CCNA 3 Chapter 7 v5.0 Exam Answers 2015 (100%)

1. Which protocol is used by EIGRP to send hello packets?

- TCP
- UDP
- RTP
- IP

2. When an EIGRP-enabled router uses a password to accept routes from other EIGRP-enabled routers, which mechanism is used?

- bounded updates
- partial updates
- EIGRP authentication
- Diffusing Update Algorithm
- Reliable Transport Protocol

3. What is the purpose of using protocol-dependent modules in EIGRP?

- to describe different routing processes
- to identify different application layer protocols
- to use different transport protocols for different packets
- to accommodate routing of different network layer protocols

4. If all router Ethernet interfaces in an EIGRP network are configured with the default EIGRP timers, how long will a router wait by default to receive an EIGRP packet from its neighbor before declaring the neighbor unreachable?

- 10 seconds
- 15 seconds
- 20 seconds
- 30 seconds

5. Which statement describes a characteristic of the delivery of EIGRP update packets?

- EIGRP uses UDP to send all update packets.
- EIGRP sends all update packets via unicast.
- EIGRP sends all update packets via multicast.
- EIGRP uses a reliable delivery protocol to send all update packets.

6. Which destination MAC address is used when a multicast EIGRP packet is encapsulated into an Ethernet frame?

- 01-00-5E-00-00-09
- 01-00-5E-00-00-10
- 01-00-5E-00-00-0A
- 01-00-5E-00-00-0B

7. Why would a network administrator use a wildcard mask in the network command when configuring a router to use EIGRP?

- to lower the router overhead
- to send a manual summarization
- to exclude some interfaces from the EIGRP process
- to subnet at the time of the configuration

8. Refer to the exhibit. Which command should be used to configure EIGRP to only advertise the network that is attached to the gigabit Ethernet 0/1 interface?

```
R1> enable
R1# config terminal
R1(config)# interface gigabitEthernet 0/0
R1(config-if)# ip address 172.16.23.254 255.255.255.128
R1(config-if)# no shutdown
R1(config-if)# exit
R1(config)# interface gigabitEthernet 0/1
R1(config-if)# ip address 172.16.23.126 255.255.255.192
R1(config-if)# no shutdown
```

- network 172.16.23.64 0.0.0.63
- network 172.16.23.0 255.255.255.192
- network 172.16.23.64 0.0.0.127
- network 172.16.23.0 255.255.255.128

9. Which EIGRP route would have the preferred administrative distance?

- a summary route
- an internal route
- an external route that is redistributed from RIP
- an external route that is redistributed from OSPF

10. Where are EIGRP successor routes stored?

- only in the routing table

- only in the neighbor table
- in the routing table and the topology table
- in the routing table and the neighbor table

11. Which table is used by EIGRP to store all routes that are learned from EIGRP neighbors?

- the routing table
- the neighbor table
- the topology table
- the adjacency table

12. How do EIGRP routers establish and maintain neighbor relationships?

- by exchanging neighbor tables with directly attached routers
- by comparing known routes to information received in updates
- by exchanging hello packets with neighboring routers
- by dynamically learning new routes from neighbors
- by exchanging routing tables with directly attached routers

13. Which command or commands must be entered on a serial interface of a Cisco router to restore the bandwidth to the default value of that specific router interface?

- bandwidth 1500
- shutdown
  no shutdown
- copy running-config startup-config
  reload
- no bandwidth

14. Which command is used to display the bandwidth of an interface on an EIGRP-enabled router?

- show ip route
- show interfaces
- show ip protocols
- show ip interface brief

15. A new network administrator has been asked to verify the metrics that are used by EIGRP on a Cisco device. Which two EIGRP metrics are measured by using static values on a Cisco device? (Choose two.)

- bandwidth

- load
- reliability
- delay
- MTU

16. Which three metric weights are set to zero by default when costs in EIGRP are being calculated? (Choose three.)

- k1
- k2
- k3
- k4
- k5
- k6

17. Refer to the exhibit. R2 has two possible paths to the 192.168.10.4 network. What would make the alternate route meet the feasibility condition?

```
R2# show ip eigrp topology
EIGRP-IPv4 Topology Table for AS(1)/ID(2.2.2.2)
Codes: P - Passive, A - Active, U - Update, Q - Query, R - Reply,
       r - reply Status, s - sia Status

<output omitted>

P 192.168.10.4/30, 1 successors, FD is 3523840
        via 192.168.10.10 (3523840/2169856), Serial0/0/1
        via 172.16.3.1 (41024000/2169856), Serial0/0/0

<output omitted>
```

- a reported distance less than 3523840
- a reported distance greater than 41024000
- a feasible distance greater than 41024000
- an administrative distance less than 170

18. What is indicated when an EIGRP route is in the passive state?

- The route has the highest path cost of all routes to that destination network.
- The route must be confirmed by neighboring routers before it is put in the active state.
- The route is a feasible successor and will be used if the active route fails.
- There is no activity on the route to that network.
- The route is viable and can be used to forward traffic.

19. Refer to the exhibit. Which two networks contain feasible successors? (Choose two.)

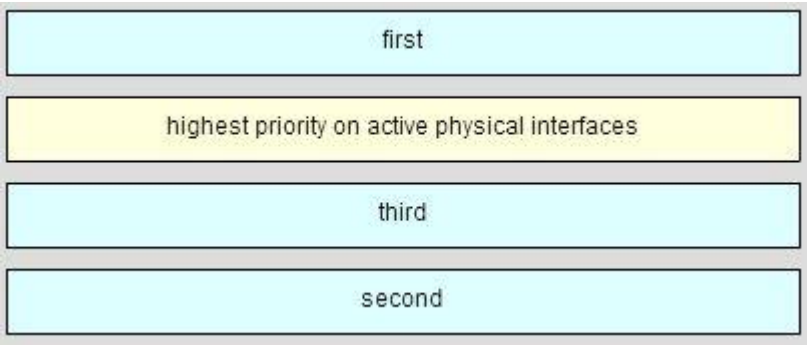
```
R4#show ip eigrp topology all-links
IP-EIGRP Topology Table for AS 54

Codes: P - Passive, A - Active, U - Update, Q - Query, R -Reply,
       r - Reply status

P 192.168.41.0/25, 1 successors, FD is 128256
         via Connected, Loopback0
P 10.44.103.252/30, 1 successors, FD is 2816
         via Connected, GigabitEthernet0/0
P 10.44.104.252/30, 1 successors, FD is 25600256
         via Connected, GigabitEthernet0/1
P 192.168.51.0/25, 1 successors, FD is 130816
         via 10.44.103.253 (130816/128256), GigabitEthernet0/0
         via 10.44.104.253 (25600512/261899), GigabitEthernet0/1
P 10.44.101.252/30, 1 successors, FD is 3072
         via 10.44.103.253 (3072/2816), GigabitEthernet0/0
P 10.44.100.252/30, 1 successors, FD is 3072
         via 10.44.103.253 (3072/2816), GigabitEthernet0/0
         via 10.44.104.253 (25600512/2816), GigabitEthernet0/1
P 192.168.71.0/25, 1 successors, FD is 131072
         via 10.44.103.253 (131072/130816), GigabitEthernet0/0
         via 10.44.104.253 (25728256/128256), GigabitEthernet0/1
```

- 192.168.71.0
- 192.168.51.0
- 10.44.100.252
- 10.44.104.253
- 10.44.101.252

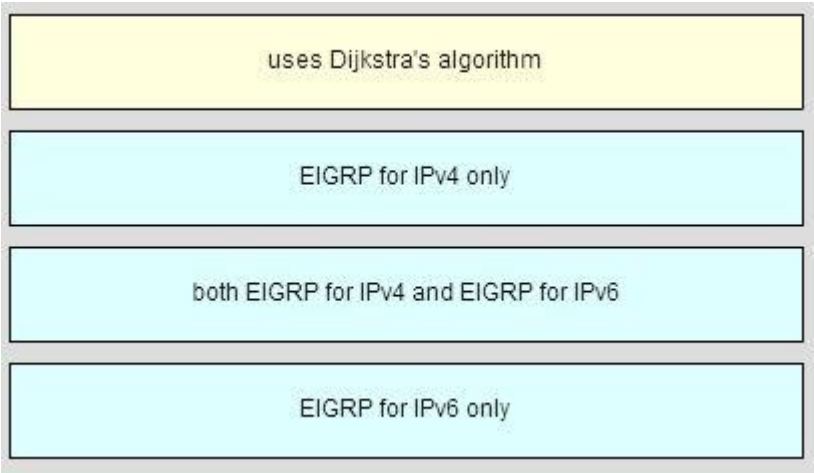
20. Fill in the blank.

In an EIGRP topology table, a route that is in a/an active state will cause the Diffusing Update Algorithm to send EIGRP queries that ask other routers for a path to this network.

21. Order the precedence in which an EIGRP router would choose the router ID. (Not all options are used.)



22. Match the correct version of EIGRP with the EIGRP features. (Not all options are used.)



23. Open the PT Activity. Perform the tasks in the activity instructions and then answer the question.
Which code is displayed on the web server?

- Done
- EIGRP
- Complete
- IPv6EIGRP