

Cisco 642-902 Exam Bundle

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Cisco 642-902 Exam Bundle

Exam Name: Cisco implementing cisco ip routing

Certkiller

QUESTION 1

A company has a Frame Relay WAN with one central-site router and 100 branch office routers. A partial mesh of PVCs exists: one PVC between the central site and each of the 100branch routers. Which of the following could be true about the number of EIGRP neighbor ships?

- A. A partial mesh totaling 100: one between the central-site router and each of the 100branches.
- B. A full mesh - $(101 * 100) / 2 = 5050$ -One neighbor ship between each pair of routers.
- C. 101-One between each router (including the central site) and its nearby PE router.
- D. None of the answers is correct.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

A network design shows that R1 has four different possible paths from itself to the Data Center subnets. Which one of the following commands is most likely to show you all the possible nexthop IP addresses for these four possible routes?

- A. show ip eigrp topology
- B. show ip eigrp topology all-links
- C. show ip route eigrp
- D. show ip route eigrp all-links
- E. show ip eigrp topology all-learned

Correct Answer: B

Section: (none)

Explanation

QUESTION 3

Router R1 has been configured for EIGRP. The configuration also includes an ACL with one line access- list 1 permit 10.100.32.0 0.0.15.255-and the EIGRP configuration includes the distribute list 1 in command. Which of the following routes could not be displayed in the output of the show ip eigrp topology command as a result?

- A. 10.10.32.0/19
- B. 10.10.44.0/22
- C. 10.10.40.96/27
- D. 10.10.48.0/23
- E. 10.10.60.0/30

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4

The command output that follows was gathered from router R1. If correctly referenced by an EIGRP distribution list that filters outbound Updates, which of the following statements is true about the filtering of various prefixes

by this Prefix list? R1#sh ip prefix-list ip prefix-list question: 4 entries
seq 5 deny 10.1.2.0/24 ge 25 le 27
seq 15 deny 10.2.0.0/16 ge le
seq 20 permit 0.0.0.0/0

- A. Prefix 10.1.2.0/24 will be filtered due to clause 5.
- B. Prefix 10.1.2.224/26 will be filtered due to clause 5.
- C. Prefix 10.2.2.4/30 will be filtered due to clause 15.
- D. Prefix 10.0.0.0/8 will be permitted.
- E. Prefix 0.0.0.0/0 will be permitted.

Correct Answer: BCE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 5

An engineer plans to configure summary routes with the ip summary-address eigrp asn prefix mask command. Which of the following, when added to such a command, would create a summary that includes all four of the following subnets: 10.1.100.0/25, 10.1.101.96/27, 10.1.101.224/28, and 10.1.100.128.25?



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- A. 10.1.0.0 255.255.192.0
- B. 10.1.64.0 255.255.192.0
- C. 10.1.100.0 255.255.255.0
- D. 10.1.98.0 255.255.252.0

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

In a lab, R1 connects to R2, which connects to R3. R1 and R2 each have several working interfaces, all assigned addresses in class A network 10.0.0.0. Router R3 has some working interfaces in class A network 10.0.0.0, and others in class B network 172.16.0.0. The engineer experiments with the auto-summary command on R2 and R3, enabling and disabling the command in various combinations. Which of the following combinations will result in R1 seeing a route for 172.16.0.0/16, instead of the individual subnets of class B network 172.16.0.0?

- A. auto-summary on R2 and no auto-summary on R3
- B. auto-summary on R2 and auto-summary on R3
- C. no auto-summary on R2 and no auto-summary on R3
- D. no auto-summary on R2 and auto-summary on R3

Correct Answer: BD

Section: (none)

Explanation

QUESTION 7

Router R1 exists in an Enterprise that uses EIGRP as its routing protocol. The show ip route command output on router R1 lists the following phrase: "Gateway of last resort is 1.1.1.1 to network 2.0.0.0". Which of the following is most likely to have caused this output to occur on R1?

- A. R1 has been configured with an ip default-network 2.0.0.0 command.
- B. R1 has been configured with an ip route 0.0.0.0 0.0.0.0 1.1.1.1 command.
- C. R1 has been configured with an ip route 2.0.0.0 255.0.0.0 1.1.1.1 command.
- D. Another router has been configured with an ip default-network 2.0.0.0 command.
- E. Another router has been configured with an ip route 2.0.0.0 255.0.0.0 1.1.1.1 command.

Correct Answer: D

Section: (none)

Explanation

QUESTION 8

A router has been configured with the commands router ospf 9, network 172.16.1.0.0.255 area 8, and network 172.16.0.0.0.255.255 area 9, in that order. No other OSPF related commands have been configured. The answers list the IP addresses that could be assigned to this router's Fa0/0 interface. Which answers list an IP address/prefix length that would cause the router to put Fa0/0 into area 9? (Choose two.)

- A. 172.16.0.1/23
- B. 172.16.1.1/26
- C. 172.16.1.1/24
- D. 172.16.0.255/23
- E. None of the other answers is correct.

Correct Answer: AD

Section: (none)

Explanation

QUESTION 9

Which of the following can either directly or indirectly identify all the interfaces for which both 1) OSPF has been enabled and 2) OSPF is not passive? (Choose two.)

- A. show ip ospf database
- B. show ip ospf interface brief
- C. show ip protocols
- D. show ip route ospf
- E. show ip ospf neighbors

Correct Answer: BC

Section: (none)

Explanation

QUESTION 10

Routers R1 and R2 are OSPF neighbors using their Fa0/0 interfaces, respectively, using default settings for all

timers. An engineer adds the `ip ospf hello-interval 6` command to R1's Fa0/0 configuration. Which of the following is true regarding the results from this change? (Choose two)

- A. The `show ip ospf neighbor` command on R1 lists the revised Hello timer.
- B. The `show ip ospf interface brief` command on R1 lists the revised Hello timer.
- C. The R1-R2 neighborship fails due to Hello timer mismatch.
- D. The `show ip ospf interface` command on R1 lists the revised Hello timer.

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 11

A network design shows area 1 with three internal routers, area 0 with four internal routers, and area 2 with five internal routers. Additionally, one ABR (ABR1) connects areas 0 and 1, plus a different ABR (ABR2) connects areas 0 and 2. How many Type 1 LSAs would be listed in ABR2's LSDB?

- A. 6
- B. 7
- C. 15
- D. 12
- E. None of the other answers is correct.

Correct Answer: D

Section: (none)

Explanation

QUESTION 12

A network planning diagram shows a large internetwork with many routers. The configurations show that OSPF has been enabled on all interfaces, IP addresses correctly configured, and OSPF working. For which of the following cases would you expect a router to create and flood a Type 2LSA?

- A. When OSPF is enabled on a LAN interface, and the router is the only router connected to the subnet.
- B. When OSPF is enabled on a point-to-point serial link, and that router has both the higher router ID and higher interface IP address on the link.
- C. When OSPF is enabled on a Frame Relay point-to-point sub interface, has the lower RID and lower sub interface IP address, and otherwise uses default OSPF configuration on the interface.
- D. When OSPF is enabled on a working LAN interface on a router, and the router has been elected BDR.
- E. None of the other answers is correct.

Correct Answer: E

Section: (none)

Explanation

QUESTION 13

Routers R1, R2, R3, and R4 connect to the same 10.10.10.0/24 LAN-based subnet. OSPF is fully working in the subnet. Later, R5, whose OSPF priority is higher than the other four routers, joins the subnet. Which of the following are true about the OSPF database Exchange process over this subnet at this point? (Choose two.)

- A. R5 will send its DD, LSR, and LSU packets to the 224.0.0.5 all-DR-routers multicast address.

- B. R5 will send its DD, LSR, and LSU packets to the 224.0.0.6 all-DR-routers multicast address.
- C. The DR will inform R5 about LSAs by sending its DD, LSR, and LSU packets to the 224.0.0.6 all-SPF-routers multicast address.
- D. The DR will inform R5 about LSAs by sending its DD, LSR, and LSU packets to the 224.0.0.5 all-SPF-routers multicast address.

Correct Answer: BD

Section: (none)

Explanation

QUESTION 14

Router B1, an internal router in area 1, displays the following output. The only two ABRs connected to area 1 are performing Type 3 LSA filtering. Which of the following answers is true based on the information in the output from B1? R1# show ip route 10.1.0.0 255.255.0.0 longerprefixes! Legend lines omitted for brevity

```
10.0.0.0/8 is variably sub netted, 17 subnets, 3 masks
O 10.1.2.0/24 [110/658] via 10.10.13.1, 00:00:32, Serial0/0/0.1
O IA 10.1.1.0/24 [110/658] via 10.10.23.2, 00:41:39, Serial0/0/0.2
O IA 10.1.3.0/24 [110/658] via 10.10.23.2, 00:41:39, Serial0/0/0.2
```

- A. A Type 3 LSA for 10.2.2.0/24 was filtered by both ABRs.
- B. A Type 3 LSA for 10.1.2.0/24 was not filtered by both ABRs.
- C. A Type 3 LSA for 10.1.3.0/24 was not filtered by at least one ABR.
- D. A Type 3 LSA for 10.1.1.0/24 filtered by both ABRs.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 15

R1, an ABR between backbone area 0 and area 1, has intra-area routes in area 0 for 10.1.1.0/24, 10.1.2.0/24, and 10.1.3.0/24. These routes have metrics of 21, 22, and 23, respectively. An engineer then adds the area 0 range 10.1.0.0 255.255.0.0 command under the OSPF process of R1. Which of the following is true? (Choose two.)

- A. R1 loses and then re-establishes neighbor ships with all neighbors.
- B. R1 no longer advertises 10.1.1.0/24 to neighbors into area 1.
- C. R1 advertises a 10.1.0.0/16 route into area 1 with a metric of 23 (largest metric).
- D. R1 advertises a 10.1.0.0/16 route into area 1 with metric of 21 (lowest metric).

Correct Answer: BD

Section: (none)

Explanation

QUESTION 16

The following output exists on Router R1, a router internal to area 1. What can you determine as true from the output of the show ip ospf database summary command?

```
Routing Bit Set on this LSA LS age: 124
Options: (No TOS-capability, DC, Upward) LS
Type: Summary Links (Network)
Link State ID: 10.1.0.0 (summary Network Number)
```

Advertising Router: 1.1.1.1 LS
Seq Number: 80000001
Checksum: 0x878F
Length: 28 Network
Mask: /22 TOS: 0 Metric: 11

- A. The LSA was created by an ABR due to an area range command.
- B. The LSA was created by an ASBR due to a summary-address command.
- C. If created by an area range command, the best metric for a subordinate subnet on that ABR must have been 11.
- D. None of the other answers is correct.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 17

Which of the following is true about routers internal to a totally NSSA area? (Choose two.)

- A. Routers cannot redistribute external routes into the area.
- B. Routers should have zero Type 3 LSAs in their LSDBs.
- C. Routers should have zero Type 5 LSAs in their LSDBs.
- D. Routers should learn default routes from the ABRs attached to the area.

Correct Answer: CD

Section: (none)

Explanation

QUESTION 18

Router R1 connects to a Frame Relay cloud using a multipoint sub interface, with ten PVCs associated with the sub interface. What command would make this router not use a DR and require static OSPF neighbor definition?

- A. ip ospf network broadcast
- B. ip ospf network non-broadcast
- C. ip ospf network point-to-multipoint
- D. ip ospf network point-to-multipoint non-broadcast

Correct Answer: D

Section: (none)

Explanation

QUESTION 19

Ten routers, R1 through R10, connect in a partial mesh over Frame Relay. For the mesh, R1 and R2 have PVCs connected to all other routers, but Routers R3 through R10 act as branch routers, with only two PVCs- one to R1 and one to R2. The routers use IP subnet 10.1.1.0/24, with addresses 10.1.1.1, 10.1.1.2, and so on, through 10.1.1.10, respectively. The routers all use Inverse ARP to learn Frame Relay mapping information. All routers use a multipoint sub interface with network type point-to-multipoint non broadcast. A co-worker's implementation plan lists lots of configuration commands related to this design. The design states that all hosts should be able to ping all other hosts. Which commands are required for proper functioning of OSPF in this case? (Choose two.)

- A. frame-relay map commands on R3-R10 referencing the other routers in this group.
- B. Nine OSPF neighbor commands on each router.
- C. Nine OSPF neighbor commands on R1 and R2, with only two such commands on R3-R10.
- D. R1 and R2 with ip ospf priority 1 commands to ensure they become DR and BDR. E. R3-R10 with ip ospf priority 0 commands to ensure they do not become DR or BDR.

Correct Answer: AC

Section: (none)

Explanation

QUESTION 20

For a router to successfully redistribute routes between OSPF and EIGRP, which of the following are true? (Choose two.)

- A. The router must have one routing protocol configured, but configuration for both routing protocols is not necessary.
- B. The router must have at least one working link connected to each routing domain.
- C. The redistribute command must be configured under EIGRP to send the routes to OSPF.
- D. The redistribute command should be configured under OSPF to take routes from EIGRP into OSPF.

Correct Answer: BD

Section: (none)

Explanation

QUESTION 21

Router R1 has a connected route for 10.1.1.0/24 off interface Fa0/0. Interface Fa0/0 has been enabled for OSPF due to a router ospf 1 and network 10.0.0.0 0.0.0.255 area 0 command. R1 also has EIGRP configured, with the redistribute ospf 1 metric 1000 100 10 1 1500 command configured under EIGRP. Which one of the following is true?

- A. R1 will not redistribute 10.1.1.0/24 into EIGRP, because R1 knows it as a connected route and not as an OSPF route.
- B. For any OSPF routes redistributed into EIGRP, the metric components include a value equivalent to 1 Mbps of bandwidth.
- C. For any OSPF routes redistributed into EIGRP, the metric components include a value equivalent to 100 microseconds of delay.
- D. No subnets of network 10.0.0.0 will be redistributed due to the omission of the subnets parameter.

Correct Answer: B

Section: (none)

Explanation

QUESTION 22

Router R1 refers to route-map fred when redistributing from EIGRP into OSPF. The entire route map is listed next. Which of the following answers must be true based on the configuration as shown? route-map fred deny 10 match ip address one route-map fred deny 20 match ip address two route-map fred permit 100

- A. The third route map clause will allow any routes not already filtered by the first two clauses.
- B. Routes permitted by ACL "two" will be redistributed.
- C. Routes denied by ACL "one" will be redistributed.
- D. All routes will be filtered.

Correct Answer: A
Section: (none)
Explanation

QUESTION 23

Router R1 is redistributing between two OSPF processes. Given the configuration shown, which includes all commands in the route map named fred, which of the following answers is true regarding the redistribution into OSPF process 1?
router ospf 1 redistribute ospf 2 external 2 route-map fred !
route-map fred permit 10 match ip address 1 set metric-type type-1

- A. No routes are redistributed because a route cannot be both E1 and E2.
- B. Only OSPF E2 routes in the OSPF 2 domain will be considered for redistribution.
- C. Inside the OSPF 2 domain, any formerly E2 routes will become E1 routes.
- D. Routes permitted by ACL 1 will be redistributed, regardless of whether the routes are E1 or E2 routes.

Correct Answer: B
Section: (none)
Explanation

QUESTION 24

A co-worker is developing an implementation plan for a design that uses OSPF 2 and RIPv2 routing domains, with two routers redistributing between the two domains. The co-worker asks your help in choosing how to prevent domain loops by setting administrative distance. Assuming all other related settings use defaults, which of the following would solve the domain loop problem?

- A. The distance ospf intra-area 80 inter-area 80 OSPF subcommand
- B. The distance ospf external 80 OSPF subcommand
- C. The distance ospf intra-area 180 inter-area 180 OSPF subcommand
- D. The distance ospf external 180 OSPF subcommand

Correct Answer: D
Section: (none)
Explanation

QUESTION 25

Policy-Based Routing (PBR) has been enabled on Router R1's interface F0/0. Which of the following is true regarding how PBR works? (Choose two.)

- A. Packets entering F0/0 will be compared based on the PBR route map.
- B. Packets exiting F0/0 will be compared based on the PBR route map.
- C. IOS ignores the PBR forwarding directions when the packet matches a route map deny clause.
- D. IOS ignores the PBR forwarding directions when the packet matches a route map permit clause.

Correct Answer: AC
Section: (none)
Explanation

QUESTION 26

Examine the following configuration on Router R1. R1's show ip route 172.16.4.1 command lists a route with outgoing interface S0/1/1. Host 172.16.3.3 uses telnet to connect to host 172.16.4.1. What will Router R1 do with the packets generated by host 172.16.3.3 because of the telnet, assuming the packets enter R1's F0/0

interface? (Choose two.)

```
!  
interface FastEthernet 0/0  
ip address 172.16.1.1 255.255.255.0  
ip policy route-map Q2  
!  
route-map Q2 permit 10  
match ip address 101  
set interface s0/0/1  
!  
access-list 101 permit tcp host 172.16.3.3 172.16.4.0 0.0.0.255
```

- A. The packet will be forwarded out S0/0/1, or not at all.
- B. The packet will be forwarded out S0/0/1 if it is up.
- C. The packet will be forwarded out S0/1/1 if it is up.
- D. The packet will be forwarded out S0/1/1 if it is up, or if it is not up, out s0/0/1. E. The packet will be forwarded out S0/0/1 if it is up, or if it is not up, out s0/1/1.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 27

The following configuration commands exist only in an implementation plan document. An engineer does a copy/paste of these commands into configuration mode on Router R1. Which of the following answers is most accurate regarding the results?

```
ip sla 1 icmp-echo 1.1.1.1 source-ip 2.2.2.2  
ip sla schedule 1 start-time now life forever
```

- A. The SLA operation will be configured but will not start until additional commands are used.
- B. The SLA operation is not completely configured so it will not collect any data.
- C. The SLA operation is complete and working, collecting data into the RTTMON MIB.
- D. The SLA operation is complete and working but will not store the data in the RTTMON MIB without more configuration.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 28

The following output occurs on Router R1. IP SLA operation 1 uses an ICMP echo operation type, with default frequency of 60 seconds. The operation pings from address 1.1.1.1 to address 2.2.2.2. Which of the following answers is true regarding IP SLA and object tracking on R1?

```
R1# show track  
Track 2 IP SLA 1 state State is Up 3 changes, last change 00:00:03  
Delay up 45 secs, down 55 secs  
Latest operation return code: OK Latest RTT (milli secs) 6  
Tracked by: STATICIP- ROUTING 0
```

- A. The tracking return code fails after the SLA operation results in an ICMP echo failure three times.
- B. The tracking return code fails after the SLA operation results in an ICMP echo failure one time.
- C. After the tracking object fails, the tracking object moves back to an up state 45 seconds later in all cases.
- D. After moving to a down state, the tracking object moves back to an OK state 45 seconds after the SLA operation moves to an OK state.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 29

Which of the following are considered private IPv4 addresses? (Choose two.)

- A. 192.16.1.1
- B. 172.35.1.1
- C. 225.0.0.1
- D. 127.0.0.1
- E. 10.1.1.1

Correct Answer: BE

Section: (none)

Explanation

QUESTION 30

Class C network 200.1.1.0/24 was allocated to an ISP that operated primarily in Asia. That ISP then assigned this entire Class C network to one of its Asian customers. Network 200.1.2.0/24 has yet to be assigned to any ISP. Which of the following is most likely to be true?

- A. 200.1.2.0/24 could be assigned to any registrar or ISP in the world.
- B. 200.1.2.0/24 will be assigned in the same geography (Asia) as 200.1.1.0/24.
- C. 200.1.2.0/24 cannot be assigned as public address space.
- D. Routers inside North American ISPs increase their routing table size by 1 as a result of the customer with 200.1.1.0/24 connecting to the Internet.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:



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QUESTION 31

Router R1, in ASN 11, learns a BGP route from BGP peer R22 in ASN 22. R1 and then uses BGP to advertise

the route to R2, also in ASN 11. What ASNs would you see in the BGP table on R2 for this route?

- A. 22
- B. 11
- C. 1
- D. None

Correct Answer: A

Section: (none)

Explanation

QUESTION 32

Which of the following are most likely to be used as an ASN by a company that has a registered public 16-bit ASN? (Choose two.)

- A. 1
- B. 65,000
- C. 64,000
- D. 64,550

Correct Answer: AC

Section: (none)

Explanation

QUESTION 33

The following terms describe various design options for Enterprise connectivity to the Internet. Which of the following imply that the Enterprise connects to two or more ISPs? (Choose two.)

- A. Single Homed
- B. Dual Homed
- C. Single Multi homed
- D. Dual Multi homed

Correct Answer: CD

Section: (none)

Explanation

QUESTION 34

Enterprise Router R1, in ASN 1, connects to ISP Router I1, ASN 2, using e BGP. The single serial link between the two routers uses IP addresses 10.1.1.1 and 10.1.1.2, respectively. Both routers use their S0/0 interfaces for this link. Which of the following commands would be needed on R1 to configure eBGP? (Choose two.)

- A. router bgp 2
- B. router bgp 1
- C. neighbor 10.1.1.2 remote-as 2
- D. neighbor 10.1.1.2 Update-source 10.1.1.1
- E. neighbor 10.1.1.2 Update-source S0/0

Correct Answer: BC

Section: (none)

Explanation

QUESTION 35

The following output, taken from a show ip bgp command on Router R1, lists two neighbors. In what BGP neighbor state is neighbor 1.1.1.1?

```
Neighbor V AS Msg Rcvd Msg Sent TbVer InQ OutQ Up/Down State/PfxRcd
1.1.1.1 4 1 60 61 26 0 0 00:45:01 0
2.2.2.2 4 3 153 159 26 0 0 00:38:13 1
```

- A. Idle
- B. Open sent
- C. Active
- D. Established

Correct Answer: D

Section: (none)

Explanation

QUESTION 36

The following output occurs on Router R1. Which of the following cannot be determined from this output?

```
R1# show ip route 180.1.1.0 255.255.255.240
Routing entry for 180.1.1.0/28 Known via "bgp 2", distance 20, metric 0 Tag 3, type external Last update from
192.168.1.2
00:10:27 ago Routing Descriptor Blocks:
* 192.168.1.2, from 192.168.1.2, 00:10:27 ago Route metric is 0, traffic share count is 1 AS Hops 2Route tag 3
```

- A. The type of BGP peer (I BGP or e BGP) that advertised this route to R1
- B. R1's ASN
- C. The next-hop router's ASN
- D. The AS_Path length

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37

A company uses Routers R1 and R2 to connect to ISP1 and ISP2, respectively, with Routers I1 and I2 used at the ISPs. R1 peers with I1 and R2; R2 peers with I2 and R1. R1 and R2 do not share a common subnet, relying on other routers internal to the Enterprise for IP connectivity between the two routers. Which of the following could be used to prevent potential routing loops in this design? (Choose two)

- A. Using an iBGP mesh inside the Enterprise core
- B. Configuring default routes in the Enterprise pointing to both R1 and R2
- C. Redistributing BGP routes into the Enterprise IGP
- D. Tunneling the packets for the iBGP connection between R1 and R2

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 38

R1 is currently advertising prefixes 1.0.0.0/8, 2.0.0.0/8, and 3.0.0.0/8 over its eBGP connection to neighbor 2.2.2.2 (R2). An engineer configures a prefix list (fred) on R1 that permits only 2.0.0.0/8 and then enables the filter with the neighbor R2 prefix-list fred out command. Upon exiting configuration mode, the engineer uses some show commands on R1, but no other commands. Which of the following is true in this case?

- A. The show ip bgp neighbor 2.2.2.2 received-routes command lists the three original prefixes.
- B. The show ip bgp neighbor 2.2.2.2 advertised-routes command lists the three original prefixes.
- C. The show ip bgp neighbor 2.2.2.2 routes command lists the three original prefixes.
- D. The show ip bgp neighbor 2.2.2.2 routes command lists only 2.0.0.0/8.
- E. The show ip bgp neighbor 2.2.2.2 advertised-routes command lists only 2.0.0.0/8.

Correct Answer: B

Section: (none)

Explanation

QUESTION 39

Which of the following three BGP filtering methods enabled with the neighbor command will filter BGP prefixes based on the prefix and prefix length? (Choose 3)

- A. A neighbor distribute-list out command, referencing a standard ACL
- B. A neighbor prefix-list out command
- C. A neighbor filter-list out command
- D. A neighbor distribute-list out command, referencing an extended ACL
- E. A neighbor route-map out command

Correct Answer: BDE

Section: (none)

Explanation

QUESTION 40

Router R1 learns two routes with BGP for prefix 200.1.0.0/16. Comparing the two routes, route 1 has a shorter AS_Path Length, smaller MED, the same Weight, and smaller Local Preference. Which of the following is true about Router R1's choice of best path for this prefix?

- A. Route 1 is the best route.
- B. Route 2 is the best route.
- C. The routes tie as best, but one will be picked to be placed in the routing table based on tiebreakers.
- D. Neither route is considered best.

Correct Answer: B

Section: (none)

Explanation

QUESTION 41

The following line of output was gathered on Enterprise Router Ent1 using the command show ip route. Which of the following answers is most likely to be true, based on this output?

B 128.107.0.0 [20/10] via 11.11.11.11, 00:02:18

- A. This router has set the Weight of this route to 10.
- B. This router's BGP table lists this route as an iBGP route.
- C. This router's MED has been set to 10.
- D. This router's BGP table lists an AS_Path length of 10 for this route.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 42

Which of the following answers lists either a protocol or function that can be used by a host to dynamically learn its own IPv6 address? (Choose two.)

- A. Stateful DHCP
- B. Stateless DHCP
- C. Stateless autoconfiguration
- D. Neighbor Discovery Protocol

Correct Answer: AC

Section: (none)

Explanation

QUESTION 43

Router R1 has two LAN interfaces and three serial interfaces enabled for IPv6. All the interfaces use link local addresses automatically generated by the router. Which of the following could be the link local address of R1's interface S0/0?

- A. FE80::200:FF:FE11:0
- B. FE80::200:FF:FE11:1111
- C. FE80::0213:19FF:FE7B:0:1
- D. FEB0::211:11FF:FE11:1111

Correct Answer: B

Section: (none)

Explanation

QUESTION 44

Router R1 has the following configuration. Assuming R1's F0/0 interface has a MAC address of 0200.0011.1111, what IPv6 addresses will R1 list for interface F0/0 in the output of the show ipv6 interface brief command?

```
interface f0/0
ipv6 address 2345:0:0:8::1/64
```

- A. 2345:0:0:8::1
- B. 2345:0:0:8:0:FF:FE11:1111
- C. FE80::8:0:FF:FE11:1111
- D. FE80:0:0:8::1

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 45

Router R1 connects to Router R2 over an Ethernet LAN with both routers using their F0/0 interfaces. R1 learns a route from R2 using EIGRP for IPv6. That route lists F0/0 as the outgoing interface with R2 as the next hop. The configuration excerpt shows all relevant configuration on R2's F0/0 interface. Which of the following is true about R1's route?

```
!  
interface f0/0  
mac-address 1111.1111.1111  
ipv6 address 2000::/64 eui-64  
ipv6 address 2001::1/64
```

- A. The next hop is 2000::1311:11FF:FE11:1111
- B. The next hop is FE80::1311:11FF:FE11:1111
- C. The next hop is FE80::5111:11FF:FE11:1111
- D. The next hop is 2001::1

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 46

Router R1 currently has no configuration related to IPv6 or IPv4. The following configuration exists in a planning document, intended to be used to copy/paste into Router R1 to enable OSPFv3 on interfaces F0/0 and S0/0/0. No other related configuration exists. Assuming F0/0 and S0/0/0 reach an up/up state, which of the following is true about OSPFv3 on R1 after this configuration has been pasted into R1?

```
!  
ipv6 router ospf 1  
ipv6 unicast-routing  
!  
interface f0/0  
ipv6 address 2000::1/64  
ipv6 ospf 1 area 1  
!  
interface s0/0/0  
ipv6 address 2001::/64 eui-64  
ipv6 ospf 1 area 0
```

- A. OSPF works on F0/0 and S0/0/0 without further configuration.
- B. OSPF works with the addition of one command: a no shutdown command in OSPF router configuration mode.
- C. OSPF works with the addition of one command: an router-id command in OSPF router configuration mode.
- D. OSPFv3 needs at least two more configuration commands before it works on R1.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 47

A client host uses IPv4 to communicate with one server and IPv6 to communicate with another. Which of the following IPv6 coexistence features is likely at work on the host?

- A. Native IPv6
- B. Point-to-point tunnels
- C. Multipoint tunnels
- D. NAT-PT
- E. Dual stacks

Correct Answer: E

Section: (none)

Explanation

QUESTION 48

An engineer is reviewing another engineer's sample configuration for a GRE tunnel used to pass IPv6 traffic. The tunnel has not yet been configured on the router. Which of the following commands is not required for the configuration to pass IPv6 traffic?

- A. tunnel source
- B. tunnel destination
- C. tunnel mode
- D. All these commands are required.

Correct Answer: C

Section: (none)

Explanation

QUESTION 49

Router R1 uses MAC address 1111.1111.1111 for its Fa0/0 interface. An engineer sees the following configuration in the output of a show running-config command. Then, the engineer issues a show ipv6 interface brief command. What global unicast IPv6 address does this command display for interface tunnel 1?

```
!  
interface loopback 1  
ip address 192.168.1.1 255.255.255.255  
!  
interface tunnel 1  
tunnel source loopback 1  
tunnel destination 192.168.1.2  
tunnel mode ipv6ip isatap  
ipv6 address 2000::/64 eui-64
```

- A. 2000::1311:11FF:FE11:1111
- B. 2000::C0A5:101
- C. 2000:C0A5:101::
- D. 2000::5EFE:C0A5:101

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 50

Router R1 sits at an Enterprise branch office, using both the Internet and a leased line to another Enterprise router for its two connectivity options back into the rest of the Enterprise network. The engineer planning for this branch decided to use the leased line for all Enterprise traffic, unless it fails, in which case the Internet connection should be used to pass traffic to the Enterprise. Which of the following is most likely to be useful on the branch router? (Choose two.)

- A. IPsec tunnel
- B. GRE tunnel
- C. Floating static route
- D. An IGP

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:



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