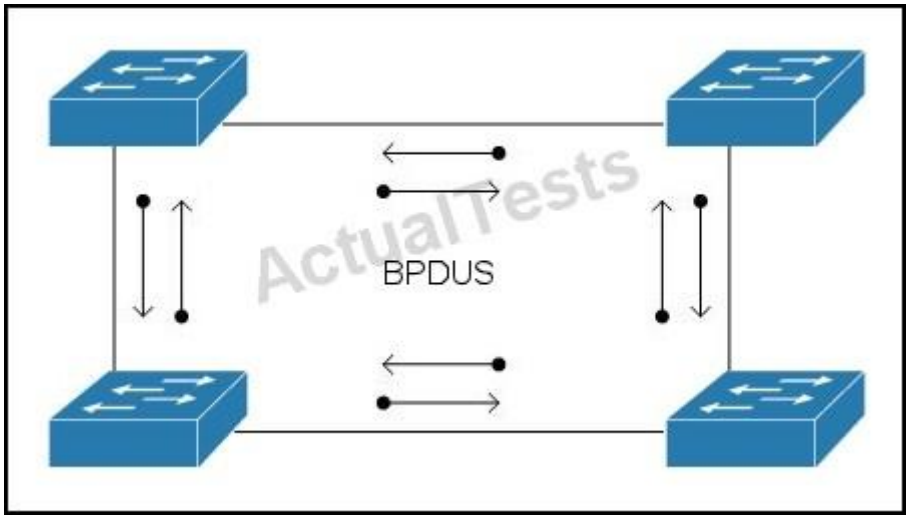

Which statement describes the effect on the network if FastEthernet0/1 goes down temporarily?

A. FastEthernet0/2 forwards traffic only until FastEthernet0/1 comes back up.
B. FastEthernet0/2 stops forwarding traffic until FastEthernet0/1 comes back up.
C. FastEthernet0/2 forwards traffic indefinitely.
D. FastEthernet0/1 goes into standby.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 18
Refer to the exhibit.



Which technology does the use of bi-directional BPDUs on all ports in the topology support?

A. RSTP
B. MST
C. Bridge Assurance
D. Loop Guard
E. Root Guard
F. UDLD

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 19
Which three statements are true about PPP CHAP authentication? (Choose three.)

A. PPP encapsulation must be enabled globally.
B. The LCP phase must be complete and in closed state.
C. The hostname used by a router for CHAP authentication cannot be changed.
D. PPP encapsulation must be enabled on the interface.

E. The LCP phase must be complete and in open state.
F. By default, the router uses its hostname to identify itself to the peer.

Correct Answer: DEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 20
Which two statements are true about an EPL? (Choose two.)

A. It is a point-to-point Ethernet connection between a pair of NNIs.
B. It allows for service multiplexing.
C. It has a high degree of transparency.
D. The EPL service is also referred to as E-line.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 21
Which two statements describe characteristics of HDLC on Cisco routers? (Choose two.)

A. It supports multiple Layer 3 protocols.
B. It supports multiplexing.
C. It supports only synchronous interfaces.
D. It supports authentication.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 22
Refer to the exhibit.

```
R1#show ip mroute 232.1.1.1
IP Multicast Routing Table
Flags: D - Dense, S - Sparse, B - Bidir Group, s - SSM Group, C - Connected,
       L - Local, P - Pruned, R - RP-bit set, F - Register flag,
       T - SPT-bit set, J - Join SPT, M - MSDP created entry,
       X - Proxy Join Timer Running, A - Candidate for MSDP Advertisement,
       U - URD, I - Received Source Specific Host Report,
       Z - Multicast Tunnel, z - MDT-data group sender,
       Y - Joined MDT-data group, y - Sending to MDT-data group
Outgoing interface flags: H - Hardware switched, A - Assert winner
 Timers: Uptime/Expires
 Interface state: Interface, Next-Hop or VCD, State/Mode

(10.1.4.7, 232.1.1.1), 00:17:24/00:02:53, flags: sTI
  Incoming interface: Ethernet1/0, RPF nbr 10.1.5.6*
  Outgoing interface list:
    Loopback0, Forward/Sparse, 00:14:42/00:01:21
```

What is the meaning of the asterisk (*) in the output?

A. PIM neighbor 10.1.5.6 is the RPF neighbor for the group 232.1.1.1 for the shared tree.
B. PIM neighbor 10.1.5.6 is the one that is seen as the RPF neighbor when performing the command show ip rpf 10.1.4.7.
C. PIM neighbor 10.1.5.6 is the winner of an assert mechanism.
D. The RPF neighbor 10.1.5.6 is invalid.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 23
Refer to the exhibit.

```
Router#show ip pim tunnel
Tunnel0
  Type   : PIM Encap
  RP     : 10.1.100.2*
  Source: 10.1.100.2
Tunnel1*
  Type   : PIM Decap
  RP     : 10.1.100.2*
  Source: -
```

What is the role of this multicast router?

A. a first-hop PIM router
B. a last-hop PIM router
C. a PIM rendezvous point
D. a PIM inter-AS router

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 24
Refer to the exhibit.

```
interface Ethernet0/1
 ip address 110.100.1.4 255.255.255.0
!
router ospf 100
 router-id 4.4.4.4
 redistribute static metric-type 1 subnets tag 704
 network 110.110.0.0 0.0.255.255 area 110
!
ip route 192.168.10.0 255.255.255.0 Ethernet0/1 110.100.1.1
!


External LSA:

            OSPF Router with ID (4.4.4.4) (Process ID 100)

                Type-5 AS External Link States

  LS age: 101
  Options: (No TOS-capability, DC, Upward)
  LS Type: AS External Link
  Link State ID: 192.168.10.0 (External Network Number )
  Advertising Router: 4.4.4.4
  LS Seq Number: 80000084
  Checksum: 0x74E2
  Length: 36
  Network Mask: /24
        Metric Type: 1 (Comparable directly to link state metric)
        MTID: 0
        Metric: 20
        Forward Address: 0.0.0.0
        External Route Tag: 704
```


Which option explains why the forwarding address is set to 0.0.0.0 instead of 110.100.1.1?

A. The interface Ethernet0/1 is in down state.
B. The next-hop ip address 110.100.1.1 is not directly attached to the redistributing router.
C. The next-hop interface (Ethernet0/1) is specified as part of the static route command; therefore, the forwarding address is always set to 0.0.0.0.

D. OSPF is not enabled on the interface Ethernet0/1.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 25
Refer to the exhibit.

```
Hub2#sh ip eigrp neighbors
EIGRP-IPv4 Neighbors for AS(123)
H   Address                 Interface              Hold Uptime   SRTT   RTO  Q  Seq
                                                   (sec)         (ms)       Cnt Num
0   192.168.0.2             Et0/3                    11 01:49:56    1  3000  0  1
Hub2#sh ip ospf neighbor

Neighbor ID     Pri   State           Dead Time   Address         Interface
192.168.0.2       1   FULL/DR         00:00:31    192.168.0.2     Ethernet0/3
```


You have configured two routing protocols across this point-to-point link. How many BFD sessions will be established across this link?

A. three per interface
B. one per multicast address
C. one per routing protocol
D. one per interface

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 26
Refer to the exhibit.

```
R1#show ipv6 route

 C   2001:DB8::/64 [0/0]
      via Ethernet0/0, directly connected
 L   2001:DB8::1/128 [0/0]
      via Ethernet0/0, receive
```

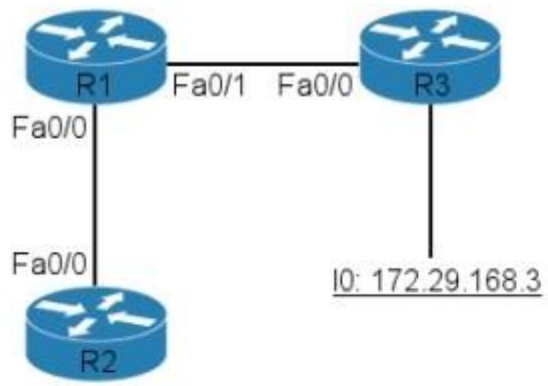
Which statement is true?

A. 2001:DB8::1/128 is a local host route, and it can be redistributed into a dynamic routing protocol.
B. 2001:DB8::1/128 is a local host route, and it cannot be redistributed into a dynamic routing protocol.
C. 2001:DB8::1/128 is a local host route that was created because ipv6 unicast-routing is not enabled on this router.
D. 2001:DB8::1/128 is a route that was put in the IPv6 routing table because one of this router's loopback interfaces has the IPv6 address 2001:DB8::1/128.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 27
Refer to the exhibit.




```
R1
!
interface FastEthernet0/0
description TO R2
ip address 172.17.17.1 255.255.255.128
!
interface FastEthernet0/1
description TO R3
ip address 10.17.12.1 255.255.255.0
!
ip route 172.29.168.3 255.255.255.255
      172.17.17.2
!
router eigrp 10
no auto-summary
network 172.17.17.0 0.0.0.127
network 10.17.12.0 0.0.0.255
```

```
R2
!
interface FastEthernet0/0
description TO R1
ip address 172.17.17.2 255.255.255.128
!
ip route 0.0.0.0 0.0.0.0 172.17.17.1
!
router eigrp 10
no auto-summary
network 172.17.17.0 0.0.0.255
```

```
R3
!
interface loopback0
ip address 172.29.168.3 255.255.255.255
!
interface FastEthernet0/0
description TO R1
ip address 10.17.12.3 255.255.255.0
!
router eigrp 10
no auto-summary
network 172.29.168.3 0.0.0.0
network 10.17.12.3 255.255.255.0
!
```


Routers R1, R2, and R3 are configured as shown, and traffic from R2 fails to reach 172.29.168.3.

Which action can you take to correct the problem?

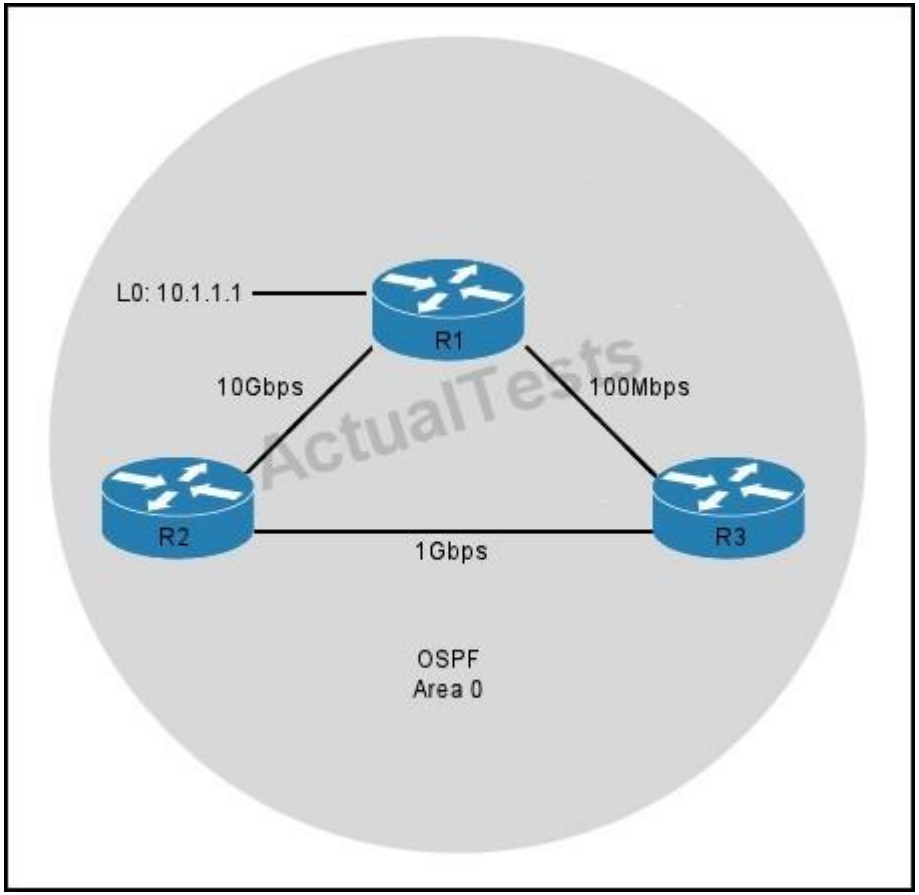
A. Correct the static route on R1.
B. Correct the default route on R2.

C. Edit the EIGRP configuration of R3 to enable auto-summary.
D. Correct the network statement for 172.29.168.3 on R3.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 28
Refer to the exhibit.



R3 prefers the path through R1 to reach host 10.1.1.1.

Which option describes the reason for this behavior?

A. The OSPF reference bandwidth is too small to account for the higher speed links through R2.
B. The default OSPF cost through R1 is less than the cost through R2.
C. The default OSPF cost through R1 is more than the cost through R2.
D. The link between R2 and R1 is congested.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 29
Refer to the exhibit.

```
*>172.21.95.0/22  172.17.192.1   0  120 0 65534 65535 65100 65235 ?
```

For which reason could a BGP-speaking device in autonomous system 65534 be prevented from installing the given route in its BGP table?

A. The AS number of the BGP is specified in the given AS_PATH.
B. The origin of the given route is unknown.
C. BGP is designed only for publicly routed addresses.
D. The AS_PATH for the specified prefix exceeds the maximum number of ASs allowed.
E. BGP does not allow the AS number 65535.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 30

Which statement about the feasibility condition in EIGRP is true?

A. The prefix is reachable via an EIGRP peer that is in the routing domain of the router.
B. The EIGRP peer that advertises the prefix to the router has multiple paths to the destination.
C. The EIGRP peer that advertises the prefix to the router is closer to the destination than the router.
D. The EIGRP peer that advertises the prefix cannot be used as a next hop to reach the destination.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 31
Which two statements about the function of the stub feature in EIGRP are true? (Choose two.)

A. It stops the stub router from sending queries to peers.
B. It stops the hub router from sending queries to the stub router.
C. It stops the stub router from propagating dynamically learned EIGRP prefixes to the hub routers .
D. It stops the hub router from propagating dynamically learned EIGRP prefixes to the stub routers .

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 32
In which type of EIGRP configuration is EIGRP IPv6 VRF-Lite available?

A. stub
B. named mode
C. classic mode
D. passive

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 33
Two routers are trying to establish an OSPFv3 adjacency over an Ethernet link, but the adjacency is not forming. Which two options are possible reasons that prevent OSPFv3 to form between these two routers? (Choose two.)

A. mismatch of subnet masks
B. mismatch of network types
C. mismatch of authentication types
D. mismatch of instance IDs
E. mismatch of area types

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 34
Like OSPFv2, OSPFv3 supports virtual links.Which two statements are true about the IPv6 address of a virtual neighbor? (Choose two.)

A. It is the link-local address, and it is discovered by examining the hello packets received from the virtual neighbor.
B. It is the link-local address, and it is discovered by examining link LSA received by the virtual neighbor.
C. It is the global scope address, and it is discovered by examining the router LSAs received by the virtual neighbor.
D. Only prefixes with the LA-bit not set can be used as a virtual neighbor address.
E. It is the global scope address, and it is discovered by examining the intra-area-prefix-LSAs received by the virtual neighbor.
F. Only prefixes with the LA-bit set can be used as a virtual neighbor address.

Correct Answer: EF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 35
Which field is specific to the OPSFv3 packet header, as opposed to the OSPFv2 packet header?

A. checksum
B. router ID
C. AuType
D. instance ID

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

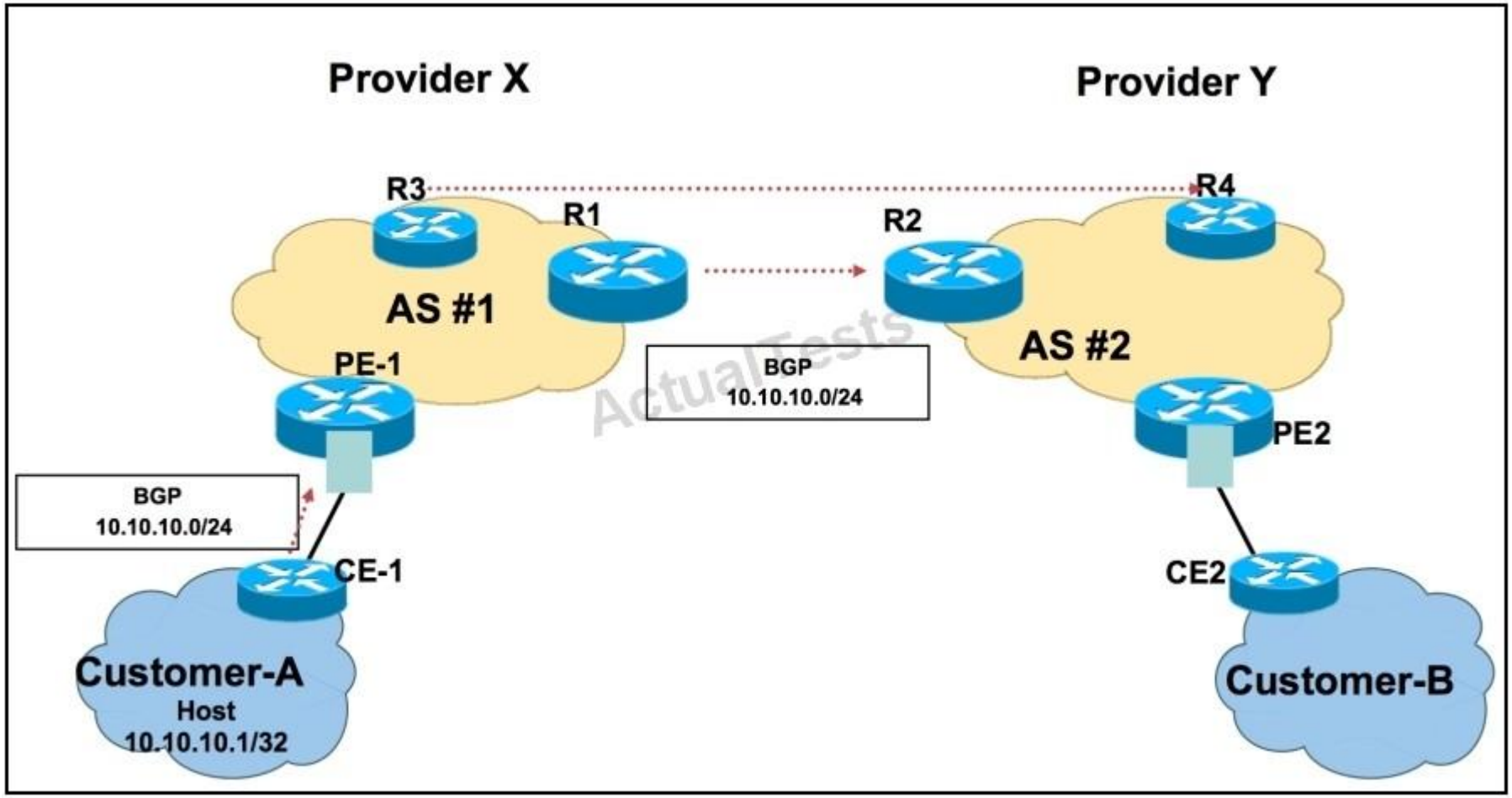
QUESTION 36
Which two functions are performed by the DR in OSPF? (Choose two.)

A. The DR originates the network LSA on behalf of the network.
B. The DR is responsible for the flooding throughout one OSPF area.
C. The DR forms adjacencies with all other OSPF routers on the network, in order to synchronize the LSDB across the adjacencies.
D. The DR is responsible for originating the type 4 LSAs into one area.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 37
Refer to the exhibit.



AS #1 and AS #2 have multiple EBGP connections with each other. AS #1 wants all return traffic that is destined to the prefix 10.10.10.1/32 to enter through the router R1 from AS #2. In order to achieve this routing policy, the AS 1 advertises a lower MED from R1, compared to a higher MED from R3, to their respective BGP neighbor for the prefix 10.10.10.0/24. Will this measure guarantee that the routing policy is always in effect?

A. Yes, because MED plays a deterministic role in return traffic engineering in BGP.
B. Yes, because a lower MED forces BGP best-path route selection in AS #2 to choose R1 as the best path for 10.10.10.0/24.
C. Yes, because a lower MED in AS #2 is the highest BGP attribute in BGP best-path route selection.
D. No, AS #2 can choose to alter the weight attribute in R2 for BGP neighbor R1, and this weight value is cascaded across AS #2 for BGP best-path route selection.

E. No, AS #2 can choose to alter the local preference attribute to overwrite the best-path route selection over the lower MED advertisement from AS #1. This local preference attribute is cascaded across AS #2 for the BGP best-path route selection.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 38
Refer to the exhibit.

```
R1>sh ip bgp 10.1.1.1
BGP routing table entry for 10.1.0.0/16, version 182
Paths: (2 available, best #1, table default, not advertised to EBGP peer)
  Advertised to update-groups:
     2
  Refresh Epoch 1
  50811 65112
    172.28.1.5 from 172.28.1.5 (192.168.236.222)
      Origin incomplete, localpref 800, valid, external, best
      Community: no-export
      rx pathid: 0, tx pathid: 0x0
  Refresh Epoch 1
  50811 65112, (received-only)
    172.28.1.5 from 172.28.1.5 (192.168.236.222)
      Origin incomplete, localpref 100, valid, external
      Community: 65112:21147 50811:11145
      rx pathid: 0, tx pathid: 0
R1>
```

What does "(received-only)" mean?

A. The prefix 10.1.1.1 can not be advertised to any eBGP neighbor.
B. The prefix 10.1.1.1 can not be advertised to any iBGP neighbor.
C. BGP soft reconfiguration outbound is applied.
D. BGP soft reconfiguration inbound is applied.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 39
Which regular expression will only allow prefixes that originated from AS 65000 and that are learned through AS 65001?

A. ^65000_65001$
B. 65000_65001$
C. ^65000_65001
D. ^65001_65000$

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 40
Which statement describes the BGP add-path feature?

A. It allows for installing multiple IBGP and EBGP routes in the routing table.
B. It allows a network engineer to override the selected BGP path with an additional path created in the config.
C. It allows BGP to provide backup paths to the routing table for quicker convergence.
D. It allows multiple paths for the same prefix to be advertised.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 41
Refer to the exhibit.

```
R1#show bgp ipv4 unicast 10.100.1.1/32
BGP routing table entry for 10.100.1.1/32, version 8
Paths: (2 available, best #1, table default, RIB-failure(17))
  Advertised to update-groups:
     2
  Refresh Epoch 2
  4
    10.1.3.4 from 10.1.3.4 (10.100.1.1)
      Origin IGP, metric 0, localpref 100, valid, external, best
      rx pathid: 0, tx pathid: 0x0
  Refresh Epoch 2
  5 4
    10.1.5.5 from 10.1.5.5 (10.1.5.5)
      Origin IGP, localpref 100, valid, external
      rx pathid: 0, tx pathid: 0
```


What is a reason for the RIB-failure?

A. CEF is not enabled on this router.
B. The route 10.100.1.1/32 is in the routing table, but not as a BGP route.
C. The routing table has yet to be updated with the BGP route.
D. The BGP route is filtered inbound and hence is not installed in the routing table.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 42
Refer to the exhibit.

```
R1#show bgp ipv4 unicast summary
BGP router identifier 10.1.3.1, local AS number 1
BGP table version is 2, main routing table version 2
1 network entries using 144 bytes of memory
1 path entries using 80 bytes of memory
1/1 BGP path/bestpath attribute entries using 144 bytes of memory
1 BGP AS-PATH entries using 24 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
BGP using 392 total bytes of memory
BGP activity 1/0 prefixes, 1/0 paths, scan interval 60 secs

Neighbor        V    AS MsgRcvd MsgSent  TblVer    InQ    OutQ  Up/Down   State/PfxRcd
10.1.1.2        4     2      69      69       2      0       0  01:00:54            0
10.1.2.3        4     3      69      70       1      0       0  01:00:45            0
10.1.3.4        4     4      72      70       2      0       0  01:01:12            1
```

Which statement is true?

A. BGP peer 10.1.2.3 is performing inbound filtering.
B. BGP peer 10.1.2.3 is a route reflector.
C. R1 is a route reflector, but BGP peer 10.1.2.3 is not a route reflector client.
D. R1 still needs to send an update to the BGP peer 10.1.2.3.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 43
Refer to the exhibit.

```
RouterA#
conf t
router isis
 net 49.5200.1580.3500.6002.00

RouterB#
conf t
router isis 1
 net 49.5200.1580.3500.6002.00
```

Router A and router B are physically connected over an Ethernet interface, and ISIS is configured as shown. Which option explains why the ISIS neighborship is not getting formed between router A and router B?

A. same area ID
B. same N selector
C. same domain ID
D. same system ID

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 44
Refer to the exhibit.

```
C#show ipv6 route ::/0
IPv6 Routing Table - 6 entries
Codes: C - Connected, L - Local, S - Static, R - RIP, B - BGP
       I1 - ISIS L1, I2 - ISIS L2, IA - ISIS interarea, IS - ISIS summary
I1  ::/0 [115/10]
     via FE80::A8BB:CCFF:FE00:401, Ethernet1/0
     via ::, Ethernet0/0
```

Which statement is true?

A. There is no issue with forwarding IPv6 traffic from this router.
B. IPv6 traffic can be forwarded from this router, but only on Ethernet1/0.
C. IPv6 unicast routing is not enabled on this router.
D. Some IPv6 traffic will be blackholed from this router.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 45
Refer to the exhibit.

```
R4#show isis database R4.00-00 detail
IS-IS Level-2 LSP R4.00-00
LSPID                 LSP Seq Num  LSP Checksum  LSP Holdtime      ATT/P/OL
R4.00-00            * 0x000022BE   0xD36A        1194              0/0/0
  Area Address: 49.0001
  NLPID:        0x81 0xCC 0x8E
  Hostname: R4
  IP Address:   10.1.100.4
  IPv6 Address: 2001:100::1:4
  Metric: 10         IS-Extended R3.00
  Metric: 10         IS-Extended R5.03
  Metric: 10         IP 10.1.1.0/24
  Metric: 10         IP 10.1.2.0/24
  Metric: 10         IP 10.1.3.0/24
  Metric: 10         IP 10.1.100.4/32
  Metric: 50         IP 10.200.200.200/32
  Metric: 10         IPv6 2001:1::1:0/112
  Metric: 10         IPv6 2001:1::2:0/112
  Metric: 10         IPv6 2001:100::1:4/128
```

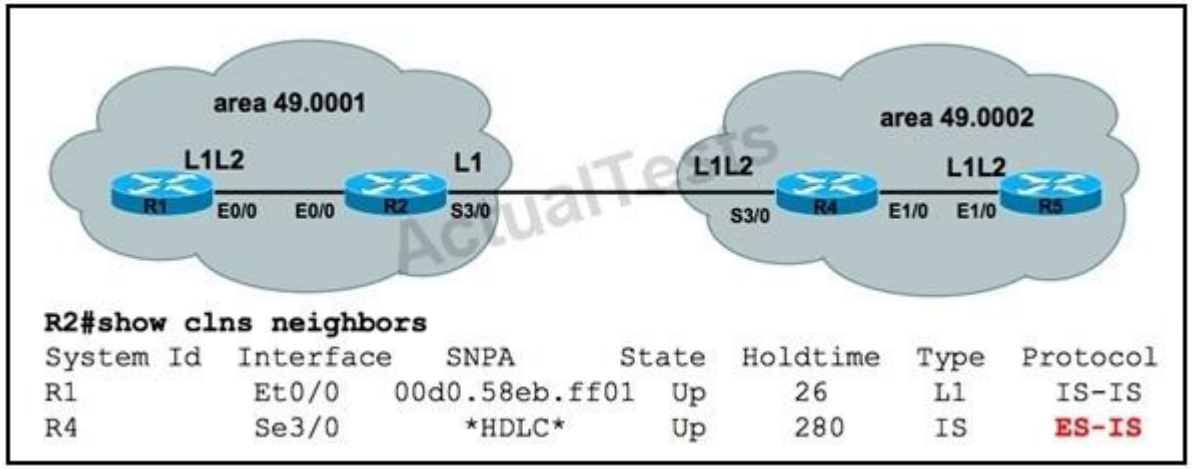

Which statement is true?

A. IS-IS has been enabled on R4 for IPv6, single-topology.
B. IS-IS has been enabled on R4 for IPv6, multitopology.
C. IS-IS has been enabled on R4 for IPv6, single-topology and multitopology.
D. R4 advertises IPv6 prefixes, but it does not forward IPv6 traffic, because the protocol has not been enabled under router IS-IS.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 46
Refer to the exhibit.



Why is the neighbor relationship between R2 and R4 shown as ES-IS?

A. because there is an MTU mismatch between R2 and R4
B. because interface S3/0 of R4 is configured as L1/L2
C. because interface S3/0 of R2 is configured as L1
D. because there is a hello interval mismatch between R2 and R4

Correct Answer: C
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 47
Refer to the exhibit.

```
R4
interface FastEthernet0/1
ip address 192.168.2.1 255.255.255.0
ip pim sparse-dense-mode
duplex auto
speed auto
standby 1 ip 192.168.2.4
standby 1 priority 150
standby 1 preempt

R5
interface FastEthernet0/1
ip address 192.168.2.2 255.255.255.0
ip pim sparse-dense-mode
duplex auto
speed auto
standby 1 ip 192.168.2.4
```


The interface FastEthernet0/1 of both routers R4 and R5 is connected to the same Ethernet segment with a multicast receiver. Which two statements are true? (Choose two)

A. Multicast traffic that is destined to a receiver with IP address 192.168.2.6 will flow through router R4.
B. Both routers R4 and R5 will send PIM join messages to the RP.
C. Only router R5 will send a multicast join message to the RP.
D. Multicast traffic that is destined to a receiver with IP address 192.168.2.6 will flow through router R5.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 48
Refer to the exhibit.

```
router ospf 100
 router-id 4.4.4.4
 area 110 nssa
 summary-address 192.168.0.0 255.255.0.0 nssa-only
 redistribute static metric-type 1 subnets tag 704
 network 110.110.0.0 0.0.255.255 area 110
```

This is the configuration of the ASBR of area 110.Which option explains why the remote ABR should not translate the type 7 LSA for the prefix 192.168.0.0/16 into a type 5 LSA?

A. The remote ABR translates all type 7 LSA into type 5 LSA, regardless of any option configured in the ASBR.
B. The ASBR sets the forwarding address to 0.0.0.0 which instructs the ABR not to translate the LSA into a type 5 LSA.
C. The ASBR originates a type 7 LSA with age equal to MAXAGE 3600.
D. The ABR clears the P bit in the header of the type 7 LSA for 192.168.0.0/16.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 49
What is the function of an EIGRP sequence TLV packet?

A. to acknowledge a set of sequence numbers during the startup update process
B. to list the peers that should listen to the next multicast packet during the reliable multicast process
C. to list the peers that should not listen to the next multicast packet during the reliable multicast process
D. to define the initial sequence number when bringing up a new peer

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

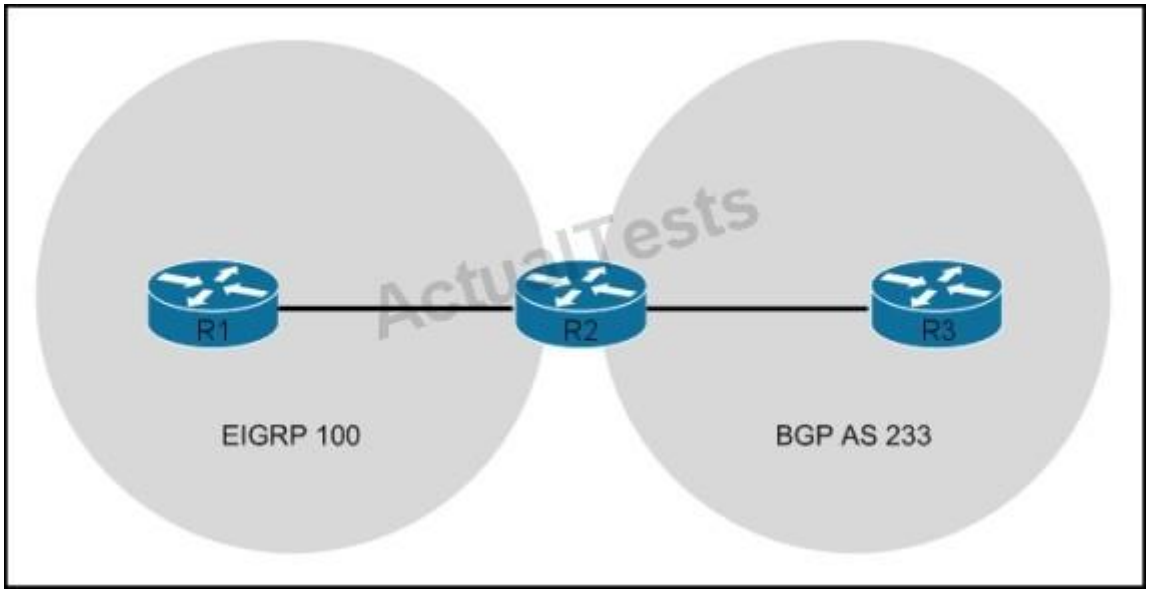
QUESTION 50
What are two reasons to define static peers in EIGRP? (Choose two.)

A. Security requirements do not allow dynamic learning of neighbors.
B. The link between peers requires multicast packets.
C. Back-level peers require static definition for successful connection.
D. The link between peers requires unicast packets.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 51
Refer to the exhibit.



R2 is mutually redistributing between EIGRP and BGP.

Which configuration is necessary to enable R1 to see routes from R3?

A. The R3 configuration must include ebgp-multihop to the neighbor statement for R2.
B. The R2 BGP configuration must include bgp redistribute-internal.
C. R1 must be configured with next-hop-self for the neighbor going to R2.
D. The AS numbers configured on R1 and R2 must match.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 52
What is the purpose of EIGRP summary leaking?

A. to allow a summary to be advertised conditionally on specific criteria
B. to allow a component of a summary to be advertised in addition to the summary
C. to allow overlapping summaries to exist on a single interface
D. to modify the metric of the summary based on which components of the summary are operational

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 53
Refer to the exhibit.

```
*May20 12:16: BGP(4):10.1.1.2 rcvd UPDATE w/ attr:nexthop 10.1.1.2,origin ?, localpref 100,metric 0,extended community RT:999:999
*May20 12:16: BGP(4):10.1.1.2 rcvd 999:999:192.168.1.99/32,label 29--DENIED due to:extended community not supported
```

You have just created a new VRF on PE3. You have enabled debug ip bgp vpnv4 unicast updates on PE1, and you can see the route in the debug, but not in the BGP VPNv4 table. Which two statements are true? (Choose two.)

A. VPNv4 is not configured between PE1 and PE3.
B. address-family ipv4 vrf is not configured on PE3.
C. After you configure route-target import 999:999 for a VRF on PE3, the route will be accepted.
D. PE1 will reject the route due to automatic route filtering.
E. After you configure route-target import 999:999 for a VRF on PE1, the route will be accepted.

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 54
Refer to the exhibit.

```
R6#debug nhrp
NHRP protocol debugging is on
*Apr 14 02:05:29.416: NHRP: Attempting to send packet through interface Tunnel0 via DEST  dst 10.250.20.1
*Apr 14 02:05:29.416: NHRP: Encapsulation succeeded.  Sending NHRP Control Packet  NBMA Address: 192.168.1.1
*Apr 14 02:05:29.416: NHRP: Send Registration Request via Tunnel0 vrf 0, packet size: 105
*Apr 14 02:05:29.416:       src: 10.250.20.6, dst: 10.250.20.1
*Apr 14 02:05:29.416: NHRP: 133 bytes out Tunnel0
*Apr 14 02:05:29.416: NHRP: Resetting retransmit due to hold-timer for 10.250.20.1
*Apr 14 02:05:30.306: NHRP: Setting retrans delay to 2 for nhs  dst 10.250.20.1

R6#sh ip nhrp brief
   Target             Via            NBMA           Mode   Intfc   Claimed
R6#
```

NHRP registration is failing; what might be the problem?

A. invalid IP addressing
B. fragmentation
C. incorrect NHRP mapping
D. incorrect NHRP authentication

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 55
In GETVPN, which key is used to secure the control plane?

A. Traffic Encryption Key (TEK)
B. content encryption key (CEK)
C. message encryption key (MEK)
D. Key Encryption Key (KEK).

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 56
Which statement is true comparing L2TPv3 to EoMPLS?

A. L2TPv3 requires OSPF routing, whereas EoMPLS does not.
B. EoMPLS requires BGP routing, whereas L2TPv3 does not.
C. L2TPv3 carries L2 frames inside MPLS tagged packets, whereas EoMPLS carries L2 frames inside IPv4 packets.
D. L2TPv3 carries L2 frames inside IPv4 packets, whereas EoMPLS carries L2 frames inside MPLS packets.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 57
Which statement is true about VPLS?

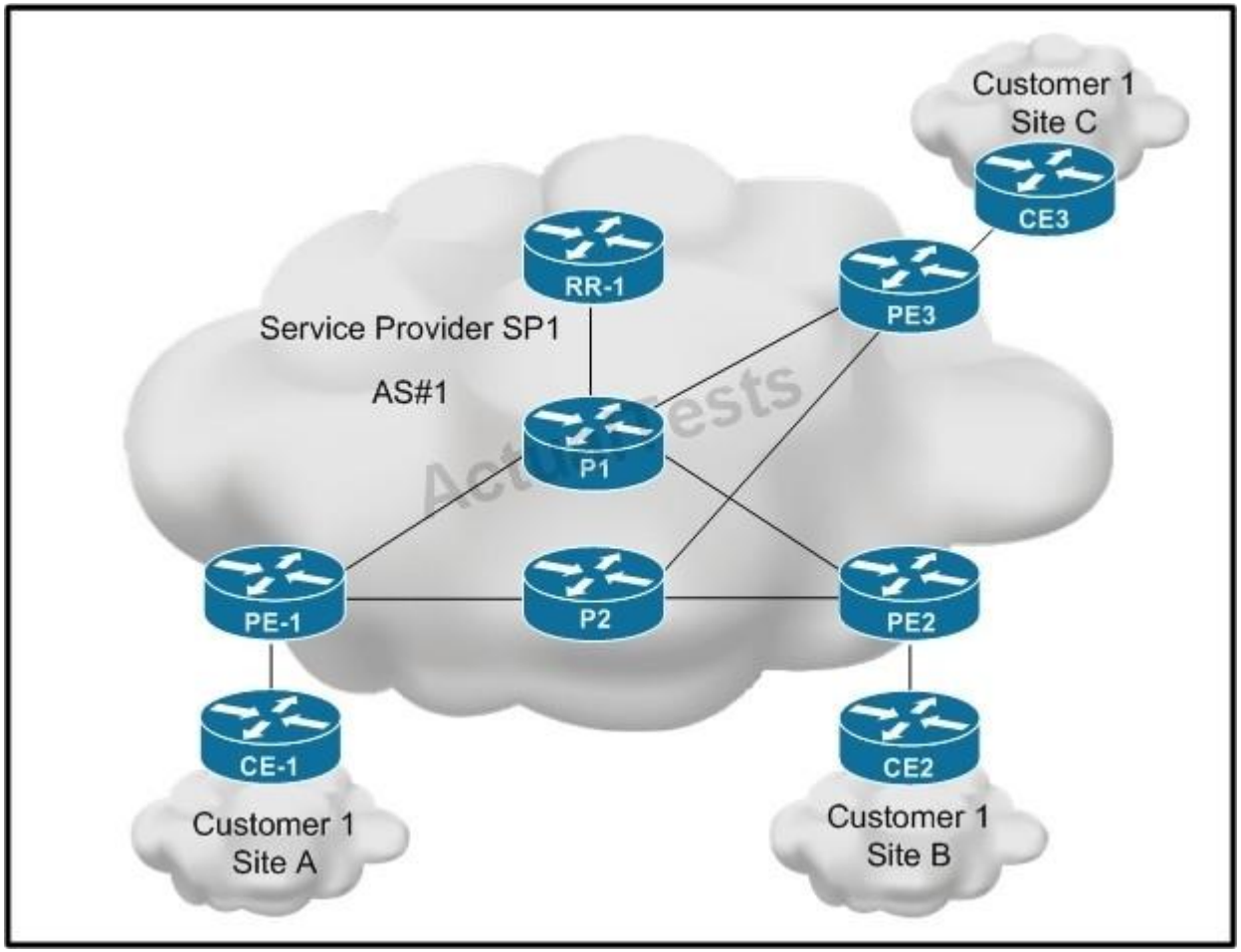
A. MPLS is not required for VPLS to work.

B. VPLS carries packets as Layer 3 multicast.
C. VPLS has been introduced to address some shortcomings of OTV.
D. VPLS requires an MPLS network.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 58
Refer to the exhibit.



Service provider SP 1 is running the MPLS-VPN service. The MPLS core network has MP-BGP configured with RR-1 as route reflector. What will be the effect on traffic between PE1 and PE2 if router P1 goes down?

A. No effect, because all traffic between PE1 and PE2 will be rerouted through P2.
B. No effect, because P1 was not the only P router in the forwarding path of traffic.
C. No effect, because RR-1 will find an alternative path for MP-BGP sessions to PE-1 and PE-2.
D. All traffic will be lost because RR-1 will lose the MP-BGP sessions to PE-1 and PE-2.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 59
According to RFC 4577, OSPF for BGP/MPLS IP VPNs, when must the down bit be set?

A. when an OSPF route is distributed from the PE to the CE, for Type 3 LSAs
B. when an OSPF route is distributed from the PE to the CE, for Type 5 LSAs
C. when an OSPF route is distributed from the PE to the CE, for Type 3 and Type 5 LSAs
D. when an OSPF route is distributed from the PE to the CE, for all types of LSAs

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 60
Refer to the exhibit.

```
IPSEC(ipsec_process_proposal): proxy identities not supported
```

What is a possible reason for the IPSEC tunnel not establishing?

A. The peer is unreachable.
B. The transform sets do not match.
C. The proxy IDs are invalid.
D. The access lists do not match.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 61
What is a key advantage of Cisco GET VPN over DMVPN?

A. Cisco GET VPN provides zero-touch deployment of IPSEC VPNs.
B. Cisco GET VPN supports certificate authentication for tunnel establishment.
C. Cisco GET VPN has a better anti-replay mechanism.
D. Cisco GET VPN does not require a secondary overlay routing infrastructure.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 62
Refer to the exhibit.

```
interface Tunnel0
 ip address 172.16.1.2 255.255.255.0
 ip nhrp map 172.16.1.1 192.168.1.1
 ip nhrp network-id 1
 ip nhrp nhs 172.16.1.1
 tunnel source 192.168.2.2
 ip mtu 1416
```

What is wrong with the configuration of the tunnel interface of this DMVPN Phase II spoke router?

A. The interface MTU is too high.
B. The tunnel destination is missing.
C. The NHRP NHS IP address is wrong.
D. The tunnel mode is wrong.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 63
Which two statements are true about VPLS? (Choose two.)

A. It can work over any transport that can forward IP packets.
B. It provides integrated mechanisms to maintain First Hop Resiliency Protocols such as HSRP, VRRP, or GLBP.
C. It includes automatic detection of multihoming.
D. It relies on flooding to propagate MAC address reachability information.
E. It can carry a single VLAN per VPLS instance.

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 64
Refer to the exhibit.

```
!
ip vrf Cust123
 rd 200:3000
 export map Cust123mgmt
 route-target export 200:3000
!
route-map Cust123mgmt permit 10
 set extcommunity rt 200:9999
!
```


What will be the extended community value of this route?

A. RT:200:3000 RT:200:9999
B. RT:200:9999 RT:200:3000
C. RT:200:3000
D. RT:200:9999

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 65
Refer to the exhibit.

```
CE1#trace
Protocol [ip]: ipv6
Target IPv6 address:  2001:db8:100:1::7
Source address: 2001:db8:100:1::5
Insert source routing header? [no]:
Numeric display? [no]:
Timeout in seconds [3]:
Probe count [3]:
Minimum Time to Live [1]:
Maximum Time to Live [30]:
Priority [0]:
Port Number [0]:
Type escape sequence to abort.
Tracing the route to 2001:10:100:1::7

  1 2001:db8:1:5::1 1 msec 1 msec 1 msec
  2 ::FFFF:10.1.2.4 [MPLS: Labels 17/23 Exp 0] 2 msec 2 msec 2 msec
  3 2001:db8:1:7::2 [AS 1] [MPLS: Label 23 Exp 0] 2 msec 1 msec 1 msec
  4 2001:db8:1:7::7 [AS 1] 2 msec 1 msec 2 msec
```


Which statement is true?

A. There is an MPLS network that is running 6PE, and the ingress PE router has no mpls ip propagate-ttl.
B. There is an MPLS network that is running 6VPE, and the ingress PE router has no mpls ip propagate-ttl.
C. There is an MPLS network that is running 6PE or 6VPE, and the ingress PE router has mpls ip propagate-ttl.
D. There is an MPLS network that is running 6PE, and the ingress PE router has mpls ip propagate-ttl.
E. There is an MPLS network that is running 6VPE, and the ingress PE router has mpls ip propagate-ttl.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 66
Refer to the exhibit.

```
vrf definition one
 rd 1:1
 route-target export 100:1
 route-target import 100:1
 !
 address-family ipv4
  route-target import 100:2
 exit-address-family
 !
 address-family ipv6
  route-target export 100:3
  route-target import 100:3
 exit-address-family
```


Which statement is true about a VPNv4 prefix that is present in the routing table of vrf one and is advertised from this router?

A. The prefix is advertised only with route target 100:1.
B. The prefix is advertised with route targets 100:1 and 100:2.
C. The prefix is advertised only with route target 100:3.
D. The prefix is not advertised.
E. The prefix is advertised with route targets 100:1, 100:2, and 100:3.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 67
Which is the way to enable the control word in an L2 VPN dynamic pseudowire connection on router R1?

A. R1(config)# pseudowire-class cw-enable
R1(config-pw-class)# encapsulation mpls
R1(config-pw-class)# set control-word
B. R1(config)# pseudowire-class cw-enable
R1(config-pw-class)# encapsulation mpls
R1(config-pw-class)# enable control-word
C. R1(config)# pseudowire-class cw-enable
R1(config-pw-class)# encapsulation mpls
R1(config-pw-class)# default control-word
D. R1(config)# pseudowire-class cw-enable
R1(config-pw-class)# encapsulation mpls
R1(config-pw-class)# control-word

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 68
What is the goal of Unicast Reverse Path Forwarding?

A. to verify the reachability of the destination address in forwarded packets
B. to help control network congestion
C. to verify the reachability of the destination address in multicast packets
D. to verify the reachability of the source address in forwarded packets

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 69
Which three features are considered part of the IPv6 first-hop security suite? (Choose three.)

A. DNS guard
B. destination guard
C. DHCP guard
D. ICMP guard
E. RA guard
F. DoS guard

Correct Answer: BCE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 70
Refer to the exhibit.

```
interface GigabitEthernet0
 ip vrf forwarding Mgmt-intf
 ip address 1.1.1.1 255.255.255.0

ip access-list extended telnet-acl
 permit tcp any 1.1.1.1 0.0.0.0 eq 23 log

line vty 0 4
 access-class telnet-acl in
 transport input telnet
```


Why is the router not accessible via Telnet on the GigabitEthernet0 management interface?

A. The wrong port is being used in the telnet-acl access list.
B. The subnet mask is incorrect in the telnet-acl access list.
C. The log keyword needs to be removed from the telnet-acl access list..
D. The access class needs to have the vrf-also keyword added.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 71
Which three modes are valid PfR monitoring modes of operation? (Choose three.)

A. route monitor mode (based on BGP route changes)
B. RMON mode (based on RMONv1 and RMONv2 data)
C. passive mode (based on NetFlow data)
D. active mode (based on Cisco IP SLA probes)
E. fast mode (based on Cisco IP SLA probes)
F. passive mode (based on Cisco IP SLA probes)

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 72
Refer to the exhibit.

```
MC#sh pfr master border detail
Border          Status   UP/DOWN             AuthFail  Version
10.1.1.1        ACTIVE   UP       00:52:21          0  3.0
 Et0/0          INTERNAL UP
 Et0/1          EXTERNAL UP

 External           Capacity      Max BW   BW Used    Load Status          Exit Id
 Interface           (kbps)       (kbps)    (kbps)     (%)
 ---------          --------      ------   ------- ------- ------          ------
 Et0/1          Tx       500         450       192      39 UP                   2
                Rx                   500        49       9
-----------------------------------------------------------------------------------
Border          Status   UP/DOWN             AuthFail  Version
10.1.1.2        ACTIVE   UP       00:52:21          0  3.0
 Et0/0          INTERNAL UP
 Et0/1          EXTERNAL UP

 External           Capacity      Max BW   BW Used    Load Status          Exit Id
 Interface           (kbps)       (kbps)    (kbps)     (%)
 ---------          --------      ------   ------- ------- ------          ------
 Et0/1          Tx       500         450       175      33 UP                   1
                Rx                   500         0       0
```


Which statement is true?

A. The Cisco PfR state is UP; however, the external interface Et0/1 of border router 10.1.1.1 has exceeded the maximum available bandwidth threshold.
B. The Cisco PfR state is UP; however, an issue is preventing the border router from establishing a TCP session to the master controller.
C. The Cisco PfR state is UP and is able to monitor traffic flows; however, MD5 authentication has not been successful between the master controller and the border routers.
D. The Cisco PfR State is UP; however, the receive capacity was not configured for inbound traffic.
E. The Cisco PfR state is UP, and the link utilization out-of-policy threshold is set to 90 percent for traffic exiting the external links.

Correct Answer: E

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 73
In the DiffServ model, which class represents the highest priority with the highest drop probability?

A. AF11
B. AF13
C. AF41
D. AF43

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 74
Refer to the exhibit.

```
Entry number: 1
Owner:
Tag:
Type of operation to perform: echo
Target address/Source address: 172.16.129.9/0.0.0.0
Type of Service parameter: 0x0
Request size (ARR data portion): 28
Operation timeout (milliseconds): 5000
Verify data: No
Vrf Name:
Schedule:
    Operation frequency (seconds): 10
    Next Scheduled Start Time: Pending trigger
    Group Scheduled : FALSE
    Randomly Scheduled : FALSE
    Life (seconds): 3600
    Entry Ageout (seconds): never
    Recurring (Starting Everyday): FALSE
    Status of entry (SNMP RowStatus): notInService
Threshold (milliseconds): 5000
Distribution Statistics:
    Number of statistic hours kept: 2
    Number of statistic distribution buckets kept: 1
    Statistic distribution interval (milliseconds): 20
History Statistics:
    Number of history Lives kept: 0
    Number of history Buckets kept: 15
    History Filter Type: None
Enhanced History:
```

Which statement about this IP SLA is true?

A. The SLA must also have a schedule configured before it will start.
B. The TTL of the SLA packets is 10.
C. The SLA has a timeout of 3.6 seconds.
D. The SLA has a lifetime of 5 seconds.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 75
Which three actions are required when configuring NAT-PT? (Choose three.)

A. Enable NAT-PT globally.
B. Specify an IPv4-to-IPv6 translation.
C. Specify an IPv6-to-IPv4 translation.
D. Specify a ::/96 prefix that will map to an IPv4 address.
E. Specify a ::/48 prefix that will map to a MAC address.
F. Specify a ::/32 prefix that will map to an IPv6 address.

Correct Answer: BCD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 76
Refer to the exhibit.

```
#show interface FastEthernet0/0
FastEthernet0/0 is up, line protocol is up
  Hardware is PQII_PRO_UEC, address is 0024.14ac.0d3c (bia 001f.9e3c.a5c2)
  Internet address is 1.1.1.1/24
  MTU 1500 bytes, BW 100000 Kbit/sec, DLY 10 usec,
     reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full Duplex, 100Mbps, media type is RJ45
  output flow-control is XON, input flow-control is XON
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:00, output 00:00:00, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/1000/0/0 (size/max/drops/flushes); Total output drops: 10000
  Queueing strategy: Class-based queueing
  Output queue: 100/1000/10000 (size/max total/drops)
  30 second input rate 361000 bits/sec, 204 packets/sec
  30 second output rate 711000000 bits/sec, 223000 packets/sec
     1221583901 packets input, 3044421428 bytes, 0 no buffer
     Received 91124750 broadcasts (0 IP multicasts)
     0 runts, 0 giants, 0 throttles
     0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
     0 watchdog, 0 multicast, 0 pause input
     1090847722 packets output, 796667418 bytes, 0 underruns
     0 output errors, 0 collisions, 0 interface resets
     0 unknown protocol drops
     0 babbles, 0 late collision, 0 deferred
     0 lost carrier, 0 no carrier, 0 pause output
     0 output buffer failures, 0 output buffers swapped out
```

Which two are causes of output queue drops on FastEthernet0/0? (Choose two.)

A. an oversubscribed input service policy on FastEthernet0/0
B. a duplex mismatch on FastEthernet0/0
C. a bad cable connected to FastEthernet0/0
D. an oversubscribed output service policy on FastEthernet0/0
E. The router trying to send more than 100 Mb/s out of FastEthernet0/0

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 77
Which two DHCP messages are always sent as broadcast? (Choose two.)

A. DHCPOFFER
B. DHCPDECLINE
C. DHCPRELEASE
D. DHCPREQUEST
E. DHCPDISCOVER

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 78
Refer to the exhibit.

```
Router#show ip cache flow
[...]
SrcIf         SrcIPaddress    DstIf         DstIPaddress    Pr SrcP DstP  Pkts
Vl1           144.254.10.206  Local         10.48.77.208    06 C363 01BB     2
```

Which statement about the output is true?

A. The flow is an HTTPS connection to the router, which is initiated by 144.254.10.206.
B. The flow is an HTTP connection to the router, which is initiated by 144.254.10.206.
C. The flow is an HTTPS connection that is initiated by the router and that goes to 144.254.10.206.
D. The flow is an HTTP connection that is initiated by the router and that goes to 144.254.10.206.

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 79
Refer to the exhibit.

```
Cos-dscp map:
cos:    0  1  2  3  4  5  6  7
----------------------------
dscp:   0  8 16 46 36 38 42 32
```

Which statement about this COS-DSCP mapping is true?

A. COS 3 is mapped to the expedited forwarding DSCP.
B. COS 16 is mapped to DSCP 2.
C. The default COS is mapped to DSCP 32.
D. This mapping is the default COS-DSCP mapping on Cisco switches.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 80
Which three statements about implementing a NAT application layer gateway in a network are true? (Choose three.)

A. It allows client applications to use dynamic ports to communicate with a server regardless of whether NAT is being used.
B. It maintains granular security over application-specific data.
C. It allows synchronization between multiple streams of data between two hosts.
D. Application layer gateway is used only in VoIP/SIP deployments.
E. Client applications require additional configuration to use an application layer gateway.
F. An application layer gateway inspects only the first 64 bytes of a packet before forwarding it through the network.

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 81
Refer to the exhibit.

```
RouterA(config)#ip options drop
```

At which location will the benefit of this configuration be observed?

A. on Router A and its upstream routers
B. on Router A and its downstream routers
C. on Router A only
D. on Router A and all of its ARP neighbors

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 82
Where is multicast traffic sent, when it is originated from a spoke site in a DMVPN phase 2 cloud?

A. spoke-spoke
B. nowhere, because multicast does not work over DMVPN
C. spoke-spoke and spoke-hub
D. spoke-hub

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 83
Refer to the exhibit.

```
Router-A# show ip nhrp
10.0.2.1/32 via 10.0.2.1, Tunnel0 created 00:00:21, expire 00:05:38
  Type: dynamic, Flags: authoritative unique registered used
NBMA address: 144.254.21.2
  (Claimed NBMA address: 172.16.2.1)

Router-B# show ip nhrp
10.0.1.1/32 via 10.0.1.1, Tunnel0 created 00:00:13, expire 00:05:48
  Type: dynamic, Flags: authoritative unique registered used
NBMA address: 72.34.1.2
```


A spoke site that is connected to Router-A cannot reach a spoke site that is connected to Router- B, but both spoke sites can reach the hub. What is the likely cause of this issue?

A. There is a router doing PAT at site B.
B. There is a router doing PAT at site A.
C. NHRP is learning the IP address of the remote spoke site as a /32 address rather than a /24 address.
D. There is a routing issue, as NHRP registration is working.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 84
Which mechanism can be used on Layer 2 switches so that only multicast packets with downstream receivers are sent on the multicast router-connected ports?

A. IGMP snooping
B. Router Guard
C. PIM snooping

D. multicast filtering

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 85
What is the cause of ignores and overruns on an interface, when the overall traffic rate of the interface is low?

A. a hardware failure of the interface
B. a software bug
C. a bad cable
D. microbursts of traffic

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

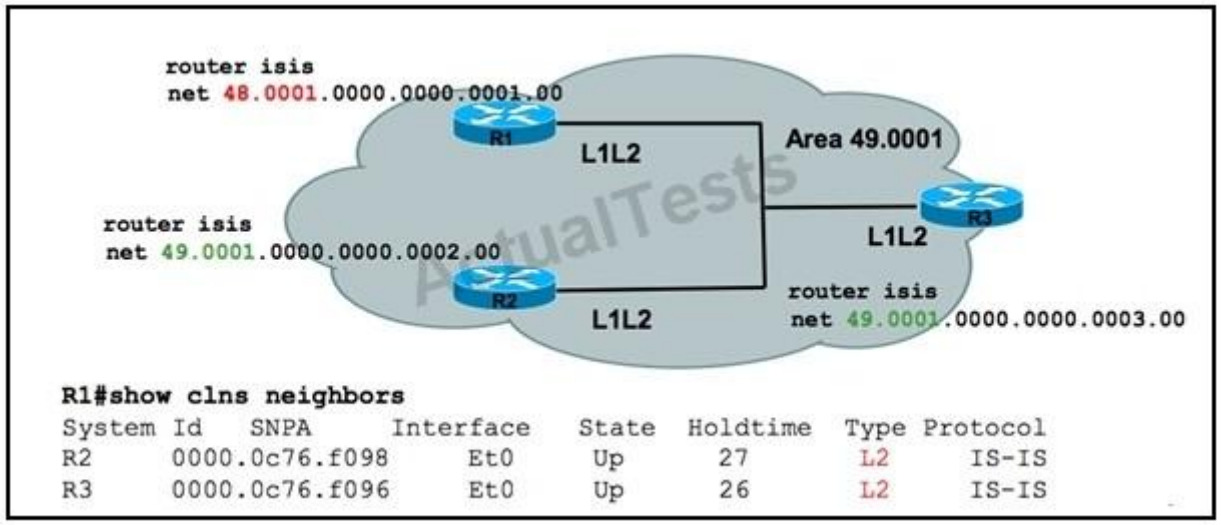
QUESTION 86
With which ISs will an ISIS Level 1 IS exchange routing information?

A. Level 1 ISs
B. Level 1 ISs in the same area
C. Level 1 and Level 2 ISs
D. Level 2 ISs

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 87
Refer to the exhibit.



Why is the neighbor relationship between R1 & R2 and R1 & R3 an L2-type neighborship?

A. because the area ID on R1 is different as compared to the area ID of R2 and R3
B. because the circuit type on those three routers is L1/L2
C. because the network type between R1, R2, and R3 is point-to-point
D. because the hello interval is not the same on those three routers

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 88
Which three statements about the designated router election in IS-IS are true? (Choose three.)

A. If the IS-IS DR fails, a new DR is elected.
B. The IS-IS DR will preempt. If a new router with better priority is added, it just becomes active in the network.
C. If there is a tie in DR priority, the router with a higher IP address wins.
D. If there is a tie in DR priority, the router with a higher MAC address wins.

E. If the DR fails, the BDR is promoted as the DR.
F. The DR is optional in a point-to-point network.

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 89
Which three elements compose a network entity title? (Choose three.)

A. area ID
B. domain ID
C. system ID
D. NSAP selector
E. MAC address
F. IP address

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 90
Which statement about shaped round robin queuing is true?

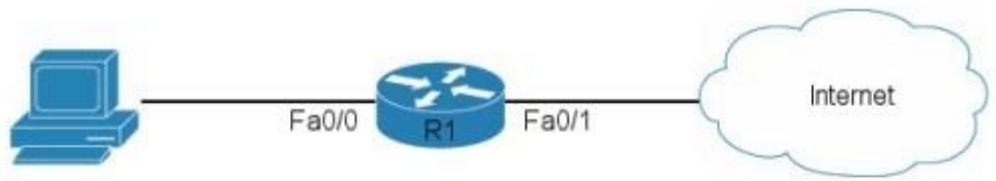
A. Queues with higher configured weights are serviced first.
B. The device waits a period of time, set by the configured weight, before servicing the next queue.
C. The device services a single queue completely before moving on to the next queue.
D. Shaped mode is available on both the ingress and egress queues.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 91
Refer to the exhibit.




```
class-map VOICE
match ip dscp ef
class-map VIDEO
match ip dscp 41
policy-map EGRESS
class VOICE
priority percent 20
class VIDEO
bandwidth percent 50
class class-default
bandwidth remaining percent 15
!
interface FastEthernet0/0
description CUSTOMER-100Mbps
ip address 192.168.1.1 255.255.255.0
!
interface FastEthernet0/1
description INTERNET-10Mbps
ip address 209.165.200.226 255.255.255.224
service-policy output EGRESS
!
```


You discover that only 1.5 Mb/s of web traffic can pass during times of congestion on the given network.

Which two options are possible reasons for this limitation? (Choose two.)

A. The web traffic class has too little bandwidth reservation.
B. Video traffic is using too much bandwidth.

C. The service-policy is on the wrong interface.
D. The service-policy is going in the wrong direction.
E. The NAT policy is adding too much overhead.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 92
Refer to the exhibit.

```
San_Jose#show debug
Load for five secs: 0%/0%; one minute: 0%; five minutes: 0%
Time source is NTP, 09:10:59.124 PST Thu Aug 22 2013
Condition 1: ip 172.16.129.4 (0 flags triggered)
```


Which statement about the debug behavior of the device is true?

A. The device debugs all IP events for 172.16.194.4.
B. The device sends all debugging information for 172.16.194.4.
C. The device sends only NTP debugging information to 172.16.194.4.
D. The device sends debugging information every five seconds.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 93
Refer to the exhibit.

```
snmp-server community public RO 2
snmp-server trap-source Loopback0
snmp-server chassis-id HONGKONG
snmp-server enable traps snmp linkdown linkup coldstart
snmp-server enable traps ospf state-change
snmp-server enable traps bgp state-changes
snmp-server enable traps pim neighbor-change
snmp-server enable traps cpu threshold
snmp-server enable traps mpls ldp
snmp-server host 192.168.252.254 version 2c public
```

Which statement about this device configuration is true?

A. The NMS needs a specific route configured to enable it to reach the Loopback0 interface of the device.
B. The ifindex of the device could be different when the device is reloaded.
C. The device will allow anyone to poll it via the public community.
D. The device configuration requires the AuthNoPriv security level.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 94
Which three steps are necessary to enable SSH? (Choose three.)

A. generating an RSA or DSA cryptographic key
B. configuring the version of SSH
C. configuring a domain name
D. configuring VTY lines for use with SSH
E. configuring the port for SSH to listen for connections
F. generating an AES or SHA cryptographic key

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 95
Which two features does the show ipv6 snooping features command show information about? (Choose two.)

A. RA guard
B. DHCP guard
C. ND inspection
D. source guard

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 96
Refer to the exhibit.

```
R1#sh policy-map control-plane

Service-policy input: CoPP-POLICY

   Class-map: CoPP-CLASS (match-all)
      8 packets, 480 bytes
      5 minute offered rate 0 bps, drop rate 0 bps
      Match: access-group name R9-TO-R2
      police:
         rate 10 pps, burst 0 packets
         conformed 0 packets; actions:
         drop
         exceeded 8 packets; actions:
         drop
         conformed 0 pps, exceed 0 pps

   Class-map: class-default (match-any)
      929 packets, 86395 bytes
      5 minute offered rate 0 bps, drop rate 0 bps
      Match: any

R1#sh access-lists
Extended IP access list R9-TO-R2
   10 permit tcp host 10.1.1.9 host 10.10.10.1 eq telnet (4 matches)
   20 deny tcp any any eq telnet (9 matches)
```


Which two statements about how the configuration processes Telnet traffic are true? (Choose two.)

A. Telnet traffic from 10.1.1.9 to 10.10.10.1 is dropped.
B. All Telnet traffic is dropped.
C. Telnet traffic from 10.10.10.1 to 10.1.1.9 is permitted.
D. Telnet traffic from 10.1.1.9 to 10.10.10.1 is permitted.
E. Telnet traffic is permitted to all IP addresses.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 97
Which three statements are functions that are performed by IKE phase 1? (Choose three.)

A. It builds a secure tunnel to negotiate IKE phase 1 parameters.
B. It establishes IPsec security associations.
C. It authenticates the identities of the IPsec peers.
D. It protects the IKE exchange by negotiating a matching IKE SA policy.
E. It protects the identities of IPsec peers.
F. It negotiates IPsec SA parameters.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 98
The session status for an IPsec tunnel with IPv6-in-IPv4 is down with the error message IKE message from 10.10.1.1 failed its sanity check or is malformed.

Which statement describes a possible cause of this error?

A. There is a verification failure on the IPsec packet.
B. The SA has expired or has been cleared.
C. The pre-shared keys on the peers are mismatched.
D. There is a failure due to a transform set mismatch.
E. An incorrect packet was sent by an IPsec peer.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 99
Which three statements describe the characteristics of a VPLS architecture? (Choose three.)

A. It forwards Ethernet frames.
B. It maps MAC address destinations to IP next hops.
C. It supports MAC address aging.
D. It replicates broadcast and multicast frames to multiple ports.
E. It conveys MAC address reachability information in a separate control protocol.
F. It can suppress the flooding of traffic.

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 100
A GRE tunnel is down with the error message %TUN-5-RECURDOWN: Tunnel0 temporarily disabled due to recursive routing error.

Which two options describe possible causes of the error? (Choose two.)

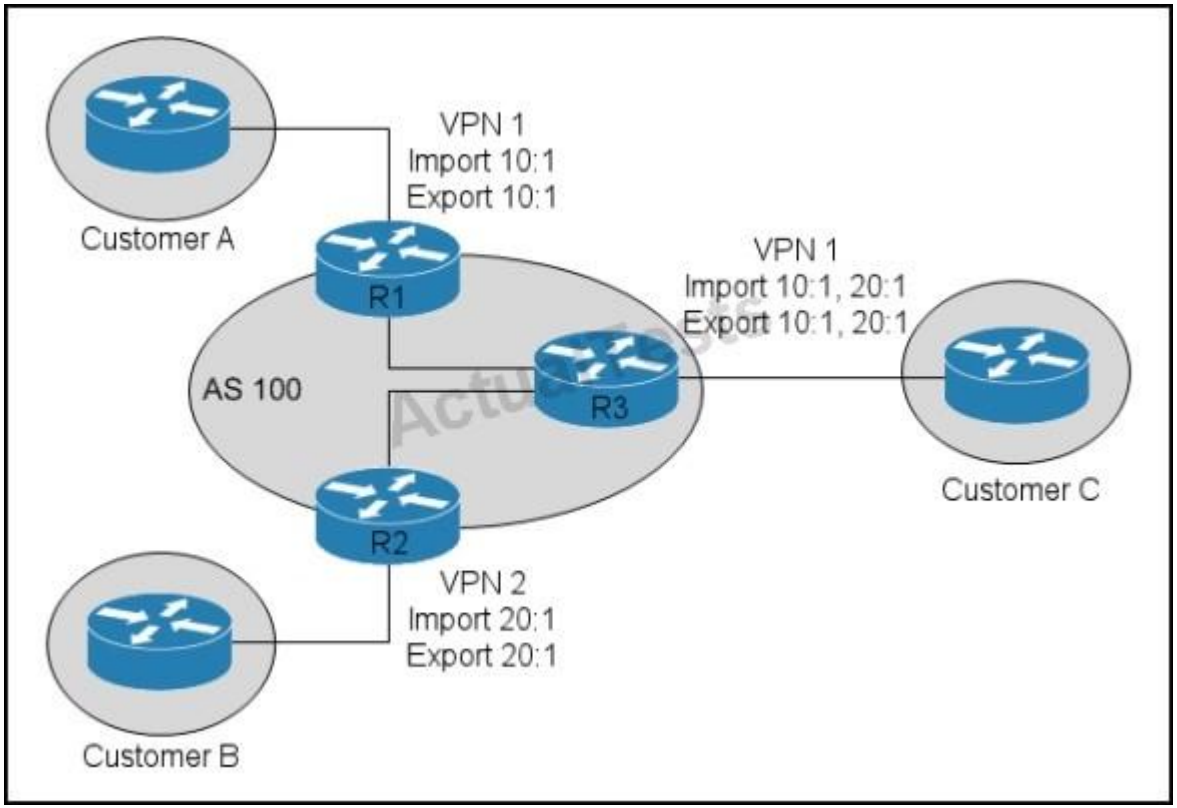
A. Incorrect destination IP addresses are configured on the tunnel.
B. There is link flapping on the tunnel.
C. There is instability in the network due to route flapping.
D. The tunnel mode and tunnel IP address are misconfigured.
E. The tunnel destination is being routed out of the tunnel interface.

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Topic 2, Volume B

QUESTION 101
Refer to the exhibit.



Which two statements about the VPN solution are true? (Choose two.)

A. Customer A and customer B will exchange routes with each other.
B. R3 will advertise routes received from R1 to R2.
C. Customer C will communicate with customer A and B.
D. Communication between sites in VPN1 and VPN2 will be blocked.
E. R1 and R2 will receive VPN routes advertised by R3.

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 102
Which three statements about IS-IS are true? (Choose three.)

A. IS-IS can be used only in the service provider network.
B. IS-IS can be used to route both IP and CLNP.
C. IS-IS has three different levels of authentication: interface level, process level, and domain level.
D. IS-IS is an IETF standard.
E. IS-IS has the capability to provide address summarization between areas.

Correct Answer: BCE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 103
Which mechanism does Cisco recommend for CE router interfaces that face the service provider for an EVPL circuit with multiple EVCs and multiple traffic classes?

A. HCBWFQ
B. LLQ
C. tail drop
D. WRED

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 104
Which Carrier Ethernet service supports the multiplexing of multiple point-to-point EVCs across as a single UNI?

A. EPL
B. EVPL
C. EMS
D. ERMS

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 105
Which technology can be used to prevent flooding of IPv6 multicast traffic on a switch?

A. IGMP snooping
B. IGMP filtering
C. MLD snooping
D. MLD filtering

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 106
Refer to the exhibit.

```
event manager applet LARGECONFIG
   event cli pattern "show running-config" sync yes
   action 1.0 puts "Warning! This device has a VERY LARGE configuration
         and may take some time to process"
   action 1.1 puts nonewline "Do you wish to continue [Y/N]"
   action 1.2 gets response
   action 1.3 string toupper "$response"
   action 1.4 string match "$_string_result" "Y"
   action 2.0 if $_string_result eq 1
   action 2.1 cli command "enable"
   action 2.2 cli command "show running-config"
   action 2.3 puts $_cli_result
   action 2.4 cli command "exit"
   action 2.9 end
```

Which two statements about the EEM applet configuration are true? (Choose two.)

A. The EEM applet runs before the CLI command is executed.
B. The EEM applet runs after the CLI command is executed.
C. The EEM applet requires a case-insensitive response.
D. The running configuration is displayed only if the letter Y is entered at the CLI.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 107
Which variable in an EEM applet is set when you use the sync yes option?

A. $_cli_result
B. $_result
C. $_string_result
D. $_exit_status

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 108
Which two options are advantages of NetFlow version 9 over NetFlow version 5? (Choose two.)

A. NetFlow version 9 adds support for IPv6 headers.
B. NetFlow version 9 adds support for MPLS labels.
C. NetFlow version 9 adds support for the Type of Service field.
D. NetFlow version 9 adds support for ICMP types and codes.

Correct Answer: AB
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 109
Refer to the exhibit.

```
Flow export v5 is enabled for main cache
   Export source and destination details :
   VRF ID : Default
      Destination(1)  10.5.206.250 (9995)
   Version 5 flow records
   Cache for prefix aggregation:
      Flow export is disabled
   53 flows exported in 18 udp datagrams
   0 flows failed due to lack of export packet
   0 export packets were sent up to process level
   0 export packets were dropped due to no fib
   0 export packets were dropped due to adjacency issues
   0 export packets were dropped due to fragmentation failures
   0 export packets were dropped due to encapsulation fixup failures
   0 export packets were dropped enqueuing for the RP
   0 export packets were dropped due to IPC rate limiting
   0 export packets were dropped due to Card not being able to export
```

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

A. It indicates that prefix aggregation cache export is enabled on the device.
B. It was obtained with the show ip cache flow command.
C. It indicates that the device is using NetFlow version 5.
D. It indicates that the flows are being sent to a destination using an RFC1918 address.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 110
Which statement describes the function of the tracking object created by the track 10 ip route 192.168.99.0/24 reachability command?

A. It tracks the reachability of route 192.168.99.0/24.
B. It tracks the line protocol status of the interface on which route 192.168.99.0/24 is received.
C. It tracks exactly 10 occurrences of route 192.168.99.0/24.
D. It tracks the summary route 192.168.99.0/24 and all routes contained within.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 111
Refer to the exhibit.

```
Switch#show interfaces fastEthernet0/1 switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 3 (VLAN0003)
Administrative Native VLAN tagging: enabled
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk Native VLAN tagging: enabled
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: 4-100
Pruning VLANs Enabled: 100-200
Capture Mode Disabled
Capture VLANs Allowed: ALL

Protected: false
Unknown unicast blocked: disabled
Unknown multicast blocked: disabled
Appliance trust: none
```

Which VLANs are permitted to send frames out port FastEthernet0/1?

A. 100 - 200
B. 4 - 100
C. 1 and 4 - 100
D. 3 and 4 - 100

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 112
Which option is the default maximum age of the MAC address table?

A. 300 seconds
B. 500 seconds
C. 1200 seconds
D. 3600 seconds

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 113
Which statement about MSS is true?

A. It is negotiated between sender and receiver.
B. It is sent in all TCP packets.
C. It is 20 bytes lower than MTU by default.
D. It is sent in SYN packets.
E. It is 28 bytes lower than MTU by default.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 114
Which two methods change the IP MTU value for an interface? (Choose two.)

A. Configure the default MTU.
B. Configure the IP system MTU.

C. Configure the interface MTU.
D. Configure the interface IP MTU.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 115
Which implementation can cause packet loss when the network includes asymmetric routing paths?

A. the use of ECMP routing
B. the use of penultimate hop popping
C. the use of Unicast RPF
D. disabling Cisco Express Forwarding

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 116
Which two mechanisms can be used to eliminate Cisco Express Forwarding polarization? (Choose two.)

A. alternating cost links
B. the unique-ID/universal-ID algorithm
C. Cisco Express Forwarding antipolarization
D. different hashing inputs at each layer of the network

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 117
Which two mechanisms provide Cisco IOS XE Software with control plane and data plane separation? (Choose two.)

A. Forwarding and Feature Manager
B. Forwarding Engine Driver
C. Forwarding Performance Management
D. Forwarding Information Base

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 118
Which group of neighbors can be configured as a BGP peer group?

A. a group of iBGP neighbors that have the same outbound route policies
B. a group of iBGP and eBGP neighbors that have the same inbound distribute-list
C. a group of eBGP neighbors in the same autonomous system that have different outbound route policies
D. a group of iBGP neighbors that have different outbound route policies

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 119
Refer to the exhibit.

```
BGP(0): 10.1.3.4 rcvd UPDATE w/ attr: nexthop 10.1.3.4, origin i,
metric 0, merged path 4, AS_PATH
BGP(0): 10.1.3.4 rcvd 10.100.1.1/32...duplicate ignored
```

Notice that debug ip bgp updates has been enabled. What can you conclude from the debug output?

A. This is the result of the clear ip bgp 10.1.3.4 in command.
B. This is the result of the clear ip bgp 10.1.3.4 out command.
C. BGP neighbor 10.1.3.4 performed a graceful restart.
D. BGP neighbor 10.1.3.4 established a new BGP session.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 120
In the DiffServ model, which class represents the lowest priority with the lowest drop probability?

A. AF11
B. AF13
C. AF41
D. AF43

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 121
Which set of commands conditionally advertises 172.16.0.0/24 as long as 10.10.10.10/32 is in the routing table?

A.

```
neighbor x.x.x.x advertise-map ADV exist-map EXT
route-map ADV
 match IP address prefix-list ADV
!
route-map EXT
 match IP address prefix-list EXT
!
ip prefix-list EXT permit 172.16.0.0/24
!
ip prefix-list ADV permit 10.10.10.10/32
```

B.

```
neighbor x.x.x.x advertise-map ADV exist-map EXT
route-map ADV
 match IP address prefix-list ADV
!
route-map EXT
 match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```

C.

```
neighbor x.x.x.x advertise-map ADV
noute-map ADV
 match IP address prefix-list ADV
 match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```

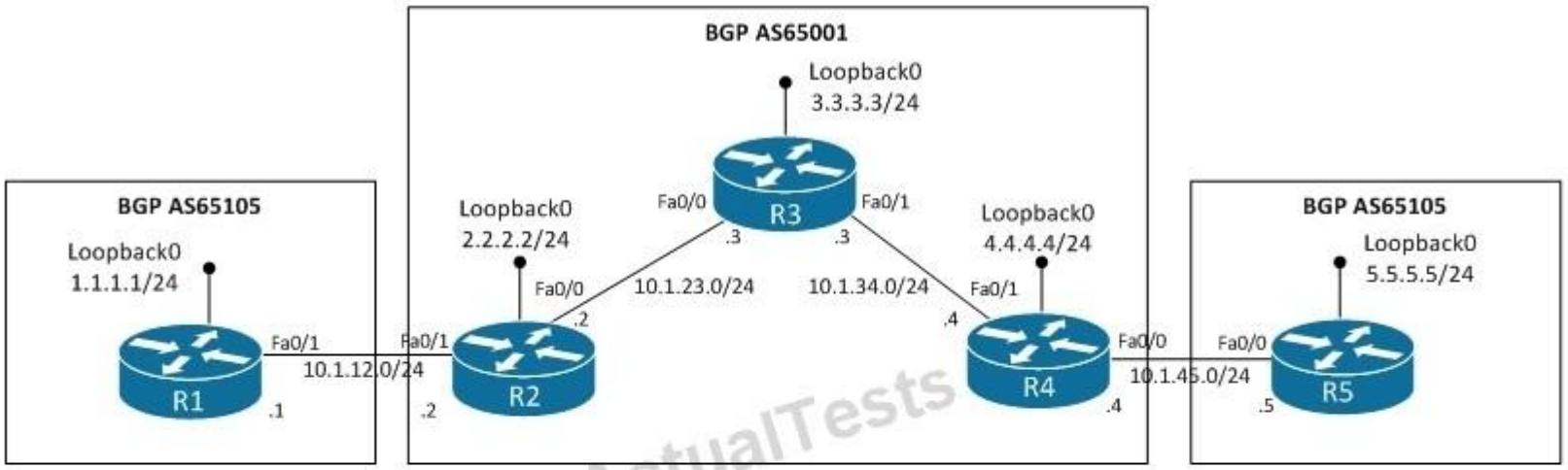
D.

```
neighbor x.x.x.x exist-map EXT
route-map EXT
 match IP address prefix-list ADV
 match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 122
Refer to the exhibit.




```
R2#sh ip bgp
BGP table version is 4, local router ID is 2.2.2.2
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
              r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network          Next Hop            Metric LocPrf Weight Path
*> 1.1.1.0/24       10.1.12.1                0             0 65105 i
*> 2.2.2.0/24       0.0.0.0                  0         32768 i
*>i3.3.3.0/24       10.1.23.3                0    100      0 i
*  i4.4.4.0/24       10.1.34.4                0    100      0 i
```

Why is R2 unable to ping the loopback interface of R4?

A. The local preference is too high.
B. The weight is too low.
C. The next hop is not reachable from R2.
D. The route originated from within the same AS.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 123
Refer to the exhibit.

```
Switch# show spanning-tree vlan 1 detail

VLAN0001 is executing the ieee compatible Spanning Tree protocol
  Bridge Identifier has priority 32768, sysid 1, address 0007.0e8f.04c0
  Configured hello time 2, max age 20, forward delay 15
  Current root has priority 8192, address 0007.4f1c.e847
  Root port is 65 (GigabitEthernet2/1), cost of root path is 119
  Topology change flag not set, detected flag not set
  Number of topology changes 1 last change occurred 00:00:35 ago
          from GigabitEthernet1/1
  Times:  hold 1, topology change 35, notification 2
          hello 2, max age 20, forward delay 15
  Timers: hello 0, topology change 0, notification 0, aging 300
```

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

A. 802.1D spanning tree is being used.
B. Setting the priority of this switch to 0 for VLAN 1 would cause it to become the new root.
C. The hello, max-age, and forward delay timers are not set to their default values.
D. Spanning-tree PortFast is enabled on GigabitEthernet1/1.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 124
Which statement about the BGP originator ID is true?

A. The route reflector always sets the originator ID to its own router ID.
B. The route reflector sets the originator ID to the router ID of the route reflector client that injects the route into the AS.
C. The route reflector client that injects the route into the AS sets the originator ID to its own router ID.
D. The originator ID is set to match the cluster ID.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 125
Refer to the exhibit.

```
R5#show ip bgp
BGP table version is 24, local router ID is 10.100.1.5
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
              r RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete
   Network          Next Hop            Metric LocPrf Weight Path
*> 10.100.1.1/32    10.1.1.1                 0    100      0 65001 23456 2 i
r> 10.100.1.2/32    10.1.2.1                 0    100      0 65001 23456 i
```

Which two statements are true? (Choose two.)

A. This router is not 4-byte autonomous system aware.
B. This router is 4-byte autonomous system aware.
C. The prefix 10.100.1.1/32 was learned through an autonomous system number with a length of 4 bytes, and this router is 4-byte autonomous system aware.
D. The prefix 10.100.1.1/32 was learned through an autonomous system number with a length of 4 bytes, and this router is not 4-byte autonomous system aware.
E. The prefix 10.100.1.1/32 was originated from a 4-byte autonomous system.

Correct Answer: AD

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 126
Refer to the exhibit.

```
R2# show bgp ipv4 unicast summary

BGP router identifier 10.100.1.2, local AS number 2

BGP table version is 1, main routing table version 1


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

10.100.1.1      4            1       0       0        1    0    0 6d20h    Idle (PfxCt)
```


Which command is configured on this router?

A. bgp update-delay 60
B. neighbor 10.100.1.1 maximum-prefix 200
C. neighbor 10.100.1.1 maximum-path 2
D. neighbor 10.100.1.1 ebgp-multihop 2

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 127
What is the purpose of Route Target Constraint?

A. to avoid using route reflectors in MPLS VPN networks
B. to avoid using multiple route distinguishers per VPN in MPLS VPN networks
C. to be able to implement VPLS with BGP signaling

D. to avoid sending unnecessary BGP VPNv4 or VPNv6 updates to the PE router
E. to avoid BGP having to perform route refreshes

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 128
Refer to the exhibit.

```
R3#sho ip bgp 172.16.1.0
BGP routing table entry for 172.16.1.0/24, version 5
Paths: (1 available, no best path)
Not advertised to any peer
Refresh Epoch 1
1
192.168.1.1 (inaccessible) from 192.168.2.1 (192.168.3.1)
 Origin IGP, metric 0, localpref 100, valid, internal
 rx pathid: 0x0, tx pathid: 0
```


Why is network 172.16.1.0/24 not installed in the routing table?

A. There is no ARP entry for 192.168.1.1.
B. The router cannot ping 192.168.1.1.
C. The neighbor 192.168.1.1 just timed out and BGP will flush this prefix the next time that the BGP scanner runs.
D. There is no route for 192.168.1.1 in the routing table.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 129
Which two statements about port ACLs are true? (Choose two.)

A. Port ACLs are supported on physical interfaces and are configured on a Layer 2 interface on a switch.
B. Port ACLs support both outbound and inbound traffic filtering.
C. When it is applied to trunk ports, the port ACL filters only native VLAN traffic.
D. When it is applied to a port with voice VLAN, the port ACL filters both voice and data VLAN traffic.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 130
Which two statements about private VLANs are true? (Choose two.)

A. Only one isolated VLAN can be mapped to a primary VLAN.
B. Only one community VLAN can be mapped to a primary VLAN.
C. Multiple isolated VLANs can be mapped to a primary VLAN.
D. Multiple community VLANs can be mapped to a primary VLAN.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 131
Refer to the exhibit.

```
Routing Process "ospf 1" with ID 1.1.1.1
Start time: 1w5d, Time elapsed: 4d11h
Supports only single TOS(TOS0) routes
Supports opaque LSA
Supports Link-local Signaling (LLS)
Supports area transit capability
Router is not originating router-LSAs with maximum metric
Initial SPF schedule delay 5000 msecs
Minimum hold time between two consecutive SPFs 10000 msecs
Maximum wait time between two consecutive SPFs 10000 msecs
Incremental-SPF disabled
Minimum LSA interval 5 secs
Minimum LSA arrival 1000 msecs
LSA group pacing timer 240 secs
Interface flood pacing timer 33 msecs
Retransmission pacing timer 66 msecs
Number of external LSA 0. Checksum Sum 0x000000
Number of opaque AS LSA 0. Checksum Sum 0x000000
Number of DCbitless external and opaque AS LSA 0
Number of DoNotAge external and opaque AS LSA 0
Number of areas in this router is 1. 1 normal 0 stub 0 nssa
Number of areas transit capable is 0
External flood list length 0
IETF NSF helper support enabled
Cisco NSF helper support enabled
Reference bandwidth unit is 100 mbps
   Area BACKBONE(0)
       Number of interfaces in this area is 2 (1 loopback)
       Area has no authentication
       SPF algorithm last executed 00:00:11.176 ago
       SPF algorithm executed 7 times
       Area ranges are
       Number of LSA 3. Checksum Sum 0x0140E9
       Number of opaque link LSA 0. Checksum Sum 0x000000
       Number of DCbitless LSA 0
       Number of indication LSA 0
       Number of DoNotAge LSA 0
       Flood list length 0
```

Which two statements are true? (Choose two.)

A. This is the output of the show ip ospf command.
B. This is the output of the show ip protocols command.
C. This router is an ABR.
D. This router is an ASBR.
E. Authentication is not configured for the area.

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 132
Consider a network that mixes link bandwidths from 128 kb/s to 40 Gb/s. Which value should be set for the OSPF reference bandwidth?

A. Set a value of 128.
B. Set a value of 40000.
C. Set a manual OSPF cost on each interface.
D. Use the default value.
E. Set a value of 40000000.
F. Set a value of 65535.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 133
Which statement about a type 4 LSA in OSPF is true?

A. It is an LSA that is originated by an ABR, that is flooded throughout the AS, and that describes a route to the ASBR.
B. It is an LSA that is originated by an ASBR, that is flooded throughout the AS, and that describes a route to the ASBR.
C. It is an LSA that is originated by an ASBR, that is flooded throughout the area, and that describes a route to the ASBR.
D. It is an LSA that is originated by an ABR, that is flooded throughout the AS, and that describes a route to the ABR.
E. It is an LSA that is originated by an ABR, that is flooded throughout the area, and that describes a route to the ASBR.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 134
Refer to the exhibit.

```
R1#show ip route 1.1.1.1
% Network not in table

R1#sho ip ospf database router 1.1.1.1

OSPF Router with ID (10.10.10.10) (Process ID 1)

Router Link States (Area 0)

  Adv Router is not-reachable
  LS age: 6
  Options: (No TOS-capability, DC)
  LS Type: Router Links
  Link State ID: 1.1.1.1
  Advertising Router: 1.1.1.1
  LS Seq Number: 80000003
  Checksum: 0x6889
  Length: 48
  Number of Links: 2

Link connected to: a Stub Network
 (Link ID) Network/subnet number: 1.1.1.1
 (Link Data) Network Mask: 255.255.255.255
   TOS 0 Metrics: 1

Link connected to: a Transit Network
 (Link ID) Designated Router address: 10.1.1.0
 (Link Data) Router Interface address: 10.1.1.1
   TOS 0 Metrics: 10

R1#sho ip ospf neighbor

Neighbor ID     Pri   State           Dead Time   Address         Interface
1.1.1.1           0   FULL/  -        00:00:36    10.1.1.1        Ethernet0/0
```

Why is the prefix 1.1.1.1/32 not present in the routing table of R1?

A. There is a duplicate router ID.
B. There is a subnet mask mismatch on Ethernet0/0.
C. The router LSA has an invalid checksum.
D. There is an OSPF network type mismatch that causes the advertising router to be unreachable.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 135
Refer to the exhibit.

```
R101#show ip cache verbose flow
[...]
SrcIf          SrcIPaddress    DstIf          DstIPaddress    Pr TOS Flgs  Pkts
Port Msk AS                    Port Msk AS    NextHop             B/Pk  Active
Et0/0          10.0.0.1        Et1/0*         14.0.0.2        01 80  10       1
0000 /0  0                     0800 /0  0     0.0.0.0               100     0.0
```


What is the PHB class on this flow?

A. EF
B. none
C. AF21
D. CS4

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 136
Refer to the exhibit.

```
R101#show ip cache flow
[...]
SrcIf          SrcIPaddress    DstIf          DstIPaddress    Pr SrcP DstP  Pkts
Et0/0          10.0.0.1        Et1/0*         14.0.0.2        01 0000 0800    34
Et0/0          10.0.0.1        Et1/0          14.0.0.2        01 0000 0800   100
Et0/0          10.0.0.1        Se3/0*         14.0.0.2        01 0000 0800    33
Et0/0          10.0.0.1        Se2/0*         14.0.0.2        01 0000 0800    33
Et0/0          10.0.0.1        Null           224.0.0.5       59 0000 0000    26
```


What kind of load balancing is done on this router?

A. per-packet load balancing
B. per-flow load balancing
C. per-label load balancing
D. star round-robin load balancing

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 137
Which authentication method does OSPFv3 use to secure communication between neighbors?

A. plaintext
B. MD5 HMAC
C. PKI
D. IPSec

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 138
Refer to the exhibit.

```
P#show mpls forwarding-table
Local      Outgoing   Prefix           Bytes Label   Outgoing   Next Hop
Label      Label      or Tunnel Id     Switched      interface

19         21         [mdt 1000:2000 0]   \
                                       33516         Et2/0      10.1.2.2
           19         [mdt 1000:2000 0]   \
                                       912           Et1/0      10.1.1.1
20         24         [mdt 1000:2000 0]   \
                                       1932          Et3/0      10.1.3.3
           21         [mdt 1000:2000 0]   \
                                       1932          Et2/0      10.1.2.2
23         24         [mdt 1000:2000 0]   \
                                       33940         Et3/0      10.1.3.3
           19         [mdt 1000:2000 0]   \
                                       912           Et1/0      10.1.1.1
```


Which statement is true?

A. This is an MPLS TE point-to-multipoint LSP in an MPLS network.

B. This is an MPLS TE multipoint-to-point LSP in an MPLS network.
C. This is a point-to-multipoint LSP in an MPLS network.
D. This is a multipoint-to-multipoint LSP in an MPLS network.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 139
Which three statements are true about OSPFv3? (Choose three.)

A. The only method to enable OSPFv3 on an interface is via the interface configuration mode.
B. Multiple instances of OSPFv3 can be enabled on a single link.
C. There are two methods to enable OSPFv3 on an interface, either via the interface configuration mode or via the router configuration mode.
D. For OSPFv3 to function, IPv6 unicast routing must be enabled.
E. For OSPFv3 to function, IPv6 must be enabled on the interface.
F. Only one instance of OSPFv3 can be enabled on a single link.

Correct Answer: BDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 140
Which statement about OSPF multiaccess segments is true?

A. The designated router is elected first.
B. The designated and backup designated routers are elected at the same time.
C. The router that sent the first hello message is elected first.
D. The backup designated router is elected first.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 141
Refer to the exhibit.

```
R1#show mpls l2transport vc 100 detail
Local interface: Fa2/6 up, line protocol up, Ethernet up
  Destination address: 2.2.2.3, VC ID: 100, VC status: up
    Preferred path: Tunnel1,  active
    Default path: ready
    Tunnel label: 12307, next hop point2point
    Output interface: Tu1, imposed label stack {12307 20}
  Create time: 00:00:11, last status change time: 00:00:11
  Signaling protocol: LDP, peer 2.2.2.3:0 up
    MPLS VC labels: local 21, remote 20
    Group ID: local 0, remote 2
    MTU: local 1500, remote 1500
    Remote interface description:
  Sequencing: receive disabled, send disabled
  VC statistics:
    packet totals: receive 1, send 6
    byte totals:   receive 368, send 0
    packet drops:  receive 0, send 0
```


Which statement is true?

A. R1 routes this pseudowire over MPLS TE tunnel 1 with transport label 20.
B. The default route 0.0.0.0/0 is available in the IPv4 routing table.
C. R1 is using an MPLS TE tunnel for this pseudowire, because the IP path is not available.
D. R1 has preferred-path configured for the pseudowire.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 142
What are the minimal configuration steps that are required to configure EIGRP HMAC-SHA2 authentication?

A. classic router mode, interface XX, authentication mode hmac-sha-256 <password>
B. named router mode, address-family statement, authentication mode hmac-sha-256 <password>
C. named router mode, address-family statement, af-interface default, authentication mode hmac- sha-256 <password>
D. named router mode, address-family statement, authentication mode hmac-sha-256 <password>

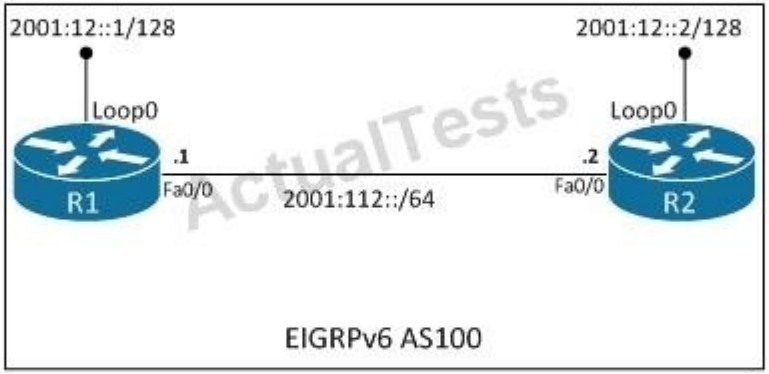
Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 143
Refer to the exhibit.

```
R1:

interface Loopback0
 ip address 1.1.1.1 255.255.255.0
 ipv6 address 2001:12::1/128
 ipv6 eigrp 100
!
interface FastEthernet0/0
 ip address 10.1.12.1
255.255.255.0
 duplex auto
 speed auto
 ipv6 address 2001:112::1/64
 ipv6 eigrp 100
!
interface FastEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
ipv6 router eigrp 100
 no shutdown
!
!
control-plane
!
```




```
R2:

interface Loopback0
 ip address 2.2.2.2 255.255.255.0
 ipv6 address 2001:12::2/128
 ipv6 eigrp 100
!
interface FastEthernet0/0
 ip address 10.1.12.2
255.255.255.0
 duplex auto
 speed auto
 ipv6 address 2001:112::2/64
 ipv6 eigrp 100
!
interface FastEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
ip forward-protocol nd
!
!
no ip http server
no ip http secure-server
!
!
ipv6 router eigrp 100
 shutdown
!
!
control-plane
!
```

How many EIGRP routes will appear in the routing table of R2?

A. 0
B. 1
C. 2

D. 3

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 144
For which kind of MPLS deployment is the next-hop-self all keyword used on a BGP neighbor command?

A. 6VPE
B. MPLS Carrier's carrier
C. inter-AS MPLS VPN option D
D. inter-AS MPLS VPN option C
E. Unified MPLS

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 145
What is a reason for 6PE to use two MPLS labels in the data plane instead of one?

A. 6PE allows penultimate hop popping and has a requirement that all P routers do not have to be IPv6 aware.
B. 6PE does not allow penultimate hop popping.
C. It allows MPLS traffic engineering to work in a 6PE network.
D. It allows 6PE to work in an MPLS network where 6VPE is also deployed.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 146
Which two configuration changes should be made on the OTP interface of an EIGRP OTP route reflector? (Choose two.)

A. passive-interface
B. no split-horizon
C. no next-hop-self
D. hello-interval 60, hold-time 180

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 147
Which statement about the function of poison reverse in EIGRP is true?

A. It tells peers to remove paths that previously might have pointed to this router.
B. It tells peers to remove paths to save memory and bandwidth.
C. It provides reverse path information for multicast routing.
D. It tells peers that a prefix is no longer reachable.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 148
What is the preferred method to improve neighbor loss detection in EIGRP?

A. EIGRP natively detects neighbor down immediately, and no additional feature or configuration is required.
B. BFD should be used on interfaces that support it for rapid neighbor loss detection.
C. Fast hellos (subsecond) are preferred for EIGRP, so that it learns rapidly through its own mechanisms.
D. Fast hellos (one-second hellos) are preferred for EIGRP, so that it learns rapidly through its own mechanisms.

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 149
How does EIGRP derive the metric for manual summary routes?

A. It uses the best composite metric of any component route in the topology table.
B. It uses the worst composite metric of any component route in the topology table.
C. It uses the best metric vectors of all component routes in the topology table.
D. It uses the worst metric vectors of all component routes in the topology table.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 150
Refer to the exhibit.

```
R2#show ipv6 interface e0/0
Ethernet0/0 is up, line protocol is up
  IPv6 is enabled, link-local address is FE80::A8BB:CCFF:FE00:200
  No Virtual link-local address(es):
  No global unicast address is configured
  Joined group address(es):
    FF02::1
    FF02::2
    FF02::A
    FF02::1:FF00:200
```

Which part of the joined group addresses list indicates that the interface has joined the EIGRP multicast group address?

A. FF02::1
B. FF02::1:FF00:200
C. FF02::A

D. FF02::2

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 151
EIGRP allows configuration of multiple MD5 keys for packet authentication to support easy rollover from an old key to a new key. Which two statements are true regarding the usage of multiple authentication keys? (Choose two.)

A. Received packets are authenticated by the key with the smallest key ID.
B. Sent packets are authenticated by all valid keys, which means that each packet is replicated as many times as the number of existing valid keys.
C. Received packets are authenticated by any valid key that is chosen.
D. Sent packets are authenticated by the key with the smallest key ID.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 152
Refer to the exhibit.

```
R1
!
ip vrf R2
rd 1:1
!
interface FastEthernet0/0
ip address 192.168.0.1 255.255.255.252
!
router eigrp 100
no auto-summary
address-family ipv4 vrf R2
network 192.168.0.0 0.0.0.255
!

R2
!
interface FastEthernet0/0
ip address 192.168.0.2 255.255.255.252
!
router eigrp 100
no auto-summary
network 192.168.0.2 0.0.0.1
!
```

Which two corrective actions could you take if EIGRP routes from R2 fail to reach R1? (Choose two.)

A. Configure R2 to use a VRF to send routes to R1.
B. Configure the autonomous system in the EIGRP configuration of R1.
C. Correct the network statement on R2.
D. Add the interface on R1 that is connected to R2 into a VRF.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 153
Refer to the exhibit.

```
R1
!
interface Fastethernet0/0
ip address 10.1.1.5 255.255.255.0
!
router ospf 1
network 10.1.1.5 0.0.0.0 area 0
passive-interface default
!

R2
!
interface FastEthernet0/1
ip address 10.1.1.6 255.255.255.0
!
router ospf 10
network 10.1.1.6 0.0.0.0 area 0
!
```


Which additional configuration is necessary for R1 and R2 to become OSPF neighbors?

A. R1
!
router ospf 1
no passive-interface Fastethernet0/0
!

B. R2
!
router ospf 10
no network 10.1.1.6 0.0.0.0 area 0
network 10.1.1.6 0.0.0.0 area 1
!

C. R1
!
interface FastEthernet0/0
ip ospf mtu-ignore
!
R2
!

```
interface FastEthernet0/1
ip ospf mtu-ignore
!
```

D. R1

```
!
no router ospf 1
router ospf 10
network 10.1.1.5 0.0.0.0 area 0
```

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 154
Consider an OSPFv3 network with four parallel links between each pair of routers. Which measure can you use to reduce the CPU load and at the same time keep all links available for ECMP?

A. Configure some interfaces as passive interface.
B. Configure ipv6 ospf priority 0 on some interfaces.
C. Configure some routers with a distribute list in ingress of the OSPFv3 process.
D. Configure ipv6 ospf database-filter all out on some interfaces.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 155
Refer to the exhibit.

```
Load for five secs: 12%/0%; one minute: 4%; five minutes: 5%
Time source is NTP, 11:19:50.533 US/Ariz Tue Oct 1 2013

(10.10.76.191, 239.93.200.8), 7w0d/00:02:55, flags: sTI
   Incoming interface: TenGigabitEthernet8/2, RPF nbr 70.169.73.188, RPF-MFD
   Outgoing interface list:
      GigabitEthernet1/5, Forward/Sparse, 2w5d/00:02:25, H
      GigabitEthernet1/2, Forward/Sparse, 5w3d/00:02:25, H
      GigabitEthernet1/1, Forward/Sparse, 25w6d/00:02:49, H

(10.10.76.191, 239.93.200.9), 7w0d/00:02:55, flags: sTI
   Incoming interface: TenGigabitEthernet8/2, RPF nbr 70.169.73.188, RPF-MFD
   Outgoing interface list:
      GigabitEthernet1/5, Forward/Sparse, 2w5d/00:02:25, H
```

Which two statements about the device that generated the output are true? (Choose two.)

A. The SPT-bit is set.
B. The sparse-mode flag is set.
C. The RP-bit is set.
D. The source-specific host report was received.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 156
A service provider is deploying L2VPN LAN services in its MPLS cloud. Which statement is true regarding LDP signaling and autodiscovery?

A. LDP signaling requires that each PE is identified, and that an LDP session is active with its P neighbor for autodiscovery to take place.
B. LDP signaling requires that each P is identified, and that a targeted LDP session is active for autodiscovery to take place.
C. LDP signaling requires that each PE is identified, and that a targeted LDP session with a BGP route reflector is active for autodiscovery to take place.
D. LDP signaling requires that each PE is identified, and that a targeted LDP session is active for autodiscovery to take place.

Correct Answer: D

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 157
Refer to the exhibit.

```
Switch#show ip mroute
IP Multicast Routing Table
Flags: D - Dense, S - Sparse, B - Bidir Group, s - SSM Group, C - Connected,
       L - Local, P - Pruned, R - RP-bit set, F - Register flag,
       T - SPT-bit set, J - Join SPT, M - MSDP created entry, E - Extranet,
       X - Proxy Join Timer Running, A - Candidate for MSDP Advertisement,
       U - URD, I - Received Source Specific Host Report,
       Z - Multicast Tunnel, z - MDT-data group sender,
       Y - Joined MDT-data group, y - Sending to MDT-data group,
       V - RD & Vector, v - Vector
Outgoing interface flags: H - Hardware switched, A - Assert winner
 Timers: Uptime/Expires
 Interface state: Interface, Next-Hop or VCD, State/Mode

(*, 239.192.1.1), 00:01:43/stopped, RP 10.210.150.1, flags: SJC
  Incoming interface: Null, RPF nbr 0.0.0.0
  Outgoing interface list:
    Vlan150, Forward/Sparse-Dense, 00:01:43/00:02:55

(10.210.168.132, 239.192.1.1), 00:00:25/00:02:38, flags: T
  Incoming interface: Port-channel1, RPF nbr 10.85.20.20
  Outgoing interface list:
    Vlan150, Forward/Sparse-Dense, 00:00:25/00:02:34

(*, 224.0.1.40), 00:01:57/00:02:53, RP 10.210.150.1, flags: SJCL
  Incoming interface: Null, RPF nbr 0.0.0.0
  Outgoing interface list:
    Port-channel1, Forward/Sparse-Dense, 00:01:09/00:03:18
    Vlan150, Forward/Sparse-Dense, 00:01:39/00:02:55
```


Which three statements about the output are true? (Choose three.)

A. This switch is currently receiving a multicast data stream that is being forwarded out VLAN 150.
B. A multicast receiver has requested to join one or more of the multicast groups.
C. Group 224.0.1.40 is a reserved address, and it should not be used for multicast user data transfer.

D. One or more multicast groups are operating in PIM dense mode.
E. One or more of the multicast data streams will be forwarded out to neighbor 10.85.20.20.
F. Group 239.192.1.1 is a reserved address, and it should not be used for multicast user data transfer.

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 158
Which statement about the RPF interface in a BIDIR-PIM network is true?

A. In a BIDIR-PIM network, the RPF interface is always the interface that is used to reach the PIM rendezvous point.
B. In a BIDIR-PIM network, the RPF interface can be the interface that is used to reach the PIM rendezvous point or the interface that is used to reach the source.
C. In a BIDIR-PIM network, the RPF interface is always the interface that is used to reach the source.
D. There is no RPF interface concept in BIDIR-PIM networks.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 159
Which technology is an application of MSDP, and provides load balancing and redundancy between the RPs?

A. static RP
B. PIM BSR
C. auto RP
D. anycast RP

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 160
Which two statements are true about IPv6 multicast? (Choose two.)

A. Receivers interested in IPv6 multicast traffic use IGMPv6 to signal their interest in the IPv6 multicast group.
B. The PIM router with the lowest IPv6 address becomes the DR for the LAN.
C. An IPv6 multicast address is an IPv6 address that has a prefix of FF00::/8.
D. The IPv6 all-routers multicast group is FF02:0:0:0:0:0:0:2.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 161
Which attribute is not part of the BGP extended community when a PE creates a VPN-IPv4 route while running OSPF between PE-CE?

A. OSPF domain identifier
B. OSPF route type
C. OSPF router ID
D. MED
E. OSPF network type

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 162
Refer to the exhibit.

```
aaa new-model
aaa authentication login default local
username cisco privilege 15 password cisco

User Access Verification

Username: cisco
Password:

Router>en
% Error in authentication.

Router>
```


While configuring AAA with a local database, users can log in via Telnet, but receive the message "error in authentication" when they try to go into enable mode. Which action can solve this problem?

A. Configure authorization to allow the enable command.
B. Use aaa authentication login default enable to allow authentication when using the enable command.
C. Verify whether an enable password has been configured.
D. Use aaa authentication enable default enable to allow authentication when using the enable command.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 163
Which three factors does Cisco PfR use to calculate the best exit path? (Choose three.)

A. quality of service
B. packet size
C. delay
D. loss
E. reachability

F. administrative distance

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 164
What is a reason to use DHCPv6 on a network that uses SLAAC?

A. To get a record of the IPs that are used by the clients
B. To push DNS and other information to the clients
C. No reason, because there is no need for DHCPv6 when using SLAAC
D. Because DHCPv6 can be used only in stateful mode with SLAAC to record the IPs of the clients
E. Because DHCPv6 can be used only in stateless mode with SLAAC to record the IPs of the clients
F. Because DHCPv6 is required to use first-hop security features on the switches

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 165
Which statement is true about Fast Link Pulses in Ethernet?

A. They are used during collision detection.
B. They are used only if the media type is optical.
C. They are part of UniDirectional Link Detection.
D. They are used during autonegotiation.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 166
Which statement is true regarding UDLD and STP timers?

A. The UDLD message timer should be two times the STP forward delay to prevent loops.
B. UDLD and STP are unrelated features, and there is no relation between the timers.
C. The timers need to be synced by using the spanning-tree udld-sync command.
D. The timers should be set in such a way that UDLD is detected before the STP forward delay expires.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

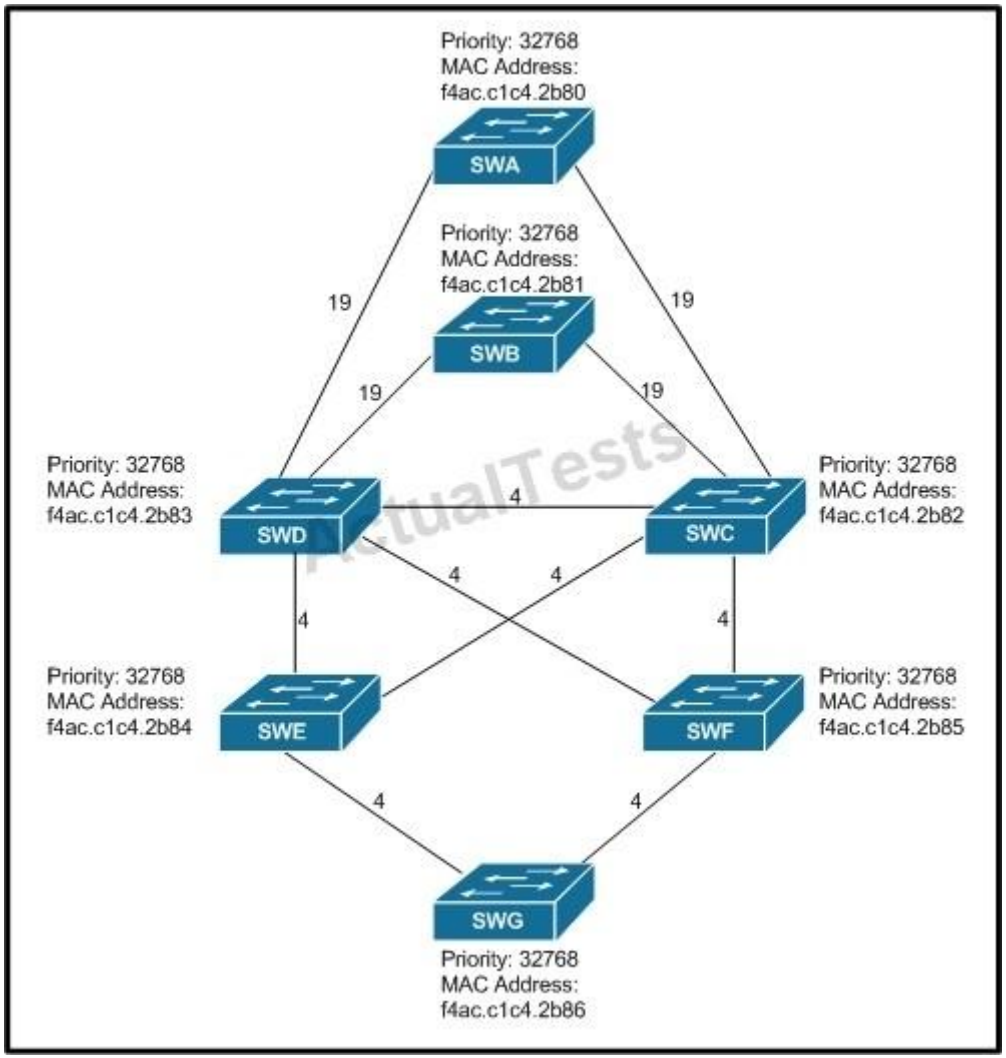
QUESTION 167
Which switching technology can be used to solve reliability problems in a switched network?

A. fragment-free mode
B. cut-through mode
C. check mode
D. store-and-forward mode

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 168
Refer to the exhibit.



All switches have default bridge priorities, and originate BPDUs with MAC addresses as indicated. The numbers shown are STP link metrics. Which two ports are in blocking state after STP converges? (Choose two.)

A. the port on switch SWD that connects to switch SWE
B. the port on switch SWF that connects to switch SWG
C. the port on switch SWD that connects to switch SWC

D. the port on switch SWB that connects to switch SWD

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 169
What is the most efficient way to confirm whether microbursts of traffic are occurring?

A. Monitor the output traffic rate using the show interface command.
B. Monitor the output traffic rate using the show controllers command.
C. Check the CPU utilization of the router.
D. Sniff the traffic and plot the packet rate over time.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 170
What is a cause for unicast flooding?

A. Unicast flooding occurs when multicast traffic arrives on a Layer 2 switch that has directly connected multicast receivers.
B. When PIM snooping is not enabled, unicast flooding occurs on the switch that interconnects the PIM-enabled routers.
C. A man-in-the-middle attack can cause the ARP cache of an end host to have the wrong MAC address. Instead of having the MAC address of the default gateway, it has a MAC address of the man-in-the-middle. This causes all traffic to be unicast flooded through the man-in-the-middle, which can then sniff all packets.
D. Forwarding table overflow prevents new MAC addresses from being learned, and packets destined to those MAC addresses are flooded until space becomes available in the forwarding table.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 171
Which statement is true about IGMP?

A. Multicast sources send IGMP messages to their first-hop router, which then generates a PIM join message that is then sent to the RP.
B. Multicast receivers send IGMP messages to their first-hop router, which then forwards the IGMP messages to the RP.
C. IGMP messages are encapsulated in PIM register messages and sent to the RP.
D. Multicast receivers send IGMP messages to signal their interest to receive traffic for specific multicast groups.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 172
What is a disadvantage of using aggressive mode instead of main mode for ISAKMP/IPsec establishment?

A. It does not use Diffie-Hellman for secret exchange.
B. It does not support dead peer detection.
C. It does not support NAT traversal.
D. It does not hide the identity of the peer.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 173
What can PfR passive monitoring mode measure for TCP flows?

A. only delay
B. delay and packet loss
C. delay and reachability
D. delay, packet loss, and throughput
E. delay, packet loss, throughput, and reachability

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 174
Which two statements are true about an EVPL? (Choose two.)

A. It has a high degree of transparency.
B. It does not allow for service multiplexing.
C. The EVPL service is also referred to as E-line.
D. It is a point-to-point Ethernet connection between a pair of UNIs.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 175
Which two statements are true about OTV? (Choose two.)

A. It relies on flooding to propagate MAC address reachability information.
B. It uses a full mesh of point-to-multipoint tunnels to prevent head-end replication of multicast traffic.
C. It can work over any transport that can forward IP packets.
D. It supports automatic detection of multihoming.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 176
Which two statements are true about RSTP? (Choose two.)

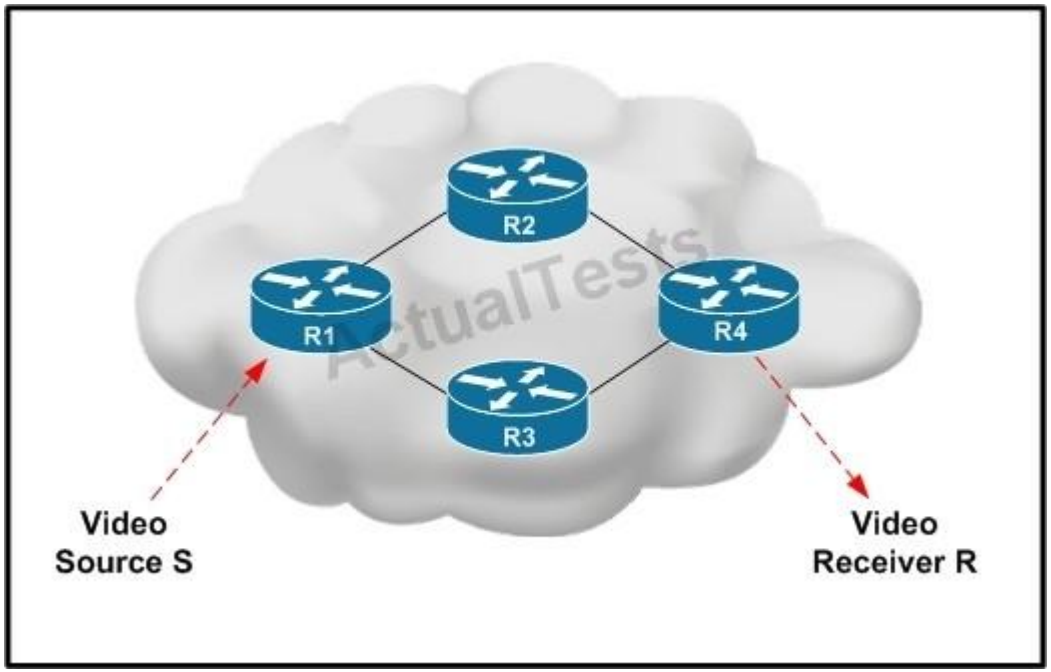
A. By default, RTSP uses a separate TCN BPDU when interoperating with 802.1D switches.

B. By default, RTSP does not use a separate TCN BPDU when interoperating with 802.1D switches.
C. If a designated port receives an inferior BPDU, it immediately triggers a reconfiguration.
D. By default, RTSP uses the topology change TC flag.
E. If a port receives a superior BPDU, it immediately replies with its own information, and no reconfiguration is triggered.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 177
Refer to the exhibit.



Video Source S is sending interactive video traffic to Video Receiver R. Router R1 has multiple routing table entries for destination R. Which load-balancing mechanism on R1 can cause out-of- order video traffic to be received by destination R?

A. per-flow load balancing on R1 for destination R

B. per-source-destination pair load balancing on R1 for destination R
C. CEF load balancing on R1 for destination R
D. per-packet load balancing on R1 for destination R

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 178
Refer to the exhibit.

```
switch#show spanning-tree detail

 MST0 is executing the mstp compatible Spanning Tree protocol
  Bridge Identifier has priority 32768, sysid 0, address f4ac.c1c4.2b80
  Configured hello time 2, max age 20, forward delay 15, transmit hold-count 6
  Current root has priority 24576, address 0019.07aa.9ac0
  Root port is 56 (Port-channel1), cost of root path is 0
  Topology change flag not set, detected flag not set
  Number of topology changes 296 last change occurred 00:01:17 ago
          from GigabitEthernet0/15
```

Which two statements are true about the displayed STP state? (Choose two.)

A. The STP version configured on the switch is IEEE 802.1w.
B. Port-channel 1 is flapping and the last flap occurred 1 minute and 17 seconds ago.
C. The switch does not have PortFast configured on Gi0/15.
D. BPDUs with the TCN bit set are transmitted over port channel 1.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 179
Refer to the exhibit.

```
police cir percent 10 conform-action proceed exceed-action set-mpls-experimental-topmost 6
```

A PE router is configured with a policy map that contains the policer shown. The policy map is configured in the inbound direction of an interface facing a CE router. If the PE router receives 12Mb/s of traffic with the CoS value set to 7 on a 100-Mb/s interface from the CE router, what value of MPLS EXP is set when this traffic goes through the policer shown?

A. 0
B. 6
C. 7
D. 8

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 180
DRAG DROP

What is the correct order of the VSS initialization process? Drag the actions on the left to the correct initialization step on the right.

bring up VSL links	initialization step 1
run VSLP	initialization step 2
preparse config	initialization step 3
run RRP	initialization step 4
continue system bootup	initialization step 5
interchassis SSO	initialization step 6

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

What is the correct order of the VSS initialization process? Drag the actions on the left to the correct initialization step on the right.

bring up VSL links	preparse config
run VSLP	bring up VSL links
preparse config	run VSLP
run RRP	run RRP
continue system bootup	interchassis SSO
interchassis SSO	continue system bootup

Explanation:

preparse config

bring up VSL links

run VSLP

run RRP

interchassis SSO

continue system bootup

QUESTION 181
DRAG DROP

Drag and drop the IPv6 address on the left to the correct IPv6 address type on the right.

FF01::2	Link Local Unicast
FE80:2a5b::5	Global Unicast
FDF8:E5F3:83E4:FEAA::53	Multicast
2005:CA75:D095::5	Unique Local Unicast
F880:E6F4:B665::44	

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the IPv6 address on the left to the correct IPv6 address type on the right.

FF01::2	FE80:2a5b::5
FE80:2a5b::5	2005:CA75:D095::5
FDF8:E5F3:83E4:FEAA::53	FF01::2
2005:CA75:D095::5	FDF8:E5F3:83E4:FEAA::53
F880:E6F4:B665::44	

Explanation:

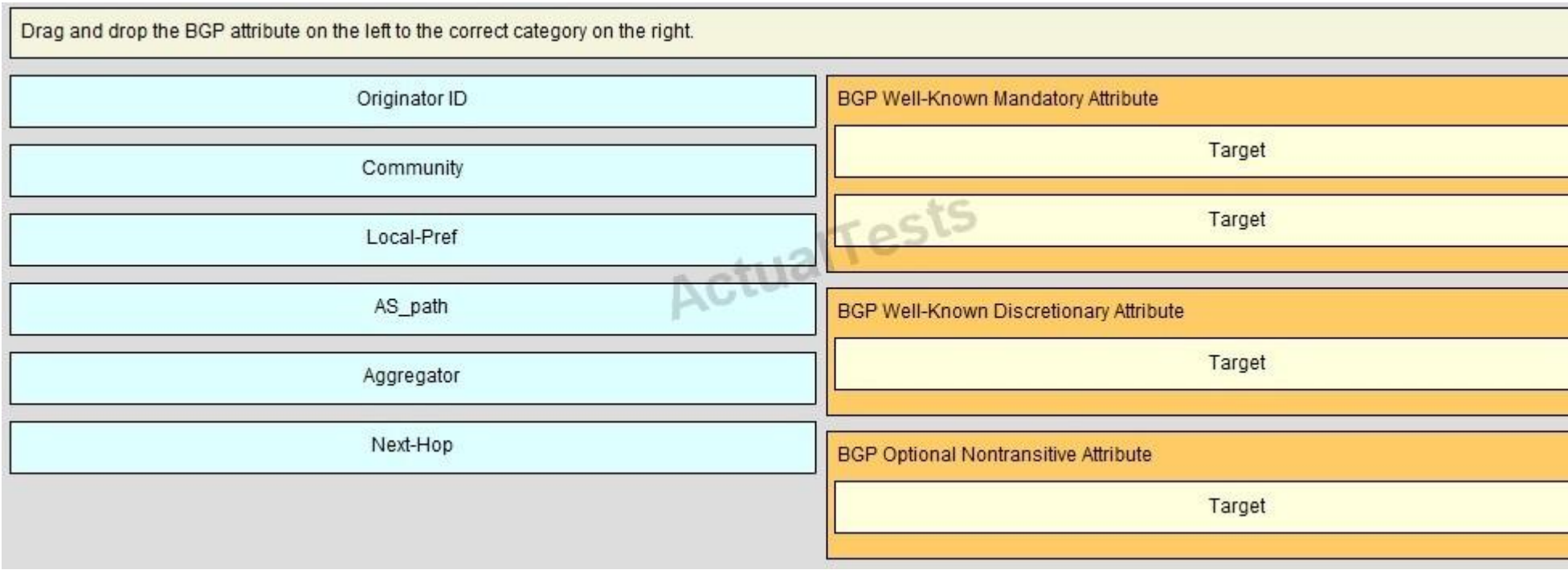
FE80:2a5b::5

2005:CA75:D095::5

FF01::2

FDF8:E5F3:83E4:FEAA::53

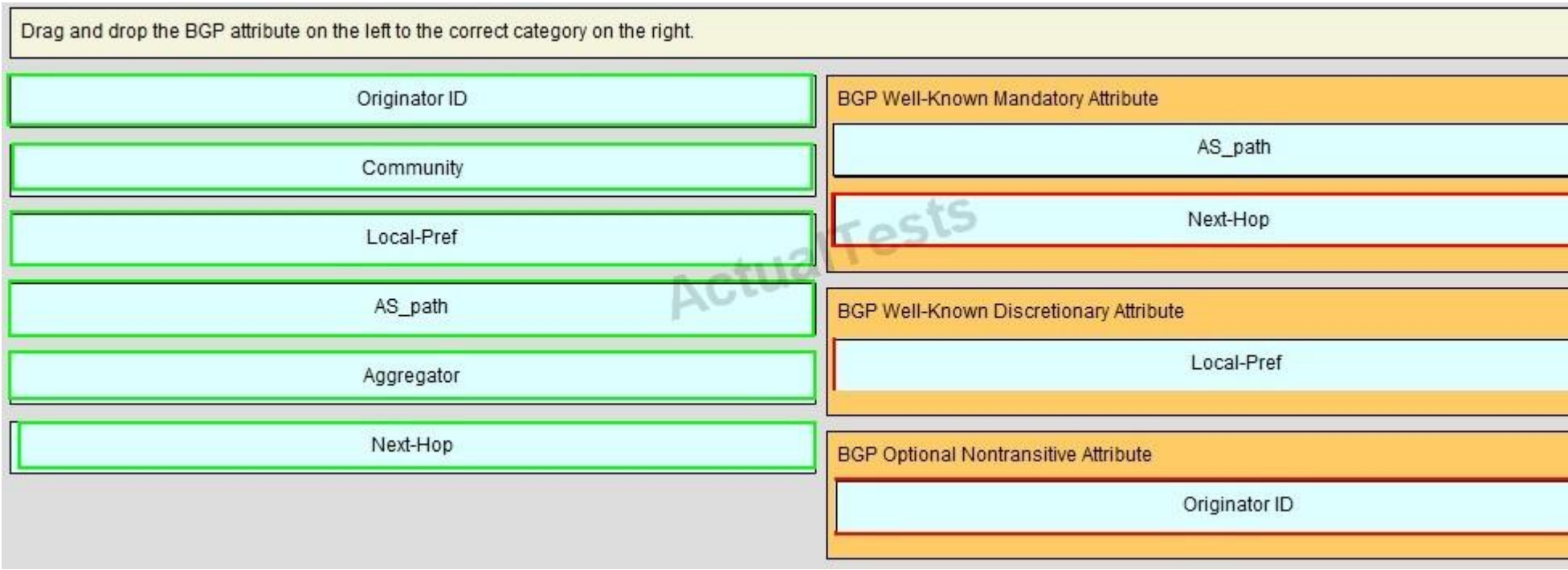
QUESTION 182
DRAG DROP



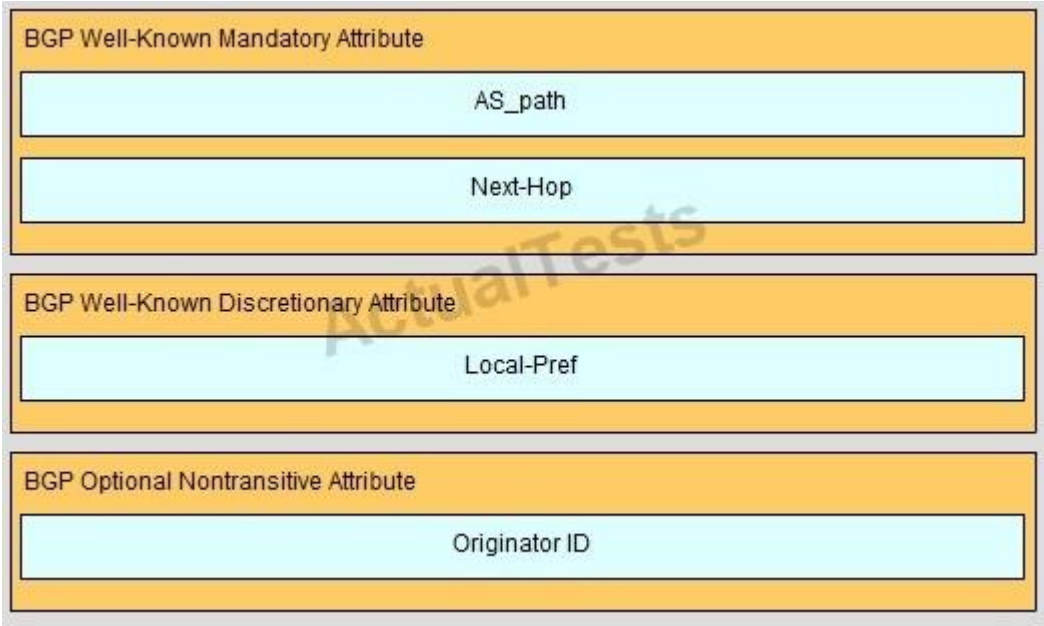
A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

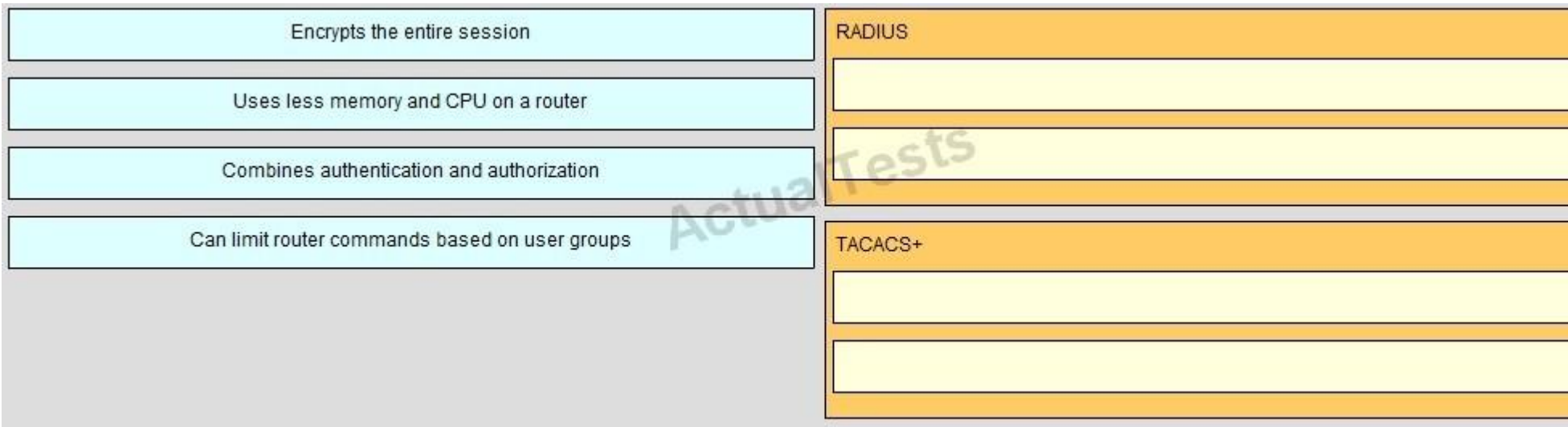
Explanation/Reference:



Explanation:



QUESTION 183
DRAG DROP

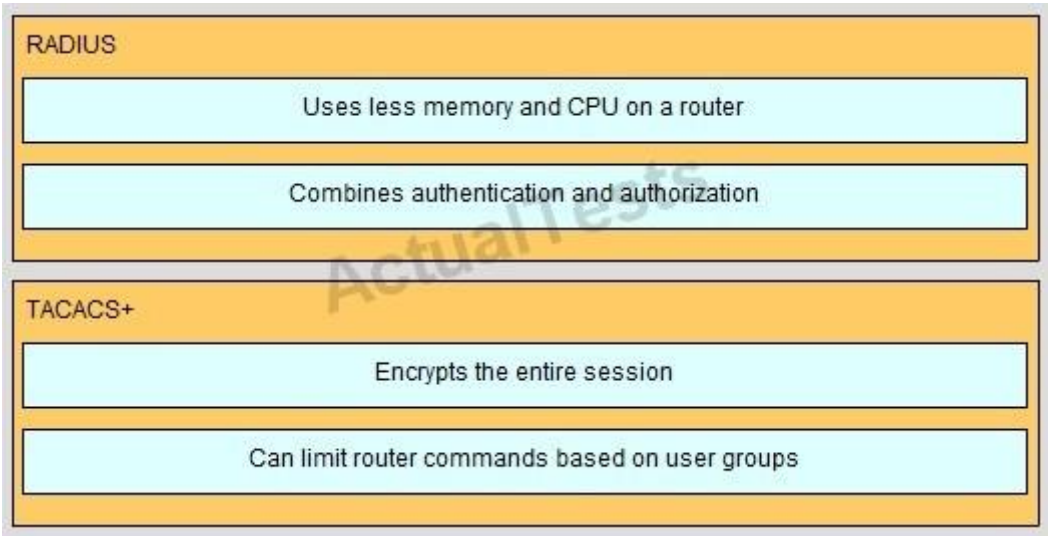


A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Explanation:



QUESTION 184
DRAG DROP

Drag and drop the events on the left to display the correct sequence on the right when CoPP is enabled.

The packet gets forwarded to the switch CPU.	1
A packet enters the switch that is configured with CoPP on the ingress port.	2
The switch makes a routing or a switching decision, which determines whether or not the packet is destined for the control plane.	3
The port performs any applicable input port and QoS services.	4
Packets that are destined for the control plane are processed by CoPP and are dropped or delivered to the control plane according to each traffic class policy. Packets that have other destinations are forwarded normally.	5

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the events on the left to display the correct sequence on the right when CoPP is enabled.

The packet gets forwarded to the switch CPU.	A packet enters the switch that is configured with CoPP on the ingress port.
A packet enters the switch that is configured with CoPP on the ingress port.	The port performs any applicable input port and QoS services.
The switch makes a routing or a switching decision, which determines whether or not the packet is destined for the control plane.	The packet gets forwarded to the switch CPU.
The port performs any applicable input port and QoS services.	The switch makes a routing or a switching decision, which determines whether or n packet is destined for the control plane.
Packets that are destined for the control plane are processed by CoPP and are dropped or delivered to the control plane according to each traffic class policy. Packets that have other destinations are forwarded normally.	Packets that are destined for the control plane are processed by CoPP and are dro or delivered to the control plane according to each traffic class policy. Packets that other destinations are forwarded normally.

Explanation:

A packet enters the switch that is configured with CoPP on the ingress port.

The port performs any applicable input port and QoS services.

The packet gets forwarded to the switch CPU.

The switch makes a routing or a switching decision, which determines whether or not the packet is destined for the control plane.

Packets that are destined for the control plane are processed by CoPP and are dropped or delivered to the control plane according to each traffic class policy. Packets that have other destinations are forwarded normally.

QUESTION 185
DRAG DROP

Drag and drop the QoS requirement on the left to the correct QoS technology on the right.

Guarantees an amount of bandwidth	Police
Is an application classification	CBWFQ
Prioritizes real-time voice traffic	Shaping
Buffers bursting traffic	LLQ
Limits an amount of bandwidth	NBAR

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the QoS requirement on the left to the correct QoS technology on the right.

Guarantees an amount of bandwidth	Limits an amount of bandwidth
Is an application classification	Guarantees an amount of bandwidth
Prioritizes real-time voice traffic	Buffers bursting traffic
Buffers bursting traffic	Prioritizes real-time voice traffic
Limits an amount of bandwidth	Is an application classification

Explanation:

Limits an amount of bandwidth

Guarantees an amount of bandwidth

Buffers bursting traffic

Prioritizes real-time voice traffic

Is an application classification

QUESTION 186
DRAG DROP

Drag and drop the IPv6 multicast feature or protocol on the left to the correct address space on the right.

All nodes	FF02::D
All routers	FF02::6
EIGRP	FF02::2
PIM routers	FF02::A
RIP routers	FF02::1
OSPFv3 all DR routers	FF02::9

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the IPv6 multicast feature or protocol on the left to the correct address space on the right.

All nodes	PIM routers
All routers	OSPFv3 all DR routers
EIGRP	All routers
PIM routers	EIGRP
RIP routers	All nodes
OSPFv3 all DR routers	RIP routers

Explanation:

PIM routers

OSPFv3 all DR routers

All routers

EIGRP

All nodes

RIP routers

QUESTION 187
DRAG DROP

Drag and drop the multicast protocol or feature on the left to the correct address space on the right.

Auto-RP announcement	224.0.0.13
PIMv2	232.0.0.0/8
GLBP	224.0.1.40
Auto-RP discovery	224.0.0.102
Source Specific Multicast (SSM)	224.0.1.39

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the multicast protocol or feature on the left to the correct address space on the right.

Auto-RP announcement	PIMv2
PIMv2	Source Specific Multicast (SSM)
GLBP	Auto-RP discovery
Auto-RP discovery	GLBP
Source Specific Multicast (SSM)	Auto-RP announcement

Explanation:

PIMv2

Source Specific Multicast (SSM)

Auto-RP discovery

GLBP

Auto-RP announcement

QUESTION 188
DRAG DROP

Drag and drop the router preference on the left to the correct routing sequence (from most preferred to least preferred) on the right.

EBGP route	1
Static route	2
Most specific prefix	3
Directly connected route	4

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the router preference on the left to the correct routing sequence (from most preferred to least preferred) on the right.

EBGP route	Most specific prefix
Static route	Directly connected route
Most specific prefix	Static route
Directly connected route	EBGP route

Explanation:

Most specific prefix

Directly connected route

Static route

EBGP route

QUESTION 189
DRAG DROP

Drag and drop the multicast protocol definition on the left to the correct default time interval on the right.

IGMPv2 query interval	30 seconds
IGMPv2 querier timeout	
IGMPv1 query interval	60 seconds
PIMv1 query interval	
IGMPv3 query interval	
	120 seconds

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the multicast protocol definition on the left to the correct default time interval on the right.

- IGMPv2 query interval
- IGMPv2 querier timeout
- IGMPv1 query interval
- PIMv1 query interval
- IGMPv3 query interval

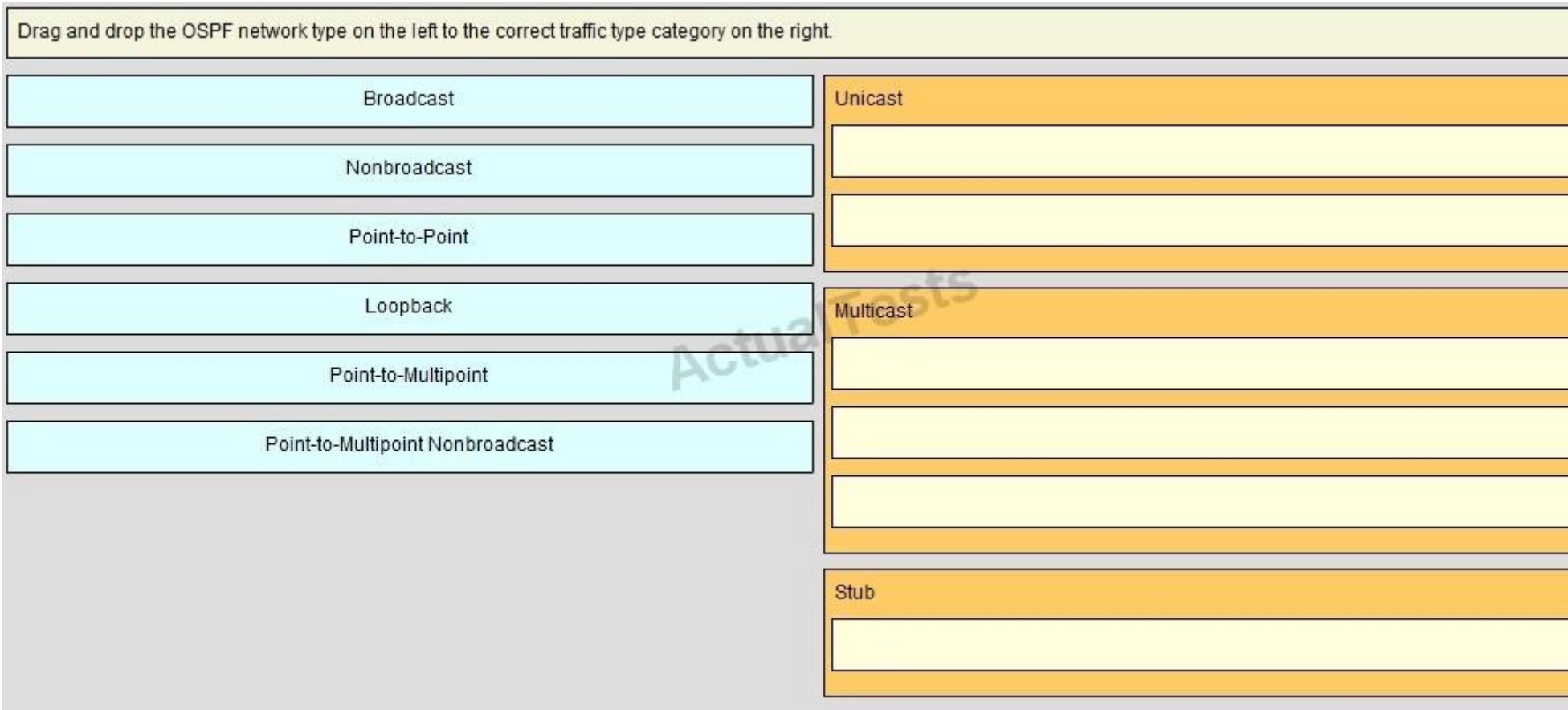
30 seconds
- PIMv1 query interval

60 seconds
- IGMPv2 query interval
- IGMPv1 query interval
- IGMPv3 query interval

120 seconds
- IGMPv2 querier timeout

Explanation:

QUESTION 190
DRAG DROP



A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the OSPF network type on the left to the correct traffic type category on the right.

- Broadcast
- Nonbroadcast
- Point-to-Point
- Loopback
- Point-to-Multipoint
- Point-to-Multipoint Nonbroadcast

Unicast
- Nonbroadcast
- Point-to-Multipoint Nonbroadcast

Multicast
- Broadcast
- Point-to-Point
- Point-to-Multipoint

Stub
- Loopback

Explanation:

QUESTION 191
What is Nagle's algorithm used for?

A. To increase the latency
B. To calculate the best path in distance vector routing protocols
C. To calculate the best path in link state routing protocols
D. To resolve issues caused by poorly implemented TCP flow control.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 192
Which statement is true regarding the UDP checksum?

A. It is used for congestion control.
B. It cannot be all zeros.
C. It is used by some Internet worms to hide their propagation.
D. It is computed based on the IP pseudo-header.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 193
How many hash buckets does Cisco Express Forwarding use for load balancing?

A. 8
B. 16
C. 24
D. 32

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 194
Which statement describes the purpose of the Payload Type field in the RTP header?

A. It identifies the signaling protocol.
B. It identifies the codec.
C. It identifies the port numbers for RTP.
D. It identifies the port numbers for RTCP.

Correct Answer: B
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 195
Which Cisco IOS XE process administers routing and forwarding?

A. Forwarding manager
B. Interface manager
C. Cisco IOS
D. Host manager

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 196
Which circumstance can cause packet loss due to a microburst?

A. slow convergence
B. a blocked spanning-tree port
C. process switching
D. insufficient buffers

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 197
When you migrate a network from PVST+ to rapid-PVST+, which two features become inactive? (Choose two.)

A. Root guard
B. Loop guard

C. UplinkFast
D. UDLD
E. BackboneFast
F. Bridge Assurance

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 198
Which three condition types can be monitored by crypto conditional debug? (Choose three.)

A. Peer hostname
B. SSL
C. ISAKMP
D. Flow ID
E. IPsec
F. Connection ID

Correct Answer: ADF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 199
Refer to the exhibit.

```
Internet Protocol, Src: 192.168.0.2 (192.168.0.2), Dst: 224.0.0.10 (224.0.0.10)
Version: 4
Header length: 20 bytes
Differentiated Services Field: 0xc0 (DSCP 0x30: Class Selector 6; ECN: 0x00)
Total Length: 60
Identification: 0x0000 (0)
Flags: 0x00
Fragment offset: 0
Time to live: 2
Protocol: EIGRP (88)
Header checksum: 0x16f6 [correct]
Source: 192.168.0.2 (192.168.0.2)
Destination: 224.0.0.10 (224.0.0.10)
```


Which two pieces of information in this Wireshark capture indicate that you are viewing EIGRP traffic? (Choose two.)

A. the header length
B. the protocol number
C. the destination address
D. the Class Selector
E. the source address
F. the header checksum

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 200
Which statement is true about MLD?

A. MLD v1 gives hosts the ability to receive multicast packets from specific source addresses.
B. All MLD messages are sent with a link-local IPv6 source address of FF02::D.
C. The multicast address field is cleared to zero when sending an MLD report message.
D. MLD is used by IPv6 routers to discover multicast listeners on a directly attached link.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Topic 3, Volume C

QUESTION 201
Which statement is true about LLDP?

A. LLDP provides VTP support.
B. LLDP does not use a multicast address to communicate.
C. LLDP can indicate only the duplex setting of a link, and not the speed capabilities.
D. LLDP does not support native VLAN indication.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 202
Which statement is true when using a VLAN ID from the extended VLAN range (10064094)?

A. VLANs in the extended VLAN range can be used with VTPv2 in either client or server mode.
B. VLANs in the extended VLAN range can only be used as private VLANs.
C. STP is disabled by default on extended-range VLANs.
D. VLANs in the extended VLAN range cannot be pruned.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 203
Which statement is true about trunking?

A. Cisco switches that run PVST+ do not transmit BPDUs on nonnative VLANs when using a dot1q trunk.

B. When removing VLAN 1 from a trunk, management traffic such as CDP is no longer passed in that VLAN.
C. DTP only supports autonegotiation on 802.1q and does not support autonegotiation for ISL.
D. DTP is a point-to-point protocol.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 204
Which three statements are true about an EtherChannel? (Choose three.)

A. PAGP and LACP can be configured on the same switch if the switch is not in the same EtherChannel.
B. EtherChannel ports in suspended state can receive BPDUs but cannot send them.
C. An EtherChannel forms between trunks that are using different native VLANs.
D. LACP can operate in both half duplex and full duplex, if the duplex setting is the same on both ends.
E. Ports with different spanning-tree path costs can form an EtherChannel.

Correct Answer: ABE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 205
Which technology can be affected when switches are used that do not support jumbo frames?

A. 802.1x
B. BFD
C. OSPFv3
D. 802.1q

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 206
Which statement describes the native VLAN concept in an ISL trunk?

A. It is the VLAN ID that is assigned to untagged packets.
B. It is the VLAN with highest priority.
C. It is the default VLAN for a trunk.
D. There is no native VLAN concept in an ISL trunk.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 207
Which protocol is the encapsulating protocol for mtrace packets?

A. ICMP
B. IGMP
C. PIM
D. GRE

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 208
Assume that the following MAC addresses are used for the bridge ID MAC address by four different switches in a network. Which switch will be elected as the spanning-tree root bridge?

A. SwitchA uses MAC 1000.AA-AA-AA-AA-AA-AA.
B. SwitchB uses MAC 2000.BB-BB-BB-BB-BB-BB.
C. SwitchC uses MAC 3000.CC-CC-CC-CC-CC-CC.
D. SwitchD uses MAC 4000.DD-DD-DD-DD-DD-DD.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

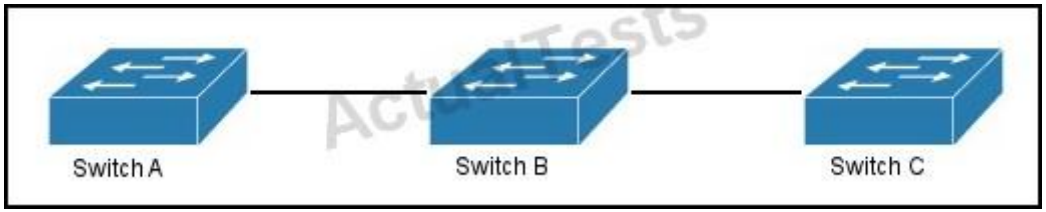
QUESTION 209
What is the destination MAC address of a BPDU frame?

A. 01-80-C2-00-00-00
B. 01-00-5E-00-00-00
C. FF-FF-FF-FF-FF-FF
D. 01-80-C6-00-00-01

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 210
Refer to the exhibit.



All switches are Cisco switches. Assume that Cisco Discovery Protocol is enabled only on switches A and C.

Which information is returned when you issue the command show cdp neighbors on switch C?

A. a limited amount of information about switch B
B. no neighbor details will be returned
C. neighbor details for switch B

D. neighbor details for switch A
E. neighbor details for switch C

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 211
Which two features are supported when Cisco HDLC is implemented? (Choose two.)

A. error recovery
B. error detection
C. asynchronous links
D. multiple protocols

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 212
Refer to the exhibit.

```
R1
interface Serial0/0
   encapsulation ppp
   ppp pap sent-username SITE2 password cisco

R2
username SITE2 password cisco
   interface Serial0/0
   encapsulation ppp
   ppp authentication pap
```

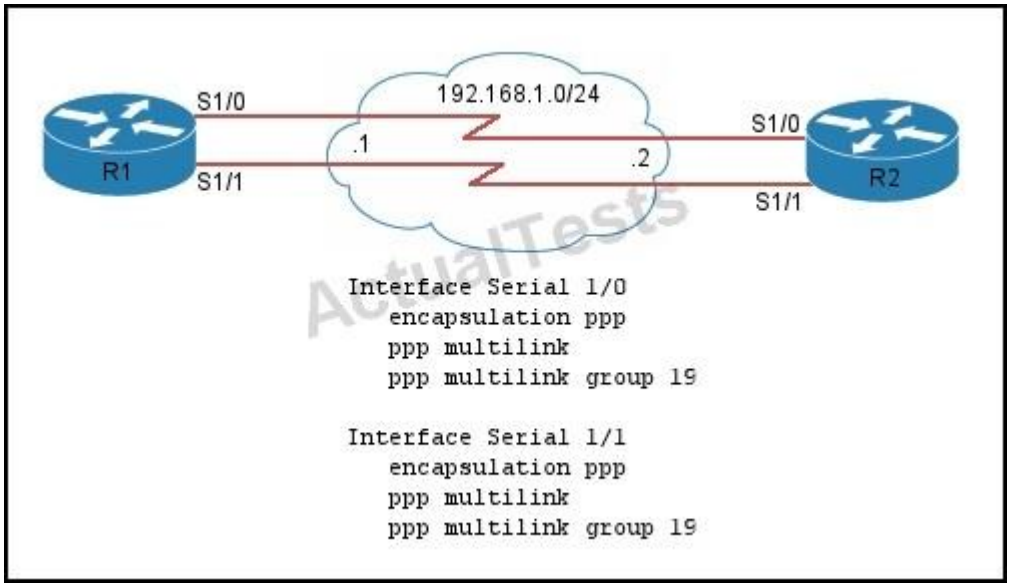
With these configurations for R1 and R2, which statement about PPP authentication is true?

A. Authentication fails because R1 is missing a username and password.
B. R2 responds with the correct authentication credentials.
C. R2 requires authentication from R1.
D. R1 requires authentication from R2.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 213
Refer to the exhibit.



You must complete the configuration on R1 so that a maximum of three links can be used and fragmentation is supported.

Which additional configuration accomplishes this task?

A. interface Multilink19

ip address 192.168.1.1 255.255.255.0
ppp multilink
ppp multilink group 19
ppp multilink links minimum 1
ppp multilink links maximum 3
ppp multilink interleave

B. interface Multilink19
ip address 192.168.1.1 255.255.255.0
ppp multilink
ppp multilink group 19
ppp multilink links maximum 3
ppp multilink fragment delay 20

C. interface Multilink19
ip address 192.168.1.1 255.255.255.0
ppp multilink
ppp multilink group 19
ppp multilink links maximum 3
ppp multilink fragment delay 20
ppp multilink interleave

D. interface Multilink19
ip address 192.168.1.1 255.255.255.252
ppp multilink
ppp multilink group 19
ppp multilink links maximum 3
ppp multilink interleave

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 214
When BGP route reflectors are used, which attribute ensures that a routing loop is not created?

A. weight
B. local preference
C. multiexit discriminator
D. originator ID

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 215
Refer to the exhibit.

```
Router#sh ip osp data summ

            OSPF Router with ID (100.1.1.1) (Process ID 1)

                Summary Net Link States (Area 0)

  LS age: 22
  Options: (No TOS-capability, DC, Downward)
  LS Type: Summary Links(Network)
  Link State ID: 2.2.0.0 (summary Network Number)
  Advertising Router: 2.3.4.101
  LS Seq Number: 80000001
  Checksum: 0x3316
  Length: 28
  Network Mask: /24
        MTID: 0         Metric: 1
```

Which statement is true about the downward bit?

A. It forces the CE router to use a backup link instead of sending traffic via MPLS VPN.
B. It informs the PE router that the LSA metric has been recently decreased to 1 and that partial SPF calculation cannot be delayed.
C. It forces the CE router to install the LSA with the downward bit set into its routing table as a discard route.
D. It informs the PE router that the LSA was already redistributed into BGP by another PE router and that the LSA must not be redistributed into BGP again.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 216
Which regular expression will match prefixes that originated from AS200?

A. ^$
B. ^200_
C. _200$
D. ^200)
E. _200_

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 217
Which statement describes the difference between a stub area and a totally stub area?

A. The ABR advertises a default route to a totally stub area and not to a stub area.
B. Stub areas do not allow LSA types 4 and 5, while totally stub areas do not allow LSA types 3, 4, and 5.
C. Totally stub areas allow limited external routes in the area via a special type 7 LSA, while stub areas do not
D. Stub areas do not allow external LSAs, ASBR summary LSAs, or summary LSAs with the exception of a default route originated by the ABR via a summary LSA.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 218
Which two statements are true about IS-IS? (Choose two.)

A. IS-IS DIS election is nondeterministic.

B. IS-IS SPF calculation is performed in three phases.
C. IS-IS works over the data link layer, which does not provide for fragmentation and reassembly.
D. IS-IS can never be routed beyond the immediate next hop.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 219
Which command do you use to connect a dense-mode domain to a sparse-mode multicast domain?

A. none, because there is no such command
B. ip pim spt-threshold infinity
C. ip pim register dense-mode
D. ip pim dense-mode proxy-register

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 220
Which two statements about the function of a PIM designated router are true? (Choose two.)

A. It forwards multicast traffic from the source into the PIM network.
B. It registers directly connected sources to the PIM rendezvous point.
C. It sends PIM Join/Prune messages for directly connected receivers.
D. It sends IGMP queries.
E. It sends PIM asserts on the interfaces of the outgoing interface list.

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 221
Refer to the exhibit.

```
router bgp 1
neighbor 10.1.1.1 remote-as 2
neighbor 10.1.1.1 ttl-security hops 2
```

Which IP packets will be accepted from EBGP neighbor 10.1.1.1?

A. IP packets with a TTL count in the header that is equal to or greater than 253
B. IP packets with a TTL count in the header that is equal to 253
C. IP packets with a TTL count in the header that is equal to or greater than 2
D. IP packets with a TTL count in the header that is equal to 2

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 222
Which two statements about proxy ARP are true? (Choose two.)

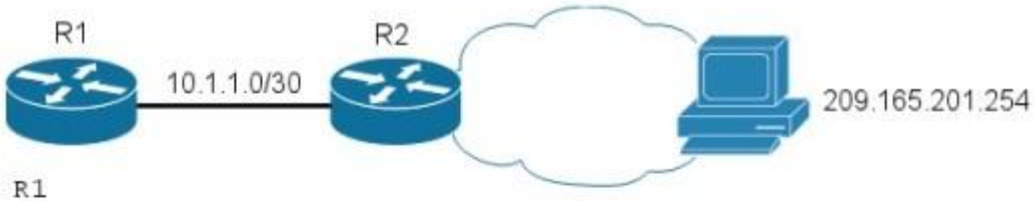
A. It is supported on networks without ARP.
B. It allows machines to spoof packets.
C. It requires larger ARP tables
D. It reduces the amount of ARP traffic.

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 223

Refer to the exhibit.




```
R1
!
interface GigabitEthernet0/0
ip address 10.1.1.1 255.255.255.252
!
router ospf 1
router-id 10.1.1.1
network 10.1.1.1 0.0.0.0 area 0
!

R2
!
interface GigabitEthernet0/0
ip address 10.1.1.2 255.255.255.252
!
router ospf 1
router-id 10.1.1.2
network 10.1.1.2 0.0.0.0 area 0
default-information originate
!
interface GigabitEthernet0/1
description INTERNET
ip address 209.165.202.129 255.255.255.224
!
ip route 209.165.201.254 255.255.255.255 GigabitEthernet0/1
!
```


Routers R1 and R2 are configured as shown, and traffic from R1 fails to reach host 209.165.201.254.

Which action can you take to correct the problem?

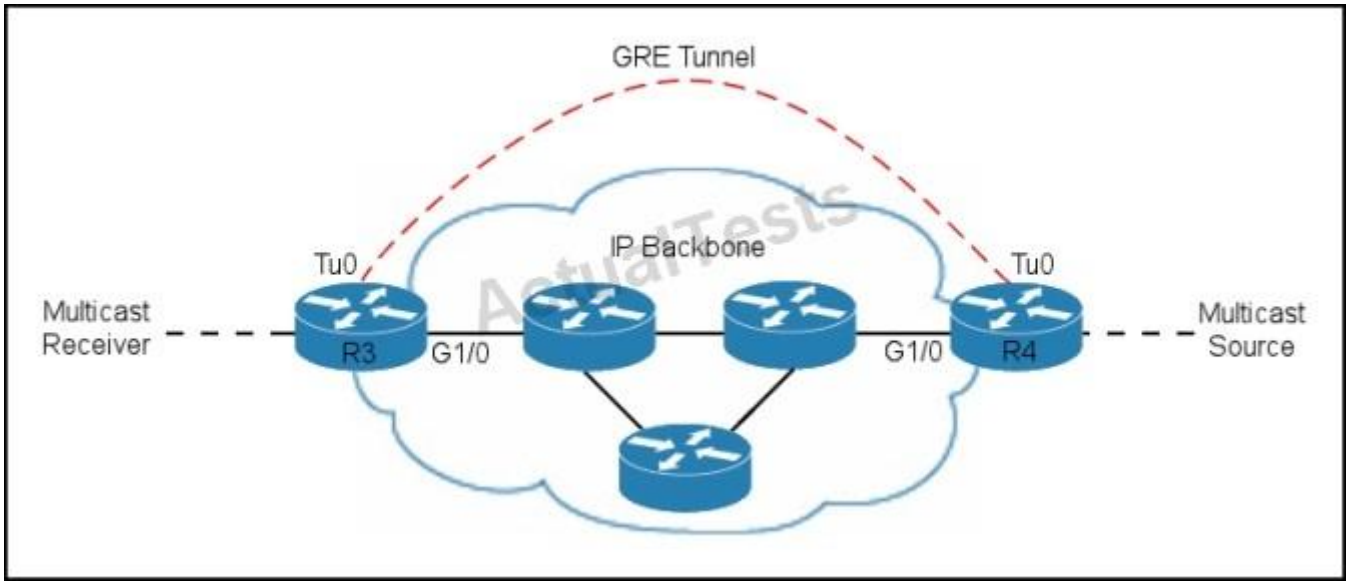
A. Ensure that R2 has a default route in its routing table.

B. Change the OSPF area type on R1 and R2.
C. Edit the router configurations so that address 209.165.201.254 is a routable address.
D. Remove the default-information originate command from the OSPF configuration of R2.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 224
Refer to the exhibit.



A tunnel is configured between R3 to R4 sourced with their loopback interfaces. The ip pim sparse-dense mode command is configured on the tunnel interfaces and multicast-routing is enabled on R3 and R4. The IP backbone is not configured for multicast routing.

The RPF check has failed toward the multicast source.

Which two conditions could have caused the failure? (Choose two.)

A. The route back to the RP is through a different interface than tunnel 0.

B. The backbone devices can only route unicast traffic.
C. The route back to the RP is through the same tunnel interface.
D. A static route that points the RP to GigabitEthernet1/0 is configured.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 225
Which option is the default number of routes over which EIGRP can load balance?

A. 1
B. 4
C. 8
D. 16

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 226
When EIGRP is used as the IPv4 PE-CE protocol, which two requirements must be configured before the BGP IPv4 address family can be configured? (Choose two.)

A. the route distinguisher
B. the virtual routing and forwarding instance
C. the loopback interface
D. the router ID

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 227
Which three EIGRP packet types are valid? (Choose three.)

A. open
B. notification
C. keep-alive
D. hello
E. query
F. reply

Correct Answer: DEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 228
Which term describes an EIGRP route that has feasible successors?

A. active
B. passive
C. redistributed
D. invalid

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 229
Refer to the exhibit.

```
Routing Protocol is "eigrp 1"
  Outgoing update filter list for all interfaces is not set
  Incoming update filter list for all interfaces is not set
  Default networks flagged in outgoing updates
  Default networks accepted from incoming updates
  EIGRP metric weight K1=1, K2=0, K3=1, K4=1, K5=0
  EIGRP maximum hopcount 100
  EIGRP maximum metric variance 1
  Redistributing: eigrp 1
  EIGRP NSF-aware route hold timer is 240s
  Automatic network summarization is not in effect
  Maximum path: 4
  Routing for Networks:
    10.1.24.0/24
    10.1.34.0/24
  Routing Information Sources:
    Gateway         Distance      Last Update
    10.1.24.2             90      00:00:28
    10.1.34.3             90      00:00:28
  Distance: internal 90 external 170
```

If EIGRP is configured between two routers as shown in this output, which statement about their EIGRP relationship is true?

A. The routers will establish an EIGRP relationship successfully.
B. The routers are using different authentication key-strings.
C. The reliability metric is enabled.
D. The delay metric is disabled.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 230
Which type of OSPF packet is an OSPF link state update packet?

A. type 1

B. type 2
C. type 3
D. type 4
E. type 5

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 231
If two OSPF type 3 prefixes have the same metric, and are within the same process, which prefix(es) are installed into the routing table?

A. The route whose originator has the lower router ID.
B. Both routes are installed.
C. The route whose originator has the higher router ID.
D. The first route that is learned.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 232
Which OSPF feature supports LSA rate limiting in milliseconds to provide faster convergence?

A. LSA throttling
B. incremental SPF
C. fast hello
D. SPF tuning

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 233
Which two options are BGP attributes that are updated when router sends an update to its eBGP peer? (Choose two.)

A. weight
B. local preference
C. AS_path
D. next-hop

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

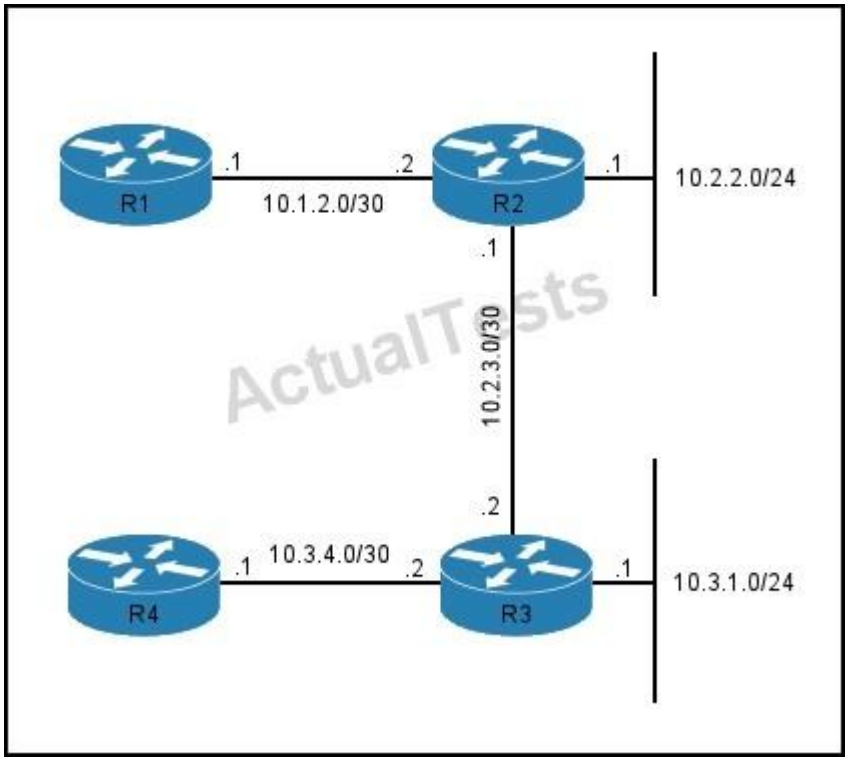
QUESTION 234
Which BGP aggregate address configuration advertises only the aggregate address, with attributes inherited from the more specific routes?

A. summary-only as-set
B. as-set
C. summary
D. summary-only

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 235
Refer to the exhibit.



If ISIS is configured utilizing default metrics, what is the cost for Router 4 to reach the 10.2.2.0/24 network?

A. 1
B. 20
C. 30
D. 63

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 236
Refer to the exhibit.

```
ip route vrf red 0.0.0.0 0.0.0.0 192.168.1.1 global
```

Which three statements about this configuration are true? (Choose three.)

A. The default route appears in the global routing table.
B. The static route appears in the VRF red routing table.
C. The subnet 192.168.1.0 is unique to the VRF red routing table.
D. The static route is added to the global routing table and leaked from the VRF red.
E. The subnet 192.168.1.0 is unique to the global routing table.
F. 192.168.1.1 is reachable using any of the addresses on the router where the static route is configured.

Correct Answer: ABE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 237
Refer to the exhibit.

```
ip route 10.0.0.0 255.255.255.0 192.168.1.2
interface loopback0
   ip address 10.0.0.1 255.255.255.0
router rip
   network 10.0.0.0
router eigrp 1
   network 10.0.0.0
router ospf 1
   network 10.0.0.0 0.0.0.255 area 0
```

Which route type is displayed when you enter the command show ip route supernets-only on a device with this configuration?

A. Connected
B. OSPF

C. RIP
D. EIGRP
E. An empty route set

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 238
Which statement about passive interfaces is true?

A. The interface with the OSPF passive interface configuration appears as a not-so-stubby network.
B. The interface with the EIGRP passive interface configuration ignores routes after the exchange of hello packets.
C. The interface with the IS-IS passive interface configuration sends the IP address of that interface in the link-state protocol data units.
D. Passive interface can be configured on the interface for IS-IS.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 239
Refer to the exhibit.

```
access-list 1 permit 10.3.5.0 0.0.3.255
router eigrp 1
   network 10.0.0.0
   no auto-summary
   distribute-list 1 out
```

Which two routes are included in the route update? (Choose two.)

A. 10.3.0.0
B. 10.3.2.0

C. 10.3.4.0
D. 10.3.6.0

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 240
Which two statements about the metric-style wide statement as it applies to route redistribution are true? (Choose two.)

A. It is used in IS-IS.
B. It is used in OSPF.
C. It is used in EIGRP.
D. It is used for accepting TLV.
E. It is used in PIM for accepting mroutes.
F. It is used for accepting external routes.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 241
You are tasked with configuring a router on an OSPF domain to import routes from an EIGRP domain and summarize the routes to 192.168.64.0.

Which statement configures the summarized route and provides equal-path route redundancy?

A. area 32 range 192.168.64.0 255.255.192.0 cost 100
B. area 32 range 192.168.64.0 255.255.63.0 cost 100
C. area 32 range 192.168.64.0 255.255.64.0 cost 100
D. area 32 range 192.168.64.0 255.255.192.0 multi-path

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 242
Packets from a router with policy-based routing configured are failing to reach the next hop.

Which two additions can you make to the router configuration to enable the packets to flow correctly? (Choose two.)

A. Enable ip proxy-arp on the exiting interface.
B. Specify the next hop as an address.
C. Specify the next hop as an interface.
D. Add a match-any permit statement to the route map.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 243
Which two options are EIGRP route authentication encryption modes? (Choose two.)

A. MD5
B. HMAC-SHA2-256bit
C. ESP-AES
D. HMAC-AES

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 244
Which technology facilitates neighbor IP address resolution in DMVPN?

A. CEF
B. mGRE

C. a dynamic routing protocol
D. NHRP

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 245
Which two are features of DMVPN? (Choose two.)

A. It does not support spoke routers behind dynamic NAT.
B. It requires IPsec encryption.
C. It only supports remote peers with statically assigned addresses.
D. It supports multicast traffic.
E. It offers configuration reduction.

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 246
Refer to the exhibit.

```
interface tunnel 1
 tunnel source ethernet 0
 tunnel mode ipv6ip isatap
 ipv6 address 2001:DB8::/64 eui-64
```

What is wrong with the configuration of this tunnel interface?

A. ISATAP tunnels cannot use the EUI-64 address format.
B. No tunnel destination has been specified.
C. The tunnel source of an ISATAP tunnel must always point to a loopback interface.

D. Router advertisements are disabled on this tunnel interface.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 247
Which two statements are true about a 6to4 tunnel connecting two IPv6 islands over the IPv4 Internet? (Choose two.)

A. It embeds the IPv6 packet into the IPv4 payload with the protocol type set to 51.
B. It works by appending the private IPv4 address (converted into hexadecimal format) to the 2002::/16 prefix.
C. It embeds the IPv6 packet into the IPv4 payload with the protocol type set to 41.
D. It works by appending the public IPv4 address (converted into hexadecimal format) to the 2002::/16 prefix.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 248
Refer to the exhibit.

```
interface GigabitEthernet0/0
ip address 10.10.10.1 255.255.255.0
duplex auto
speed auto
media-type rj45
!
interface Tunnel0
ip address 192.168.1.1 255.255.255.252
tunnel source GigabitEthernet0/0
tunnel destination 192.168.1.240
```


What will be the IP MTU of tunnel 0?

A. 1500
B. 1524
C. 1476
D. 1452
E. 1548

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 249
On an MPLS L3VPN, which two tasks are performed by the PE router? (Choose two.)

A. It exchanges VPNv4 routes with other PE routers.
B. It typically exchanges iBGP routing updates with the CE device.
C. It distributes labels and forwards labeled packets.
D. It exchanges VPNv4 routes with CE devices.
E. It forwards labeled packets between CE devices.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 250
Refer to the exhibit.

```
R1#show ip nhrp detail
10.1.0.2/32 via 10.1.0.2, Tunnel0 created 00:06:35, expire 00:00:29
  Type: dynamic, Flags: authoritative unique registered used
  NBMA address: 192.168.2.2
10.1.0.3/32 via 10.1.0.3, Tunnel0 created 00:05:28, expire 00:00:52
  Type: dynamic, Flags: authoritative unique registered used
  NBMA address: 192.168.3.3
```

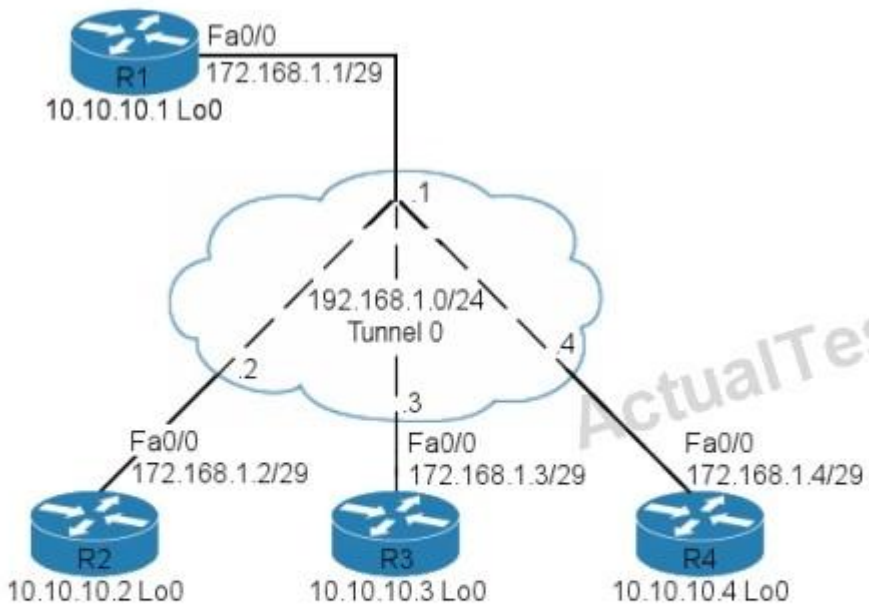
Which statement describes what the authoritative flag indicates?

A. Authentication was used for the mapping.
B. R1 learned about the NHRP mapping from a registration request.
C. Duplicate mapping in the NHRP cache is prevented.
D. The registration request had the same flag set.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 251
Refer to the exhibit.




```
hostname R1
!
crypto isakmp policy 1
   authentication pre-share
crypto isakmp key dmvpn address
   0.0.0.0 0.0.0.0
!
crypto ipsec transform-set vpntrans
   ah-sha-hmac esp-aes 256 esp-sha-hmac
!
crypto ipsec profile DMV_PRO
   set transform-set vpntrans
!
<output omitted>
!
interface Tunnel0
   ip address 192.168.1.1 255.255.255.0
   no ip redirects
   ip nhrp authentication dmvpn
   ip nhrp map multicast dynamic
   ip nhrp network-id 99
   tunnel source FastEthernet0/1
   tunnel mode gre multipoint
   tunnel protection ipsec profile
      DMV_PRO
!
```


Which two statements about this configuration are true? (Choose two.)

A. Spoke devices will be dynamically added to the NHRP mappings.
B. The next-hop server address must be configured to 172.168.1.1 on all spokes.
C. The next-hop server address must be configured to 192.168.1.1 on all spokes.
D. R1 will create a static mapping for each spoke.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 252
Which two tunneling techniques determine the IPv4 destination address on a per-packet basis? (Choose two.)

A. 6to4 tunneling
B. ISATAP tunneling
C. manual tunneling
D. GRE tunneling

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 253
Which two services are used to transport Layer 2 frames across a packet-switched network? (Choose two.)

A. Frame Relay
B. ATM
C. AToM
D. L2TPv3

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 254
Which two statements about the C-bit and PW type are true? (Choose two.)

A. The C-bit is 1 byte and the PW type is 15 bytes.
B. The PW type indicates the type of pseudowire.
C. The C-bit is 3 bits and the PW type is 10 bits.
D. The C-bit set to 1 indicates a control word is present.
E. The PW type indicates the encryption type.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 255
Which statement describes the function of rekey messages?

A. They prevent unencrypted traffic from passing through a group member before registration.
B. They refresh IPsec SAs when the key is about to expire.
C. They trigger a rekey from the server when configuring the rekey ACL.
D. They authenticate traffic passing through a particular group member.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 256
Which three statements about GET VPN are true? (Choose three.)

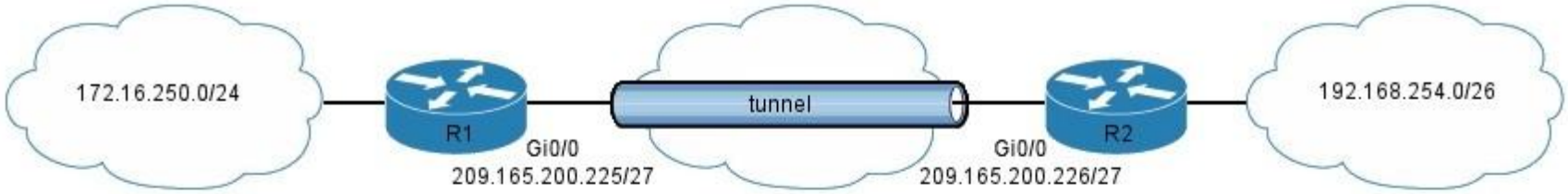
A. It encrypts WAN traffic to increase data security and provide transport authentication.
B. It provides direct communication between sites, which reduces latency and jitter.
C. It can secure IP multicast, unicast, and broadcast group traffic.
D. It uses a centralized key server for membership control.
E. It enables the router to configure tunnels.
F. It maintains full-mesh connectivity for IP networks.

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 257

Refer to the exhibit.




```
R1

ip access-list standard VPN
   permit ip 172.16.0.0 0.0.255.255

crypto isakmp policy 10
   encr 3des
   hash md5
   authentication pre-share
   group 2
   lifetime 86400
crypto isakmp key 0 CISCO address 209.165.200.226
crypto isakmp keepalive 10 2 periodic
crypto ipsec transform-set T-SET esp-3des es-md5-hmac
crypto map VPN-MAP 10 ipsec-isakmp
   set peer 209.165.200.226
   set transform-set TS
   match address VPN

router eigrp 10
no auto-summary
network 209.165.200.224 0.0.0.31
network 172.16.250.0 0.0.0.255

interface GigabitEthernet0/0
   crypto map VPN-MAP
```

```
R2

ip access-list extended VPN
   permit ip 172.16.0.0 0.0.255.255

crypto isakmp policy 10
   encr 3des
   hash md5
   authentication pre-share
   group 2
   lifetime 86400
crypto isakmp key 0 CISCO address 209.165.200.225
crypto isakmp keepalive 10 2 periodic
crypto ipsec transform-set TS esp-aes 256 esp-sha-hmac
crypto map VPN-MAP 10 ipsec-isakmp
   set peer 209.165.200.225
   set transform-set TS
   match address VPN

router eigrp 10
no auto-summary
network 209.165.200.224 0.0.0.31
network 192.168.254.0 0.0.0.63

interface GigabitEthernet0/0
   crypto map VPN-MAP
```


If the traffic flowing from network 192.168.254.0 to 172.16.250.0 is unencrypted, which two actions must you take to enable encryption? (Choose two).

A. Configure the transform-set on R2 to match the configuration on R1.

B. Configure the crypto map on R2 to include the correct subnet.
C. Configure the ISAKMP policy names to match on R1 and R2.
D. Configure the crypto map names to match on R1 and R2.
E. Configure the Diffie-Hellman keys used in the ISAKMP policies to be different on R1 and R2.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 258
Which service is disabled by the no service tcp-small-servers command?

A. the finger service
B. the Telnet service
C. the Maintenance Operation Protocol service
D. the chargen service

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 259
What is the ip dhcp snooping information option command used for?

A. It displays information about the DHCP snooping table.
B. It sends a syslog and an SNMP trap for a DHCP snooping violation.
C. It enables the DHCP snooping host tracking feature.
D. It enables DHCP option 82 data insertion.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 260
Which two statements are true about unicast RPF? (Choose two.)

A. Unicast RPF requires CEF to be enabled.
B. Unicast RPF strict mode works better with multihomed networks.
C. Unicast RPF strict mode supports symmetric paths.
D. Unicast RPF strict mode supports asymmetric paths.
E. CEF is optional with Unicast RPF, but when CEF is enabled it provides better performance.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 261
Under Cisco IOS Software, which two features are supported in RADIUS Change of Authorization requests? (Choose two.)

A. session identification
B. session reauthentication
C. session termination
D. host termination

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 262
In a PfR environment, which two statements best describe the difference between active mode monitoring and fast mode monitoring? (Choose two.)

A. Active mode monitoring can monitor and measure actual traffic via NetFlow data collection.
B. Fast mode monitoring can measure bursty traffic better than active mode.
C. Active mode monitoring uses IP SLA probes for the purpose of obtaining performance characteristics of the current WAN exit link.
D. Fast mode monitoring uses IP SLA probes via all valid exits continuously to quickly determine an alternate exit link.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 263
Refer to the exhibit.

```
MC#sh pfr master traffic-class

OER Prefix Statistics:
 Pas - Passive, Act - Active, S - Short term, L - Long term, Dly - Delay (ms),
 P - Percentage below threshold, Jit - Jitter (ms),
 MOS - Mean Opinion Score
 Los - Packet Loss (packets-per-million), Un - Unreachable (flows-per-million),
 E - Egress, I - Ingress, Bw - Bandwidth (kbps), N - Not applicable
 U - unknown, * - uncontrolled, + - control more specific, @ - active probe all
 # - Prefix monitor mode is Special, & - Blackholed Prefix
 % - Force Next-Hop, ^ - Prefix is denied

DstPrefix          Appl_ID Dscp Prot     SrcPort     DstPort SrcPrefix
           Flags             State     Time            CurrBR  CurrI/F Protocol
         PasSDly  PasLDly   PasSUn   PasLUn  PasSLos  PasLLos      EBw      IBw
         ActSDly  ActLDly   ActSUn   ActLUn  ActSJit  ActPMOS  ActSLos  ActLLos
-------------------------------------------------------------------------------
10.1.0.0/24               N    N    N           N           N N
                        INPOLICY*      @83          10.4.5.4 Et0/1           U
              52       52        0        0        0        0       67        7
              51       51        0        0        N        N        N        N
```

Which two statements are true regarding prefix 10.1.0.0/24? (Choose two.)

A. The prefix is in policy, and Cisco PfR rerouted the traffic via 10.4.5.3 Et0/1 because of an OOP event.
B. Cisco PfR is monitoring the prefix via passive NetFlow mode only.
C. Cisco PfR is monitoring the prefix via active, fast, or active throughput IP SLA probe mode only.

D. The prefix is in policy, and Cisco PfR did not reroute the traffic via 10.4.5.3 Et0/1 because the traffic was previously in policy.
E. Cisco PfR is monitoring the prefix via mode monitor, which provides both NetFlow and IP SLA measurements.

Correct Answer: DE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 264
In the DiffServ model, which class represents the lowest priority with the highest drop probability?

A. AF11
B. AF13
C. AF41
D. AF43

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 265
Which two hashing algorithms can be used when configuring SNMPv3? (Choose two.)

A. MD5
B. SHA-1
C. Blowfish
D. DES
E. AES
F. SSL

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 266
Which two statements about the default router settings for SSH connections are true? (Choose two.)

A. The default timeout value for the SSH negotiation phase is 120 seconds.
B. Data is exchanged in clear text by default unless AAA authentication is enabled on the console.
C. The default number of authentication retries is 3.
D. SSH is enabled by default when you configure the username command.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 267
Refer to the exhibit.

```
R1#sh logging
Syslog logging: enabled (12 messages dropped, 0 messages rate-limited, 0 flushes, 0 overruns, xml disabled, filtering disabled)

No Active Message Discriminator.

No Inactive Message Discriminator.

   Console logging: level debugging, 28 messages logged, xml disabled, filtering disabled
   Monitor logging: level debugging, 0 messages logged, xml disabled, filtering disabled
   Buffer logging:  level debugging, 7 messages logged, xml disabled, filtering disabled
   Logging Exception size (4096 bytes)
   Count and timestamp logging messages: disabled
   Persistent logging: disabled

No active filter modules.

ESM: 0 messages dropped

%SYS-5-CONFIG_I: Configured from console by console
   Trap logging: level informational, 32 message lines logged

Log Buffer (4096 bytes):

%BGP-5-ADJCHANGE: neighbor 209.165.200.226 Down Interface flap
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to administratively down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to down
%SYS-5-CONFIG_I: Configured from console by console
```


Which statement about the R1 configuration is true?

A. It supports the service timestamps log uptime command to display time stamps.
B. The logging buffer command was used to increase the default of the buffer.
C. The logging of warning messages is disabled.
D. Log message sequence numbering is disabled.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

Explanation:

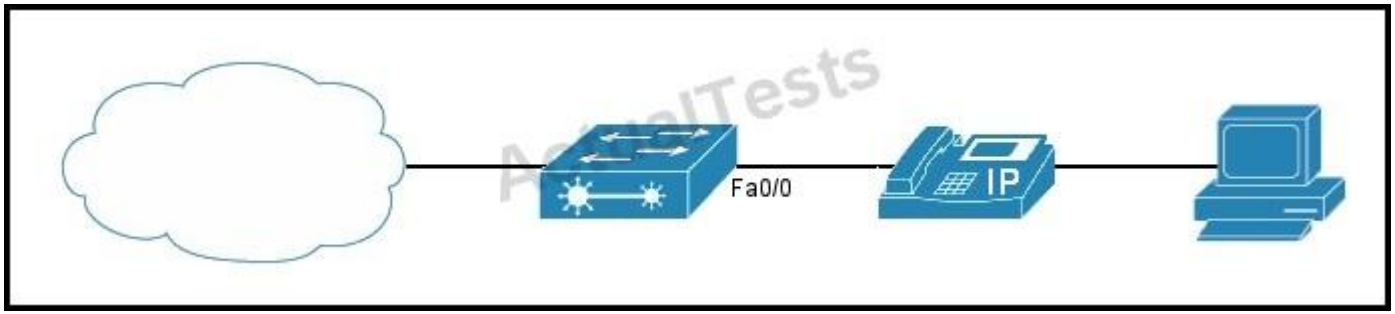
QUESTION 268
Which two statements about class maps are true? (Choose two.)

A. As many as eight DSCP values can be included in a match dscp statement.
B. The default parameter on a class map with more than one match command is match-any.
C. The match class command can nest a class map within another class map.
D. A policy map can be used to designate a protocol within a class map.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 269
Refer to the exhibit.



Which statement about configuring the switch to manage traffic is true?

A. The switchport priority extend cos command on interface FastEthernet0/0 prevents traffic to and from the PC from taking advantage of the high-priority data queue that is assigned to the IP phone.
B. The switchport priority extend cos command on interface FastEthernet0/0 enables traffic to and from the PC to use the high priority data queue that is assigned to the IP phone.
C. When the switch is configured to trust the CoS label of incoming traffic, the trusted boundary feature is disabled automatically.
D. The mls qos cos override command on interface FastEthernet0/0 configures the port to trust the CoS label of traffic to and from the PC.

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation:

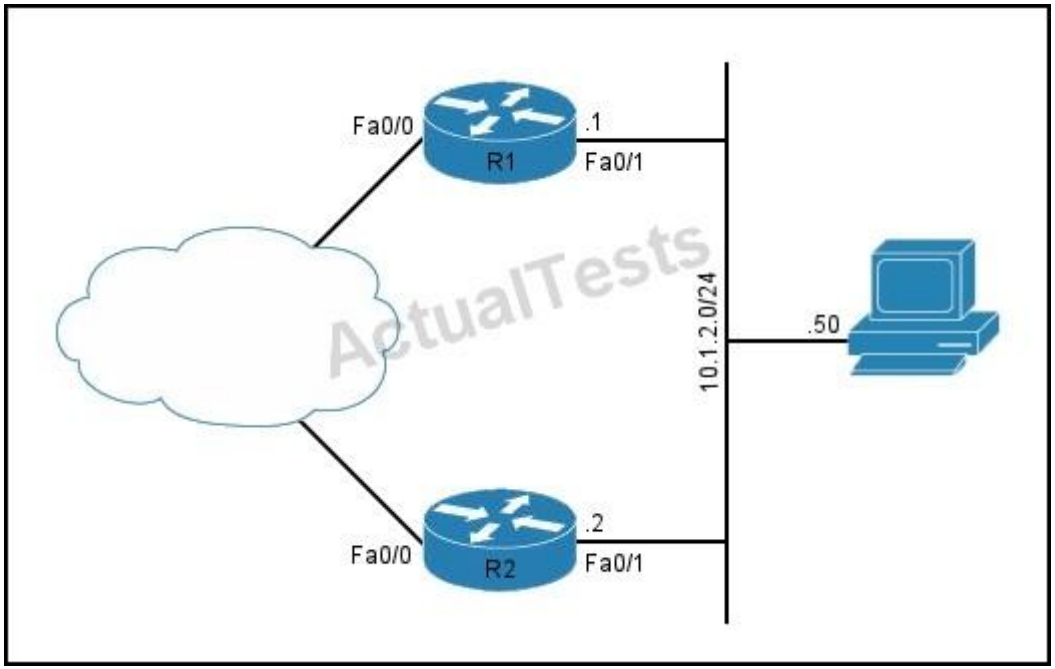
QUESTION 270
Which IP SLA operation type is enhanced by the use of the IP SLAs Responder?

A. DNS
B. HTTP
C. ICMP Echo
D. UDP Echo

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 271
Refer to the exhibit.



Router 1 and Router 2 use HSRP to provide first hop redundancy for hosts on the 10.1.2.0/24 network.

Which feature can provide additional failover coverage for the PC?

A. Cisco Express Forwarding
B. NetFlow
C. Accounting
D. Enhanced Object Tracking

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 272
Which neighbor-discovery message type is used to verify connectivity to a neighbor when the link- layer address of the neighbor is known?

A. neighbor solicitation
B. neighbor advertisement
C. router advertisement
D. router solicitation

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 273
Refer to the exhibit.

```
R2#show ntp associations
    address      ref clock    st  when  poll reach  delay  offset   disp
   ~10.1.1.1     0.0.0.0      16   61    64   0      0.0    0.00   16000.
   * master (synced), # master (unsynced), + selected, - candidate, ~ configured

R2#show ip route | include 10.1.1.1
O     10.1.1.1/32 [110/11] via 10.1.12.1, 00:20:28, FastEthernet0/0.12

R2#show run | include ntp
ntp authentication-key 1 md5 110A1016141D 7
ntp authenticate
ntp trusted-key 1
ntp clock-period 17179894
ntp server 10.1.1.1 key 1

R1#show ip route connected
   209.165.200.0/27 is subnetted, 1 subnets
C     209.165.200.224 is directly connected, FastEthernet0/0.112
   10.0.0.0/8 is variably subnetted, 7 subnets, 2 masks
C     10.1.13.0/24 is directly connected, FastEthernet0/1.13
C     10.1.12.0/24 is directly connected, FastEthernet0/0.12
C     10.1.1.0/24 is directly connected, Loopback0
```


Which two possible network conditions can you infer from this configuration? (Choose two.)

A. The authentication parameters on R1 and R2 are mismatched.

B. R1 is using the default NTP source configuration.
C. R1 and R2 have established an NTP session.
D. R2 is configured as the NTP master with a stratum of 7.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 274
Which three message types are used for prefix delegation in DHCPv6? (Choose three.)

A. DHCP Discover
B. Renew
C. Solicit
D. DHCP Offer
E. Advertise
F. DHCP Ack

Correct Answer: BCE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 275
Which two statements about static NAT are true? (Choose two.)

A. An outside local address maps to the same outside global IP address.
B. An inside local address maps to a different inside global IP address.
C. An outside local address maps to a different outside global IP address.
D. An inside local address maps to the same inside global IP address.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 276
DRAG DROP

Drag and drop the IPv6 prefix on the left to the correct address type on the right.

FF00::/8	Unique Local Unicast
FEC0::/10	Global Unicast
2000::/3	Link Local Unicast
FE80::/10	Multicast
FC00::/7	
FE00::/9	

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the IPv6 prefix on the left to the correct address type on the right.

FF00::/8	FC00::/7
FEC0::/10	2000::/3
2000::/3	FEC0::/10
FE80::/10	FF00::/8
FC00::/7	
FE00::/9	

Explanation:

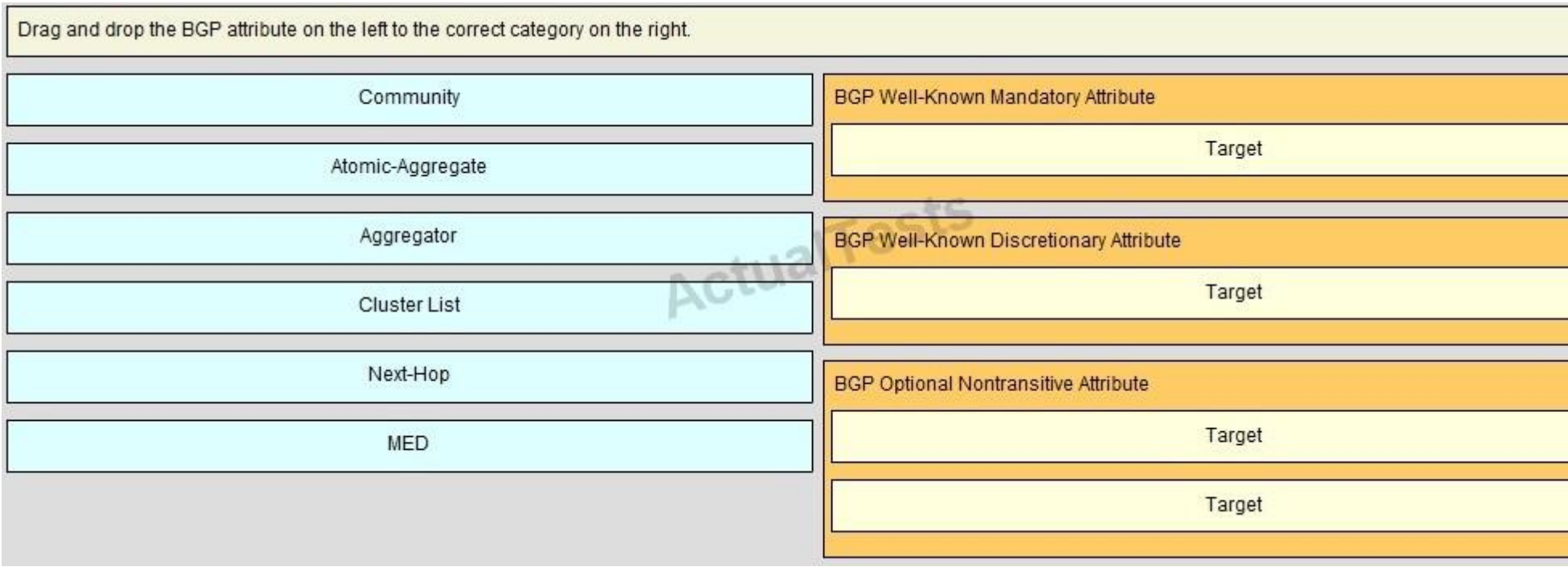
FC00::/7

2000::/3

FE80::/10

FF00::/8

QUESTION 277
DRAG DROP



A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the BGP attribute on the left to the correct category on the right.

- Community
- Atomic-Aggregate
- Aggregator
- Cluster List
- Next-Hop
- MED

BGP Well-Known Mandatory Attribute
- Next-Hop

BGP Well-Known Discretionary Attribute
- Atomic-Aggregate

BGP Optional Nontransitive Attribute
- Cluster List
- MED

Explanation:

QUESTION 278
DRAG DROP

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Explanation:

TACACS+	
	Is proprietary to Cisco
	Separates authentication, authorization, and accountability
RADIUS	
	Uses UDP
	Encrypts only the password

QUESTION 279
DRAG DROP

Drag and drop the protocol on the left to the corresponding administrative distance on the right.

ODR	0
connected	1
external EIGRP	160
static	115
IS-IS	200
iBGP	170

A.

B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the protocol on the left to the corresponding administrative distance on the right.

ODR	connected
connected	static
external EIGRP	ODR
static	IS-IS
IS-IS	iBGP
iBGP	external EIGRP

Explanation:

connected

static

ODR

IS-IS

iBGP

external EIGRP

QUESTION 280
DRAG DROP

Drag and drop the PPPoE packet type on the left to the corresponding description on the right.

PADR	A packet that is sent with the destination_addr set to the broadcast address. The p indicates the type of service requested.
PADT	A packet that is sent with the destination_addr set to the unicast address of the PP client. The packet contains an offer for the client.
PADO	A packet that is sent from the PPPoE client with the destination_addr set to the ch access concentrator. The packet contains a session request from the client.
PADI	A packet that is sent as confirmation to the client. The packet contains the unique PPPoE session ID.
PADS	A packet that is sent to terminate the PPPoE session.

A.
B.
C.
D.

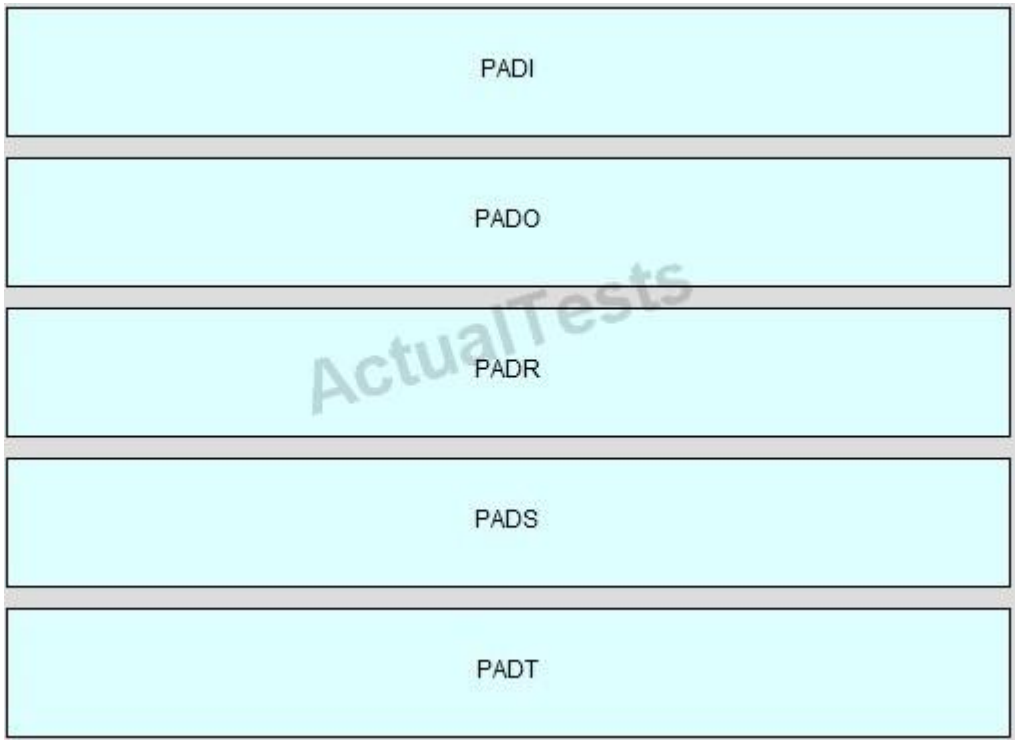
Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the PPPoE packet type on the left to the corresponding description on the right.

PADR	PADI
PADT	PADO
PADO	PADR
PADI	PADS
PADS	PADT

Explanation:



QUESTION 281
DRAG DROP

Drag and drop the BGP state on the left to the action that defines it on the right.

OpenConfirm	The BGP routing process detects that a peer is trying to establish a TCP session w local BGP speaker.
Idle	The BGP routing process tries to establish a TCP session with a peer device
Active	The TCP connection is established.
Connect	The BGP routing process waits to receive an intial keepalive message from the p
Established	The initial BGP state.
OpenSent	The router exchanges update messages with the peer.

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the BGP state on the left to the action that defines it on the right.

OpenConfirm	Connect
Idle	Active
Active	OpenSent
Connect	OpenConfirm
Established	Idle
OpenSent	Established

Connect

Active

OpenSent

OpenConfirm

Idle

Established

QUESTION 282
DRAG DROP

Drag and drop the extended ping command field on the left to its usage on the right.

type of service	discovering framing issues on serial lines
sweep range of sizes	adjusting delay, throughput, and reliability preferences for the ping
data pattern	configuring the IP header options of the ping
loose, strict, record, timestamp, verbose	determining the minimum MTU in a path

Drag and drop the extended ping command field on the left to its usage on the right.

type of service	data pattern
sweep range of sizes	type of service
data pattern	loose, strict, record, timestamp, verbose
loose, strict, record, timestamp, verbose	sweep range of sizes

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:
Explanation:

data pattern
type of service
loose, strict, record, timestamp, verbose
sweep range of sizes

QUESTION 283
DRAG DROP

Drag and drop the argument of the **mls ip cef load-sharing** command on the left to the function it performs on the right.

simple	configures CEF load balancing to use Layer 3 and Layer 4 information, excluding m adjacencies
full	configures CEF load balancing to use only destination Layer 4 ports
full simple	configures CEF load balancing to use only Layer 3 information, excluding multip adjacencies
exclude-port source	configures CEF load balancing to use only source Layer 4 ports
exclude-port destination	configures CEF load balancing to use source and destination Layer 3 and Layer 4 information, including multiple adjacencies

A.
B.
C.
D.

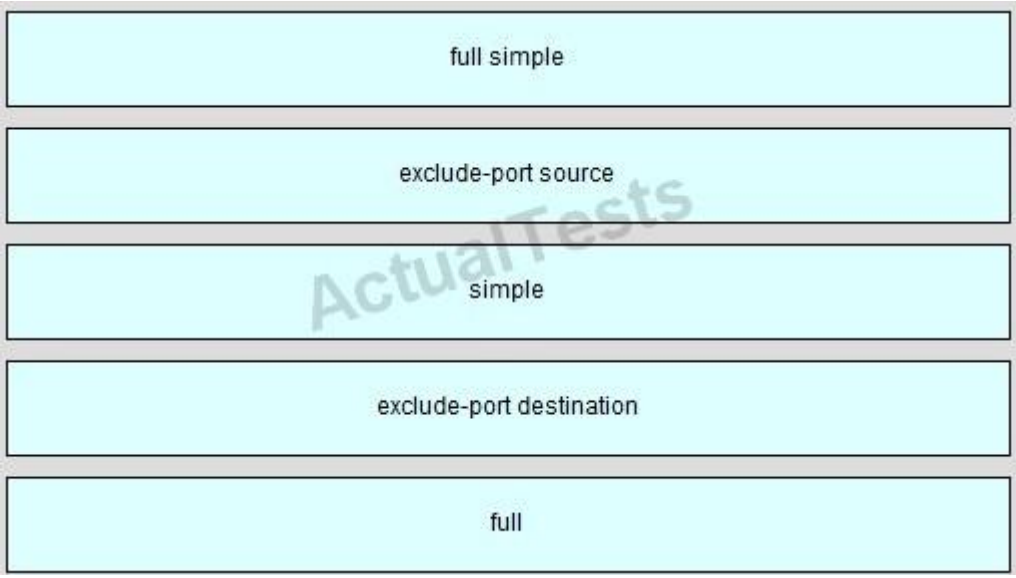
Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

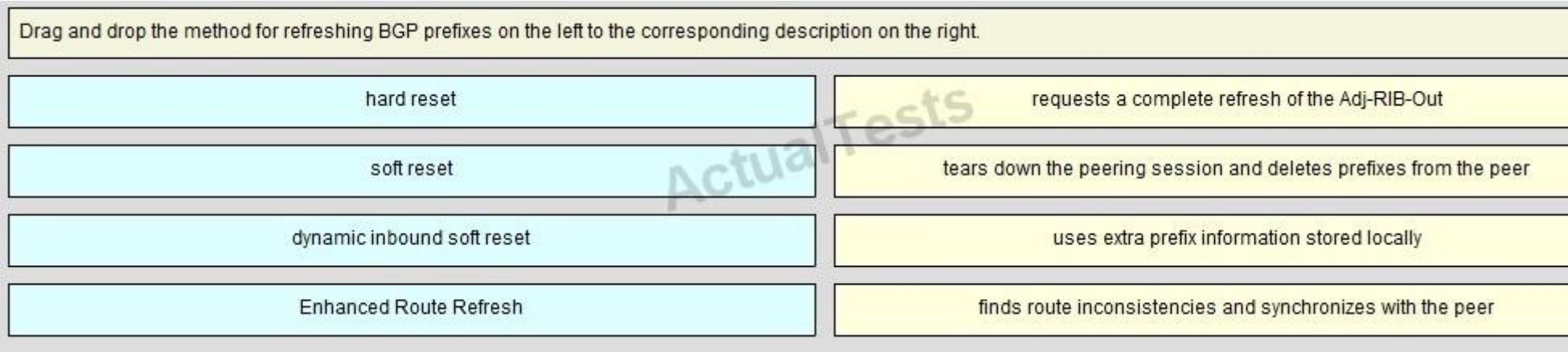
Drag and drop the argument of the **mls ip cef load-sharing** command on the left to the function it performs on the right.

simple	full simple
full	exclude-port source
full simple	simple
exclude-port source	exclude-port destination
exclude-port destination	full

Explanation:



QUESTION 284
DRAG DROP

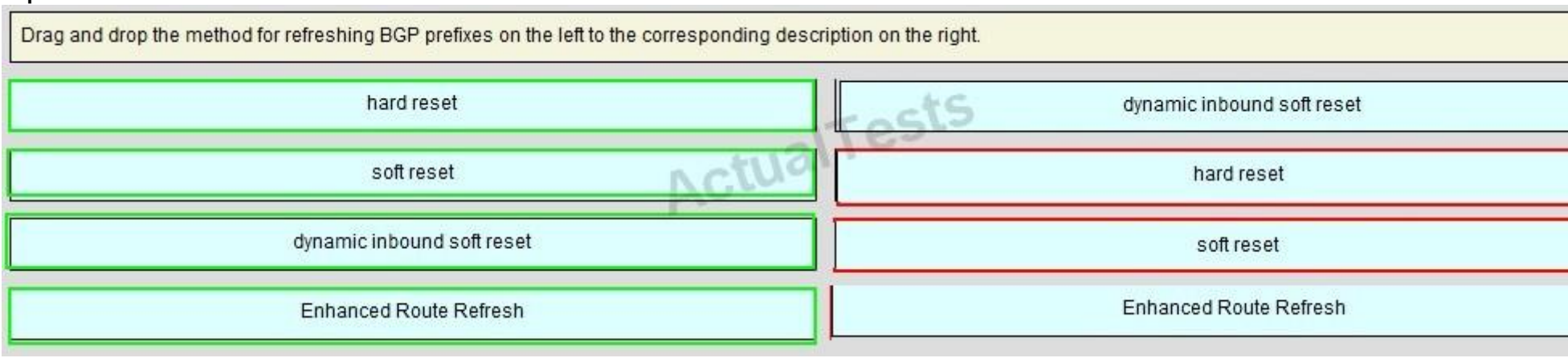


A.
B.
C.

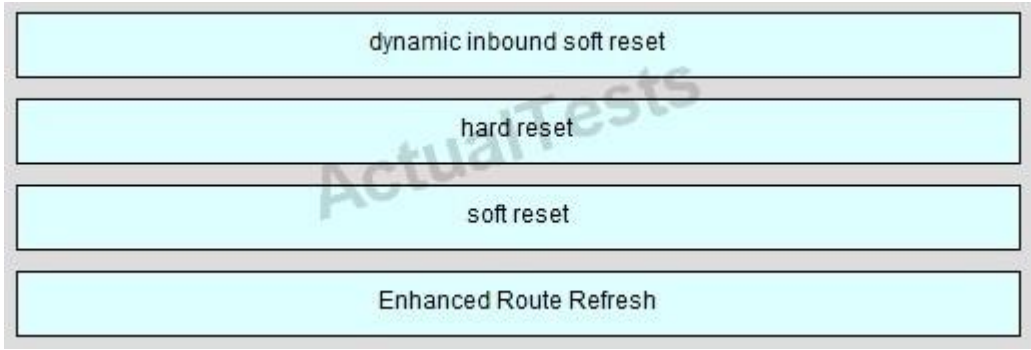
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:



Explanation:



QUESTION 285
DRAG DROP

Drag and drop the IS-IS component on the left to the function that it performs on the right.

attached bits	instructs other devices to route around the sending device until its LSDB is ful converged
overload bit	discovers neighboring IS-IS systems
TLV	carries additional data within an IS-IS packet
IIH	synchronizes the LSDB within an IS-IS domain
PNSP	indicates to a Level 1 device that the sending device has reachability to other areas
CNSP	requests retransmission of the latest version of an LSP

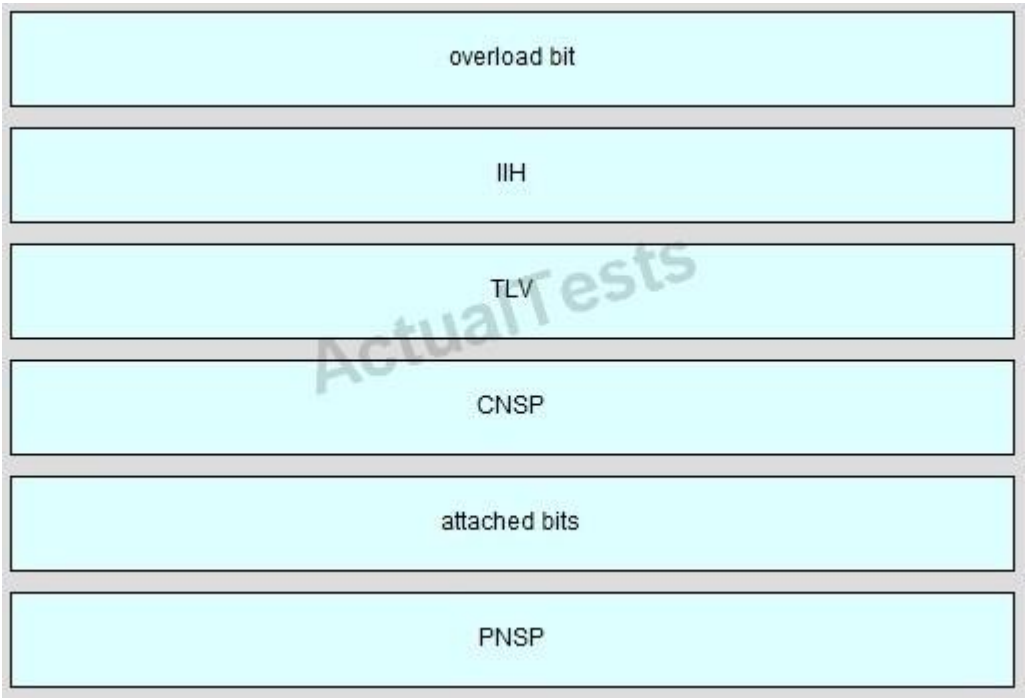
A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the IS-IS component on the left to the function that it performs on the right.

attached bits	overload bit
overload bit	IIH
TLV	TLV
IIH	CNSP
PNSP	attached bits
CNSP	PNSP



QUESTION 286
DRAG DROP

Drag and drop the NHRP flag on the left to the corresponding meaning on the right.

authoritative	NHRP information was learned from a forwarded NHRP packet.
implicit	The NHRP mapping entry is active and process-switched.
negative	NHRP information was obtained from the next hop server that maintains the NBMA mapping.
used	The requested NBMA mapping failed.

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the NHRP flag on the left to the corresponding meaning on the right.

authoritative	implicit
implicit	used
negative	authoritative
used	negative

Explanation:

implicit

used

authoritative

negative

QUESTION 287
DRAG DROP

Drag and drop the RIP configuration command on the left to the function it performs on the right.

ip rip triggered	configures the router to verify the IP address of routers that send updates
output-delay	configures the router to send information only when the routing database is updated
validate-update-source	configures the router to modify routing metrics
offset-list	configures the router to throttle RIP updates

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the RIP configuration command on the left to the function it performs on the right.

ip rip triggered	validate-update-source
output-delay	ip rip triggered
validate-update-source	offset-list
offset-list	output-delay

Explanation:

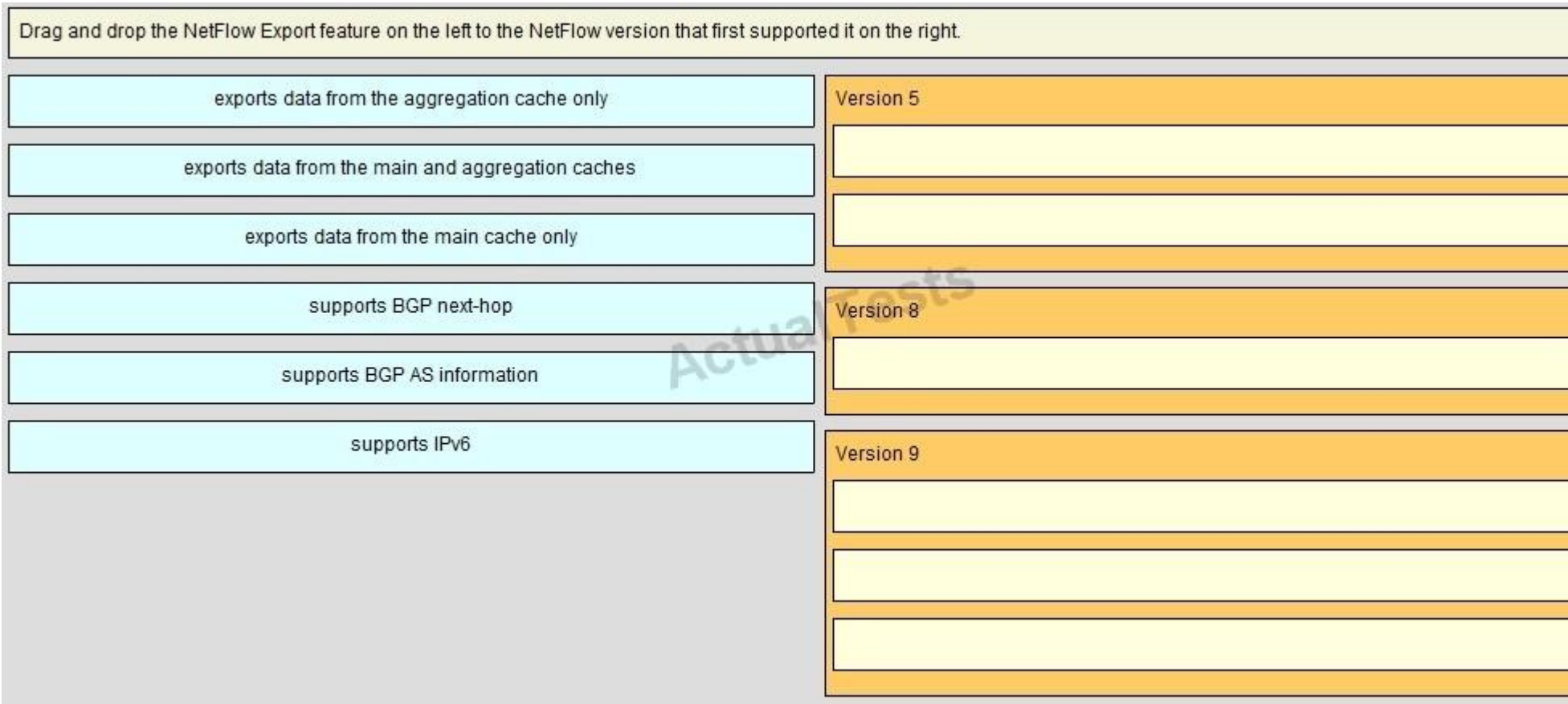
validate-update-source

ip rip triggered

offset-list

output-delay

QUESTION 288
DRAG DROP



A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the NetFlow Export feature on the left to the NetFlow version that first supported it on the right.

- exports data from the aggregation cache only
- exports data from the main and aggregation caches
- exports data from the main cache only
- supports BGP next-hop
- supports BGP AS information
- supports IPv6

Version 5

- exports data from the main cache only
- supports BGP AS information

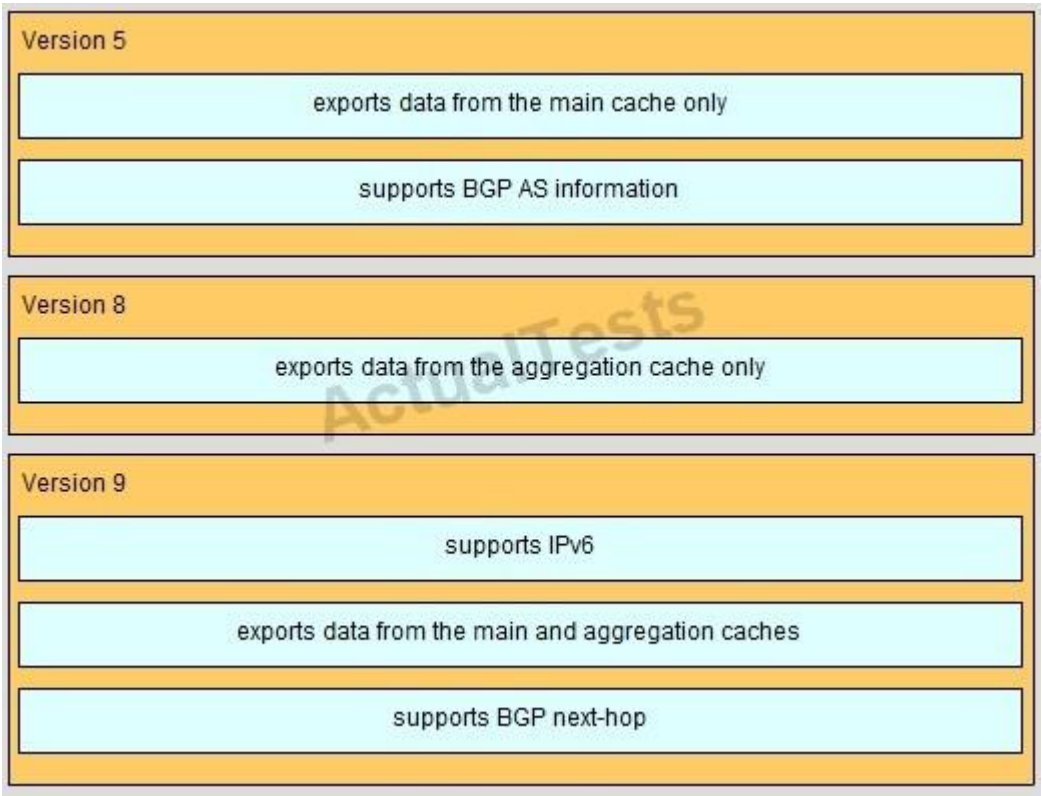
Version 8

- exports data from the aggregation cache only

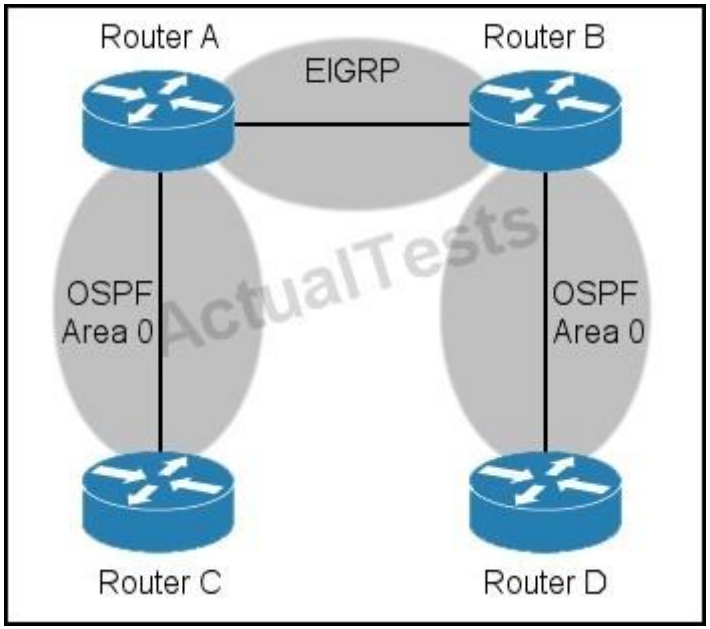
Version 9

- supports IPv6
- exports data from the main and aggregation caches
- supports BGP next-hop

Explanation:



QUESTION 289
Refer to the exhibit.



Which action must you take to enable full reachability from router C to router D?

A. Build an OSPF virtual link.
B. Build an OSPF sham link.
C. Configure mutual redistribution between OSPF and EIGRP on routers A and B.
D. Add a static route on router D.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 290
Which two Cisco Express Forwarding tables are located in the data plane? (Choose two.)

A. the forwarding information base
B. the label forwarding information base
C. the IP routing table

D. the label information table
E. the adjacency table

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 291
Which option is the most effective action to avoid packet loss due to microbursts?

A. Implement larger buffers.
B. Install a faster CPU.
C. Install a faster network interface.
D. Configure a larger tx-ring size.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 292
Which two statements about packet fragmentation on an IPv6 network are true? (Choose two.)

A. The fragment header is 64 bits long.
B. The identification field is 32 bits long.
C. The fragment header is 32 bits long.
D. The identification field is 64 bits long.
E. The MTU must be a minimum of 1280 bytes.
F. The fragment header is 48 bits long.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 293
You are backing up a server with a 1 Gbps link and a latency of 2 ms. Which two statements about the backup are true? (Choose two.)

A. The bandwidth delay product is 2 Mb.
B. The default TCP send window size is the limiting factor.
C. The default TCP receive window size is the limiting factor.
D. The bandwidth delay product is 500 Mb.
E. The bandwidth delay product is 50 Mb.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 294
Which two pieces of information does RTCP use to inform endpoint devices about the RTP flow? (Choose two.)

A. the transmitted octet
B. the lost packet count
C. session control function provisioning information
D. the CNAME for session participants
E. the authentication method
F. MTU size changes in the path of the flow

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 295
Which two options are required parts of an EEM policy? (Choose two.)

A. event register keyword
B. body

C. environment must defines
D. namespace import
E. entry status
F. exit status

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 296
Which two actions can you take to allow the greatest number of pertinent packets to be stored in the temporary buffer of Cisco IOS Embedded Packet Capture? (Choose two.)

A. Specify the sampling interval.
B. Specify the capture buffer type.
C. Specify a reflexive ACL.
D. Specify the minimum packet capture rate.
E. Specify the packet size.
F. Store the capture simultaneously onto an external memory card as the capture occurs.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 297
Which technology can be used to secure the core of an STP domain?

A. UplinkFast
B. BPDU guard
C. BPDU filter
D. root guard

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation:

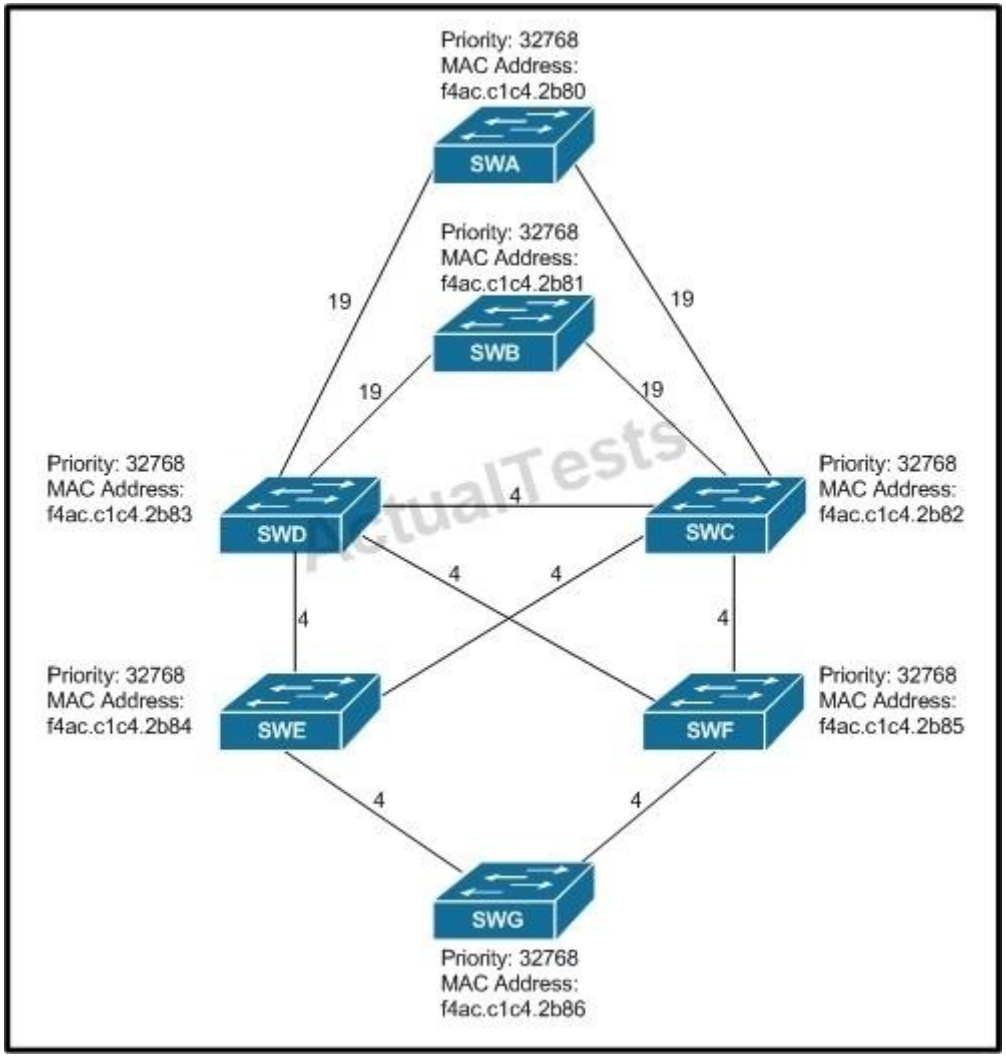
QUESTION 298
What is the destination multicast MAC address for BPDUs on the native VLAN, for a switch that is running 802.1D?

A. 0185. C400. 0000
B. 0100.0CCC.CCCC
C. 0100.0CCC.CCCD
D. 0180. C200. 0000

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 299
Refer to the exhibit.



All switches have default bridge priorities, and originate BPDUs with MAC addresses as indicated.
The numbers shown are STP link metrics.

After STP converges, you discover that traffic from switch SWG toward switch SWD takes a less optimal path. What can you do to optimize the STP tree in this switched network?

A. Change the priority of switch SWA to a lower value than the default value.

B. Change the priority of switch SWB to a higher value than the default value.
C. Change the priority of switch SWG to a higher value than the default value.
D. Change the priority of switch SWD to a lower value than the default value.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 300
Which three statements are true about VSS? (Choose three.)

A. VSS separates the control planes of the active and the standby chassis.
B. Configuration changes can be made on both active and standby chassis.
C. When the VSS active chassis recovers after a failure, it initiates a switchover and takes on the active role again.
D. VSS unifies the control planes of the active and the standby chassis.
E. HSRP configuration is not required to run VSS.
F. The VSS standby chassis monitors the VSS active chassis using the VSL.

Correct Answer: DEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

Topic 4, Volume D

QUESTION 301
Which flag in a configuration BPDU instructs all switches to shorten their bridge table aging process from the default 300 seconds to the current forward delay value?

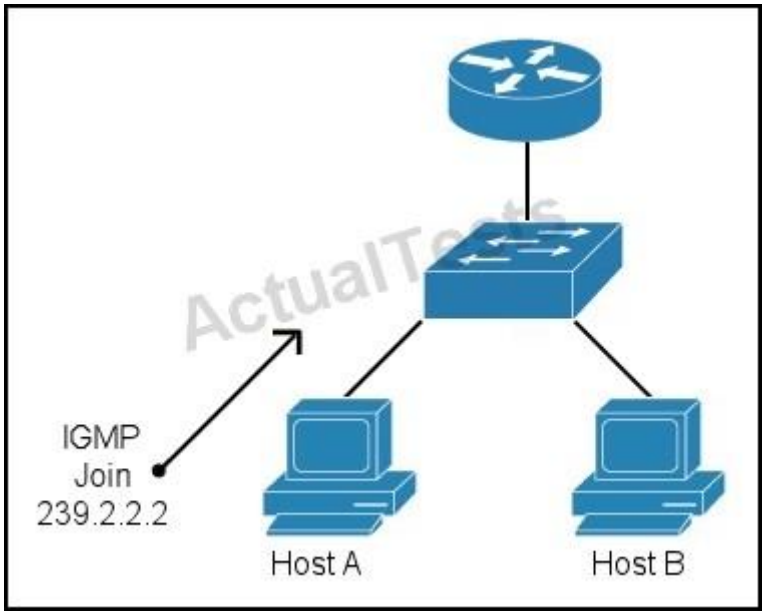
A. topology change bit
B. topology change acknowledgment bit
C. priority bit
D. max-age bit

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 302
Refer to the exhibit.



Which technology can be used on the switch to enable host A to receive multicast packets for 239.2.2.2 but prevent host B from receiving them?

A. IGMP filtering
B. MLD snooping
C. IGMP snooping
D. MLD filtering

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 303
Which option describes the purpose of the PPP endpoint discriminator?

A. It identifies the maximum payload packet.
B. It notifies the peer that it prefers 12-bit sequence numbers.
C. It identifies the system attached to the link.
D. It determines whether a loopback is on the link.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 304
Which three statements about SPAN traffic monitoring are true? (Choose three.)

A. Traffic from a non-source VLAN is discarded when it arrives on a source VLAN.
B. Multiple sessions can send traffic to an individual destination port.
C. It supports up to 32 SPAN ports per switch.
D. The destination port acts as a normal switchport.
E. It supports up to 64 SPAN ports per switch.
F. Only one session can send traffic to an individual destination port.

Correct Answer: AEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 305
Which option describes how a VTPv3 device responds when it detects a VTPv2 device on a trunk port?

A. It sends VTPv3 packets only.
B. It sends VTPv2 packets only.
C. It sends VTPv3 and VTPv2 packets.

D. It sends a special packet that contains VTPv3 and VTPv2 packet information.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 306
Which three statements about bridge assurance are true? (Choose three.)

A. Bridge assurance must be enabled on both ends of a link.
B. Bridge assurance can be enabled on one end of a link or on both ends.
C. Bridge assurance is enabled on STP point-to-point links only.
D. Bridge assurance is enabled on STP multipoint links only.
E. If a bridge assurance port fails to receive a BPDU after a timeout, the port is put into a blocking state.
F. If a bridge assurance port fails to receive a BPDU after a timeout, the port is put into an error disabled state.

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

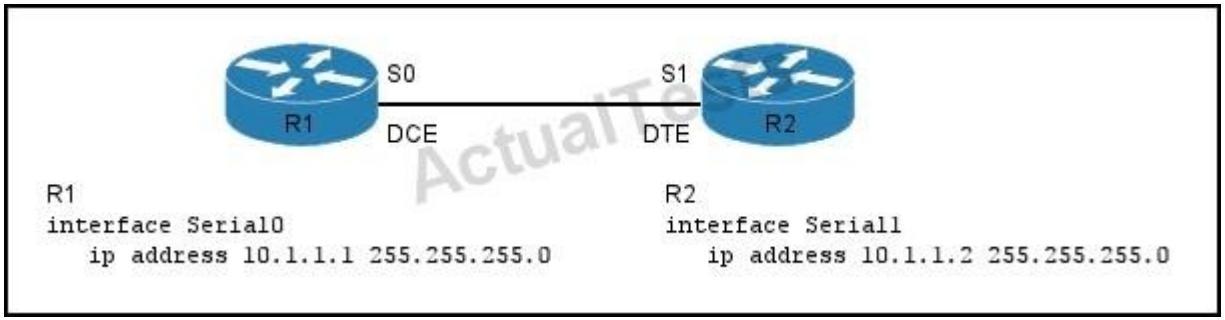
QUESTION 307
What is the hop limit for an MLD message?

A. 1
B. 2
C. 15
D. 255

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 308
Refer to the exhibit.



Which action must you take to enable the WAN link to function properly?

A. Enter a clock rate on the DCE interface.
B. Enter a clock rate on the DTE interface.
C. Enter a compression algorithm on both interfaces.
D. Configure both interfaces for HDLC encapsulation.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 309
Which two options are the two main phases of PPPoE? (Choose two.)

A. Active Discovery Phase
B. IKE Phase
C. Main Mode Phase
D. PPP Session Phase
E. Aggressive Mode Phase
F. Negotiation Phase

Correct Answer: AD

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 310
Which three statements about EVCs are true? (Choose three.)

A. Spanning Tree must use MST mode on EVC ports.
B. PAGP is supported on EVC ports.
C. Spanning Tree must use RSTP mode on EVC ports.
D. LACP is supported on EVC ports.
E. Layer 2 multicast framing is supported.
F. Bridge domain routing is required.

Correct Answer: ABD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 311
Refer to the exhibit.

```
Router#show version

Router processor (revision 0x00) with 524288K bytes of memory.


Router#show memory statistics
                Head     Total(b)     Used(b)     Free(b)   Lowest(b)  Largest(b)
Processor    38A6400   405117952   360086164     1031788    37130412    34036896

Router#show process memory
 PID TTY  Allocated      Freed    Holding    Getbufs    Retbufs Process
   0   0   73373216    1706280   69497168          0          0 *Init*
 154   0 1103256760 1247933568  311905892     204360          0 BGP Router
 327   0  212528944  322521272   44071084          0          0 IP RIB Update


Router#show ip bgp summary
BGP router identifier 1.1.1.1, local AS number 65000
BGP table version is 310248959, main routing table version 310248959
246316 network entries using 29557920 bytes of memory
1586197 path entries using 76137456 bytes of memory
256960/41528 BGP path/bestpath attribute entries using 27751680 bytes of memory
440 BGP rrinfo entries using 10560 bytes of memory
115467 BGP AS-PATH entries using 3047538 bytes of memory
5952 BGP community entries using 479704 bytes of memory
0 BGP route-map cache entries using 0 bytes of memory
230723 BGP filter-list cache entries using 2768676 bytes of memory
BGP using 139753534 total bytes of memory
Dampening enabled. 8 history paths, 0 dampened paths
631350 received paths for inbound soft reconfiguration
BGP activity 9798913/9552597 prefixes, 220384574/218798377 paths, scan interval 60 secs
Neighbor    V    AS  MsgRcvd  MsgSent   TblVer  InQ OutQ Up/Down  State/PfxRcd
1.1.1.2     4 65001 39985912  1384531 310248959    0    0 9w1d       277030
1.1.1.3     4 65001 12269759   529250 310248959    0    0 26w0d      276929
1.1.1.4     4 65001 42728751 20209410 310248959    0    0 32w2d      200372
1.1.1.5     4 65001 46624114 20179383 310248959    0    0 1y14w      200372
```

Why is the router out of memory?

A. The router is experiencing a BGP memory leak software defect.
B. The BGP peers have been up for too long.
C. The amount of BGP update traffic in the network is too high.
D. The router has insufficient memory due to the size of the BGP database.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 312
Refer to the exhibit.

```
R1#show ip ospf neighbor

Neighbor ID     Pri   State           Dead Time   Address         Interface
192.168.2.2       0   2WAY/DROTHER    00:00:35    10.25.123.2     Ethernet0/0
192.168.3.3       0   2WAY/DROTHER    00:00:38    10.25.123.3     Ethernet0/0
R1#
```


Why is the OSPF state in 2WAY/DROTHER?

A. This is the expected output when the interface Ethernet0/0 of R1 is configured with OSPF Priority 0.
B. There is a duplicate router ID.
C. There is an MTU mismatch.
D. There is an OSPF timer (hello/dead) mismatch.
E. This is the expected output when R1 is the DR.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 313

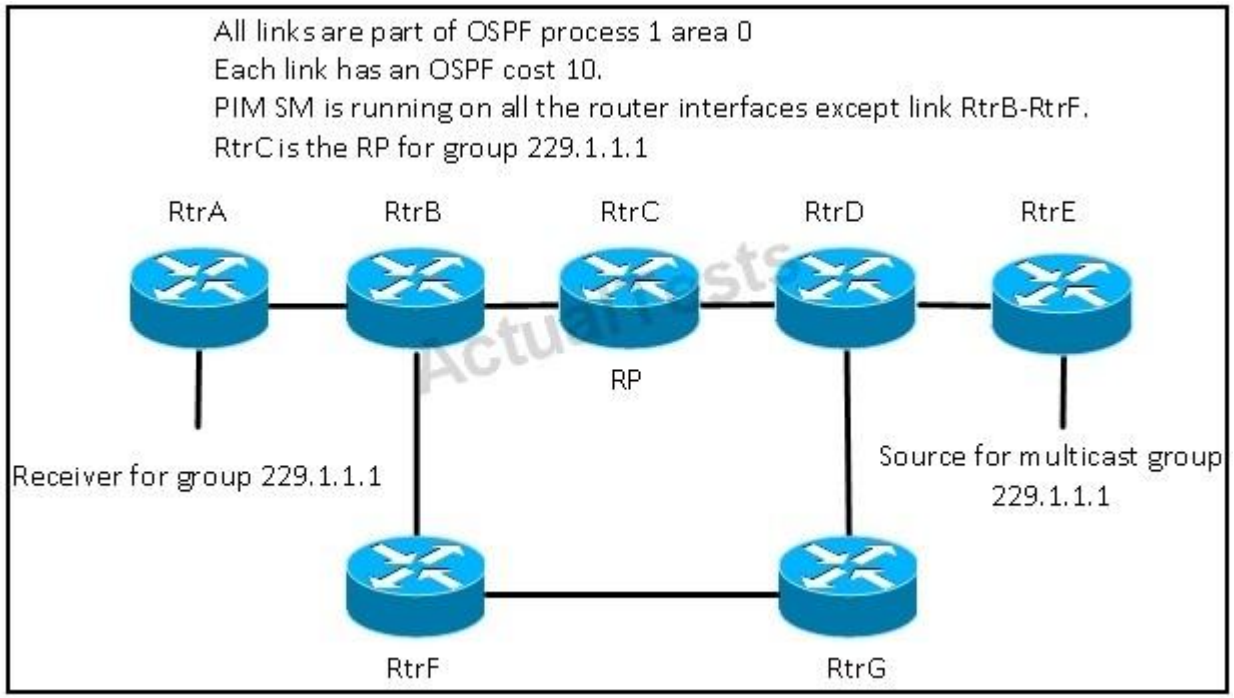
In a nonbackbone OSPF area, all traffic that is destined to the Internet is routed by using a default route that is originated by the ABR. Which change in the configuration of the OSPF area type causes traffic from that area that is destined to the Internet to be dropped?

A. The OSPF area changes from NSSA to totally stubby area.
B. The OSPF area changes from NSSA to regular area.
C. The OSPF area changes from stub area to totally stubby area.
D. The OSPF area changes from stub area to NSSA.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 314
Refer to the exhibit.



When the link between RtrB and RtrC goes down, multicast receivers stop receiving traffic from the source for multicast group 229.1.1.1.Which solution

will resolve this?

A. adding a static mroute on RtrB and RtrF
B. adding a static unicast route on RtrB and RtrF
C. creating a GRE tunnel between RtrB and RtrD
D. enabling PIM sparse mode on both ends of the link between RtrB and RtrF

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 315
Which measure does ISIS use to avoid sending traffic with a wrong MTU configuration?

A. ISIS does not protect from MTU mismatch.
B. MTU value is communicated in ISIS Sequence Number PDUs (SNP), and ISIS adjacency is not established if an MTU mismatch is detected.
C. ISIS uses path MTU discovery as specified in RFC 1063.
D. ISIS uses padding of hello packets to full MTU.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 316
Which regular expression will match prefixes from the AS 200 that is directly connected to our AS?

A. ^$
B. ^200)
C. _200$
D. _200_
E. ^200_

Correct Answer: E
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 317
Refer to the exhibit.

```
!
interface Loopback10
 no ip address
 ipv6 address 6010:AB8::/64 eui-64
!
interface Loopback20
 no ip address
 ipv6 address 6020:AB8::/64 eui-64
!
interface Ethernet0/0
 no ip address
 ipv6 enable
 ipv6 eigrp 50
!
ipv6 router eigrp 50
!
```


Assuming that the peer is configured correctly and the interface is up, how many neighbors will be seen in the EIGRPv6 neighbor table on this IPv6-only router?

A. one neighbor, which will use a local router-id of 6010. AB8. . /64
B. one neighbor, which will use a local router-id of 6020. AB8. . /64
C. none, because EIGRPv6 only supports authenticated peers
D. none, because of the mismatch of timers
E. none, because there is no EIGRP router ID configured

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 318
What does a nonzero forwarding address indicate in a type-5 LSA?

A. It indicates that this link-state ID is eligible for ECMP.
B. It indicates that this router should have an OSPF neighbor relationship with the forwarding address before using this link-state ID.
"Pass Any Exam. Any Time." - www.actualtests.com 173 Cisco 400-101 Exam
C. It indicates that the receiving router must check that the next hop is reachable in its routing table before using this link-state ID.
D. It indicates that traffic can be directly routed to this next hop in shared segment scenarios where the external route source is directly connected.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 319
Which type of EIGRP routes are summarized by the auto-summary command?

A. internal routes that are learned from a peer that is outside the range of local network statements
B. external routes that are learned from a peer that is inside the range of local network statements
C. locally created routes that are outside the range of local network statements
D. external routes that are learned from a peer that is outside the range of local network statements

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 320
Refer to the exhibit.

```
router eigrp foo
 !
 address-family ipv4 unicast autonomous-system 1
  !
  af-interface default
   hello-interval 10
   hold-time 30
  exit-af-interface
  !
  topology base
  exit-af-topology
  network 10.0.0.0
 exit-address-family
```


How can the EIGRP hello and hold time for Gig0/0 be changed to 5 and 15?

A. No action is required, since Gig0/0 is not listed with a nondefault hello and hold time.
B. Add the commands ip hello-interval eigrp 1 5 and ip hold-time eigrp 1 15 under interface Gig0/0.
C. Add the commands hello-interval 5 and hold-time 15 under "af-interface Gig0/0" under the address family.
D. Add the commands default hello-interval and default hold-time under the af-interface Gig0/0 statement under the address family.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 321
What is the range of addresses that is used for IPv4-mapped IPv6 addresses?

A. 2001. db9. . /32
B. 2001. db8. . /32
C. 2002. . /16
D. . . ffff. /16
E. . . ffff. 0. 0/96

Correct Answer: E

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 322
Which statement about the overload bit in IS-IS is true?

A. The IS-IS adjacencies on the links for which the overload bit is set are brought down.
B. Routers running SPF ignore LSPs with the overload bit set and hence avoid blackholing traffic.
C. A router setting the overload bit becomes unreachable to all other routers in the IS-IS area.
D. The overload bit in IS-IS is used only for external prefixes.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 323
Refer to the exhibit.

```
R2#show ip mroute 225.1.1.1
(*, 225.1.1.1), 01:32:54/00:03:06, RP 10.100.1.2, flags: SJC
  Incoming interface: Ethernet1/0, RPF nbr 10.1.3.2
  Outgoing interface list:
    Ethernet3/0, Forward/Sparse, 01:32:54/00:03:06

(10.1.4.7, 225.1.1.1), 01:32:54/00:01:05, flags: JT
  Incoming interface: Ethernet1/0, RPF nbr 10.1.3.2
  Outgoing interface list:
    Ethernet3/0, Forward/Sparse, 00:37:38/00:02:26, A
```


Which statement is true?

A. R2 is directly connected to the receiver for this group and is the winner of an assert mechanism.

B. R2 is directly connected to the receiver for this group, and it forwards the traffic onto Ethernet3/0, but it is forwarding duplicate traffic onto Ethernet3/0.
C. R2 has the A flag (Accept flag) set on Ethernet 3/0. This is fine, since the group is in BIDIR PIM mode.
D. R2 is directly connected to the receiver for this group and is the loser of an assert mechanism.
E. The A flag is set until the SPT threshold is reached for this multicast group.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 324
Which three statements about IS-IS are true? (Choose three.)

A. IS-IS is not encapsulated in IP.
B. IS-IS is directly encapsulated in the data link layer.
C. 0XFEFE is used in the Layer 2 header to identify the Layer 3 protocol.
D. IS-IS uses protocol ID 93.
E. IS-IS can be used to route the IPX protocol.
F. IS-IS is an IETF standard.

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 325
Refer to the exhibit.

```
PE1#show ip rpf 10.100.1.4
RPF information for ? (10.100.1.4)
  RPF interface: Ethernet1/0
  RPF neighbor: ? (10.1.1.4)
  RPF route/mask: 10.100.1.4/32
  RPF type: multicast (isis)
  Doing distance-preferred lookups across tables
  RPF topology: ipv4 multicast base
```

Which statement is true?

A. The command ip multicast rpf multitopology is missing from the configuration.
B. Multitopology routing for multicast has been enabled for IS-IS.
C. This output is invalid.
D. The command mpls traffic-eng multicast-intact is configured on this router.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 326
As a best practice, when a router is configured as an EIGRP Stub, which routes should be received from its distribution neighbor?

A. the default route
B. static routes
C. internal routes only
D. internal and external routes

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 327
Which BGP feature allows BGP routing tables to be refreshed without impacting established BGP sessions?

A. BGP synchronization
B. soft reconfiguration
C. confederations
D. hard reset

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 328
Which two options describe two functions of a neighbor solicitation message? (Choose two.)

A. It requests the link-layer address of the target.
B. It provides its own link-layer address to the target.
C. It requests the site-local address of the target.
D. It provides its own site-local address to the target.
E. It requests the admin-local address of the target.
F. It provides its own admin-local address to the target.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 329
Which three options are three of the default EIGRP administrative distances? (Choose three.)

A. Internal, 90
B. External, 170
C. Summary, 5
D. Outside Local, 100

E. Inside Local, 180
F. Inside Global, 1

Correct Answer: ABC
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 330
Refer to the exhibit.

```
O E2     172.17.108.128/25
            [110/20] via 10.169.73.12, 3d07h, TenGigabitEthernet8/0/0
O E2     10.167.111.216/29
            [110/20] via 10.169.73.12, 3d07h, TenGigabitEthernet8/0/0
O IA     10.68.2.0/31
            [110/489] via 10.169.73.12, 3d07h, TenGigabitEthernet8/0/0
O IA     10.68.2.2/31
            [110/488] via 10.169.73.12, 3d07h, TenGigabitEthernet8/0/0
B        10.1.50.0/24 [200/0] via 172.16.189.9, 3d07h
B        10.1.51.0/24 [200/0] via 172.16.189.9, 3d07h
```

Which two statements about this route table are true? (Choose two.)

A. The BGP routes are internal.
B. The OSPF routes with the E2 flag retain the same metric as they leave the router.
C. The OSPF routes with the IA flag have their administrative distances incremented as they leave the router.
D. The BGP routes are external.
E. The OSPF routes with the E2 flag have their metrics incremented as they leave the router.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 331

Refer to the exhibit.

```
interface GigabitEthernet0/1
   ip address 192.168.1.5 255.255.255.0
prefix-list FILTER seq 5 permit 172.16.0.0/16
prefix-list FILTER seq 10 permit 0.0.0.0/0
router eigrp 65000
   no auto-summary
   network 192.168.1.5 0.0.0.0
   distribute-list prefix FILTER out
```

Which two statements about this configuration are true? (Choose two.)

A. It allows 172.16.0.0/16 to be distributed into EIGRP.
B. It allows a default route to be distributed into EIGRP.
C. It allows 172.16.0.0/16 and larger subnets to be distributed into EIGRP.
D. It prevents 172.16.0.0/16 from being distributed into EIGRP.
E. It prevents a default route from being distributed into EIGRP.
F. It creates summary routes and injects them into EIGRP.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 332
Refer to the exhibit.

R2

```
interface Loopback2
   ip address 172.16.2.2 255.255.255.0
interface Loopback3
   ip address 172.16.3.3 255.255.255.0
interface Loopback4
   ip address 172.16.5.4 255.255.255.0
interface GigabitEthernet1/0
   ip address 10.0.78.8 255.255.255.0
   ip router isis
router isis
   net 49.0001.0031.0031.00
   redistribute connected route-map LOOPBACKS
ip access-list standard LOOPBACKS
   permit 172.16.0.0 0.0.3.255
route-map LOOPBACKS permit 10
   match ip address LOOPBACKS
```

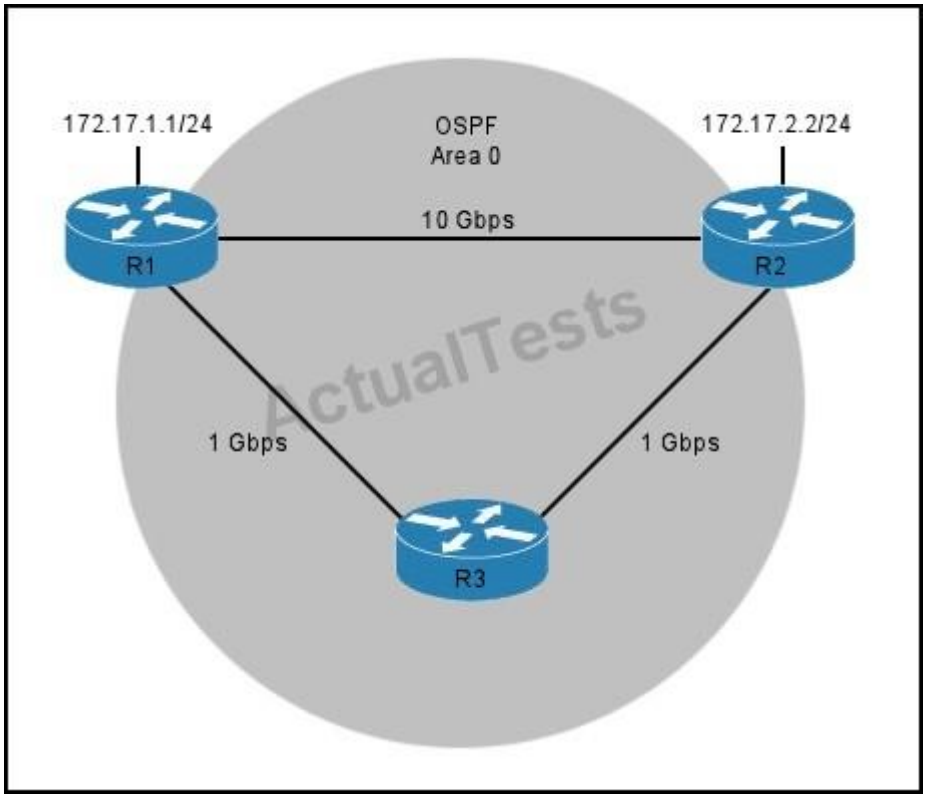
R1 is able to reach only some of the subnets that R2 is advertising. Which two configuration changes can you make to ensure that R1 can reach all routes from R2? (Choose two.)

A. Add an additional permit statement to the LOOPBACKS route map.
B. Modify the LOOPBACKS access list to include all loopback subnets.
C. Add an additional statement in the LOOPBACKS route map to match both Level 1 and Level 2 circuits.
D. Add an additional statement in the LOOPBACKS route map to match the R1 CLNS address.
E. Configure the interfaces between R1 and R2 with a Level 1 IS-IS circuit.
F. Configure the interfaces between R1 and R2 with a Level 2 IS-IS circuit.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 333
Refer to the exhibit.



R1, R2, and R3 have full network connectivity to each other, but R2 prefers the path through R3 to reach network 172.17.1.0/24. Which two actions can you take so that R2 prefers the path through R1 to reach 172.17.1.0/24? (Choose two.)

A. Set the reference bandwidth to 10000 on R1, R2, and R3.
B. Configure the cost on the link between R1 and R3 to be greater than 100 Mbps.
C. Set the reference bandwidth on R2 only.
D. Configure a manual bandwidth statement with a value of 1 Gbps on the link between R1 and R3.
E. Modify the cost on the link between R1 and R2 to be greater than 10 Gbps.
F. Configure a manual bandwidth statement with a value of 100 Mbps on the link between R1 and R2.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 334
What are two advantages to using Asynchronous mode instead of Demand mode for BFD? (Choose two.)

A. Asynchronous mode requires half as many packets as Demand mode for failure detection.
B. Asynchronous mode can be used in place of the echo function.
C. Asynchronous mode supports a larger number of BFD sessions.
D. Asynchronous mode requires one fourth as many packets as Demand mode for failure detection.
E. Asynchronous mode's round-trip jitter is less than that of Demand mode.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 335
Which action does route poisoning take that serves as a loop-prevention method?

A. It immediately sends routing updates with an unreachable metric to all devices.
B. It immediately sends routing updates with a metric of 255 to all devices.
C. It prohibits a router from advertising back onto the interface from which it was learned.
D. It advertises a route with an unreachable metric back onto the interface from which it was learned.
E. It poisons the route by tagging it uniquely within the network.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 336
Which two statements about the ipv6 ospf authentication command are true? (Choose two.)

A. The command is required if you implement the IPsec AH header.
B. The command configures an SPI.

C. The command is required if you implement the IPsec TLV.
D. The command can be used in conjunction with the SPI authentication algorithm.
E. The command must be configured under the OSPFv3 process.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 337
Which two statements about SoO checking in EIGRP OTP deployments are true? (Choose two).

A. During the import process, the SoO value in BGP is checked against the SoO value of the site map.
B. During the reception of an EIGRP update, the SoO value in the EIGRP update is checked against the SoO value of the site map on the ingress interface.
C. At the ingress of the PE/CE link, the SoO in the EIGRP update is checked against the SoO within the PE/CE routing protocol.
D. At the egress of the PE/CE link, the SoO is checked against the SoO within the PE/CE routing protocol.
E. The SoO is checked at the ingress of the backdoor link.
F. The SoO is checked at the egress of the backdoor link.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 338
Which two OSPF LSA types are flooded within the originating area? (Choose two.)

A. type 1, Router LSA
B. type 2, Network LSA
C. type 3, Network Summary LSA
D. type 4, ASBR Summary LSA
E. type 6, Group Membership LSA
F. type 9, Opaque LSA

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

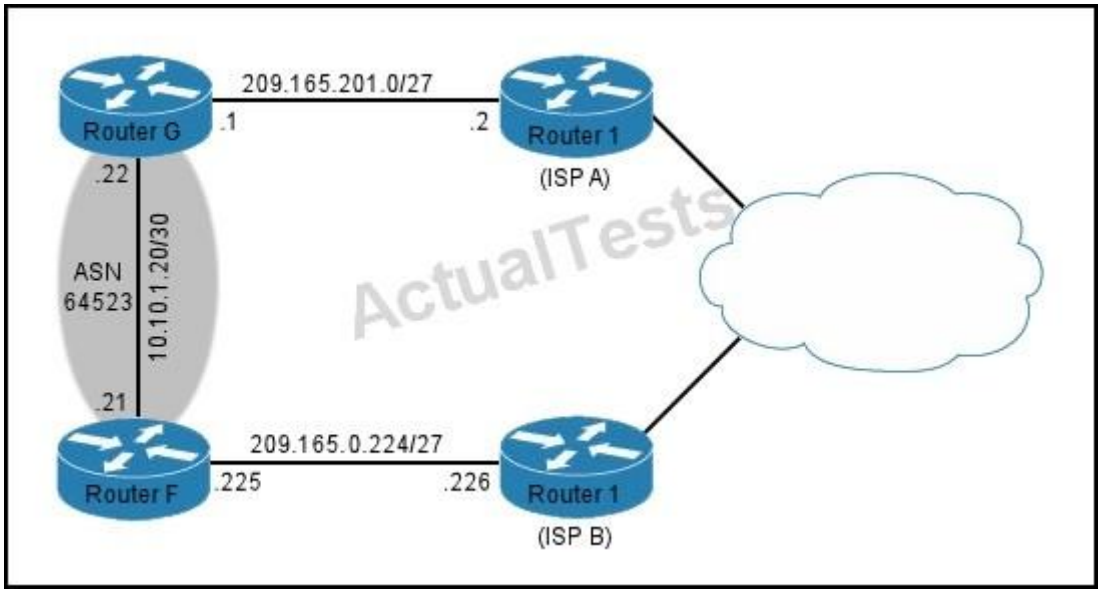
QUESTION 339
Which statement about the OSPF Loop-Free Alternate feature is true?

A. It is supported on routers that are configured with virtual links.
B. It is supported in VRF OSPF instances.
C. It is supported when a traffic engineering tunnel interface is protected.
D. It is supported when traffic can be redirected to a primary neighbor.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 340
Refer to the exhibit.



ASN 64523 has a multihomed BGP setup to ISP A and ISP B. Which BGP attribute can you set to allow traffic that originates in ASN 64523 to exit the ASN through ISP B?

A. origin
B. next-hop
C. weight
D. multi-exit discriminator

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 341
When deploying redundant route reflectors in BGP, which attribute can you configure on the route reflector to allow routes to be identified as belonging to the same group?

A. ROUTER_ID
B. CLUSTER_ID

C. ORIGINATOR_ID
D. PEER_GROUP

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 342
Which two options are mandatory components of a multiprotocol BGP VPN-IPv4 address? (Choose two.)

A. a route distinguisher
B. an IPv4 address
C. a route target
D. an MPLS label
E. a system ID
F. an area ID

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 343
Which BGP feature enables you to install a backup path in the forwarding table?

A. soft reconfiguration
B. prefix independent convergence
C. route refresh
D. synchronization

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Explanation:

QUESTION 344
Refer to the exhibit.

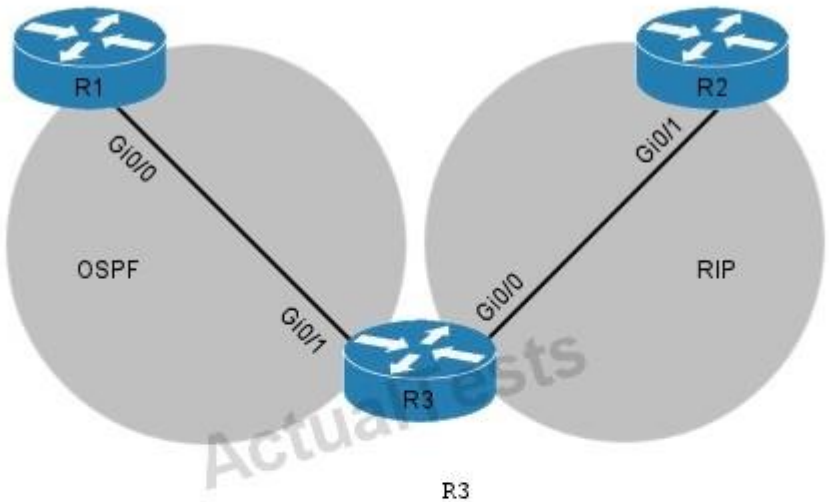
R1 and R2 have a working VRF-Lite configuration, but R1 is receiving a route only to 10.2.2.2 from R2. Which two changes can you make so that R1 receives all routes from R2? (Choose two.)

A. Create an additional permit statement in the access list that is referenced by the import-map on R1.
B. Disable VRF filtering on R1.
C. Set the R1 and R2 OSPF process IDs to match.
D. Change the wildcard mask for the network 10.3.3.0 to 0.0.0.0.
E. Create a matching export map in the VRF for R2.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 345
Refer to the exhibit.




```
R1
interface GigabitEthernet0/0
ip address 172.16.1.1 255.255.255.252
router ospf 1
network 172.16.1.1 0.0.0.0 area 0

R2
interface GigabitEthernet0/0
ip address 192.168.254.2 255.255.255.254
router rip
version 2
no auto-summary
network 192.168.254.0

R3
interface GigabitEthernet0/0
ip address 192.168.254.3 255.255.255.254
interface GigabitEthernet0/1
ip address 172.16.1.2 255.255.255.252
router ospf 2
network 192.168.254.0 0.0.0.255 area 0
redistribute rip subnets
router rip
version 2
no auto-summary
redistribute ospf 2
network 172.16.0.0
```

R2 is unable to access the 172.16.1.0/30 network between R1 and R3. Which option is a possible reason for the failure?

A. The seed metric for redistributing into RIP on R3 is missing.
B. The OSPF processes on R2 and R3 are different.
C. Auto-summary is misconfigured under the RIP process of R3.
D. The subnet mask on the link between R2 and R3 is smaller than /30.
E. The wildcard mask on R3 is misconfigured.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 346
Refer to the exhibit.

```
interface tunnel0
 tunnel mode ipv6ip 6to4
 tunnel source 125.203.89.1
 ipv6 address ?
```

Which statement is true about a valid IPv6 address that can be configured on interface tunnel0?

A. There is not enough information to calculate the IPv6 address.
B. 6to4 tunneling allows you to use any IPv6 address.
C. 2001. 7DCB. 5901. . /128 is a valid IPv6 address.
D. 2002. 7DCB. 5901. . /128 is a valid IPv6 address.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 347
Which technology is not necessary to set up a basic MPLS domain?

A. IP addressing
B. an IGP
C. LDP or TDP
D. CEF
E. a VRF

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 348
What is the main component of Unified MPLS?

A. Multiple IGPs in the network are used, where the loopback IP addresses of the PE routers are aggregated on the area border routers.
B. Confederations are used to provide scalability.
C. The loopback prefixes from one IGP area are redistributed into BGP without changing the next hop.
D. The ABR is a BGP route reflector and sets next-hop to self for all reflected routes.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 349
For which feature is the address family "rtfilter" used?

A. Enhanced Route Refresh
B. MPLS VPN filtering
C. Route Target Constraint
D. Unified MPLS

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 350
Refer to the exhibit.

```
Codes: '!' - success, 'Q' - request not sent, '.' - timeout,
   'L' - labeled output interface, 'B' - unlabeled output interface,
   'D' - DS Map mismatch, 'F' - no FEC mapping, 'f' - FEC mismatch,
   'M' - malformed request, 'm' - unsupported tlvs, 'N' - no label entry,
   'P' - no rx intf label prot, 'p' - premature termination of LSP,
   'R' - transit router, 'I' - unknown upstream index,
   'X' - unknown return code, 'x' - return code 0

Type escape sequence to abort.
!    size 100, reply addr 70.169.72.33, return code 3
!    size 100, reply addr 70.169.72.33, return code 3
!    size 100, reply addr 70.169.72.33, return code 3
!    size 100, reply addr 70.169.72.33, return code 3
!    size 100, reply addr 70.169.72.33, return code 3

Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
```

What does the return code 3 represent in this output?

A. The mapping of the replying router for the FEC is different.
B. The packet is label-switched at stack depth.
C. The return code is reserved.
D. The upstream index is unknown.
E. The replying router was the proper egress for the FEC.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 351
Which two values comprise the VPN ID for an MPLS VPN? (Choose two.)

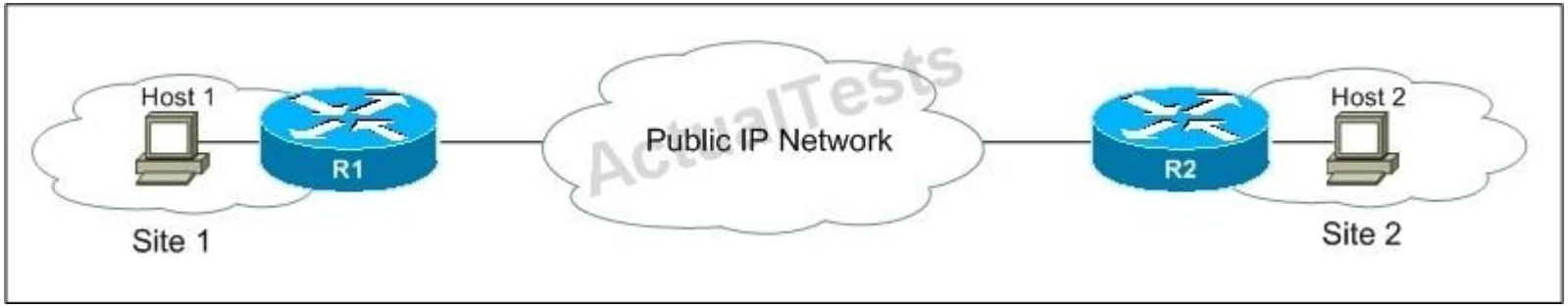
A. an OUI
B. a VPN index
C. a route distinguisher

D. a 16-bit AS number
E. a 32-bit IP address

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 352
Refer to the exhibit.



Which LISP component do routers in the public IP network use to forward traffic between the two networks?

A. EID
B. RLOC
C. map server
D. map resolver

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 353
Refer to the exhibit.

```
NHRP: Send Registration Request via Tunnel1 vrf 0, packet size: 108
   src: 172.30.10.66, dst: 172.30.10.1
   (F) afn: AF_IP(1), type: IP(800), hop: 255, ver: 1
      shtl: 4(NSAP), sstl: 0(NSAP)
      pktsz: 108 extoff: 52
   (M) flags: "unique nat ", reqid: 113922
      src NBMA: 10.100.100.193
      src protocol: 172.30.10.66, dst protocol: 172.30.10.1
   (C-1) code: no error(0)
      prefix: 32, mtu: 17912, hd_time: 600
      addr_len: 0(NSAP), subaddr_len: 0(NSAP), proto_len: 0, pref: 0
NHRP: Receive Registration Reply via
      addr_len: 0(NSAP), subaddr_len: 0(NSAP), proto_len: 0, pref: 0
```

Which device role could have generated this debug output?

A. an NHS only
B. an NHC only
C. an NHS or an NHC
D. a DMVPN hub router

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 354
Which statement about the NHRP network ID is true?

A. It is sent from the spoke to the hub to identify the spoke as a member of the same NHRP domain.
B. It is sent from the hub to the spoke to identify the hub as a member of the same NHRP domain.
C. It is sent between spokes to identify the spokes as members of the same NHRP domain.
D. It is a locally significant ID used to define the NHRP domain for an interface.

Correct Answer: D
Section: (none)

Explanation

Explanation/Reference:
Explanation:

QUESTION 355
You are configuring a DMVPN spoke to use IPsec over a physical interface that is located within a VRF. For which three configuration sections must you specify the VRF name? (Choose three.)

A. the ISAKMP profile
B. the crypto keyring
C. the IPsec profile
D. the IPsec transform set
E. the tunnel interface
F. the physical interface

Correct Answer: BEF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 356
Which IPv6 prefix is used for 6to4 tunnel addresses?

A. 2001. . /23
B. 2002. . /16
C. 3ffe. . /16
D. 5f00. . /8
E. 2001. . /32

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 357

When you configure the ip pmtu command under an L2TPv3 pseudowire class, which two things can happen when a packet exceeds the L2TP path MTU? (Choose two.)

A. The router drops the packet.
B. The router always fragments the packet after L2TP/IP encapsulation.
C. The router drops the packet and sends an ICMP unreachable message back to the sender only if the DF bit is set to 1.
D. The router always fragments the packet before L2TP/IP encapsulation.
E. The router fragments the packet after L2TP/IP encapsulation only if the DF bit is set to 0.
F. The router fragments the packet before L2TP/IP encapsulation only if the DF bit is set to 0.

Correct Answer: CF
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 358
Which two parameters does the Tunnel Mode Auto Selection feature select automatically? (Choose two.)

A. the tunneling protocol
B. the transport protocol
C. the ISAKMP profile
D. the transform-set
E. the tunnel peer

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 359
By default, how does a GET VPN group member router handle traffic when it is unable to register to a key server?

A. All traffic is queued until registration is successful or the queue is full.
B. All traffic is forwarded through the router unencrypted.
C. All traffic is forwarded through the router encrypted.

D. All traffic through the router is dropped.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 360
Which two protocols are not protected in an edge router by using control plane policing? (Choose two.)

A. SMTP
B. RPC
C. SSH
D. Telnet

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 361
Which two statements are true about AAA? (Choose two.)

A. AAA can use RADIUS, TACACS+, or Windows AD to authenticate users.
B. If RADIUS is the only method configured in AAA, and the server becomes unreachable, the user will be able to log in to the router using a local username and password.
C. If the local keyword is not included and the AAA server does not respond, then authorization will never be possible and the connection will fail.
D. AAA can be used to authenticate the enable password with a AAA server.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 362

Which three types of traffic are allowed by IEEE 802.1X access control prior to getting authenticated? (Choose three.)

A. EAPOL
B. VTP
C. STP
D. ARP
E. CDP
F. HTTP

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 363
Which two statements about MAC ACLs are true? (Choose two.)

A. They support only inbound filtering.
B. They support both inbound and outbound filtering.
C. They are configured with the command mac access-list standard.
D. They can filter non-IP traffic on a VLAN and on a physical interface.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 364
Refer to the exhibit.

```
Router#sh policy-map control-plane
   Control Plane

      Service-policy output: control-plane-out

         Class-map: icmp-class (match-all)
            197314985 packets, 11510114428 bytes
            5 minute offered rate 1000 bps, drop rate 0000 bps
            Match: access-group name killicmpv2
            police:
                  cir 1000000 bps, bc 31250 bytes
               conformed 197138885 packets, 11499818077 bytes; actions:
                  transmit
               exceeded 176100 packets, 10296351 bytes; actions:
                  drop
               conformed 1000 bps, exceed 0000 bps

          Class-map: class-default (match-any)
             1126224901 packets, 158790413979 bytes
             5 minute offered rate 41000 bps, drop rate 0000 bps
             Match: any
```

What happens to packets when traffic in the icmp-class class exceeds the policed amount?

A. Packets are discarded and a message is logged.
B. Packets are discarded and a trap is sent to any servers that are configured to receive traps.
C. Packets are discarded silently.
D. Packets are discarded and an inform is sent to any servers that are configured to receive informs.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 365
Which statement describes Cisco PfR link groups?

A. Link groups enable Cisco PfR Fast Reroute when NetFlow is enabled on the external interfaces of the border routers.

B. Link groups define a strict or loose hop-by-hop path preference.
C. Link groups are required only when Cisco PfR is configured to load-balance all traffic.
D. Link groups are enabled automatically when Cisco PfR is in Fast Reroute mode.
E. Link groups set a preference for primary and fallback (backup) external exit interfaces.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 366
Which two statements about NetFlow are true? (Choose two.)

A. It must be configured on each router in a network.
B. It supports ATM LAN emulation.
C. The existing network is unaware that NetFlow is running.
D. It uses SIP to establish sessions between neighbors.
E. It provides resource utilization accounting.

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 367
You are installing a new device to replace a device that failed. The configuration of the failed device is stored on a networked server, and the new device has an RXBOOT image installed. Under which condition does the streamlined Setup mode fail?

A. The last four bits of the configuration register are not equal to the decimal value 0 or 1.
B. The startup configuration file was deleted.
C. Bit 6 is set in the configuration register.
D. The startup configuration is corrupt.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

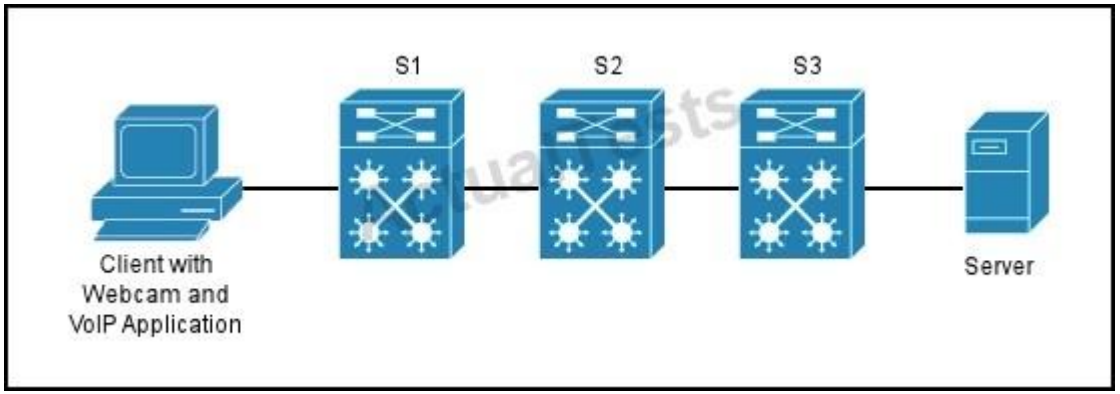
QUESTION 368
Which option is the Cisco recommended method to secure access to the console port?

A. Configure the activation-character command.
B. Configure a very short timeout (less than 100 milliseconds) for the port.
C. Set the privilege level to a value less than 15.
D. Configure an ACL.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 369
Refer to the exhibit.



You are configuring the S1 switch for the switchport connecting to the client computer. Which option describes the effect of the command mls qos map cos-dscp 0 8 16 24 32 40 46 56?

A. Voice traffic is excluded from the default priority queue.
B. Voice packets are given a class selector of 5.

C. Video conferencing is marked CS3.
D. Voice packets are processed in the priority queue.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 370
Refer to the exhibit.

```
class-map match-any voice
match dscp ef
class-map match-any router
match dscp cs6
class-map match-any gold
match dscp af41
class-map match-any silver
match dscp af31

policy-map egress_queue
class voice
priority percent 25
class gold
bandwidth percent 40
class silver
bandwidth percent 15
class router
bandwidth percent 5
class class-default
bandwidth percent remaining

policy-map egress_queue_2
class class-default
shape average 6000000
service-policy egress_queue

interface GigabitEthernet0/1
service-policy output egress_queue_2
```


If the network switch is configured as shown, which two statements about network traffic are true? (Choose two.)

A. Traffic enters the shaper on a FIFO basis.
B. Traffic enters the shaper on a weighted fair queueing basis.
C. Drop behavior is random for traffic in excess of 6 Mbps.
D. Voice traffic is given priority until it reaches 1.5 Mbps.
E. Voice traffic is given priority until it reaches 6 Mbps.

Correct Answer: AD

Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 371
Which two options are two characteristics of the HSRPv6 protocol? (Choose two.)

A. It uses virtual MAC addresses 0005.73a0.0000 through 0005.73a0.0fff.
B. It uses UDP port number 2029.
C. It uses virtual MAC addresses 0005.73a0.0000 through 0005.73a0.ffff.
D. It uses UDP port number 2920.
E. If a link local IPv6 address is used, it must have a prefix.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 372
Which statement about VRRP is true?

A. It supports load balancing.
B. It can be configured with HSRP on a switch or switch stack.
C. It supports IPv4 and IPv6.
D. It supports encrypted authentication.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 373
Refer to the exhibit.

```
ip sla monitor 10
   type echo protocol ipIcmpEcho 10.1.1.1 source-ipaddr 10.1.1.2
   frequency 60

ip sla monitor schedule 10 life 360
```

What is the polling frequency set by this configuration?

A. 60 seconds
B. 10 seconds
C. 360 seconds
D. 60 milliseconds
E. 10 milliseconds

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 374
Refer to the exhibit.

```
configure terminal
     interface Ethernet 0/0
     ip address 10.1.1.2 255.255.255.0
ip flow-export destination 10.1.1.1
```

Which additional information must you specify in this configuration to capture NetFlow traffic?

A. ingress or egress traffic
B. the number of cache entries
C. the flow cache active timeout

D. the flow cache inactive timeout

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:

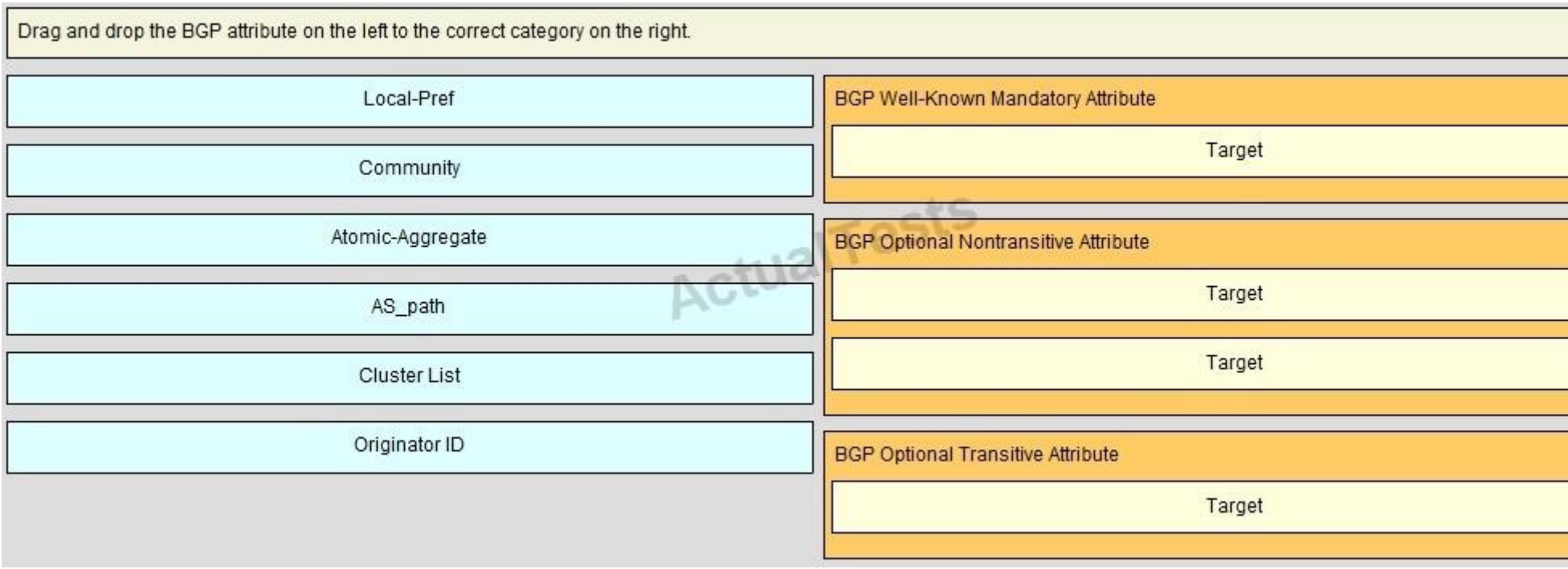
QUESTION 375
For which three routing protocols can Cisco PfR provide direct route control? (Choose three.)

A. OSPF
B. ISIS
C. BGP
D. EIGRP
E. static routing
F. ODR

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:
Explanation:

QUESTION 376
DRAG DROP



A.
B.
C.
D.

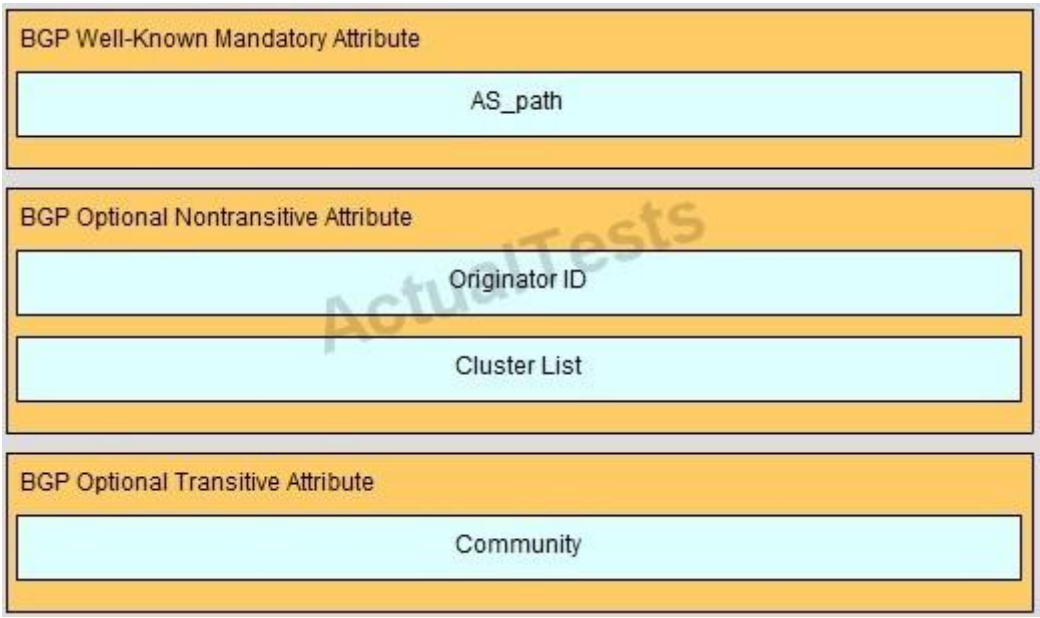
Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the BGP attribute on the left to the correct category on the right.

Local-Pref	BGP Well-Known Mandatory Attribute
Community	AS_path
Atomic-Aggregate	BGP Optional Nontransitive Attribute
AS_path	Originator ID
Cluster List	Cluster List
Originator ID	BGP Optional Transitive Attribute
	Community

Explanation:



QUESTION 377
DRAG DROP

Drag and drop the NAT operations on the left into the correct sequential order on the right.

Check the IP routing table.	step 1
Check the outbound access list.	step 2
Check the inbound access list.	step 3
Inspect CBAC.	step 4
Translate inside local to outside global.	step 5
Check the policy routing	step 6

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the NAT operations on the left into the correct sequential order on the right.

Check the IP routing table.	Check the inbound access list.
Check the outbound access list.	Check the policy routing
Check the inbound access list.	Check the IP routing table.
Inspect CBAC.	Translate inside local to outside global.
Translate inside local to outside global.	Check the outbound access list.
Check the policy routing	Inspect CBAC.

Explanation:

Check the inbound access list.

Check the policy routing

Check the IP routing table.

Translate inside local to outside global.

Check the outbound access list.

Inspect CBAC.

QUESTION 378
DRAG DROP

Drag and drop the argument of the **ip cef load-sharing algorithm** command on the left to the function it performs on the right.

original	sets the load-balancing algorithm to use a source, a destination, and an ID hash
universal	sets the load-balancing algorithm for environments with a small number of sourc destination IP address pairs
tunnel	sets the load-balancing algorithm to use Layer 4 information
include-ports source destination	sets the load-balancing algorithm to use a source and destination hash

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the argument of the **ip cef load-sharing algorithm** command on the left to the function it performs on the right.

original	universal
universal	tunnel
tunnel	include-ports source destination
include-ports source destination	original

Explanation:

universal

tunnel

include-ports source destination

original

QUESTION 379
DRAG DROP

Drag and drop the Cisco IOX XE subpackage on the left to the function it performs on the right.

RPIOS	provisions the Cisco IOS Software kernel from which the IOS software features are housed and run
ESPBase	produces the ESP software, ESP operating system, and control processes
SIPBase	manages the Cisco IOS Software and the rest of the platform via the control plane
RPControl	manages the Session Initiation Protocol carrier card operating system and control processes

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the Cisco IOX XE subpackage on the left to the function it performs on the right.

RPIOS	RPIOS
ESPBase	ESPBase
SIPBase	RPControl
RPControl	SIPBase

Explanation:

RPIOS

ESPBase

RPControl

SIPBase

QUESTION 380
DRAG DROP

Drag and drop the LACP elements on the left into the correct priority order in the hot-standby port-selection process on the right.

switch MAC address	1
port number	2
LACP system priority	3
LACP port priority	4

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop the LACP elements on the left into the correct priority order in the hot-standby port-selection process on the right.

switch MAC address	LACP system priority
port number	switch MAC address
LACP system priority	LACP port priority
LACP port priority	port number

Explanation:

LACP system priority
switch MAC address
LACP port priority
port number

QUESTION 381
DRAG DROP

Drag and drop the RIP configuration command on the left to the function it performs on the right.

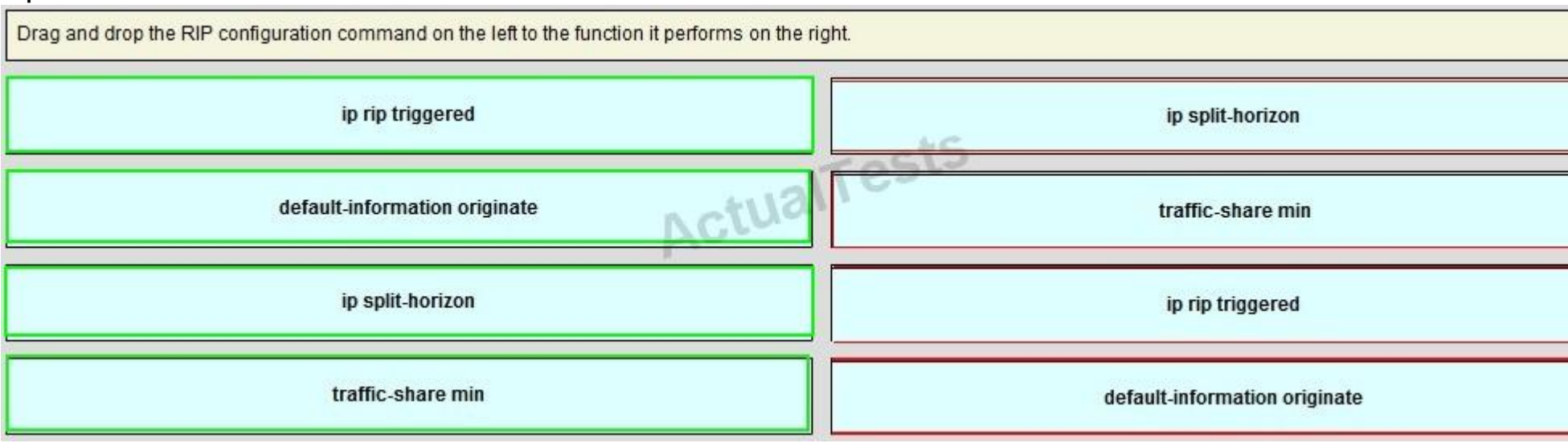
ip rip triggered	controls the advertisement of routes on an interface
default-information originate	divides traffic among routes with the lowest cost
ip split-horizon	configures the router to send information only when the routing database is updated
traffic-share min	configures the router to source the network with RIP

A.
B.
C.
D.

Correct Answer:
Section: (none)

Explanation

Explanation/Reference:



QUESTION 382
DRAG DROP

Drag and drop each step in the performance-monitoring configuration process on the left into the correct order on the right.

Configure a policy with at least one performance-monitor type flow monitor.	1
Configure a flow record.	2
Configure a class that describes the filtering criteria.	3
Associate a performance-monitor type policy with its corresponding interface.	4
Configure a flow monitor that includes the flow record and flow exporter.	5

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop each step in the performance-monitoring configuration process on the left into the correct order on the right.

Configure a policy with at least one performance-monitor type flow monitor.	Configure a flow record.
Configure a flow record.	Configure a flow monitor that includes the flow record and flow exporter.
Configure a class that describes the filtering criteria.	Configure a class that describes the filtering criteria.
Associate a performance-monitor type policy with its corresponding interface.	Configure a policy with at least one performance-monitor type flow monitor.
Configure a flow monitor that includes the flow record and flow exporter.	Associate a performance-monitor type policy with its corresponding interface.

Explanation:

Configure a flow record.

Configure a flow monitor that includes the flow record and flow exporter.

Configure a class that describes the filtering criteria.

Configure a policy with at least one performance-monitor type flow monitor.

Associate a performance-monitor type policy with its corresponding interface.

QUESTION 383
DRAG DROP

Drag and drop each EIGRP element on the left to the corresponding definition on the right.

Feasibility Condition	the metric for a route advertised by EIGRP
Feasible Distance	the lowest sum of the EIGRP metric and the metric used to reach the next hop
Feasible Successor	a route that could become the best path
Neighbor Table	the route currently in use as the best path
Reported Distance	a list of EIGRP devices that have a direct physical connection
Successor	the requirement that the RD of a new route is lower than the FD of the current route

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop each EIGRP element on the left to the corresponding definition on the right.

Feasibility Condition	Reported Distance
Feasible Distance	Feasible Distance
Feasible Successor	Feasible Successor
Neighbor Table	Successor
Reported Distance	Neighbor Table
Successor	Feasibility Condition

Explanation:

QUESTION 384
DRAG DROP

Drag and drop each BGP attribute on the left to the matching description on the right.

AS_PATH	sets the value used to reach the advertising router
community	an attribute whose value can affect the preferred path for eBGP peers
LOCAL_PREF	an attribute whose value is shared within iBGP
MED	supports values of IGP, EGP, and INCOMPLETE
NEXT_HOP	a Cisco proprietary attribute that is local to the individual router
origin	allows the administrator to customize path selection by grouping routes
weight	a list that shows the path through which a route has passed

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop each BGP attribute on the left to the matching description on the right.

AS_PATH	NEXT_HOP
community	MED
LOCAL_PREF	LOCAL_PREF
MED	origin
NEXT_HOP	weight
origin	community
weight	AS_PATH

Explanation:

NEXT_HOP

MED

LOCAL_PREF

origin

weight

community

AS_PATH

QUESTION 385
DRAG DROP

Drag and drop each GET VPN feature on the left to the corresponding function it performs on the right.

GDOI	uses pseudotime to prevent replay
KEK	encrypts the rekey message
SAR	encrypts data between group members
TEK	handles communication between group members and a group controller or key server

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop each GET VPN feature on the left to the corresponding function it performs on the right.

GDOI	SAR
KEK	KEK
SAR	TEK
TEK	GDOI

Explanation:

SAR
KEK
TEK
GDOI

QUESTION 386
DRAG DROP

Drag and drop each SNMP security model and level on the left to the corresponding mode of authentication on the right.

SNMPv2c-noAuthNoPriv	provides HMAC-MD5 or HMAC-SHA authentication with DES 56-bit encryption
SNMPv3-authNoPriv	authenticates with a user name match
SNMPv3-authPriv	provides HMAC-MD5 or HMAC-SHA authentication without encryption
SNMPv3-noAuthNoPriv	authenticates with a community string match

A.
B.
C.
D.

Correct Answer:
Section: (none)
Explanation

Explanation/Reference:

Drag and drop each SNMP security model and level on the left to the corresponding mode of authentication on the right.

SNMPv2c-noAuthNoPriv	SNMPv3-authPriv
SNMPv3-authNoPriv	SNMPv3-noAuthNoPriv
SNMPv3-authPriv	SNMPv3-authNoPriv
SNMPv3-noAuthNoPriv	SNMPv2c-noAuthNoPriv

Explanation:

SNMPv3-authPriv

SNMPv3-noAuthNoPriv

SNMPv3-authNoPriv

SNMPv2c-noAuthNoPriv

QUESTION 387
DRAG DROP

Drag and drop each description of IPv6 transition technology on the left to the matching IPv6 transition technology category on the right.

- encapsulates IPv6 packets within IPv4 packets
- supports translation between IPv4 and IPv6 by using algorithms to map addresses
- supports stateful translation between IPv4 and IPv6 with static and manual mappings
- requires IPv6-capable infrastructure
- uses routing protocols to maintain IPv4 and IPv6 routing adjacencies
- encapsulates IPv4 packets within IPv6 packets

Dual-Stack Network

Tunneling

NAT64

A.
B.
C.
D.

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

Drag and drop each description of IPv6 transition technology on the left to the matching IPv6 transition technology category on the right.

- encapsulates IPv6 packets within IPv4 packets
- supports translation between IPv4 and IPv6 by using algorithms to map addresses
- supports stateful translation between IPv4 and IPv6 with static and manual mappings
- requires IPv6-capable infrastructure
- uses routing protocols to maintain IPv4 and IPv6 routing adjacencies
- encapsulates IPv4 packets within IPv6 packets

Dual-Stack Network
- requires IPv6-capable infrastructure
- uses routing protocols to maintain IPv4 and IPv6 routing adjacencies

Tunneling
- encapsulates IPv6 packets within IPv4 packets
- encapsulates IPv4 packets within IPv6 packets

NAT64
- supports translation between IPv4 and IPv6 by using algorithms to map addresses
- supports stateful translation between IPv4 and IPv6 with static and manual mappings

Explanation: