Designing Cisco Enterprise Networks (ENSLD)

1. Which two BGP features will result in successful route exchanges between eBGP neighbors sharing the same AS number? (Choose two.)

- [ ] A. advertise-best-external
- [ ] B. bestpath as-path ignore
- [ ] C. client-to-client reflection
- [ ] D. as-override
- [ ] E. allow-as-in

Answer(s): D E

---

2. A customer with an IPv4 only network topology wants to enable IPv6 connectivity while preserving the IPv4 topology services. The customer plans to migrate IPv4 services to the IPv6 topology, then decommission the IPv4 topology. Which topology supports these requirements?

A. dual stack

B. 6VPE

C. 6to4

D. NAT64

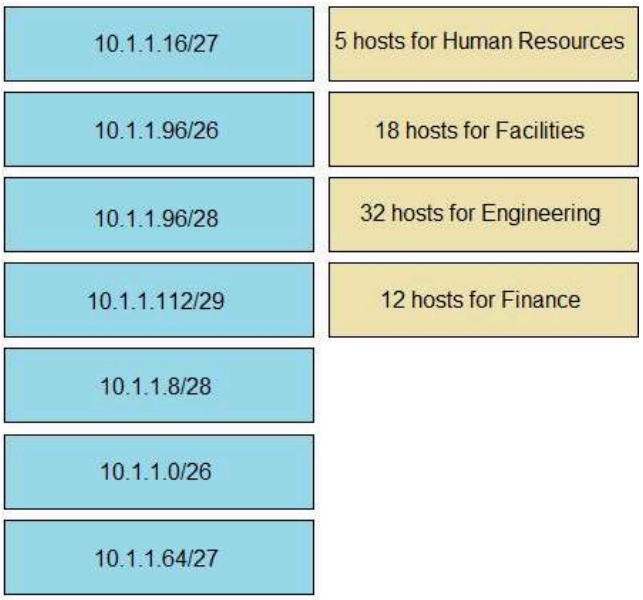
Answer(s): A

---

3. DRAG DROP (Drag and Drop is not supported)
An engineer is designing an addressing plan for a small business using a single /24 network. Each department must have its own subnet. Drag and drop the subnets from the left onto the requirements of the department they fulfill on the right. Not all options are used.

Select and Place:

Answer Area



A. See Explanation section for answer.

Answer(s): A

---

4. A company is running BGP on a single router, which has two connections to the same ISP. Which BGP feature ensures traffic is load balanced across the two links to the ISP?

A. Multihop

B. Multipath Load Sharing

C. Next-Hop Address Tracking

D. AS-Path Prepending

Answer(s): B

---

5. Company A recently acquired another company. Users of the newly acquired company must be able to access a server that exists on Company A's network, both companies use overlapping IP address ranges. Which action conserves IP address space and provides access to the server?

A. Use a single IP address to create overload NAT

B. Use a single IP address to create a static NAT entry

C. Build one-to-one NAT translation for every user that needs access

D. Re-IP overlapping address space in the acquired company

Answer(s): A

---

6. Which design consideration should be observed when EIGRP is configured on Data Center switches?

A. Perform manual summarization on all Layer 3 interfaces to minimize the size of the routing table.

B. Prevent unnecessary EIGRP neighborships from forming across switch virtual interfaces.

C. Lower EIGRP hello and hold timers to their minimum settings to ensure rapid route reconvergence.

D. Configure multiple EIGRP autonomous systems to segment Data Center services and applications.

Answer(s): A

---

7. Which design consideration must be made when using IPv6 overlay tunnels?

A. Overlay tunnels that connect isolated IPv6 networks are considered a final IPv6 network architecture.

B. Overlay tunnels should only be considered as a transition technique toward a permanent solution.

C. Overlay tunnels should be configured only between border devices and require only the IPv6 protocol stack.

D. Overlay tunneling encapsulates IPv4 packets in IPv6 packets for delivery across an IPv6 infrastructure.

Answer(s): B

---

8. When a network is designed using IS-IS, which two circuit types are supported? (Choose two.)

- ☐ A. nonbroadcast multiaccess
- ☐ B. multiaccess
- ☐ C. point-to-multipoint
- ☐ D. nonbroadcast
- ☐ E. point-to-point

Answer(s): B E

---

9. A network solution is being designed for a company that connects to multiple Internet service providers. Which Cisco proprietary BGP path attribute will influence outbound traffic flow?

A. Local Preference

B. MED

C. Weight

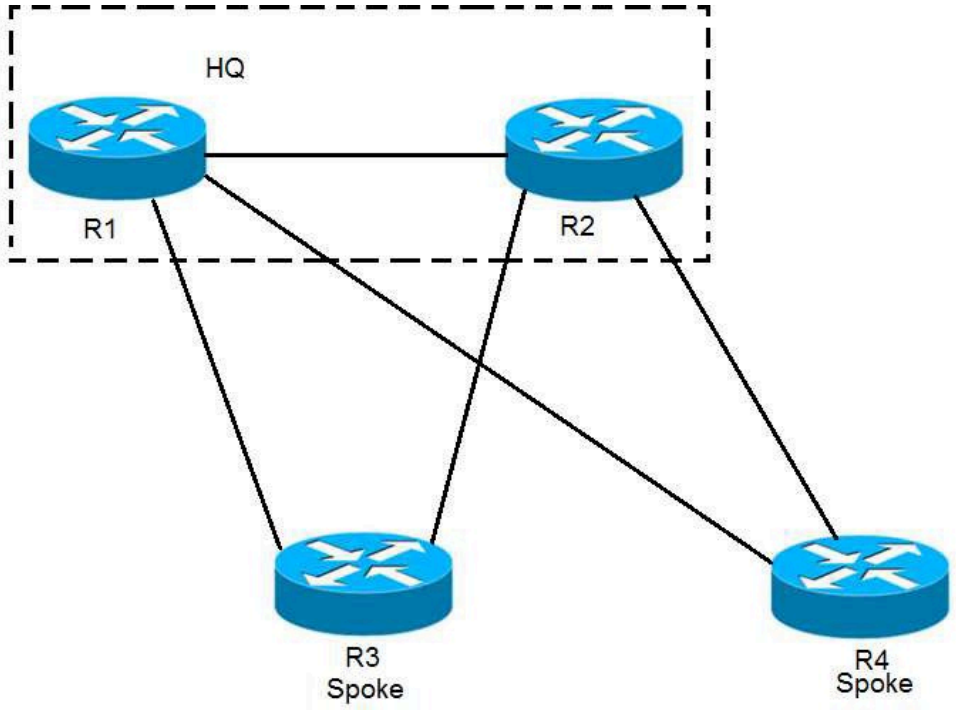
D. AS Path

E. Community

Answer(s): C

---

10. Refer to the exhibit.



EIGRP has been configured on all links. The spoke nodes have been configured as EIGRP stubs, and the WAN links to R3 have higher bandwidth and lower delay than the WAN links to R4. When a link failure occurs at the R1-R2 link, what happens to traffic on R1 that is destined for a subnet attached to R2?

A. R1 has no route to R2 and drops the traffic

B. R1 load-balances across the paths through R3 and R4 to reach R2

C. R1 forwards the traffic to R3, but R3 drops the traffic

D. R1 forwards the traffic to R3 in order to reach R2

Answer(s): A

---

11. A company is using OSPF between its HQ location and a branch office. HQ is assigned area 0 and the branch office is assigned area 1. The company purchases a second branch office, but due to circuit delays to HQ, it decides to connect the new branch office to the existing branch office as a temporary measure. The new branch office is assigned to area 2. Which OSPF configuration enables all three locations to exchange routes?

A. The existing branch office must be configured as a stub area

B. A virtual link must be configured between the new branch office and HQ

C. A sham link must be configured between the new branch office and HQ

D. The new branch office must be configured as a stub area

Answer(s): B

---

12. Which method will filter routes between EIGRP neighbors within the same autonomous system?

A. distribute-list

B. policy-based routing

C. leak-map

D. route tagging

Answer(s): A

---

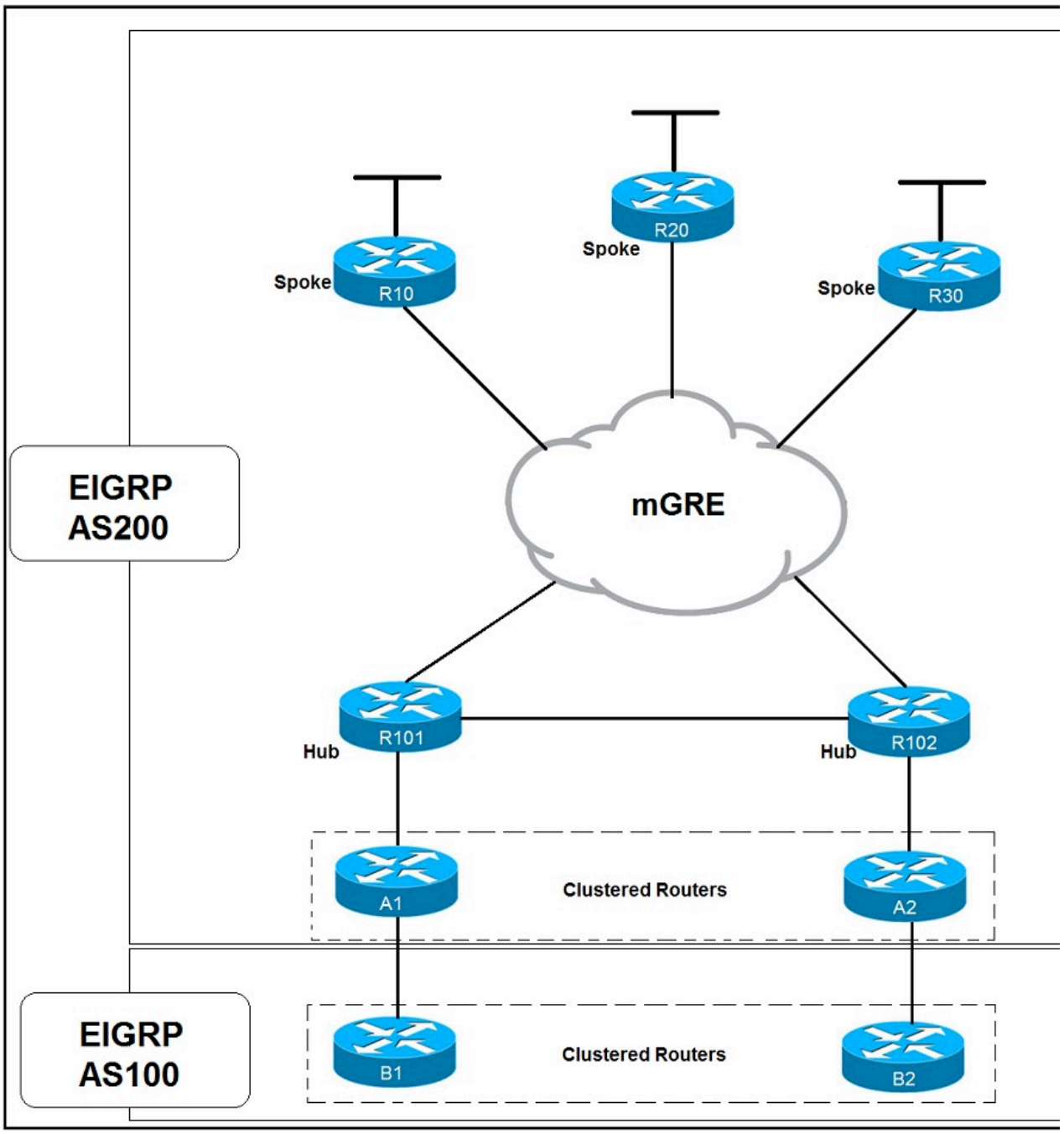
13. What are two valid scaling techniques when an EIGRP network is designed that consists of more than 1000 routers? (Choose two.)

- [ ] A. Use structured hierarchical topology with route summarization
- [ ] B. Used sub-second timers
- [ ] C. Use the distribute-list command to filter routes
- [ ] D. Modify delay parameters on the links
- [ ] E. Implement multiple EIGRP autonomous systems

Answer(s): A E

---

14. Refer to the exhibit. Which solution decreases the EIGRP convergence time?



A. Enable subsecond timers

B. Increase the hold time value

C. Increase the dead timer value

D. Enable stub routing on the spokes

Answer(s): D

---

15. A router running ISIS is showing high CPU and bandwidth utilization. An engineer discovers that the router is configured as L1/L2 and has L1 and L2 neighbors. Which step optimizes the design to address the issue?

A. Make this router a DIS for each of the interfaces

B. Disable the default behavior of advertising the default route on the L1/L2 router

C. Configure the router to be either L1 or L2

D. Configure each interface as either L1 or L2 circuit type

Answer(s): D

---

16. Which two routing protocols allow for unequal cost load balancing? (Choose two.)

- [ ] A. EIGRP
- [ ] B. IS-IS
- [ ] C. BGP
- [ ] D. OSPF
- [ ] E. RIPng

Answer(s): A C

---

17. Which two steps can be taken to improve convergence in an OSPF network? (Choose two.)

- [ ] A. Use Bidirectional Forwarding Detection
- [ ] B. Merge all the areas into one backbone area
- [ ] C. Tune OSPF parameters
- [ ] D. Make all non-backbone areas stub areas
- [ ] E. Span the same IP network across multiple areas.

Answer(s): A C

---

18. Which OSPF area blocks LSA Type 3, 4 and 5, but allows a default summary route?

A. normal

B. stub

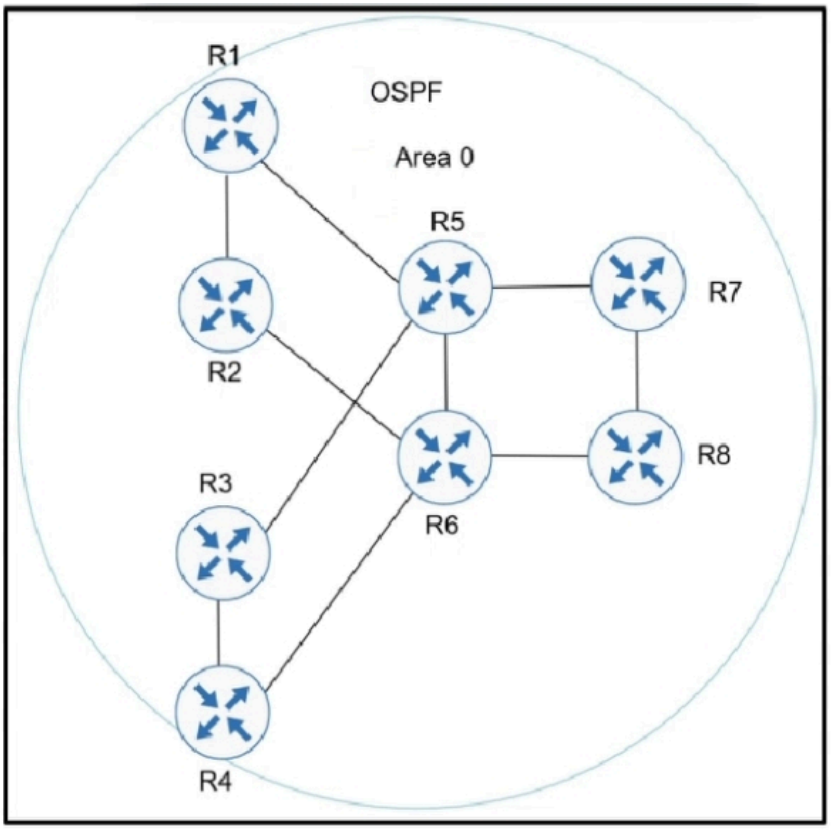
C. NSSA

D. totally stubby

Answer(s): D

---

19. Refer to the exhibit.



All routers currently reside in OSPF area 0. The network manager recently used R1 and R2 as aggregation routers for remote branch locations and R3 and R4 for aggregation routers for remote office locations. The network has since been suffering from outages, which are causing frequent SPF runs. To enhance stability and introduce areas to the OSPF network with the minimal number of ABRs possible, which two solutions should the network manager recommend? (Choose two.)

- ☐ A. a new OSPF area for R1 and R2 connections, with R1 and R2 as ABRs
- ☐ B. a new OSPF area for R3 and R4 connections, with R5 and R6 as ABRs
- ☐ C. a new OSPF area for R3 and R4 connections, with R3 and R4 as ABRs
- ☐ D. a new OSPF area for R1, R2, R3, and R4 connections, with R1, R2, R3, and R4 as ABRs
- ☐ E. a new OSPF area for R1 and R2 connections, with R5 and R6 as ABRs

Answer(s): B E

---

20. An engineer must design a solution to provide backup connectivity between two sites. The engineer plans to use an Internet connection but company policy requires the connection to be encrypted. Additionally, there are several applications that utilize multicast to deliver video streams between the sites. Which technology should the design include?

- A. GRE over IPsec
- B. IPsec direct encapsulation
- C. GETVPN
- D. DMVPN

Answer(s): A