

# **Cisco**

## **400-101 Exam**

**Cisco CCIE Routing and Switching Written Exam**

### **Questions & Answers Demo**

# Version: 55.0

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## Question: 1

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Refer to the exhibit.

```
%CFIB-7-CFIB_EXCEPTION: FIB TCAM exception, Some entries will be software switched
```

If a Layer 3 switch running OSPF in a VRF- lite configuration reports this error, which action can you take to correct the problem?

- A. Set mls cef maximum-routes in the global configuration
- B. Add the vri-lite capability to the OSPF configuration.
- C. Upgrade the Layer 3 switch to a model that can support more routes.
- D. Configure the control plane with a larger memory allocation to support the Cisco Express Forwarding Information Base.

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**Answer: A**

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## Question: 2

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Which two statements about 802.10 tunneling are true? (Choose two.)

- A. It requires a system MTU of at least 1504 bytes.
- B. The default configuration sends Cisco Discovery Protocol, STP: and VTP information.
- C. Traffic that traverses the tunnel is encrypted.
- D. It is supported on private VLAN ports.
- E. MAC-based QoS and UDLD are supported on tunnel ports.
- F. Its maximum allowable system MTU is 1546 bytes.

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**Answer: A, E**

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## Question: 3

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Refer to the exhibit.

```
R1 (config-router)#bgp bestpath ?
  compare-routerid  Compare router-id for identical EBGP paths
  cost-community    cost community
  med               MED attribute
```

When entering a question mark after bgp bestpath only three options are visible. Which two options are valid BGP hidden options for the bgp bestpath command? (Choose two.)

- A. bgp bestpath as-path multipath relax
- B. bgp bestpath as-path ignore
- C. bgp bestpath compare-all
- D. bgp bestpath localpref ignore

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**Answer: A, B**

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#### Question: 4

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Which protocol allows connections made by an NBMA network to dynamically learn connected address?

- A. PPP
- B. NHRP
- C. HDLC
- D. POP

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**Answer: B**

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#### Question: 5

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Refer to the exhibit.

```
R1
aaa authentication login default group radius group tacacs+ local
```

If R1 contacts the RADIUS server but it is unable to find the user name in the server database, how will R1 respond?

- A. It will prompt the user to enter a new username.
- B. It will attempt to contact the TACACS+ server.
- C. It will deny the user access.
- D. It will attempt to authenticate the user against the local database.

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**Answer: C**

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#### Question: 6

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When you deploy DMVPN, what is the purpose of the command `crypto isakmp key ciscotest address 0.0.0.0 0.0.0.0`?

- A. It is configured on hub and spoke router to establish peering
- B. It is configured on hub to set the pre-shared key for the spoke routers
- C. It is configured on the spokes to indicate the hub router
- D. It is configured on the Internet PE routers to allow traffic to traverse the ISP core

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**Answer: B**

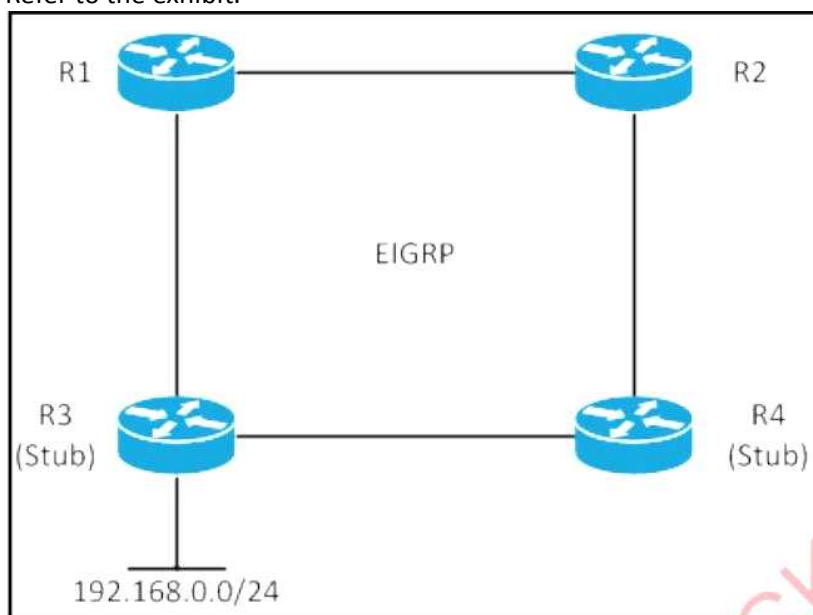
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**Question: 7**

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Refer to the exhibit.



All routers are running EIGRP and the network has converged. R3 and R4 are configured as EIGRP Stub. If the link between R1 and R3 goes down, which statement is true?

- A. R1 sends traffic destined to 192.168.0.100 via R2
- B. R2 does not have a route to 192.168.0.0/24 in the routing table.
- C. The prefix 192.168.0.0/24 becomes stuck-in-active on R4
- D. R3 does not advertise 192.168.0.0/24 to R4 anymore

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**Answer: B**

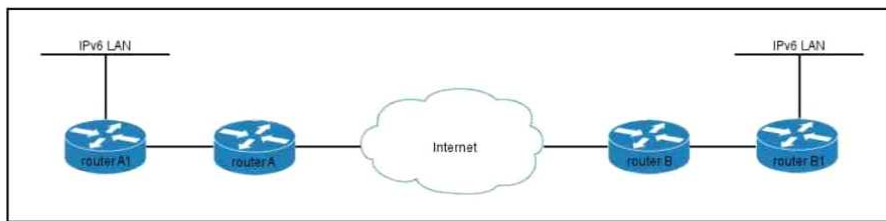
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**Question: 8**

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Refer to the exhibit.



Routers A and B are the edge devices at two different sites as shown. If each site contains an IPv6 network that must be able to communicate over an IPsec tunnel, which type of authentication can be in use between the two sites?

- A. MD5
- B. pre-shared key
- C. 802.1X
- D. CHAP

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**Answer: B**

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### Question: 9

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Which way to influence path selection with EIGRP is preferred?

- A. changing the bandwidth, because it does not have any impact on other router features.
- B. changing the bandwidth, because that is what Cisco recommends.
- C. changing the bandwidth, because it must be done only on one interface along the path.
- D. changing the delay, even if it must be done on multiple interfaces

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**Answer: D**

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### Question: 10

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In which 802.1D port state are the root bridge, the root port, and the designated port(s) elected?

- A. Listening
- B. Forwarding
- C. Learning
- D. Disabled
- E. Blocking

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**Answer: A**

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### Question: 11

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What are three valid HSRP states? (Choose three.)

- A. listen
- B. learning
- C. full
- D. established
- E. speak
- F. INIT

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**Answer: A, B, E**

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**Question: 12**

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External EIGRP route exchange on routers R1 and R2 was failing because the routers had duplicate router IDs. You changed the eigrp router-id command on R1, but the problem persists. With additional action must you take to enable the routers to exchange routes?

- A. Change the corresponding loopback address.
- B. Change the router ID on R2.
- C. Reset the EIGRP neighbor relationship.
- D. Clear the EIGRP process.

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**Answer: D**

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**Question: 13**

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Which two statement about the EIGRP Over the Top feature are true? (Choose two.)

- A. EIGRP routers traffic between the PE devices.
- B. Traffic is LISP-encapsulated on the control plan
- C. The neighbor command must be configured with USP encapsulation on each CE device
- D. The network statement must be configured on each PE device to connect separate EIGRP sites.
- E. Traffic is LISP-encapsulated on the data plan

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**Answer: C, E**

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**Question: 14**

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Refer to the exhibit.

```
interface FastEthernet0/0
  ip address 192.168.12.1 255.255.255.224

router eigrp 100
  passive-interface FastEthernet0/0
  network 192.168.12.0
  no auto-summary
```

What are two effects of the given configuration? (Choose two.)

- A. The router will fail to form neighbor adjacencies over all EIGRP interfaces except F0/0
- B. The router will fail to form neighbor adjacencies over interfaces F0/0
- C. The router will manually summarize the 192.168.12.0/27 network
- D. The router will install the 192.168.12.0/27 network into its EIGRP topology table
- E. Auto-summarization will be enabled to the F0/0 interface

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**Answer: B, D**

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### Question: 15

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Which two statements about IPv6 6to4 tunnels are true? (Choose two)

- A. Sites use addresses from the 2002::/16 prefix
- B. Sites use addresses from link-local scope
- C. They are point-to-multipoint tunnels
- D. They are point-to-point tunnels
- E. They rely on GRE encapsulation

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**Answer: C, C**

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### Question: 16

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What is the source MAC address of a BPDU frame that is sent out of a port?

- A. the lowest MAC address on the switch
- B. the highest MAC address on the switch
- C. the MAC address of the individual port that is sending the BPDU
- D. the same as the MAC address in the bridge ID

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**Answer: C**

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**Question: 17**

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What command can you enter to configure NBAR to recognize VNC traffic?

- A. ip nbar port-map VNC hex 0xAA 0x1B
- B. ip nbar custom-map VNC tcp-udp 5900 5901
- C. ip nbar port-to-application seq 5 VNC tcp 5900 5901
- D. ip nbar application-map VNC udp 5900 5901
- E. ip nbar port-map VNC tcp 5900 5901

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**Answer: E**

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**Question: 18**

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Refer to the exhibit.

```
R2#show run | include ntp
ntp server 10.1.1.1 prefer
ntp server 10.3.3.3
ntp server 10.4.4.4
```

If the route to 10.1.1.1 is removed from the R2 routing table, which server becomes the master NTP server?

- A. R2
- B. the NTP server at 10.3.3.3
- C. the NTP server at 10.4.4.4
- D. the NTP server with the lowest stratum number

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**Answer: D**

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**Question: 19**

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How many address families can a single OSPFv3 instance support?

- A. 1
- B. 2
- C. 5
- D. 10

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**Answer: A**

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**Question: 20**

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Which two items must be confined to capture packet data with the Embedded Packet Capture feature? (Choose two)

- A. the capture point
- B. the capture buffer
- C. the capture file export location
- D. the capture filter
- E. the capture rate
- F. the buffer memory size

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**Answer: A, B**

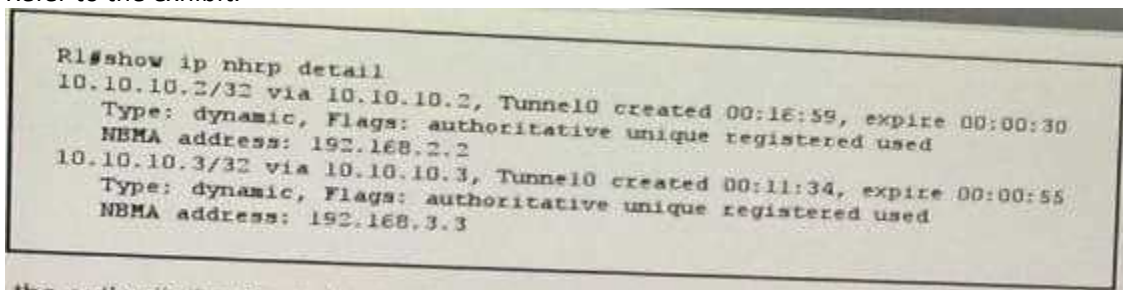
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**Question: 21**

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Refer to the exhibit.



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.

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**Answer: B**

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**Question: 22**

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

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

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**Answer: B, C, F**

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**Question: 23**

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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.

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**Answer: D, E, F**

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**Question: 24**

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Refer to the exhibit.

```
event manager applet OSPF
event syslog pattern "%OSPF-5-ADJCHG: Process 1, Nbr 10.0.0.3 on GigabitEthernet0/1 from FULL to DOWN, Neighbor Down:"
action 1.0 cli command "show clock"
action 1.1 cli command "show ip ospf neighbor GigabitEthernet0/1"
action 1.2 cli command "configure terminal"
action 1.3 cli command "router ospf 1"
action 1.4 cli command "passive-interface GigabitEthernet0/1"
action 1.5 cli command "router bgp 65500"
action 1.6 cli command "address-family ipv4"
action 1.7 cli command "no neighbor 10.0.1.1 shutdown"
action 1.8 cli command "end"
action 1.9 cli command "show ip bgp summary"
action 2.0 end
```

Which two statements about the network environment must be true? (Choose two.)

- A. If the administrator enters the show ip ospf neighbor GigabitEthernet0/ 1 command, the output is blank
- B. The applet runs only after OSPF neighbors are verified.
- C. The applet runs before any commands are executed.
- D. A BGP neighbor relationship is established over GigabitEthernet0/1
- E. An OSPF neighbor relationship is established when the interface recovers

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**Answer: A, B**

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**Question: 25**

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Which command can you enter to prevent IS-IS POU's from using the full MTU size?

- A. no hello padding
- B. set-overload-bit on-startup 120
- C. metric-style wide

D. set-overload-bit on-startup wait- for-bgp suppress interlevel

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**Answer: A**

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**Question: 26**

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An NSSA area has two ABRs connected to Area 0. Which statement is true?

- A. Both ABRs translate Type-7 LSAs to Type-5 LSAs.
- B. The ABR with the highest router ID translates Type-7 LSAs to Type-5 LSAs.
- C. No LSA translation is needed.
- D. Both ABRs forward Type-5 LSAs from the NSSA area to backbone area.

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**Answer: B**

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