

Question 207 Review

What interface-level command ensures that an interface will process incoming LLDP frames?

☒ A. lldp receive

☐ B. lldp enable

☐ C. lldp run

☐ D. lldp all

Question 35 Review

Which of the following IPv6 address blocks sends packets to a multicast address rather than a unicast address?

Explanation: The IPv6 Unicast space encompasses the entire IPv6 address range with the exception of ff00::/8, per [RFC4291]

☐ A. 2000::/3

☐ B. FC00::/7

☒ C. FF00::/8

☐ D. FE80::/10

Question 461 Review

What is the maximum wire speed of a single port on a 48-port Gigabit Ethernet switch?

☒ A. 1,000 Mbps

☐ B. 2 Gbps

☐ C. 48 Gbps

☐ D. 96 Gbps

Question 279 Review

What command assigns an access port to VLAN 10?

- ☐ A. switchport vlan 10
- ☐ B. switchport mode vlan 10
- ☐ C. switchport assign vlan 10
- ☒ D. switchport access vlan 10

Question 402 Review

Under which configuration mode is the command `ip dhcp snooping` used to enable DHCP snooping?

- ☐ A. Interface configuration mode
- ☐ B. Line configuration mode
- ☐ C. Security configuration mode
- ☒ D. Global configuration mode

Question 148 Review

Refer to the exhibit. How does the router manage traffic to 192.168.12.16?

```
EIGRP: 192.168.2.0/24  
RIP: 192.168.2.0/27  
OSPF: 192.168.2.0/28
```

- ☐ A. It load-balances traffic between all three routes.
- ☐ B. It chooses the EIGRP route because it has the lowest administrative distance.
- ☒ C. It chooses the OSPF route because it has the longest prefix inclusive of the destination address.
- ☐ D. It selects the RIP route because it has the longest prefix inclusive of the destination address.

Question 357 Review

What level of logging is appropriate for an event where an immediate action is required?

☐ A. Emergency

☐ B. Critical

☐ C. Error

☒ D. Alert

Question 180 Review

Which of the following is not a typical feature of cloud services?

- ☐ A. On demand
- ☐ B. Dynamic scaling
- ☒ C. Auto-administration
- ☐ D. Resource pooling

Question 176 Review

Which of the following is the most costly topology, and the one that requires the highest administrative overhead?

- ☒ A. Full-mesh
- ☐ B. Single-homed
- ☐ C. Hub-and-spoke
- ☐ D. Point-to-point

Question 282 Review

Where is an 802.1Q tag inserted in a frame?

- ☐ A. Between the Preamble and SFD fields
- ☐ B. Between the Source and Destination MAC fields
- ☒ C. Between the Source MAC and Type fields
- ☐ D. Between the Source MAC and FCS fields

Question 75 Review

How does a spine-and-leaf architecture allow for scalability in a network when additional access ports are required?

- ☐ A. A leaf switch and a spine switch may be added with redundant connections between them.
- ☒ B. A leaf switch may be added with connections to every spine switch.
- ☐ C. A spine switch may be added with at least 40 GB uplinks.
- ☐ D. A leaf switch may be added with a single connection to a core spine switch.

Question 274 Review

If a switch has seven workstations attached, how many collision domains are created?

☐ A. 0

☐ B. 1

☐ C. 6

☒ D. 7

☐ E. 8

Question 377 Review

What is true about banner messages on Cisco routers? (Choose two.)

- ☐ A. You must always use a # symbol to indicate the end of the banner.
- ☒ B. Various types of banner messages appear at different times or for different conditions.
- ☒ C. You can use ASCII art in them.
- ☐ D. They typically are not used for legal warnings.

Question 324 Review

What type of static route is shown in the following example?
ip route 172.20.1.0 255.255.255.0 192.168.100.101

- ☐ A. A static host route
- ☐ B. A floating static route
- ☐ C. A default route
- ☒ D. A network static route

Question 324 Review

What type of static route is shown in the following example?
ip route 172.20.1.0 255.255.255.0 192.168.100.101

- ☐ A. A static host route
- ☐ B. A floating static route
- ☐ C. A default route
- ☒ D. A network static route

Question 86 Review

Which of the following are mandatory actions that must be performed in order for SSH to operate normally on a Cisco switch? (Choose two.)

- ☐ A. IP routing must be enabled.
- ☐ B. Telnet must be disabled.
- ☐ C. A console password must be configured.
- ☒ D. The switch must be running a k9 (crypto) IOS image.
- ☒ E. The ip domain-name command must be configured.

Question 256 Review

What wireless standard introduced in 2013 permits a maximum speed of 6.93 Gbps?

☐ A. 802.11ax

☐ B. 802.11g

☒ C. 802.11ac

☐ D. 802.11n

Question 219 Review

What form of flow control is used with TCP?

- ☐ A. None
- ☐ B. Random
- ☒ C. Windowing
- ☐ D. Explicit buffering

Question 6 Review

In order to generate an RSA key for SSH on a switch, which of the following is required? (Choose two.)

Explanation: There are four steps required to enable SSH support on a Cisco IOS router:

- 1) Configure the hostname command.
- 2) Configure the DNS domain.
- 3) Generate the SSH key to be used.
- 4) Enable SSH transport support for the virtual type terminal (vty). In order to generate an RSA key, only point 1) and 2) are required

- ☐ A. Configuring VTY access.
- ☒ B. Configuring a hostname.
- ☐ C. Creating a user with a password.
- ☐ D. Configuring the version of SSH.
- ☒ E. Assigning a DNS domain name.

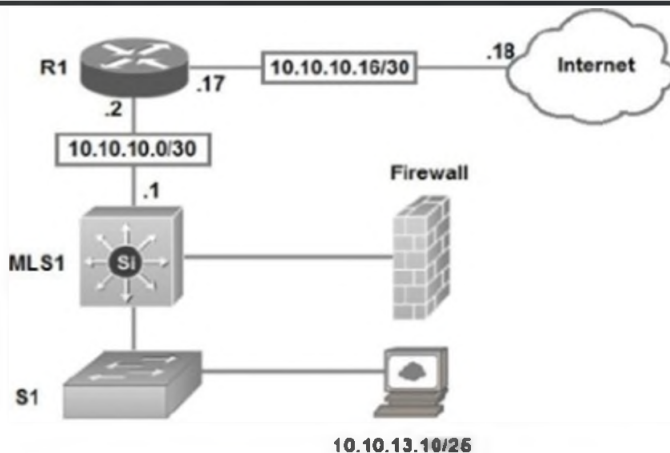
Question 197 Review

Which of the following is not a valid error typically seen in show interface output?

- ☐ A. Babble
- ☐ B. Late collision
- ☐ C. Ignored
- ☒ D. Trickle

Question 151 Review

Refer to the exhibit. Which type of route does R1 use to reach host 10.10.14.10/32?



```
R1#sh ip ro
Gateway of last resort is 10.10.10.18 to network 0.0.0.0

  10.0.0.0/8 is variably subnetted, 4 subnets, 3 masks
C       10.10.10.0/30 is directly connected, FastEthernet0/1
O       10.10.14.0/25 [110/6576] via 10.10.10.1, 06:58:21, FastEthernet0/1
C       10.10.10.16/30 is directly connected, FastEthernet0/24
O       10.10.14.144/28 [110/110] via 10.10.10.1, 06:58:21, FastEthernet0/1
B*    0.0.0.0/0 [20/0] via 10.10.10.18, 01:17:58
```

- ☐ A. default route
- ☒ B. network route
- ☐ C. host route
- ☐ D. floating static route

Question 428 Review

What feature does DAI rely on?

- ☐ A. ACLs
- ☒ B. DHCP snooping
- ☐ C. QoS DiffServ
- ☐ D. NBAR
- ☐ E. OSPF

Question 4 Review

Which of the following is true regarding spine-and-leaf architecture?

Explanation: With Leaf-Spine configurations, all devices are exactly the same number of segments away and contain a predictable and consistent amount of delay or latency for traveling information. This is possible because of the new topology design that has only two layers, the Leaf layer and Spine layer.

- ☐ A. Higher bandwidth can be obtained for each link between leaf switches.
- ☐ B. It facilitates STP troubleshooting because STP blocked ports can be predicted easily.
- ☐ C. By design, traveling information has variable latency between endpoint devices.
- ☒ D. Each device in the topology is separated by the same number of hops.

Question 212 Review

Which statement about CDP is correct?

- ☐ A. CDP is disabled by default.
- ☐ B. CDP relies on TCP.
- ☐ C. CDP is disabled on all serial interfaces by default.
- ☒ D. CDP is a Layer 2 protocol.

Question 198 Review

What counter is incremented when the number of frames transmitted is greater than 1518 bytes in size?

- ☒ A. Babble
- ☐ B. Late collision
- ☐ C. Runt
- ☐ D. Ignored

Question 87 Review

Which mode allows to configure EtherChannel between two switches without using a negotiation protocol?

- ☒ A. on
- ☐ B. auto
- ☐ C. active
- ☐ D. desirable

Question 81 Review

Which IPv6 address block forwards packets to a multicast address rather than a unicast address?

Explanation: 2000::/3 Global Unicast
fc00::/7 Unique Local Unicast
fe80::/10 Link-Scoped Unicast
ff00::/8 Multicast

- ☐ A. 2000::/3
- ☐ B. FC00::/7
- ☐ C. FE80::/10
- ☒ D. FF00::/8

Question 430 Review

Which of the following is not an HTTP method used with REST APIs?

☐ A. PUT

☐ B. POST

☒ C. SEND

☐ D. GET

☐ E. DELETE

Question 27 Review

What is a role of an SNMP agent?

- ☒ A. It responds to requests from the NMS, providing it with information about MIB variables.
- ☐ B. It handles user authentication between network devices and a RADIUS or TACACS+ server.
- ☐ C. It collects information about disastrous system events from remote network nodes.
- ☐ D. It supervises routing between Layer 3 devices in a network.

Question 69 Review

Refer to the exhibit. Based on the LACP neighbor status, in which mode is the SW1 port channel configured?

```
SW1# show lacp neighbor
```

```
Flags:  S - Device is sending Slow LACPDUs  
        F - Device is sending Fast LACPDUs  
        A - Device is in Active mode  
        P - Device is in Passive mode
```

```
Channel group 31 neighbors
```

```
Partner's information:
```

Port	Flags	LaCP port Priority	Dev ID	Admin Age	Oper key	Port Key	Port Number	Port State
Et1/0	SF	32768	aabb.cc40.4000	6s	0x0	0x23	0x101	0x3C
Et1/1	SF	32768	aabb.cc50.4000	6s	0x0	0x23	0x101	0x3C

- ☐ A. auto
- ☐ B. active
- ☒ C. passive
- ☐ D. mode on

Question 372 Review

What attack method locks out a system or even encrypts it and then offers to unlock it in exchange for money?

- ☐ A. Worm
- ☐ B. Man-in-the-middle
- ☐ C. Phishing
- ☒ D. Ransomware

Question 81 Review

Which IPv6 address block forwards packets to a multicast address rather than a unicast address?

Explanation: 2000::/3 Global Unicast
fc00::/7 Unique Local Unicast
fe80::/10 Link-Scoped Unicast
ff00::/8 Multicast

- ☐ A. 2000::/3
- ☐ B. FC00::/7
- ☐ C. FE80::/10
- ☒ D. FF00::/8

Question 430 Review

Which of the following is not an HTTP method used with REST APIs?

☐ A. PUT

☐ B. POST

☒ C. SEND

☐ D. GET

☐ E. DELETE

Question 117 Review

What is the main difference between AAA authentication and authorization?

- ☒ A. Authentication identifies and verifies users who are attempting to access the system, while authorization controls the tasks that the users can perform.
- ☐ B. Authentication controls the system processes that users are allowed to access, while authorization logs the activities that the users initiate.
- ☐ C. Authentication verifies usernames and passwords, while authorization handles the communication between the authentication agent and the user database.
- ☐ D. Authentication identifies users who are attempting to access the system, while authorization validates the users passwords.

Question 420 Review

Which RF band is used with 802.11ac?

- ☐ A. 2.4 GHz
- ☒ B. 5 GHz
- ☐ C. Both 2.4 GHz and 5 GHz
- ☐ D. 7 GHz

Question 521 Review

Which type of cable should be used to connect a computer to a switch for management of the switch?

- ☐ A. Straight-through cable
- ☐ B. Crossover cable
- ☒ C. Rolled cable
- ☐ D. Shielded cable

Question 63 Review

Networking and cloud technologies usually use which type of the following APIs?

- ☐ A. SOAP
- ☒ B. REST
- ☐ C. JSON-RPC
- ☐ D. XML-RPC

Question 454 Review

Which statement is true about collision domains?

- ☒ A. All devices in the collision domain can witness have a frame collision.
- ☐ B. All devices in the collision domain can receive layer 2 broadcast messages.
- ☐ C. All devices in the collision domain can receive layer 3 broadcast messages.
- ☐ D. All devices in the collision domain are set to 100 Mbps full-duplex.

Question 378 Review

What is an alternative to using local authentication on a Cisco router?

- ☒ A. Centralized AAA
- ☐ B. A remote Telnet database
- ☐ C. SNMP for authentication
- ☐ D. FTP for authentication

Question 105 Review

A Router has learned route 192.168.07.0/24 via IS-IS, RIP, OSPF, and Internal EIGRP. Which routing protocol is installed in the routing table?

Explanation: Internal EIGRP because it has the lowest administrative distance

- ☐ A. IS-IS
- ☒ B. Internal EIGRP
- ☐ C. RIP
- ☐ D. OSPF

Question 500 Review

Which sub-protocol inside of the PPP suite is responsible for authentication?

☐ A. MPLS

☐ B. NCP

☒ C. LCP

☐ D. ACP

Question 389 Review

What does eq indicate in an ACL?

- ☒ A. You are matching a port or ports.
- ☐ B. You are using a standard ACL in place of an extended ACL.
- ☐ C. You are only using one ACE in the ACL.
- ☐ D. Your ACL is not a traffic filter.

Question 72 Review

Which mechanism is used by Cisco DNA Center to collect data from the network?

- ☐ A. Devices send data periodically to the controller using the call-home protocol
- ☐ B. Devices exchange data with the controller after establishing an IPsec tunnel
- ☐ C. The Cisco CLI Analyzer tool collects data from all licensed network devices and streams it to the controller
- ☒ D. Network devices use a variety of services like syslog, SNMP, and streaming telemetry to send data to the controller

Question 209 Review

What command disables CDP globally on a device?

- ☒ A. no cdp run
- ☐ B. no cdp enable
- ☐ C. cdp disable
- ☐ D. cdp stop

Question 278 Review

What command can be used to view the VLANs and interface assignments on a switch?

- ☒ A. show vlan brief
- ☐ B. show vlan status
- ☐ C. show vlan summary
- ☐ D. show vlan database

Question 237 Review

What is the size of the source address field in an IPv6 header?

- ☐ A. 6 bytes
- ☐ B. 8 bytes
- ☐ C. 12 bytes
- ☒ D. 16 bytes

Question 319 Review

What is the unreachable AD?

☐ A. 0

☐ B. 100

☐ C. 200

☒ D. 255

Question 271 Review

What is the name of the database that stores address information in a Cisco switch?

☒ A. MAC address table

☐ B. Routing table

☐ C. Interface table

☐ D. Buffer table

Question 257 Review

VMware Workstation is an example of what type of hypervisor technology?

- ☒ A. Type 2
- ☐ B. Type 1
- ☐ C. Bare metal
- ☐ D. Container

Question 442 Review

What command allows to see locally used OSPF routes?

- ☐ A. show ip ospf database local
- ☐ B. show ospf all
- ☒ C. show ip route ospf
- ☐ D. show ospf routes local

Question 343 Review

Examine the following command:

```
ip nat inside source list 1 interface fa0/0 overload
```

What is the inside global address for translation?

- ☒ A. The IP address on interface fa0/0
- ☐ B. The virtual address on interface fa0/0
- ☐ C. The address in access list 1
- ☐ D. The address in the NAT pool named interface

Question 467 Review

Which of the following statements does not represent the logical management of a firewall?

- ☒ A. All physical access to the firewall should be tightly controlled.
- ☐ B. All firewall policies should be documented.
- ☐ C. Firewall logs should be regularly monitored.
- ☐ D. Firewalls should allow traffic by default and deny traffic explicitly.

Question 496 Review

In Cisco's three-tier architecture, the links between the distribution layer switches indicate what kind of topology?

- ☐ A. Full mesh topology
- ☒ B. Partial mesh topology
- ☐ C. Star topology
- ☐ D. Ring topology

Question 186 Review

When configuring a floating static route, what must be done in order to ensure that the backup route is used in case the primary route fails?

- ☒ A. The floating static route must have a higher administrative distance than the primary route so it is used as a backup
- ☐ B. The floating static route must have a lower administrative distance than the primary route so it is used as a backup
- ☐ C. The administrative distance must be higher on the primary route so that the backup route becomes secondary.
- ☐ D. The default-information originate command must be configured for the route to be installed into the routing table

Question 230 Review

What does it mean when the destination address in an Ethernet frame is set FFFF.FFFF.FFFF?

- ☐ A. The frame is a multicast frame.
- ☐ B. The frame is a unicast frame.
- ☐ C. The frame should be dropped.
- ☒ D. The frame is a broadcast frame.

Question 295 Review

What command outputs the current Spanning Tree Protocol parameters on a Cisco switch?

- ☐ A. show 802dot1d
- ☐ B. show topology spanning-tree
- ☐ C. show redundancy
- ☒ D. show spanning-tree

Question 16 Review

A company charges its network technician to backup its 30 network router configurations globally. Using the Cisco IOS MIB, what is the protocol that allows the technician to do the job?

☒ A. SNMP

☐ B. SMTP

☐ C. CDP

☐ D. ARP

☐ E. STP

Question 482 Review

Which is a direct benefit of a full mesh topology?

- ☐ A. Increased bandwidth
- ☒ B. Increased redundancy
- ☐ C. Decreased switch count
- ☐ D. Increased complexity

Question 318 Review

What is the administrative distance of Internal EIGRP routes?

- ☐ A. 5
- ☐ B. 20
- ☒ C. 90
- ☐ D. 100

Question 112 Review

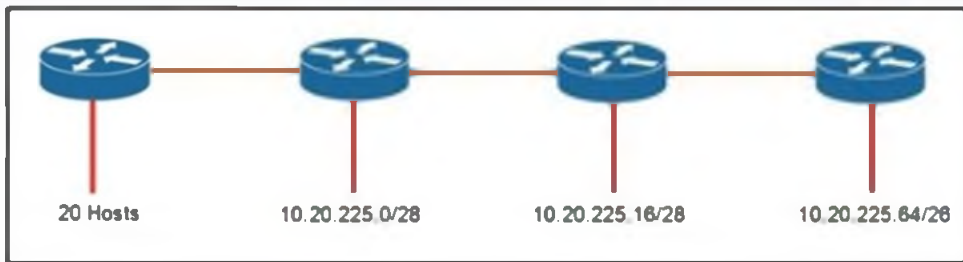
For which two reasons does a network administrator configure a floating static route? (Choose two.)

Explanation: Floating Static Routes Floating static routes are static routes that have an administrative distance greater than the administrative distance of another static route or dynamic routes. They are very useful when providing a backup to a primary link.

- ☐ A. to route traffic differently based on the source IP of the packet
- ☒ B. to enable fallback static routing when the dynamic routing protocol fails
- ☒ C. to automatically route traffic on a secondary path when the primary path goes down
- ☐ D. to support load balancing via static routing
- ☐ E. to control the return path of traffic that is sent from the router

Question 124 Review

Refer to the exhibit. A network administrator needs to add a subnet for a new floor that will add 20 users to the network. Which IPv4 network and subnet mask combination does he need to assign in order to minimize wasting addresses?



- ☐ A. 10.20.225.48 255.255.255.240
- ☐ B. 10.20.225.48 255.255.255.224
- ☐ C. 10.20.225.32 255.255.255.240
- ☒ D. 10.20.225.32 255.255.255.224

Question 265 Review

What happens to a frame with destination MAC address ffff.ffff.ffff?

- ☐ A. The frame is dropped.
- ☐ B. The frame is forwarded out the gi0/0 port only.
- ☐ C. The frame is buffered.
- ☒ D. The frame is flooded out all ports except for the port on which the frame entered the switch.

Question 174 Review

Which physical appliance can a Cisco Firepower device replace, in addition to a legacy firewall?

- ☐ A. Router
- ☐ B. L2 switch
- ☒ C. IPS
- ☐ D. Content caching system

Question 247 Review

How many more bits are used in an IPv6 address than in an IPv4 address?

☒ A. 96

☐ B. 128

☐ C. 48

☐ D. 64

Question 90 Review

Two switches are connected and using Cisco Dynamic Trunking Protocol CDTp. Switch1 is set to Dynamic Desirable and Switch2 is set to Dynamic Auto. What is the effect of this configuration?

Explanation: Dynamic Auto Makes the Ethernet port willing to convert the link to a trunk link. The port becomes a trunk port if the neighboring port is set to trunk or dynamic desirable mode. This is the default mode for some switchports.

- ☐ A. The link is in an error disabled state.
- ☐ B. The link becomes an access port.
- ☐ C. The link is in a down state.
- ☒ D. The link becomes a trunk port.