

Cisco

Exam 400-201

CCIE Service Provider Written Exam (V 4.1)

Version: 13.0

[Total Questions: 409]

Question No : 1

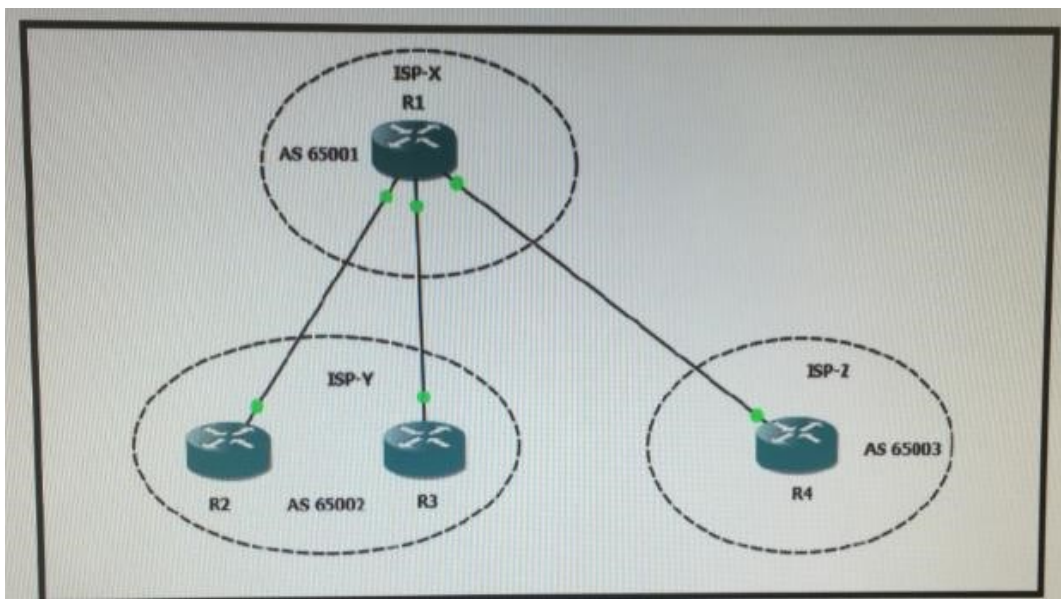
Which three statements about the secure domain router are true? (Choose three.)

- A. The logical router can span across chassis.
- B. The fabric and system controller module are shared by all logical routers.
- C. Each logical router has a distinct fabric and system controller module
- D. The logical router can share a route processor
- E. The logical router cannot share a route processor.

Answer: A,B,E

Question No : 2

Refer to the exhibit.



ISP-X customers must be able to reach both ISP-Y and ISP-Z, but ISP-X must not allow transit traffic between ISP-Y and ISP-Z at any time Which two options satisfy this requirement? (Choose two.)

- A. Use the MED to prefer the proper routes
- B. Use communities to identify and filter routes.
- C. Use local preference to prefer the routes
- D. Use a route map to filter routes on the AS number.
- E. Use the atomic aggregate attribute

Answer: B,D

Question No : 3

Which QoS DiffServ mode preserves the original customer IP marking besides of on egress PE router uses the DSCP value of this IP packet on outbound queuing?

- A. MPLS PHB mode
- B. Pipe mode
- C. IntServ mode
- D. Uniform mode
- E. Short-Pipe mode

Answer: E

Explanation:

Pipe mode marks the packet based on the EXP value vs short-pipe mode does it based on DSCP

Question No : 4

What is the importance of using Virtual Output Queues on ingress Line Cards in a high-end router?

- A. Increases forwarding performance
- B. Simplifies configuration
- C. Prevents head-of-line blocking
- D. Uses less memory

Answer: C

Question No : 5

MPLS Service Providers use Route Distinguishers and Route Targets as methods to control routing for customer VRFs. Which two statements are true about Route Distinguishers and Route Targets? (Choose two.)

- A. Route Targets are values that are used by a PE router to uniquely identify a VRF within its local MP-BGP VPNv4 table.
- B. Route Distinguishers are used by PE routers by exporting and importing routes into a local VRF.
- C. Route Targets are used by PE routers to define how to import and export prefixes into a local VRF database.

- D. Route Targets are extended communities that are used by MP-BGP to identify routes as they are advertised to neighbor PE routers.
- E. Route Distinguishers are values that are used by a PE router to uniquely identify a VRF within its local MP-BGP VPNv4 table.

Answer: C,E

Question No : 6

Which are the three header fields that affect how Equal-Cost Multipath hashes traffic flow into interface groups? (Choose three.)

- A. source MAC address
- B. source port
- C. source IP address
- D. destination IP address
- E. IP protocol ID
- F. destination MAC address

Answer: B,C,D

Explanation: <https://supportforums.cisco.com/document/111291/asr9000xr-loadbalancing-architecture-and-characteristics#field>

Question No : 7

Refer to the exhibit. All PE routers are configured with full-mesh MP-BGP and VPNv4 routing, to provide L3VPN services. A central service implemented to provide management and monitoring products to customers with dedicated VRFs. The objective of this design is to provide between the central services VRF and VRFs A and B. Which implementation achieves this goal?

```

PE1#
vrf definition A
rd 1001:1
address-family ipv4
route-target export 400:1
route-target export 500:1
  
```

```

PE1#
vrf definition A
rd 400:1
address-family ipv4
route-target import 1001:1
  
```

```

PE2#
vrf definition B
rd 500:1
address-family ipv4
route-target import 1001:1
  
```

```

PE3#
vrf definition SERVICES
rd 1001:1
address-family ipv4
route-target import 400:1
route-target import 500:1
  
```

```

PE1#
vrf definition A
rd 400:1
address-family ipv4
route-target import 400:1
route-target export 400:1
  
```

```

PE2#
vrf definition B
rd 500:1
address-family ipv4
route-target export 500:1
route-target import 1001:1
  
```

```

PE3#
vrf definition SERVICES
rd 1001:1
address-family ipv4
  
```

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

Answer: C

Question No : 8

what is the Advantage of BGP Confederation implementation compared to BGP RR implementation

- A. ibgp policies can differ internally within and between the AS
- B. Confederation allow use of template session and template policy , RR can only Use Peer-group
- C. Confederation is more scalable , RR implementation to eliminate
- D. Confederation provides better redundancy , RR client can peer to only 1 Cluster

Answer: A

Question No : 9

Which BGP feature improves the convergence and response time to adjacency changes with BGP neighbors?

- A. reducing BGP scanner timing to the minimum that is supported
- B. BGP Multihop
- C. Next-Hop Address Tracking
- D. Fast Peering Session Deactivation
- E. TTL Security Check

Answer: C

Explanation: http://www.cisco.com/c/en/us/td/docs/ios/12_2sb/feature/guide/sbbnhop.html

Question No : 10

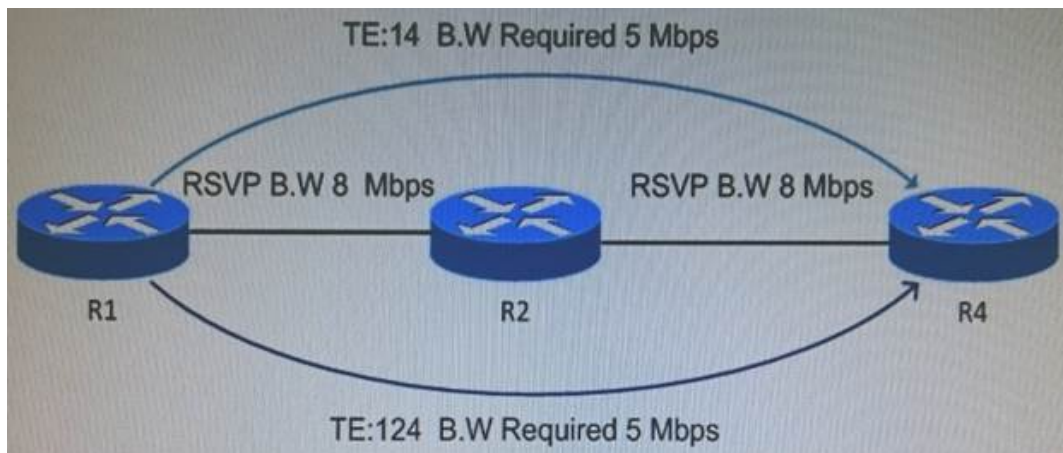
BGP best route selection process is based on what?

- A. path attributes
- B. lowest cost
- C. highest bandwidth
- D. lowest delay
- E. lowest hop-count

Answer: A

Question No : 11

Refer to the exhibit. Both MPLS TE tunnel 14 and MPLS TE tunnel 124 pass over the same physical links. Which configuration on R1 enables TE 14 to be the primary tunnel and TE 124 to become active when TE 14 is admin disabled?



- A. Interface Tunnel14
 tunnel mpls traffic-eng priority 3 1
 !
 Interface Tunnel124
 tunnel mpls traffic-eng priority 5 4
- B. Interface Tunnel14
 tunnel mpls traffic-eng priority 4 1
 !
 Interface Tunnel124
 tunnel mpls traffic-eng priority 3 2
- C. Interface Tunnel14
 tunnel mpls traffic-eng priority 7 7
 !
 Interface Tunnel124
 tunnel mpls traffic-eng priority 1 1
- D. Interface Tunnel14

```
tunnel mpls traffic-eng priority 3 2
!  
Interface Tunnel124  
tunnel mpls traffic-eng priority 4 1
```

Answer: B

Question No : 12

In PPPoA architecture, which two methods are most commonly deployed? (Choose two)

- A. terminating PPP sessions at the service provider
- B. L2TP tunneling
- C. GRE tunneling
- D. PPPmultiplexing
- E. PPP framing

Answer: A,B

Question No : 13

Which OSPF configuration suppresses the periodic OSPF hello packets?

- A. router ospf 1 area0
interface GigabitEthernet
0/1 passive
- B. router ospf 1 area0
interface GigabitEthernet 0/1
hello-interval 0
- C. router ospf 1 stub-router router-lsa r-bit
- D. router ospf 1area 0
interface GigabitEthernet 0/1 demand-circuit point-to-point

Answer: D

Question No : 14

What does RPL stand for?

- A. routing primary language
- B. routing policy language
- C. routing police language
- D. routing program language
- E. routing protocol language

Answer: B

Question No : 15

Which three configuration sections are required on service provider PE routers to enable IPv4 Layer 3 VPN? (Choose three.)

- A. Configure route distinguishers that are used for importing and exporting customer VRF routes.
- B. Configure at least one interface that is assigned to a customer link as a member of the VRF.
- C. Configure the VPNv4 address-family under the MP-BGP configuration mode on the PE routers that participate in the customer VRF routing.
- D. Configure route targets that are used for importing and exporting customer VRF routes
- E. Advertise customer routes to all PE routers by configuring the IPv4 address-family under the MP-BGP configuration mode.
- F. Implement MPLS for all customer-facing links.

Answer: B,C,D

Question No : 16

What are the three building blocks of the Cisco VPLS architectures (Choose three.)

- A. L2VPN
- B. Ethernet Virtual Switch Interface
- C. VLAN Trunk Protocol
- D. State Synchronization Protocol
- E. Label Distribution Protocol
- F. Resource Reservation Protocol

Answer: A,B,E

Question No : 17

In PIM-SM operations, the first router connected to the multicast source sends the Register message to which device?

- A. Designated Router (DR)
- B. Multicast source
- C. Multicast receiver
- D. RP mapping agent
- E. RP

Answer: E

Question No : 18 DRAG DROP

Drag and drop the MPLS operation listed on the left to the correct order of the operation on the right.

Edge LSR at egress removes label and delivers packets	
Ingress edge LSR receives packets, performs layer 3 value-added services, and "labels" packets	
Existing Routing Protocols (e.g. OSPF, IS-IS) establish reachability to destination networks	
LRS switches packets using Label Swapping	
LDP establishes "label" to destination network mappings.	

Answer: