

266Q\_CCNA\_200\_125\_4\_4\_2017\_v1

Number: 200-125  
Passing Score: 820  
Time Limit: 120 min  
File Version: 1.0

update 5 - April - 2017

266Q\_CCNA\_200\_125\_4\_4\_2017\_v2



**Sections**

1. (none)

## CCNA 200-125

### QUESTION 1

**Which technology supports the stateless assignment of IPv6 addresses?**

- A. DNS
- B. DHCPv6
- C. DHCP
- D. autoconfiguration

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 2

**What are two requirements for an HSRP group? (Choose two.)**

- A. exactly one active router
- B. one or more standby routers
- C. one or more backup virtual routers
- D. exactly one standby active router
- E. exactly one backup virtual router

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 3

**After you configure the Loopback0 interface, which command can you enter to verify the status of the interface and determine whether fast switching is enabled?**

- A. Router#show ip interface loopback 0
- B. Router#show run
- C. Router#show interface loopback 0
- D. Router#show ip interface brief

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 4

**Which command sequence can you enter to create VLAN 20 and assign it to an interface on a switch?**

- A. Switch(config)#vlan 20  
Switch(config)#Interface gig x/y  
Switch(config-if)#switchport access vlan 20
- B. Switch(config)#Interface gig x/y  
Switch(config-if)#vlan 20  
Switch(config-vlan)#switchport access vlan 20
- C. Switch(config)#vlan 20  
Switch(config)#Interface vlan 20  
Switch(config-if)#switchport trunk native vlan 20
- D. Switch(config)#vlan 20  
Switch(config)#Interface vlan 20  
Switch(config-if)#switchport access vlan 20
- E. Switch(config)#vlan 20  
Switch(config)#Interface vlan 20  
Switch(config-if)#switchport trunk allowed vlan 20

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 5**

**Which three commands can you use to set a router boot image? (Choose three.)**

- A. Router(config)# boot system flash c4500-p-mz.121-20.bin
- B. Router(config)# boot system tftp c7300-js-mz.122-33.SB8a.bin
- C. Router(config)#boot system rom c7301-advipservicesk9-mz.124-24.T4.bin
- D. Router> boot flash:c180x-adventerprisek9-mz-124-6T.bin
- E. Router(config)#boot flash:c180x-adventerprisek9-mz-124-6T.bin
- F. Router(config)#boot bootldr bootflash:c4500-jk9s-mz.122-23f.bin

**Correct Answer:** ABC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 6**

**Which two statements about IPv6 and routing protocols are true? (Choose two.)**

- A. Link-local addresses are used to form routing adjacencies.
- B. OSPFv3 was developed to support IPv6 routing.
- C. EIGRP, OSPF, and BGP are the only routing protocols that support IPv6.
- D. Loopback addresses are used to form routing adjacencies.
- E. EIGRPv3 was developed to support IPv6 routing.

**Correct Answer:** AB

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 7**

**If primary and secondary root switches with priority 16384 both experience catastrophic losses, which tertiary switch can take over?**

- A. a switch with priority 20480
- B. a switch with priority 8192
- C. a switch with priority 4096
- D. a switch with priority 12288

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 8**

**Which two statements about late collisions are true? (Choose two.)**

- A. They may indicate a duplex mismatch.
- B. By definition, they occur after the 512th bit of the frame has been transmitted.
- C. They indicate received frames that did not pass the FCS match.
- D. They are frames that exceed 1518 bytes.
- E. They occur when CRC errors and interference occur on the cable.

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 9**

**Which command can you enter to set the default route for all traffic to an interface?**

- A. router(config)#ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/1
- B. router(config)#ip route 0.0.0.0 255.255.255.255 GigabitEthernet0/1
- C. router(config-router)#default-information originate
- D. router(config-router)#default-information originate always

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 10**

**Which two spanning-tree port states does RSTP combine to allow faster convergence? (Choose two.)**

- A. blocking
- B. listening
- C. learning
- D. forwarding
- E. discarding

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 11**

**If a router has four interfaces and each interface is connected to four switches, how many broadcast domains are present on the router?**

- A. 1
- B. 2
- C. 4
- D. 8

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 12**

**The left describes the types of cables, while the right describes the purposes of the cables. Drag the items on the left to the proper locations. (Not all items can be used.) (THE COMMUNITY SHARED THAT THERE IS ANOTHER OPTION SO STUDY ALL OF WHAT THIS CABLES ARE FOR)**

crossover

null modem

straight-through

rollover

9-25 pin serial

switch access port to router

switch to switch

PC COM to Switch Console Port

A.

null modem

9-25 pin serial

straight-through

crossover

rollover

**Correct Answer:** A

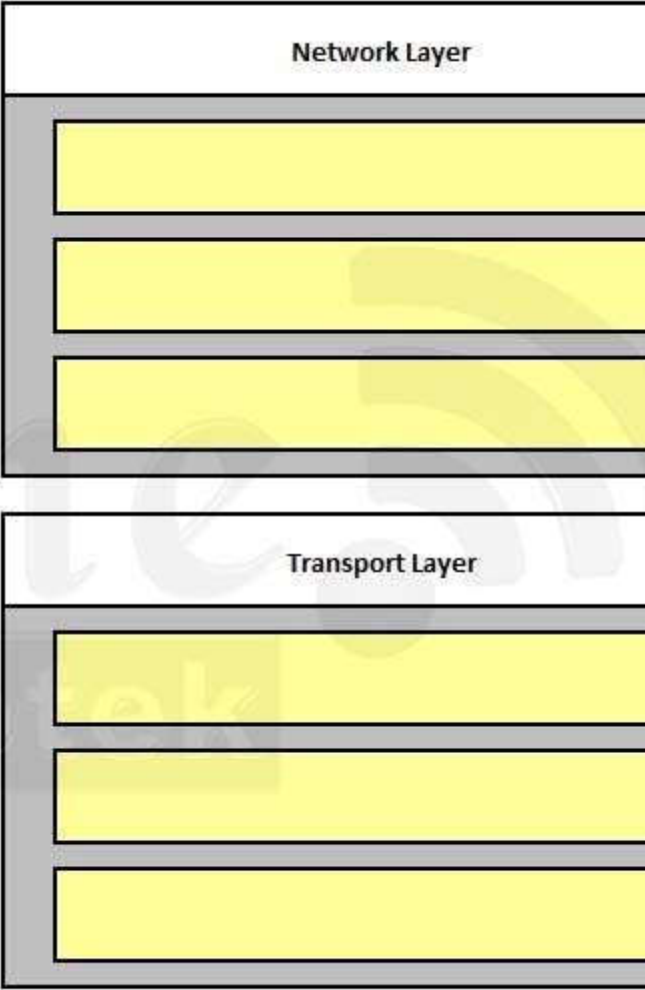
**Section:** (none)

**Explanation**

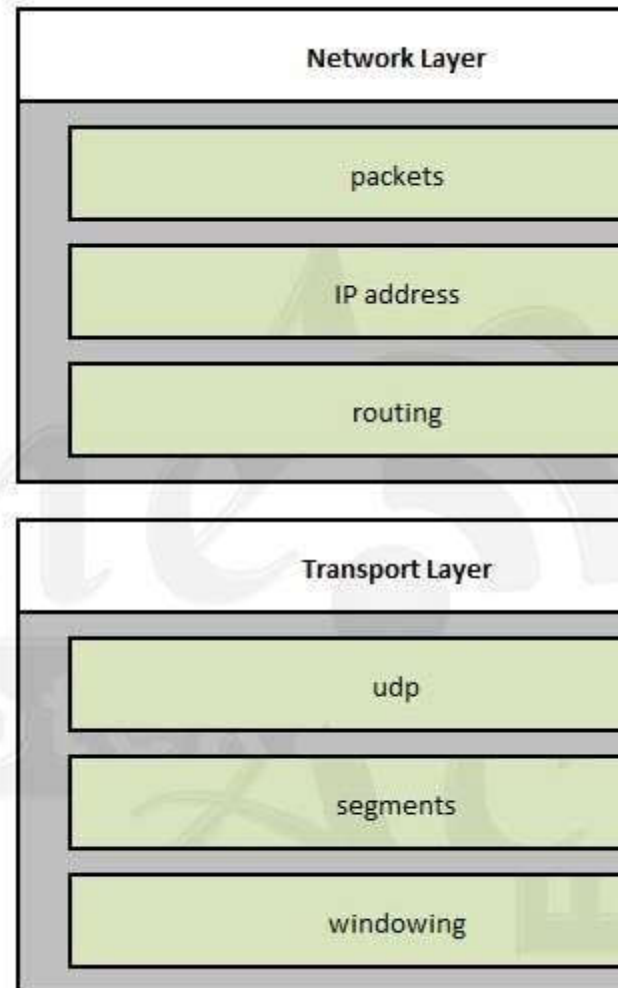
**Explanation/Reference:**

#### QUESTION 13

**Match the items on the left with appropriate OSI layer on the right. (Not all options are used.)**



A.



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 14

**Which command enables IPv6 forwarding on a Cisco router?**

- A. ipv6 local
- B. ipv6 host
- C. ipv6 unicast-routing
- D. ipv6 neighbor

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

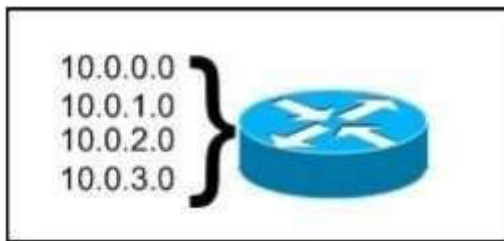
Explanation

Explanation/Reference:



#### QUESTION 15

Refer to the exhibit. What is the most appropriate summarization for these routes?



- A. 10.0.0.0 /21
- B. 10.0.0.0 /22
- C. 10.0.0.0 /23
- D. 10.0.0.0 /24

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The 10.0.0.0/22 subnet mask will include the 10.0.0.0, 10.0.1.0, 10.0.2.0, and 10.0.3.0 networks, and only those four networks.

#### QUESTION 16

Which set of commands is recommended to prevent the use of a hub in the access layer?

- A. switch(config-if)#switchport mode trunk  
switch(config-if)#switchport port-security maximum 1
- B. switch(config-if)#switchport mode trunk  
switch(config-if)#switchport port-security mac-address 1
- C. switch(config-if)#switchport mode access  
switch(config-if)#switchport port-security maximum 1
- D. switch(config-if)#switchport mode access  
switch(config-if)#switchport port-security mac-address 1

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 17

A router has learned three possible routes that could be used to reach a destination network. One route is from EIGRP and has a composite metric of 20514560. Another route is from OSPF with a metric of 782. The last is from RIPv2 and has a metric of 4. Which route or routes will the router install in the routing table?

- A. the OSPF route
- B. the EIGRP route
- C. the RIPv2 route
- D. all three routes
- E. the OSPF and RIPv2 routes

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

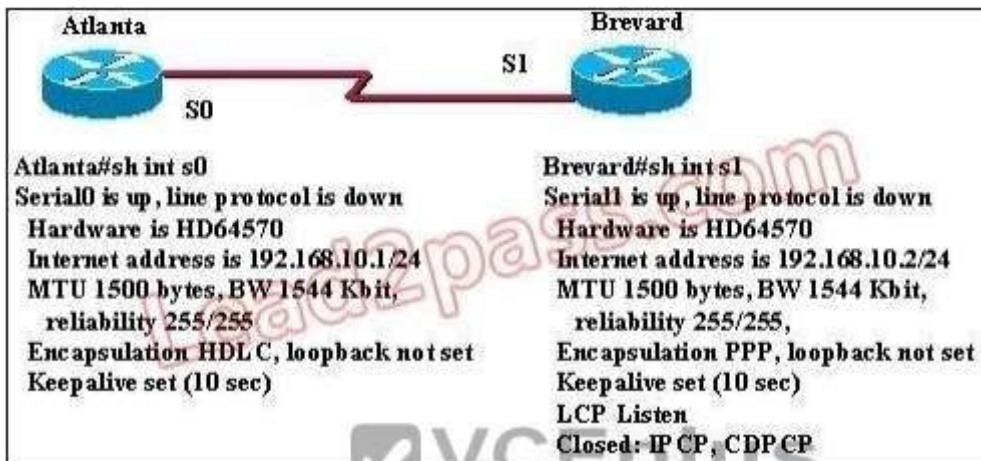
Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 18

Two routers named Atlanta and Brevard are connected via their serial interfaces as illustrated, but they are unable to communicate. The Atlanta router is known to have the correct configuration.



Given the partial configurations, identify the fault on the Brevard router that is causing the lack of connectivity

- A. incompatible IP address
- B. insufficient bandwidth
- C. incorrect subnet mask
- D. incompatible encapsulation
- E. link reliability too low
- F. IPCP closed

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 19

A network administrator needs to configure a serial link between the main office

**and a remote location. The router at the remote office is a non-Cisco router. How should the network administrator configure the serial interface of the main office router to make the connection?**

- A. Main(config)# interface serial 0/0  
Main(config-if)# ip address 172.16.1.1 255.255.255.252  
Main(config-if)# no shut
- B. Main(config)# interface serial 0/0  
Main(config-if)# ip address 172.16.1.1 255.255.255.252  
Main(config-if)# encapsulation ppp  
Main(config-if)# no shut
- C. Main(config)# interface serial 0/0  
Main(config-if)# ip address 172.16.1.1 255.255.255.252  
Main(config-if)# encapsulation frame-relay  
Main(config-if)# authentication chap  
Main(config-if)# no shut
- D. Main(config)# interface serial 0/0  
Main(config-if)# ip address 172.16.1.1 255.255.255.252  
Main(config-if)# encapsulation ietf  
Main(config-if)# no shut

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 20**

**Which Layer 2 protocol encapsulation type supports synchronous and asynchronous circuits and has built-in security mechanisms?**

- A. HDLC
- B. PPP
- C. X.25
- D. Frame Relay

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

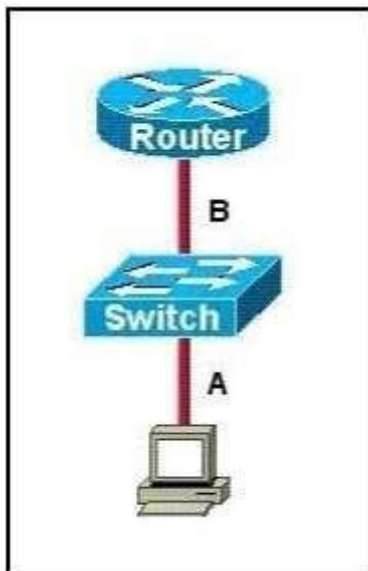
Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 21**

**Refer to the exhibit. The two connected ports on the switch are not turning orange or green. What would be the most effective steps to troubleshoot this physical layer problem? (Choose three.)**



- A. Ensure that the Ethernet encapsulations match on the interconnected router and switch ports.
- B. Ensure that cables A and B are straight-through cables.
- C. Ensure cable A is plugged into a trunk port.
- D. Ensure the switch has power.
- E. Reboot all of the devices.
- F. Reseat all cables.

**Correct Answer:** BDF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 22

**A network administrator is troubleshooting the OSPF configuration of routers R1 and R2. The routers cannot establish an adjacency relationship on their common Ethernet link.**

```

R1: Ethernet0 is up, line protocol is up
    Internet address 192.168.1.2/24, Area 0
    Process ID 1, Router ID 192.168.31.33, Network Type BROADCAST, Cost: 10
    Transmit Delay is 1 sec, State DR, Priority 1
    Designated Router (ID) 192.168.31.33, Interface address 192.168.1.2
    No backup designated router on this network
    Timer intervals configured, Hello 5, Dead 20, Wait 20, Retransmit 5

R2: Ethernet0 is up, line protocol is up
    Internet address 192.168.1.1/24, Area 0
    Process ID 2, Router ID 192.168.31.11, Network Type BROADCAST, Cost: 10
    Transmit Delay is 1 sec, State DR, Priority 1
    Designated Router (ID) 192.168.31.11, Interface address 192.168.1.1
    No backup designated router on this network
    Timer intervals configured, Hello 10, Dead 40, Wait 40, Retransmit 5
  
```

The graphic shows the output of the show ip ospf interface e0 command for routers R1 and R2. Based on the information in the graphic, what is the cause of this problem?

- A. The OSPF area is not configured properly.
- B. The priority on R1 should be set higher.
- C. The cost on R1 should be set higher.
- D. The hello and dead timers are not configured properly.
- E. A backup designated router needs to be added to the network.
- F. The OSPF process ID numbers must match.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 23

**What will happen if a private IP address is assigned to a public interface connected to an ISP?**

- A. Addresses in a private range will be not be routed on the Internet backbone.
- B. Only the ISP router will have the capability to access the public network.
- C. The NAT process will be used to translate this address to a valid IP address.
- D. A conflict of IP addresses happens, because other public routers can use the same range.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

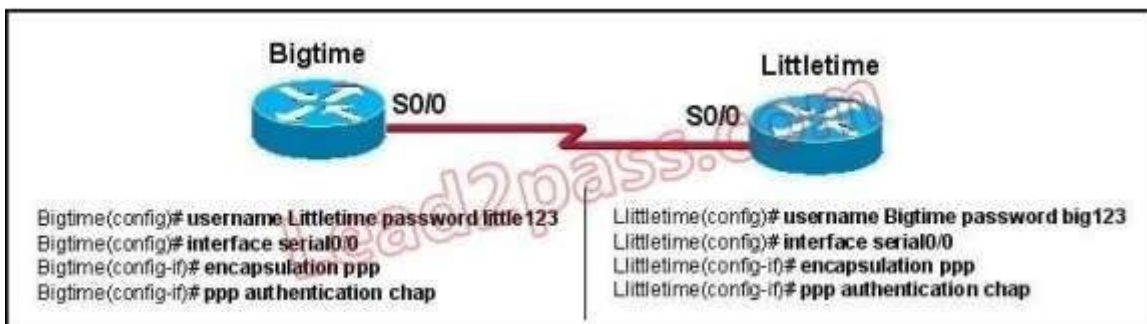
Section: (none)

Explanation

Explanation/Reference:

### QUESTION 24

**Refer to the exhibit. The Bigtime router is unable to authenticate to the Littletime router. What is the cause of the problem?**



- A. The usernames are incorrectly configured on the two routers.
- B. The passwords do not match on the two routers.
- C. CHAP authentication cannot be used on a serial interface.
- D. The routers cannot be connected from interface S0/0 to interface S0/0.
- E. With CHAP authentication, one router must authenticate to another router. The routers cannot be configured to authenticate to each other.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 25**

**What will be the result if the following configuration commands are implemented on a Cisco switch?**

**Switch(config-if)# switchport port-security**

**Switch(config-if)# switchport port-security mac-address sticky**

- A. A dynamically learned MAC address is saved in the startup-configuration file.
- B. A dynamically learned MAC address is saved in the running-configuration file.
- C. A dynamically learned MAC address is saved in the VLAN database.
- D. Statically configured MAC addresses are saved in the startup-configuration file if frames from that address are received.
- E. Statically configured MAC addresses are saved in the running-configuration file if frames from that address are received.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 26**

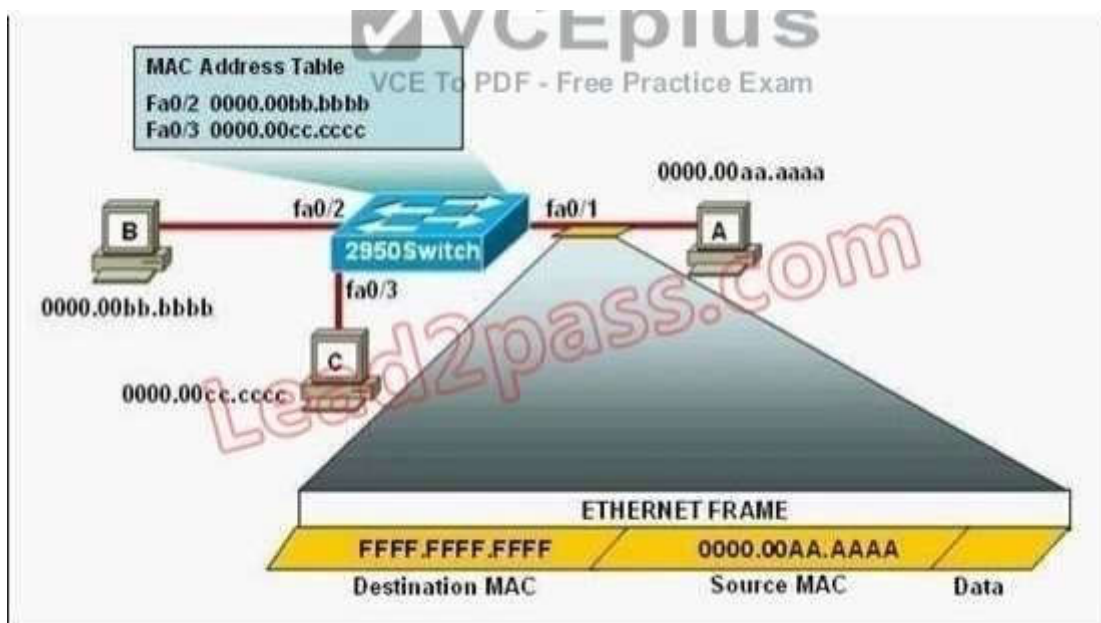
**Refer to the exhibit. The following commands are executed on interface fa0/1 of 2950Switch.**

**2950Switch(config-if)# switchport port-security**

**2950Switch(config-if)# switchport port-security mac-address sticky**

**2950Switch(config-if)# switchport port-security maximum 1**

**The Ethernet frame that is shown arrives on interface fa0/1. What two functions will occur when this frame is received by 2950Switch? (Choose two.)**



- A. The MAC address table will now have an additional entry of fa0/1 FFFF.FFFF.FFFF.
- B. Only host A will be allowed to transmit frames on fa0/1.
- C. This frame will be discarded when it is received by 2950Switch.
- D. All frames arriving on 2950Switch with a destination of 0000.00aa.aaaa will be forwarded out fa0/1.
- E. Hosts B and C may forward frames out fa0/1 but frames arriving from other switches will not be forwarded out fa0/1.
- F. Only frames from source 0000.00bb.bbbb, the first learned MAC address of 2950Switch, will be forwarded out fa0/1.

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 27

**Which command would you configure globally on a Cisco router that would allow you to view directly connected Cisco devices?**

- A. enable cdp
- B. cdp enable
- C. cdp run
- D. run cdp

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 28

**A Cisco router is booting and has just completed the POST process. It is now ready to find and load an IOS image. What function does the router perform next?**

- A. It checks the configuration register.
- B. It attempts to boot from a TFTP server.
- C. It loads the first image file in flash memory.
- D. It inspects the configuration file in NVRAM for boot instructions.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 29**

**What are three advantages of VLANs? (Choose three.)**

- A. VLANs establish broadcast domains in switched networks.
- B. VLANs utilize packet filtering to enhance network security.
- C. VLANs provide a method of conserving IP addresses in large networks.
- D. VLANs provide a low-latency internetworking alternative to routed networks.
- E. VLANs allow access to network services based on department, not physical location.
- F. VLANs can greatly simplify adding, moving, or changing hosts on the network.

**Correct Answer:** AEF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 30**

**Refer to the exhibit. The output that is shown is generated at a switch. Which three statements are true? (Choose three.)**



```

Switch# show spanning-tree vlan 30
VLAN0030
Spanning tree enabled protocol rstp
Root ID Priority 24606
Address 00d0.047b.2800
This bridge is the root
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Bridge ID Priority 24606 (priority 24576 sys-id-ext 30)
Address 00d0.047b.2800
Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
Aging Time 300

```

Interface	Role	Sts	Cost	Prio.Nbr	Type
Fa1/1	Desg	FWD	4	128.1	p2p
Fa1/2	Desg	FWD	4	128.2	p2p
Fa5/1	Desg	FWD	4	128.257	p2p

- A. All ports will be in a state of discarding, learning, or forwarding.
- B. Thirty VLANs have been configured on this switch.
- C. The bridge priority is lower than the default value for spanning tree.
- D. All interfaces that are shown are on shared media.
- E. All designated ports are in a forwarding state.
- F. This switch must be the root bridge for all VLANs on this switch.

**Correct Answer:** ACE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 31

**Which two commands can be used to verify a trunk link configuration status on a given Cisco switch interface? (Choose two.)**

- A. show interface trunk
- B. show interface interface
- C. show ip interface brief
- D. show interface vlan
- E. show interface switchport

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 32

**Which two states are the port states when RSTP has converged? (Choose two.)**

- A. discarding
- B. listening
- C. learning
- D. forwarding
- E. disabled

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

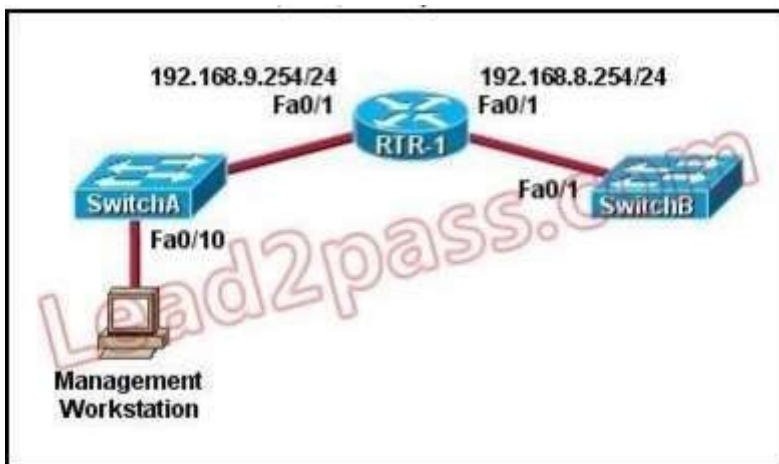
Section: (none)

Explanation

Explanation/Reference:

### QUESTION 33

**Refer to the exhibit. A technician has installed Switch B and needs to configure it for remote access from the management workstation connected to Switch A . Which set of commands is required to accomplish this task?**



- A. SwitchB(config)# interface FastEthernet 0/1  
SwitchB(config-if)# ip address 192.168.8.252 255.255.255.0 SwitchB(config-if)# no shutdown
- B. SwitchB(config)# interface vlan 1  
SwitchB(config-if)# ip address 192.168.8.252 255.255.255.0 SwitchB(config-if)# ip default-gateway 192.168.8.254 255.255.255.0 SwitchB(config-if)# no shutdown
- C. SwitchB(config)# ip default-gateway 192.168.8.254  
SwitchB(config)# interface vlan 1  
SwitchB(config-if)# ip address 192.168.8.252 255.255.255.0 SwitchB(config-if)# no shutdown
- D. SwitchB(config)# ip default-network 192.168.8.254  
SwitchB(config)# interface vlan 1  
SwitchB(config-if)# ip address 192.168.8.252 255.255.255.0 SwitchB(config-if)# no shutdown
- E. SwitchB(config)# ip route 192.168.8.254 255.255.255.0  
SwitchB(config)# interface FastEthernet 0/1  
SwitchB(config-if)# ip address 192.168.8.252 255.255.255.0 SwitchB(config-if)# no shutdown

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 34**

**Which of the following are benefits of VLANs? (Choose three.)**

- A. They increase the size of collision domains.
- B. They allow logical grouping of users by function.
- C. They can enhance network security.
- D. They increase the size of broadcast domains while decreasing the number of collision domains.
- E. They increase the number of broadcast domains while decreasing the size of the broadcast domains.
- F. They simplify switch administration.

**Correct Answer:** BCE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 35**

**What are three benefits of implementing VLANs? (Choose three.)**

- A. A higher level of network security can be reached by separating sensitive data traffic from other network traffic.
- B. A more efficient use of bandwidth can be achieved allowing many physical groups to use the same network infrastructure.
- C. A more efficient use of bandwidth can be achieved allowing many logical networks to use the same network infrastructure.
- D. Broadcast storms can be mitigated by increasing the number of broadcast domains, thus reducing their size.
- E. Broadcast storms can be mitigated by decreasing the number of broadcast domains, thus increasing their size.
- F. VLANs make it easier for IT staff to configure new logical groups, because the VLANs all belong to the same broadcast domain.
- G. Port-based VLANs increase switch-port use efficiency, thanks to 802.1Q trunks.

**Correct Answer:** ACD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 36**

**Which three statements accurately describe Layer 2 Ethernet switches? (Choose three.)**

- A. Spanning Tree Protocol allows switches to automatically share VLAN information.
- B. Establishing VLANs increases the number of broadcast domains.
- C. Switches that are configured with VLANs make forwarding decisions based on both Layer 2 and Layer 3 address information.
- D. Microsegmentation decreases the number of collisions on the network.

- E. In a properly functioning network with redundant switched paths, each switched segment will contain one root bridge with all its ports in the forwarding state. All other switches in that broadcast domain will have only one root port.
- F. If a switch receives a frame for an unknown destination, it uses ARP to resolve the address.

**Correct Answer:** BDE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 37**

**Which of the following correctly describe steps in the OSI data encapsulation process? (Choose two.)**

- A. The transport layer divides a data stream into segments and may add reliability and flow control information.
- B. The data link layer adds physical source and destination addresses and an FCS to the segment.
- C. Packets are created when the network layer encapsulates a frame with source and destination host addresses and protocol-related control information.
- D. Packets are created when the network layer adds Layer 3 addresses and control information to a segment.
- E. The presentation layer translates bits into voltages for transmission across the physical link.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 38**

**Which of the following describes the roles of devices in a WAN? (Choose three.)**

- A. A CSU/DSU terminates a digital local loop.
- B. A modem terminates a digital local loop.
- C. A CSU/DSU terminates an analog local loop.
- D. A modem terminates an analog local loop.
- E. A router is commonly considered a DTE device.
- F. A router is commonly considered a DCE device.

**Correct Answer:** ADE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 39**

**Which interface counter can you use to diagnose a duplex mismatch problem?**

- A. no carrier
- B. late collisions
- C. giants
- D. CRC errors
- E. deferred
- F. runts

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 40**

**Which feature can you implement to reserve bandwidth for VoIP calls across the call path?**

- A. PQ
- B. CBWFQ
- C. round robin
- D. RSVP

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 41**

**When an interface is configured with PortFast BPDU guard, how does the interface respond when it receives a BPDU?**

- A. It continues operating normally.
- B. It goes into a down/down state.
- C. It becomes the root bridge for the configured VLAN.
- D. It goes into an errdisable state.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 42**

**What are three characteristics of the TCP protocol? (Choose three.)**

- A. It uses a single SYN-ACK message to establish a connection.
- B. The connection is established before data is transmitted.
- C. It ensures that all data is transmitted and received by the remote device.
- D. It supports significantly higher transmission speeds than UDP.
- E. It requires applications to determine when data packets must be retransmitted.
- F. It uses separate SYN and ACK messages to establish a connection.

**Correct Answer:** BCF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 43**

**Which command can you enter to determine whether serial interface 0/2/0 has been configured using HDLC encapsulation?**

- A. router#show platform
- B. router#show interfaces Serial 0/2/0
- C. router#show ip interface s0/2/0
- D. router#show ip interface brief

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 44**

**Which two statements about IPv4 multicast traffic are true? (Choose two.)**

- A. It burdens the source host without affecting remote hosts.
- B. It uses a minimum amount of network bandwidth.
- C. It is bandwidth-intensive.
- D. It simultaneously delivers multiple streams of data.
- E. It is the most efficient way to deliver data to multiple receivers.

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 45**

**What are two benefits of private IPv4 IP addresses? (Choose two.)**

- A. They are routed the same as public IP addresses.
- B. They are less costly than public IP addresses.
- C. They can be assigned to devices without Internet connections.
- D. They eliminate the necessity for NAT policies.
- E. They eliminate duplicate IP conflicts.

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 46**

**What is the authoritative source for an address lookup?**

- A. a recursive DNS search
- B. the operating system cache
- C. the ISP local cache
- D. the browser cache

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 47**

**Which command can you enter to verify that a BGP connection to a remote device is established?**

- A. show ip bgp summary
- B. show ip community-list
- C. show ip bgp paths
- D. show ip route

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 48**

**During which phase of PPPoE is PPP authentication performed ?**

- A. the PPP Session phase
- B. Phase 2
- C. the Active Discovery phase

- D. the Authentication phase
- E. Phase 1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 49**

**Which three circumstances can cause a GRE tunnel to be in an up/down state? (Choose three.)**

- A. The tunnel interface IP address is misconfigured.
- B. The tunnel interface is down.
- C. A valid route to the destination address is missing from the routing table.
- D. The tunnel address is routed through the tunnel itself.
- E. The ISP is blocking the traffic.
- F. An ACL is blocking the outbound traffic.

**Correct Answer:** BCD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 50**

**Which two statements about using leased lines for your WAN infrastructure are true? (Choose two.)**

- A. Leased lines provide inexpensive WAN access.
- B. Leased lines with sufficient bandwidth can avoid latency between endpoints.
- C. Leased lines require little installation and maintenance expertise.
- D. Leased lines provide highly flexible bandwidth scaling.
- E. Multiple leased lines can share a router interface.
- F. Leased lines support up to T1 link speeds.

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 51**

**Which two statements about wireless LAN controllers are true? (Choose two.)**

- A. They can simplify the management and deployment of wireless LANs.



- B. They rely on external firewalls for WLAN security.
- C. They are best suited to smaller wireless networks.
- D. They must be configured through a GUI over HTTP or HTTPS.
- E. They can manage mobility policies at a systemwide level.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 52**

**Which two statements about northbound and southbound APIs are true? (Choose two.)**

- A. Only southbound APIs allow program control of the network.
- B. Only northbound APIs allow program control of the network.
- C. Only southbound API interfaces use a Service Abstraction Layer.
- D. Only northbound API interfaces use a Service Abstraction Layer.
- E. Both northbound and southbound API interfaces use a Service Abstraction Layer.
- F. Both northbound and southbound APIs allow program control of the network.

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 53**

**Which command can you enter to set the default route for all traffic to an interface?**

- A. router(config)#ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/1
- B. router(config-router)#default-information originate always
- C. router(config)#ip route 0.0.0.0 255.255.255.255 GigabitEthernet0/1
- D. route(config-router)#default-information originate

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 54**

**Which statement about RADIUS security is true?**

- A. It supports EAP authentication for connecting to wireless networks.

- B. It provides encrypted multiprotocol support.
- C. Device-administration packets are encrypted in their entirety.
- D. It ensures that user activity is fully anonymous.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 55**

**If you are configuring syslog messages specifying 'logging trap warning', which log messages will the router send?**

- A. 0-4
- B. 0-5
- C. 0-2
- D. 0-6
- E. 0-1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

0 emergencies System is unusable  
1 alerts Immediate action is needed  
2 critical Critical conditions exist  
3 errors Error conditions exist  
4 warnings Warning conditions exist  
5 notification Normal, but significant, conditions exist  
6 informational Informational messages  
7 debugging Debugging messages

#### **QUESTION 56**

**What is the correct command for floating static ipv6 route?**

- A. ipv6 route 2001:DB8::/32 serial 2/0 201
- B. ipv6 route 2001:DB8::/32 serial 2/0 1
- C. N/A
- D. N/A

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 57****What is true about Ethernet? (Choose Two.)**

- A. 802.2 Protocol
- B. 802.3 Protocol
- C. 10BaseT half duplex
- D. CSMA/CD Stops transmitting when congestion occurs
- E. CSMA/CA Stops transmitting when congestion occurs

**Correct Answer:** BD**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

<http://www.ieee802.org/3/>

CSMA/CD - It uses a carrier sensing scheme in which a transmitting station detects collisions by sensing transmissions from other stations while transmitting a frame. When this collision condition is detected, the station stops transmitting that frame.

**QUESTION 58****What IP SLA ICMP Echo measures?**

- A. Packet loss
- B. Congestion
- C. Hop-by-hop "something"
- D. -ANOTHER OPTION-
- E. -ANOTHER OPTION-

**Correct Answer:** A**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

There is no RRT (Round-trip time) in the choices @Mik said.

**QUESTION 59****What are types of IPv6 static routes? (Choose Three )**

- A. Recursive routes
- B. Directly connected routes
- C. Fully specified routes
- D. Advertised routes
- E. Virtual links
- F. Redistributed routes

**Correct Answer:** ABC**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

<http://ipcisco.com/ipv6-static-routes-for-cisco-routers/>

<http://www.orbit-computer-solutions.com/ipv6-static-and-default-route-how-to-configure-ipv6-static-and-default-route/>

#### **QUESTION 60**

**How to configure RIPv2? (Choose Two.)**

- A. Enable RIP
- B. Connect RIP to WAN interface
- C. Enable auto-summary
- D. Enable authentication
- E. -ANOTHER OPTION-

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

C because we can enable or disable auto-summary in rips.

#### **QUESTION 61**

**What is the status of port-channel if LACP is misconfigured ?**

- A. Forwarding
- B. Enabled
- C. Disabled
- D. Errdisabled

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 62**

**What is true about DTP? (Choose Three.)**

- A. Layer 2 protocol
- B. Layer 3 protocol
- C. Proprietary protocol
- D. enabled by default
- E. disabled by default

**Correct Answer:** ACD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:  
[https://en.wikipedia.org/wiki/Dynamic\\_Trunking\\_Protocol](https://en.wikipedia.org/wiki/Dynamic_Trunking_Protocol)

#### QUESTION 63

**How to create a trunk port and allow VLAN 20? (Choose Three.)**

- A. switchport trunk encapsulation dot1q
- B. switchport mode trunk
- C. switchport trunk allowed vlan 20
- D. switchport trunk native vlan 20
- E. -ANOTHER OPTION-

**Correct Answer:** ABC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 64

**What 8-bit field exists in IP packet for QoS ?**

- A. Tos Field
- B. DSCP
- C. IP Precedence
- D. Cos
- E. -ANOTHER OPTION-

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

<http://flylib.com/books/2/686/1/html/2/images/1587051990/graphics/13fig01.gif>

#### QUESTION 65

**What feature uses a random time to re-sent a frame?**

- A. CSMA/CA
- B. -ANOTHER OPTION-
- C. -ANOTHER OPTION-
- D. CSMA/CD

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 66

**Which mode is compatible with Trunk, Access, and desirable ports?**

- A. Trunk Ports
- B. Access Ports
- C. Dynamic Auto
- D. Dynamic Desirable

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

The 'dynamic auto' will configure the port to accept incoming negotiation and will accept becoming either a trunk or an access port. Dynamic Auto allows the port to negotiate DTP (Dynamic Trunking Protocol) if the other side is set to trunk or desirable. Otherwise it will become an access port.

#### QUESTION 67

**If you configure syslog messages without specifying the logging trap level, which log messages will the router send ?**

- A. 0-4
- B. 0-5
- C. 0-2
- D. 0-6
- E. 0-1

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Router(config)# logging trap level - Specifies the kind of messages, by severity level, to be sent to the syslog server. The default is informational (6) and lower ( 0 6). The possible values for level are as follows:

Emergency: 0

Alert: 1

Critical: 2

Error: 3

Warning: 4

Notice: 5

Informational: 6

Debug: 7

#### QUESTION 68

**Which command can you execute to set the user inactivity timer to 10 seconds?**

- A. SW1(config-line)#exec-timeout 0 10
- B. SW1(config-line)#exec-timeout 10
- C. SW1(config-line)#absolute-timeout 0 10

D. SW1(config-line)#absolute-timeout 10

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 69**

**Which standards-based First Hop Redundancy Protocol is a Cisco supported alternative to Hot Standby Router Protocol?**

A. VRRP

B. GLBP

C. TFTP

D. DHCP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 70**

**Two hosts are attached to a switch with the default configuration. Which statement about the configuration is true?**

A. IP routing must be enabled to allow the two hosts to communicate.

B. The two hosts are in the same broadcast domain.

C. The switch must be configured with a VLAN to allow the two hosts to communicate.

D. Port security prevents the hosts from connecting to the switch.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 71**

**If there are 3 hosts connected in one port of a switch and two other hosts connected in another port, how many collision domains are present on the router?**

A. 5

B. 2

C. 3

D. 4

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 72**

**What are three parts of an IPv6 global unicast address? (Choose three.)**

- A. an interface ID that is used to identify the local host on the network.
- B. an interface ID that is used to identify the local network for a particular host.
- C. a subnet ID that is used to identify networks inside of the local enterprise site
- D. a global routing prefix that is used to identify the network portion of the address that has been provided by an ISP
- E. a global routing prefix that is used to identify the portion of the network address provided by a local administrator

**Correct Answer:** ACD  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 73**

**You have been asked to come up with a subnet mask that will allow all three web servers to be on the same network while providing the maximum number of subnets. Which network address and subnet mask meet this requirement?**

- A. 192.168.252.0 255.255.255.252
- B. 192.168.252.8 255.255.255.248
- C. 192.168.252.8 255.255.255.252
- D. 192.168.252.16 255.255.255.240
- E. 192.168.252.16 255.255.255.252

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 74**

**What parameter can be different on ports within an EtherChannel?**

- A. speed
- B. DTP negotiation settings
- C. trunk encapsulation
- D. duplex



**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 75**

**Which two statements about IPv6 router advertisement messages are true? (Choose two.)**

- A. They use ICMPv6 type 134.
- B. The advertised prefix length must be 64 bits.
- C. The advertised prefix length must be 48 bits.
- D. They are sourced from the configured IPv6 interface address.
- E. Their destination is always the link-local address of the neighboring node.

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 76**

**Which spanning-tree protocol rides on top of another spanning-tree protocol?**

- A. MSTP
- B. RSTP
- C. PVST+
- D. Mono Spanning Tree

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 77**

**A network administrator needs to configure port security on a switch. Which two statements are true? (Choose two.)**

- A. The network administrator can apply port security to dynamic access ports.
- B. The network administrator can apply port security to EtherChannels.
- C. The sticky learning feature allows the addition of dynamically learned addresses to the running configuration.
- D. When dynamic MAC address learning is enabled on an interface, the switch can learn new addresses, up to the

maximum defined.

- E. The network administrator can configure static secure or sticky secure MAC addresses in the voice VLAN

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 78**

**Which switching method duplicates the first six bytes of a frame before making a switching decision?**

- A. fragment-free switching
- B. store-and-forward switching
- C. cut-through switching
- D. ASIC switching

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 79**

**Which logging command can enable administrators to correlate syslog messages with millisecond precision?**

- A. no logging console
- B. logging buffered 4
- C. no logging monitor
- D. service timestamps log datetime msec
- E. logging host 10.2.0.21

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 80**

**Which three statements about link-state routing are true? (Choose three.)**

- A. OSPF is a link-state protocol.
- B. Updates are sent to a broadcast address.
- C. It uses split horizon.

- D. Routes are updated when a change in topology occurs.
- E. RIP is a link-state protocol.
- F. Updates are sent to a multicast address by default.

**Correct Answer:** ADF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 81**

**Which command can you enter to determine whether a switch is operating in trunking mode?**

- A. show ip interface brief
- B. show vlan
- C. show interfaces
- D. show interface switchport

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 82**

**Which command can you enter to view the ports that are assigned to VLAN 20 ?**

- A. Switch#show ip interface vlan 20
- B. Switch#show vlan id 20
- C. Switch#show ip interface brief
- D. Switch#show interface vlan 20

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 83**

**In which two formats can the IPv6 address fd15:0db8:0000:0000:0700:0003:400F:572B be written? (Choose two.)**

- A. fd15:0db8:0000:0000:700:3:400F:572B
- B. fd15::db8::700:3:400F:572B
- C. fd15:db8:0::700:3:4F:572B
- D. fd15:0db8::7:3:4F:572B

E. fd15:db8::700:3:400F:572B

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 84

**Which function of the IP SLAs ICMP jitter operation can you use to determine whether a VoIP issue is caused by excessive end-to-end time?**

- A. packet loss
- B. jitter
- C. successive packet loss
- D. round-trip time latency

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 85

**Refer to the exhibit.**

```
00:00:39: %LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to down
00:00:40: %SPANTREE-5-EXTENDED_SYSID: Extended SysId enabled for type vlan
00:00:42: %SYS-5-CONFIG_I: Configured from memory by console
00:00:42: %SYS-5-RESTART: System restarted --
Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 12.2(25)SEE2, RELEASE SOFTWARE (fc.1)
Copyright (c) 1986-2006 by Cisco Systems, Inc.
Compiled Fri 28-Jul-06 11:57 by yenanh
00:00:44: %LINK-5-CHANGED: Interface Vlan1, changed state to administratively down
00:00:44: %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to up
00:00:44: %LINK-3-UPDOWN: Interface FastEthernet0/2, changed state to up
00:00:44: %LINK-3-UPDOWN: Interface FastEthernet0/11, changed state to up
00:00:45: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
00:00:45: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
00:00:45: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/11, changed state to up
00:00:48: %LINK-3-UPDOWN: Interface FastEthernet0/12, changed state to up
00:00:49: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/12, changed state to up
```

**Which of these statements correctly describes the state of the switch once the boot process has been completed?**

- A. A. The switch will need a different IOS code in order to support VLANs and ST.
- B. Remote access management of this switch will not be possible without configuration change.
- C. As FastEthernet0/12 will be the last to come up, it will be blocked by STP.
- D. More VLANs will need to be created for this switch.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

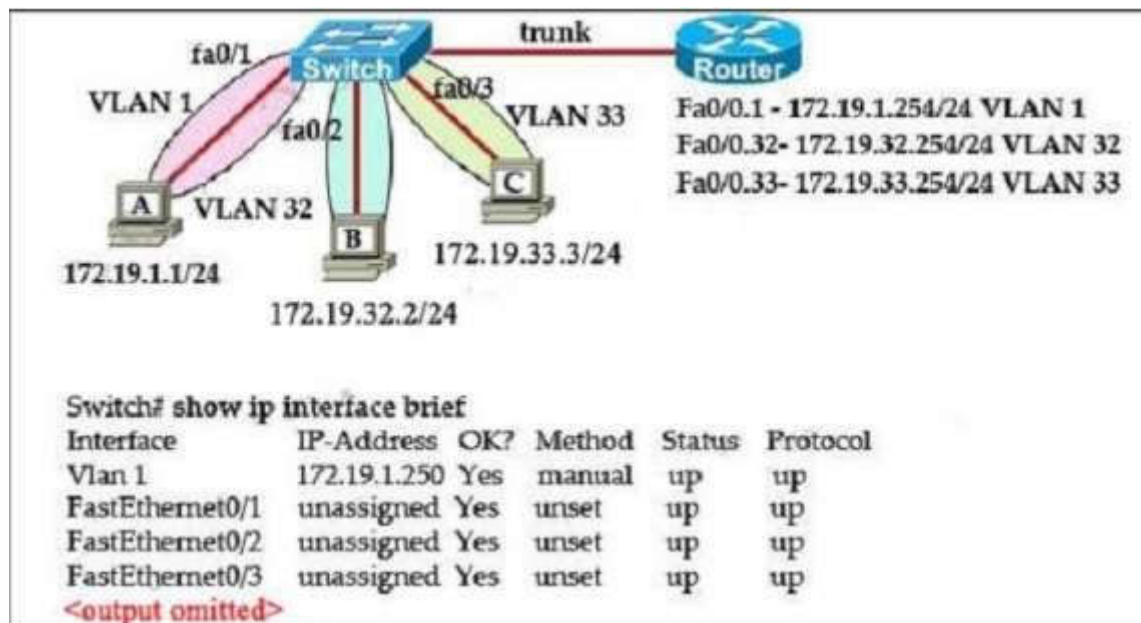
Explanation

Explanation/Reference:

#### QUESTION 86

**Refer to the exhibit.**

The network administrator normally establishes a Telnet session with the switch from host A. However, host A is unavailable. The administrator's attempt to telnet to the switch from host fails, but pings to the other two hosts are successful. What is the issue?



- A. The switch interfaces need the appropriate IP addresses assigned.
- B. Host and the switch need to be in the same subnet.
- C. The switch needs an appropriate default gateway assigned.
- D. The switch interface connected to the router is down.
- E. Host needs to be assigned an IP address in VLAN 1.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 87

**Which condition does the err-disabled status indicate on an Ethernet interface?**

- A. There is a duplex mismatch.
- B. The device at the other end of the connection is powered off.
- C. The serial interface is disabled.
- D. The interface is configured with the shutdown command.
- E. Port security has disabled the interface.
- F. The interface is fully functioning.

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 88**

**Which two correctly describe steps in the OSI data encapsulation process?  
(Choose two.)**

- A. The presentation layer translates bits into voltages for transmission across the physical link.
- B. The data link layer adds physical source and destination addresses and an FCS to the segment.
- C. Packets are created when the network layer adds Layer 3 addresses and control information to a segment.
- D. Packets are created when the network layer encapsulates a frame with source and destination host addresses and protocol-related control information.
- E. The transport layer divides a data stream into segments and may add reliability and flow control information.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

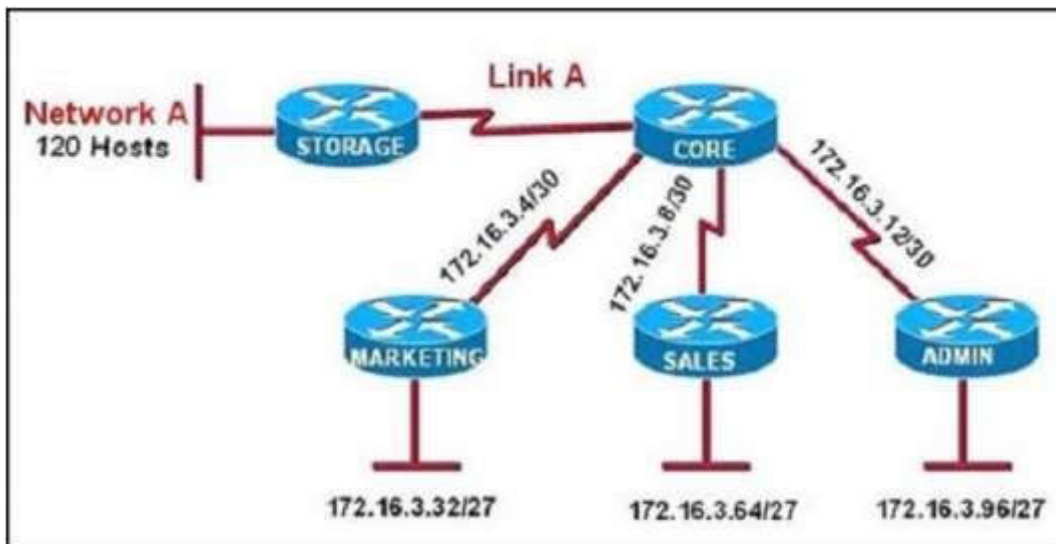
Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 89**

**Refer to the exhibit**



All of the routers in the network are configured with the ip subnet-zero command. Which network addresses should be used for Link A and Network A? (Choose two.)

- A. Link A 172.16.3.0/30
- B. Link A 172.16.3.112/30
- C. Network A 172.16.3.48/26
- D. Network A 172.16.3.128/25
- E. Link A 172.16.3.40/30
- F. Network A 172.16.3.192/26

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 90

Which type of device can be replaced by the use of subinterfaces for VLAN routing ?

- A. Layer 2 bridge
- B. Layer 2 switch
- C. Layer 3 switch
- D. router

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 91**

**Which statement about LLDP is true?**

- A. It is a Cisco proprietary protocol.
- B. It is configured in global configuration mode.
- C. The LLDP update frequency is a fixed value.
- D. It runs over the transport layer.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 92**

**If the primary root bridge experiences a power loss, which switch takes over?**

- A. switch 0040.00.90C5
- B. switch 00E0.F90B.6BE3
- C. switch 0004.9A1A.C182
- D. switch 00E0.F726.3DC6

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 93**

**A network administrator is troubleshooting an EIGRP problem on a router and needs to confirm the IP addresses of the devices with which the router has established adjacency. The retransmit interval and the queue counts for the adjacent routers also need to be checked. What command will display the required information?**

- A. Router# show ip eigrp neighbors
- B. Router# show ip eigrp interfaces
- C. Router# show ip eigrp adjacency
- D. Router# show ip eigrp topology

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 94**



**Which three statements about IPv6 prefixes are true? (Choose three.)**

- A. FEC0::/10 is used for IPv6 broadcast.
- B. FC00::/7 is used in private networks.
- C. FE80::/8 is used for link-local unicast.
- D. FE80::/10 is used for link-local unicast.
- E. 2001::1/127 is used for loopback addresses.
- F. FF00::/8 is used for IPv6 multicast.

**Correct Answer:** BDF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 95**

**Which command can you enter to display duplicate IP addresses that the DHCP server assigns?**

- A. show ip dhcp conflict 10.0.2.12
- B. show ip dhcp database 10.0.2.12
- C. show ip dhcp server statistics
- D. show ip dhcp binding 10.0.2.12

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 96**

**Which three ports will be STP designated ports if all the links are operating at the same bandwidth? (Choose three.)**

- A. Switch B - F0/0
- B. Switch A - Fa0/1
- C. Switch B - Fa0/1
- D. Switch C - F0/1
- E. Switch A - Fa0/0
- F. Switch C - Fa0/0

**Correct Answer:** ABC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

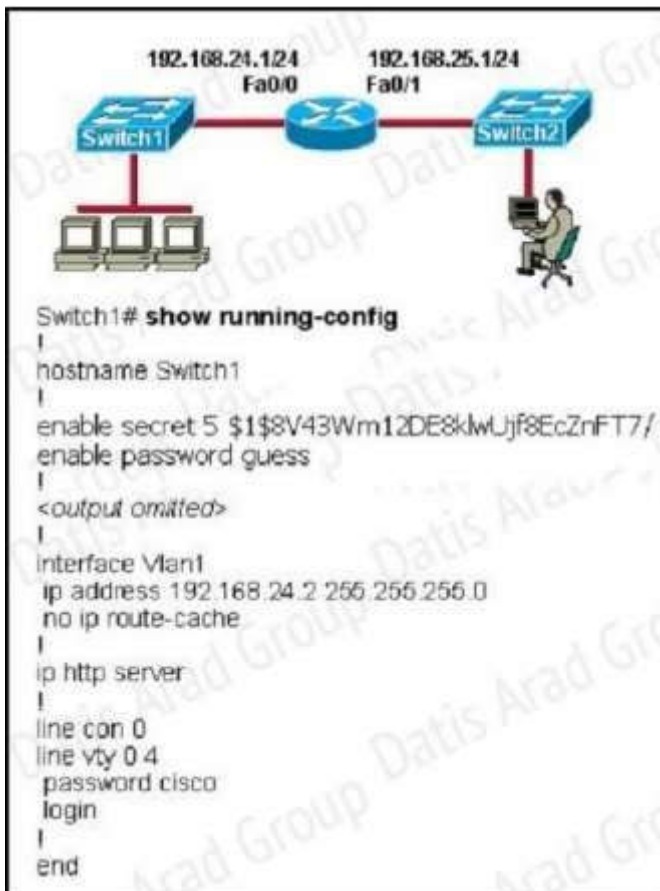
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 97**

Refer to the exhibit



The network administrator cannot connect to Switch 1 over a Telnet session, although the hosts attached to Switch1 can ping the interface Fa0/0 of the router. Given the information in the graphic and assuming that the router and Switch2 are configured properly, which of the following commands should be issued on Switch1 to correct this problem?

- A. Switch1(config)# ip default-gateway 192.168.24.1
- B. Switch1(config)# interface fa0/1Switch1(config-if)# switchport mode trunk
- C. Switch1(config)# line con0Switch1(config-line)# password ciscoSwitch1(config-line)# login
- D. Switch1(config)# interface fa0/1Switch1(config-if)# ip address 192.168.24.3 255.255.255.0
- E. Switch1(config)# interface fa0/1Switch1(config-if)# duplex fullSwitch1(config-if)# speed 100

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

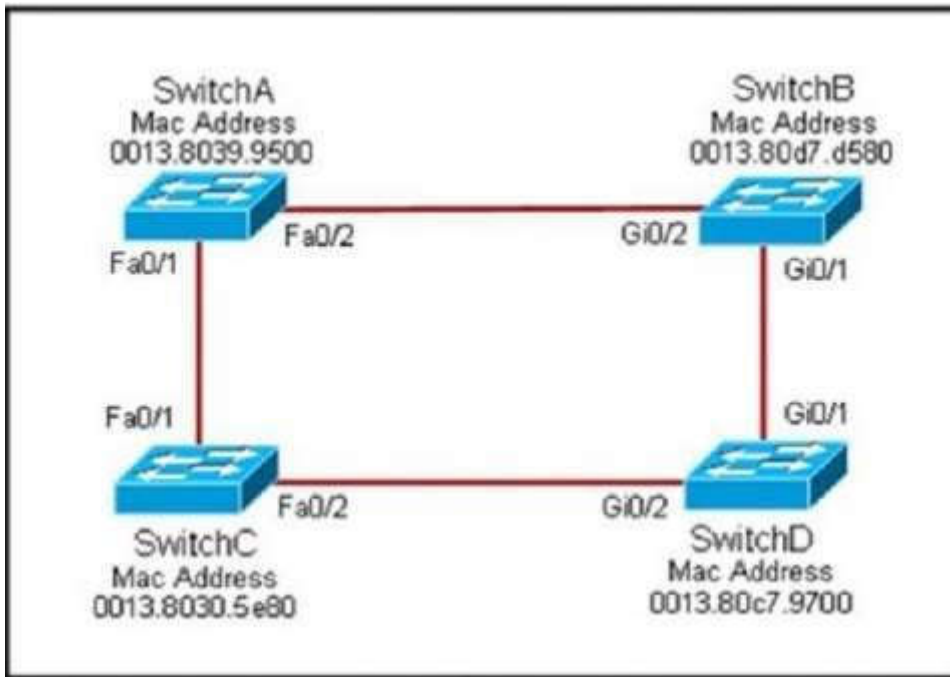
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 98**

Refer to the exhibit.



Each of these four switches has been configured with a hostname, as well as being configured to run RSTP. No other configuration changes have been made. Which three of these show the correct RSTP port roles for the indicated switches and interfaces? (Choose three.)

- A. SwitchD, Gi0/2, root
- B. SwitchA, Fa0/2, designated
- C. SwitchB, Gi0/1, designated
- D. SwitchA, Fa0/1, root
- E. SwitchB, Gi0/2, root
- F. SwitchC, Fa0/2, root

**Correct Answer:** ABD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 99

Which feature builds a FIB and an adjacency table to expedite packet forwarding?

- A. cut through
- B. fast switching
- C. process switching
- D. Cisco Express Forwarding

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 100**

**Which command can you enter to verify that a 128-bit address is live and responding?**

- A. traceroute
- B. telnet
- C. ping
- D. show ipv6

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 101**

**What are two reasons that duplex mismatches can be difficult to diagnose? (Choose two.)**

- A. The interface displays a connected (up/up) state even when the duplex settings are mismatched.
- B. 1-Gbps interfaces are full-duplex by default.
- C. Full-duplex interfaces use CSMA/CD logic, so mismatches may be disguised by collisions.
- D. The symptoms of a duplex mismatch may be intermittent.
- E. Autonegotiation is disabled.

**Correct Answer: AD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 102**

**Which condition indicates that service password-encryption is enabled?**

- A. The local username password is in clear text in the configuration.
- B. The enable secret is in clear text in the configuration.
- C. The local username password is encrypted in the configuration.
- D. The enable secret is encrypted in the configuration.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

**QUESTION 103**

**Which protocol advertises a virtual IP address to facilitate transparent failover of a Cisco routing device?**

- A. FHRP
- B. DHCP
- C. RSMLT
- D. ESRP

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 104**

**What is the correct routing match to reach 172.16.1.5/32 ?**

- A. 172.16.1.0/26
- B. 172.16.1.0/25
- C. 172.16.1.0/24
- D. the default route

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 105**

**Which layer in the OSI reference model is responsible for determining the availability of the receiving program and checking to see if enough resources exist for that communication?**

- A. transport
- B. network
- C. presentation
- D. session
- E. application

**Correct Answer: E**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 106****What is the purpose of the POST operation on a router ?**

- A. determine whether additional hardware has been added
- B. locate an IOS image for booting
- C. enable a TFTP server
- D. set the configuration register

**Correct Answer:** A**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 107****Which protocol is the Cisco proprietary implementation of FHRP ?**

- A. HSRP
- B. VRRP
- C. GLBP
- D. CARP

**Correct Answer:** A**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 108****Which three characteristics are representative of a link-state routing protocol?  
(Choose three.)**

- A. provides common view of entire topology
- B. exchanges routing tables with neighbors
- C. calculates shortest path
- D. utilizes event-triggered updates
- E. utilizes frequent periodic updates

**Correct Answer:** ACD**Section:** (none)**Explanation****Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 109****Which part of the PPPoE server configuration contains the information used to**

## assign an IP address to a PPPoE client?

- A. virtual-template interface
- B. DHCP
- C. dialer interface
- D. AAA authentication

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### QUESTION 110

Drag and drop the correct address space on the left to the IPv6 multicast feature or protocol on the right.	
FF02::5	All nodes of Link Local
FF02::A	All EIGRPv3 Routers
FF02::D	All OSPFv3 Designated Routers
FF02::1	All PIM Routers
FF05::2	All OSPFv3 Routers
FF02::6	All Routers of site local

A.

Drag and drop the correct address space on the left to the IPv6 multicast feature or protocol on the right.	
	FF02::1
	FF02::A
	FF02::6
	FF02::D
	FF02::5
	FF05::2

**Correct Answer:** A

**Section:** (none)

## Explanation

### Explanation/Reference:

FF02::1 ----- All Nodes (link-local)  
FF02::5 ----- OSPFv3 Routers  
FF02::6 ----- OSPFv3 Designated Routers  
FF02::A ----- EIGRPv3 Routers  
FF02::D ----- PIM Routers  
FF05::2 ----- All Routers (site-local)

## QUESTION 111

**Which three statements about RSTP are true? (Choose three.)**

- A. RSTP significantly reduces topology reconverging time after a link failure.
- B. RSTP expands the STP port roles by adding the alternate and backup roles.
- C. RSTP port states are blocking, discarding, learning, or forwarding.
- D. RSTP provides a faster transition to the forwarding state on point-to-point links than STP does.
- E. RSTP also uses the STP proposal-agreement sequence.
- F. RSTP uses the same timer-based process as STP on point-to-point links

**Correct Answer:** ABD

**Section:** (none)

### Explanation

### Explanation/Reference:

Section: (none)  
Explanation

Explanation/Reference:

## QUESTION 112

**What are two benefits of using NAT? (Choose two.)**

- A. NAT facilitates end-to-end communication when IPsec is enabled.
- B. NAT eliminates the need to re-address all hosts that require external access.
- C. NAT conserves addresses through host MAC-level multiplexing.
- D. Dynamic NAT facilitates connections from the outside of the network.
- E. NAT accelerates the routing process because no modifications are made on the packets.
- F. NAT protects network security because private networks are not advertised.

**Correct Answer:** BF

**Section:** (none)

### Explanation

### Explanation/Reference:

Section: (none)  
Explanation

Explanation/Reference:

## QUESTION 113

**Which two commands correctly verify whether port security has been configured on port FastEthernet 0/12 on a switch? (Choose two.)**

- A. SW1#show port-secure interface FastEthernet 0/12
- B. SW1#show switchport port-secure interface FastEthernet 0/12
- C. SW1#show running-config



- D. SW1#show port-security interface FastEthernet 0/12  
E. SW1#show switchport port-security interface FastEthernet 0/12

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

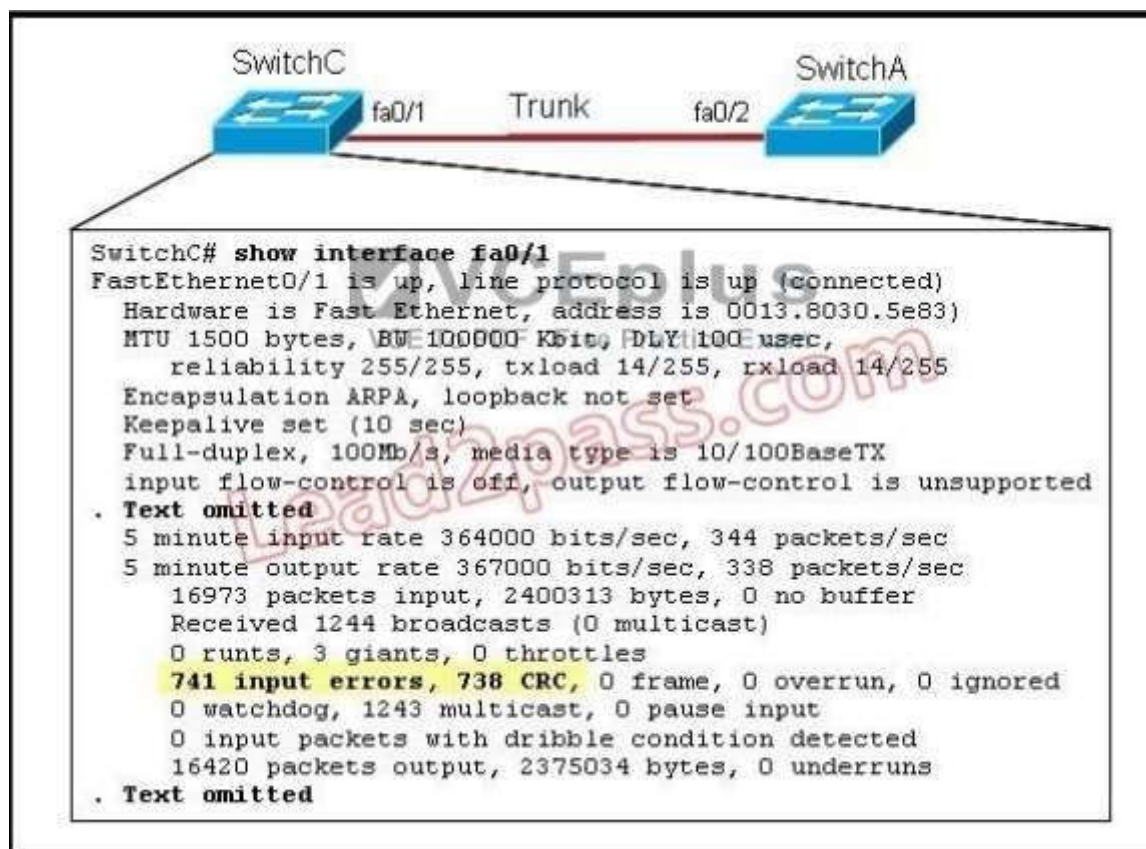
Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 114

Refer to the exhibit. Given this output for SwitchC, what should the network administrator's next action be?



- A. Check the trunk encapsulation mode for Switch C's fa0/1 port.  
B. Check the duplex mode for Switch C's fa0/1 port.  
C. Check the duplex mode for Switch A's fa0/2 port.  
D. Check the trunk encapsulation mode for Switch A's fa0/2 port

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 115**

**Which statement is correct regarding the operation of DHCP ?**

- A. A DHCP client uses a ping to detect address conflicts.
- B. A DHCP server uses a gratuitous ARP to detect DHCP clients.
- C. A DHCP client uses a gratuitous ARP to detect a DHCP server.
- D. If an address conflict is detected, the address is removed from the pool and an administrator must resolve the conflict.
- E. If an address conflict is detected, the address is removed from the pool for an amount of time configurable by the administrator.
- F. If an address conflict is detected, the address is removed from the pool and will not be reused until the server is rebooted.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 116**

**Which two statements about using the CHAP authentication mechanism in a PPP link are true ? (Choose two.)**

- A. CHAP uses a two-way handshake.
- B. CHAP uses a three-way handshake.
- C. CHAP authentication periodically occurs after link establishment.
- D. CHAP authentication passwords are sent in plaintext.
- E. CHAP authentication is performed only upon link establishment.
- F. CHAP has no protection from playback attacks.

**Correct Answer: BC**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 117**

**Refer to the exhibit. Switch port FastEthernet 0/24 on ALSwitch1 will be used to create an IEEE 802.1Q-compliant trunk to another switch. Based on the output shown, what is the reason the trunk does not form, even though the proper cabling has been attached?**

```
ALSwitch1# show running-config
«output omitted»
interface FastEthernet0/24 no ip address
«output omitted»
ALSwitch1# show interfaces FastEthernet0/24 switchport
Name: Fa0/24
Switchport: Enable
Administrative Mode: static access
Operation Mode: static access
Administrative Trunking Encapsulation: dot1q
Operation Trunking Encapsulation: native
Negotiation of Trunking: Off
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Operation private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL

Protected: false

Voice VLAN: none (Inactive)
Appliance trust: none
```

- A. VLANs have not been created yet.
- B. An IP address must be configured for the port.
- C. The port is currently configured for access mode.
- D. The correct encapsulation type has not been configured.
- E. The no shutdown command has not been entered for the port.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

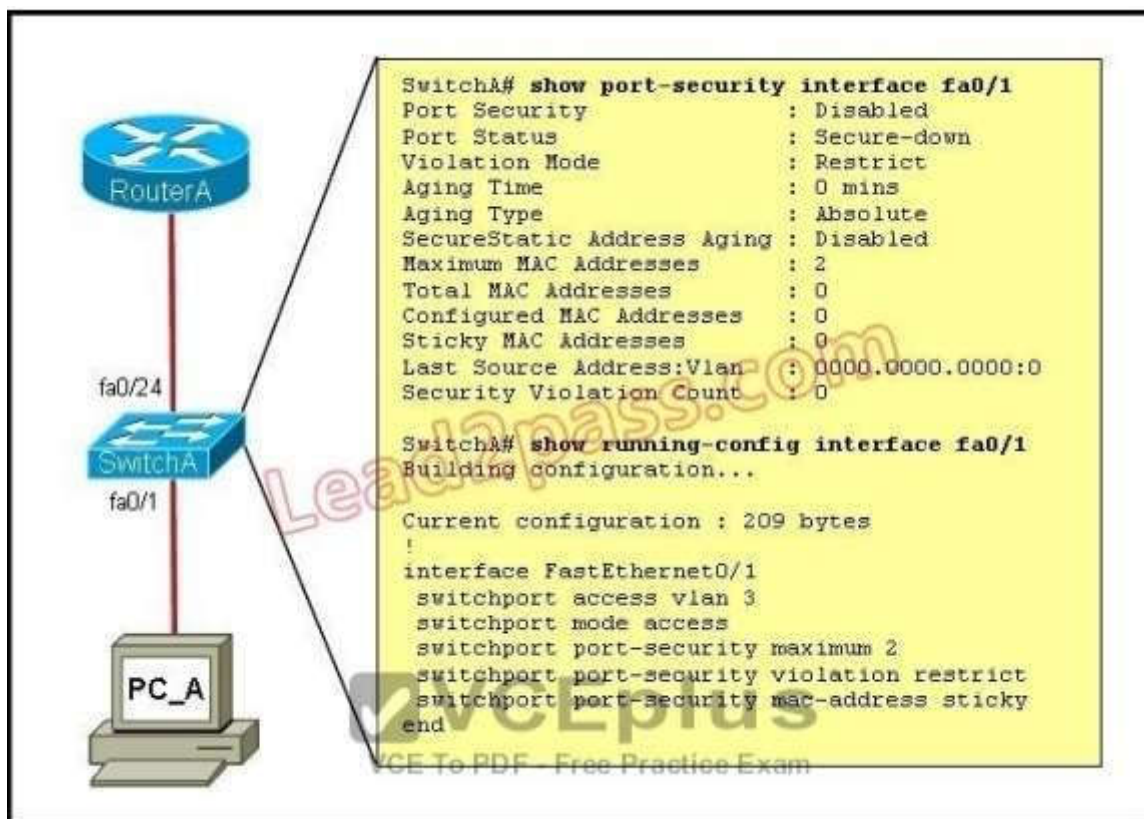
Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 118

**Refer to the exhibit. A junior network administrator was given the task of configuring port security on SwitchA to allow only PC\_A to access the switched network through port fa0/1. If any other device is detected, the port is to drop frames from this device. The administrator configured the interface and tested it with successful pings from PC\_A to RouterA, and then observes the output from these two show commands. Which two of these changes are necessary for SwitchA to meet the requirements? (Choose two.)**



- A. Port security needs to be globally enabled.
- B. Port security needs to be enabled on the interface.
- C. Port security needs to be configured to shut down the interface in the event of a violation.
- D. Port security needs to be configured to allow only one learned MAC address.
- E. Port security interface counters need to be cleared before using the show command.
- F. The port security configuration needs to be saved to NVRAM before it can become active.

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 119

**Which three statements about static routing are true? (Choose three.)**

- A. It uses consistent route determination.
- B. It is best used for small-scale deployments.
- C. Routing is disrupted when links fail.
- D. It requires more resources than other routing methods.
- E. It is best used for large-scale deployments.
- F. Routers can use update messages to reroute when links fail.

**Correct Answer:** ABC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation  
Explanation/Reference:

#### QUESTION 120

```
router eigrp 100
network 172.15.4.0
network 10.4.3.0
network 192.168.4.0
auto summary
```

**What are the address that will show at the show ip route if we configure the above statements? (Choose Three.)**

- A. 10.0.0.0
- B. 10.4.3.0
- C. 172.15.4.0
- D. 172.15.0.0
- E. 192.168.4.0
- F. 192.168.0.0

**Correct Answer:** ADE  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### QUESTION 121

**Which feature facilitates the tagging of frames on a specific VLAN ?**

- A. Routing
- B. Hairpinning
- C. Encapsulation
- D. Switching

**Correct Answer:** C  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

#### QUESTION 122

**What does split horizon prevent?**

- A. routing loops, link state
- B. routing loops, distance vector
- C. switching loops, STP
- D. switching loops, VTP

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 123**

**Which value to use in HSRP protocol election process ?**

- A. interface
- B. virtual IP address
- C. priority
- D. router ID

**Correct Answer:** C  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 124**

**Which of the following is needed to be enable back the role of active in HSRP ?**

- A. preempt
- B. priority
- C. other options
- D. other options

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 125**

**Which command is used to show the interface status of a router ?**

- A. show interface status
- B. show ip interface brief
- C. show ip route
- D. show interface

**Correct Answer:** B  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**  
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 126**

**Which of the following privilege level is the most secured ?**

- A. Level 0
- B. Level 1
- C. Level 15
- D. Level 16

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 127**

**Which IPV6 feature is supported in IPV4 but is not commonly used ?**

- A. unicast
- B. multicast
- C. anycast
- D. broadcast

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 128**

**Which two statements are true about IPv6 Unique Local Addresses ? (Choose Two.)**

- A. It is the counterpart of IPv4 private addresses
- B. It uses FC00::/7 as prefix
- C. wrong
- D. wrong

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 129**

**Which range represents the standard access list ?**

- A. 99
- B. 150
- C. 299
- D. 2000

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 130**

**What to do when the router password was forgotten ?**

- A. use default password cisco to reset
- B. access router physically
- C. use ssl/vpn
- D. Type confreg 0x2142 at the rommon 1

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 131**

**What is true about Cisco Discovery Protocol ?**

- A. it discovers the routers, switches and gateways.
- B. it is network layer protocol
- C. it is physical and data link layer protocol
- D. it is proprietary protocol

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 132**

**Which of the following encrypts the traffic on a leased line ?**

- A. telnet
- B. ssh
- C. vtp



- D. vpn
- E. dmvpn

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 133**

**How do you configure a hostname ?**

- A. Router(config)#hostname R1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 134**

**How do you maintain security in multiple websites?**

- A. vpn
- B. dmvpn
- C. other
- D. other

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 135**

**Refer to the exhibit. Switch-1 needs to send data to a host with a MAC address of 00b0.d056.efa4. What will Switch-1 do with this data?**

Switch-1# **show mac address-table**

Dynamic Addresses Count: 3

Secure Addresses (User-defined) Count: 0

Static Addresses (User-defined) Count: 0

System Self Addresses Count: 41

Total Mac addresses: 50

Non-static Address Table:

Destination Address	Address Type	VLAN	Destination Port
0010.0de0.e289	Dynamic	1	FastEthernet0/1
0010.7b00.1540	Dynamic	2	FastEthernet0/3
0010.7b00.1545	Dynamic	2	FastEthernet0/2

- A. Switch-1 will drop the data because it does not have an entry for that MAC address.
- B. Switch-1 will flood the data out all of its ports except the port from which the data originated.
- C. Switch-1 will send an ARP request out all its ports except the port from which the data originated.
- D. Switch-1 will forward the data to its default gateway.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 136

**interface fa0/0**

**ip address x.x.x.33 255.255.255.224**

**router bgp XXX**

**neighbor x.x.x.x remote as x.x.x.x**

**You need to advertise the network of Int fa0/0.**

- A. x.x.x.32 mask 255.255.255.224
- B. x.x.x.32 255.255.255.224
- C. x.x.x.32 mask 0.0.0.31=
- D. x.x.x.33 mask 255.255.255.224

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### QUESTION 137

**What routing protocol use first-hand information ?**

- A. link-state

- B. distance-vector
- C. path-vector
- D. other

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 138**

**What field is consist of 6 bytes in the field identification frame in IEEE 802.1Q ?**

- A. SA
- B. DA
- C. FCS
- D. other

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 139**

**What is new in HSRPv2 ?**

- A. preempt
- B. a greater number in hsrp group field
- C. other
- D. other

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 140**

**What's are true about MPLS ?**

- A. It use a label to separete traffic from several costumer
- B. It use IPv4 IPv6
- C. other
- D. other

**Correct Answer:** A

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 141**

**A network engineer wants to allow a temporary entry for a remote user with a specific username and password so that the user can access the entire network over the internet. Which ACL can be used?**

- A. reflexive
- B. extended
- C. standard
- D. dynamic

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 142**

**Which command is necessary to permit SSH or Telnet access to a cisco switch that is otherwise configured for these vty line protocols ?**

- A. transport type all
- B. transport output all
- C. transport preferred all
- D. transport input all

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 143**

**What should be part of a comprehensive network security plan ?**

- A. Allow users to develop their own approach to network security
- B. Physically secure network equipment from potential access by unauthorized individuals
- C. Encourage users to use personal information in their passwords to minimize the likelihood of passwords being forgotten
- D. Delay deployment of software patches and updates until their effect on end-user equipment is well known and widely reported
- E. Minimize network overhead by deactivating automatic antivirus client updates

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 144**

**Which two Cisco IOS commands, used in troubleshooting, can enable debug output to a remote location ? (Choose two)**

- A. no logging console
- B. logging host ip-address
- C. terminal monitor
- D. show logging | redirect flash:output.txt
- E. snmp-server enable traps syslog

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 145**

**Which component of the Cisco SDN solution serves as the centralized management system ?**

- A. Cisco OpenDaylight
- B. Cisco ACI
- C. Cisco APIC
- D. Cisco IWAN

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 146**

**What command can you enter in config mode to create DHCP pool ?**

- A. ip dhcp pool DHCP\_pool
- B. ip dhcp exclude -add
- C. ip dhcp conflict logging
- D. service dhcp

**Correct Answer:** A

**Section:** (none)

## **Explanation**

### **Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### **QUESTION 147**

**Which utility can you use to determine whether a switch can send echo requests and replies?**

- A. ping
- B. traceroute
- C. ssh
- D. telnet

**Correct Answer: A**

**Section: (none)**

**Explanation**

### **Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### **QUESTION 148**

**What is the two benefits of DHCP snooping ? (Choose two)**

- A. static reservation
- B. DHCP reservation
- C. prevent DHCP rouge server
- D. prevent untrusted host and servers to connect

**Correct Answer: CD**

**Section: (none)**

**Explanation**

### **Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

### **QUESTION 149**

**What are the three major components of cisco network virtualization ? (Choose Three)**

- A. network access control
- B. path isolation
- C. virtual network services
- D. policy enforcement

**Correct Answer: ABC**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

#### **QUESTION 150**

**Which feature is config by setting a variance that is at least 2 times the metric ?**

- A. unequal cost load balancing
- B. path selection
- C. equal cost load balancing
- D. path count

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 151**

**Standard industrialized protocol of etherchannel ?**

- A. LACP
- B. PAGP
- C. PRP
- D. REP

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 152**

**Two features of the extended ping command ? (Choose two)**

- A. It can send a specific number of packet
- B. It can send packet from specified interface of IP address
- C. It can resolve the destination host name
- D. It can ping multiple host at the same time

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 153**

## What command is used to configure a switch as authoritative NTP server ?

- A. Switch(config)#ntp master 3
- B. Switch(config)#ntp peer IP
- C. Switch(config)#ntp server IP
- D. Switch(config)#ntp source IP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

## QUESTION 154

### Which two statements about syslog logging are true?

- A. Syslog logging is disabled by default
- B. Messages are stored in the internal memory of device
- C. Messages can be erased when device reboots
- D. Messages are stored external to the device
- E. The size of the log file is dependent on the resources of the device.

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960/software/release/12-2\\_55\\_se/configuration/guide/scg\\_2960/swlog.html](http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960/software/release/12-2_55_se/configuration/guide/scg_2960/swlog.html)

“By default, a switch sends the output from system messages and debug privileged EXEC commands to a \_logging process\_.”

“The \_logging process\_ controls the distribution of logging messages to various destinations, such as the logging buffer, terminal lines, or a UNIX \_syslog\_ server, depending on your configuration. The process also sends messages to the console.”

Reading through parts of the reference should make it clear, that “syslog logging” is not the same as “System Message Logging”. “System Message Logging” is enabled by default and sends messages to the so called “logging process”. This then sends it to console, a buffer, or even a syslog Server (this part is not configured by default = “syslog logging” is not enabled by default).

Now the “logging synchronous” comes in, when all the messages showing up in your console get in the way of you, typing in commands, since the displaying of messages jumbles up your inputs

## QUESTION 155

### How to enable vlans automatically across multiple switches ?

- A. Configure VLAN
- B. Confiture NTP
- C. Configure each VLAN
- D. Configure VTP

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)



Explanation

Explanation/Reference:

**QUESTION 156**

**Which password types are encrypted ?**

- A. SSH
- B. Telnet
- C. enable secret
- D. enable password

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 157**

**What is the benefit of point-to-point leased line ? (Choose two.)**

- A. Low cost
- B. Full-mesh capability
- C. Flexibility of design
- D. Simple configuration

**Correct Answer: CD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 158**

**What is the binary pattern of unique ipv6 unique local address ?**

- A. 00000000
- B. 11111100
- C. 11111111
- D. 11111101

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 159**

**Which statement about ACLs is true ?**

- A. An ACL have must at least one permit action, else it just blocks all traffic.
- B. ACLs go bottom-up through the entries looking for a match
- C. An ACL has a an implicit permit at the end of ACL.
- D. ACLs will check the packet against all entries looking for a match.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 160**

**What is the cause of the Syslog output messages ?**

- A. The EIGRP neighbor on Fa0/1 went down due to a failed link.
- B. The EIGRP neighbor connected to Fa0/1 is participating in a different EIGRP process, causing the adjacency to go down.
- C. A shut command was executed on interface Fa0/1, causing the EIGRP adjacency to go down.
- D. Interface Fa0/1 has become error disabled, causing the EIGRP adjacency to go down.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 161**

**What are contained in layer 2 ethernet frame ? (Choose Three.)**

- A. Preamble
- B. TTL
- C. Type/length
- D. Frame check sequence
- E. version
- F. others

**Correct Answer:** ACD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 162**

**Describe the best way to troubleshoot and isolate a network problem ?**

- A. Create an action plan

- B. Implement an action plan
- C. Gather facts
- D. others

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/en/US/docs/internetworking/troubleshooting/guide/tr1901.html>

#### **QUESTION 163**

**Under normal operations, cisco recommends that you configure switch ports on which vlan ?**

- A. on the default vlan
- B. on the management vlan
- C. on the native vlan
- D. on any vlan except the default vlan

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/support/docs/switches/catalyst-6500-series-switches/24330-185.html>

#### **QUESTION 164**

**Which DTP switchport mode allow the port to create a trunk port if the the port is in trunk, dynamic auto and dynamic desirable mode ?**

- A. Dynamic Auto
- B. Dynamic Desirable
- C. Access
- D. Trunk

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://bradhedlund.com/2007/11/27/switchport-configurations-explained/>

#### **QUESTION 165**

**In which byte of an IP packet can traffic be marked ?**

- A. the QoS byte
- B. the CoS byte
- C. the ToS byte
- D. the DSCP byte

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/support/docs/quality-of-service-qos/qos-packet-marking/10103-dscpvalues.html>

**QUESTION 166**

**Which command can you enter to route all traffic that is destined to 192.168.0.0/20 to a specific interface ?**

- A. ip route 192.168.0.0 255.255.240.0 gi 0/1
- B. ip route 192.168.0.0 255.255.255.0 gi 0/1
- C. ip route 0.0.0.0 0.0.0.0 gi 0/1
- D. ip route 0.0.0.0 255.255.255.0 gi 0/1

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 167**

**Which two protocol can detect native vlan mismatch errors? (Choose two.)**

- A. CDP
- B. VTP
- C. DTP
- D. STP
- E. PAGP

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 168**

**Which three options are switchport config that can always avoid duplex mismatch error between the switches? (Choose Three.)**

- A. set both side on auto-negotiation.
- B. set both sides on half-duplex
- C. set one side auto and other side half-duplex
- D. set both side of connection to full-duplex
- E. set one side auto and other side on full-duplex
- F. set one side full-duplex and other side half-duplex

**Correct Answer: ABD**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

<http://www.patholutions.com/network-enemy-1-duplex-mismatch/>

**QUESTION 169**

**What are two benefits of Private IPv4 Addresses? (Choose two.)**

- A. they can be implemented without requiring admin to coordinate with IANA
- B. they are managed by IANA
- C. increase the flexibility of network design

- D. provide network isolation from the internet
- E. they are routable over internet

**Correct Answer:** AD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://smallbusiness.chron.com/advantages-disadvantages-using-private-ip-address-space-46424.html>

#### **QUESTION 170**

**How many bits represent network id in a IPv6 address ?**

- A. 32
- B. 48
- C. 64
- D. 128

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://networkengineering.stackexchange.com/questions/30836/calculate-networking-bits-for-ipv6>

64 bits for Network ID and 64 bits for Interface ID

$64+64=128$

#### **QUESTION 171**

**An interface which we have to determine from the routing the route learned by which routing protocol?**

- A. EIGRP
- B. OSPF
- C. RIP
- D. BGP

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**(An image on exhibit)**

#### **QUESTION 172**

**Which WAN topology is most appropriate for a centrally located server farm with several satellite branches ?**

- A. star
- B. hub and spoke
- C. point-to-point
- D. full mesh

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)  
Explanation

Explanation/Reference:

In a Hub-and-spoke Site-to-Site Wide Area Network (WAN) network topology, one physical site act as Hub (Example, Main Office), while other physical sites act as spokes. Spoke sites are connected to each other via Hub site. In Huband-spoke

Wide Area Network (WAN) topology, the network communication between two spokes always travels through the hub.

#### **QUESTION 173**

**Which function allows EIGRP peers to receive notice of implementing topology changes?**

- A. successors
- B. advertised changes
- C. goodbye messages
- D. expiration of the hold timer

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 174**

**If you configure syslog messages without specifying the logging trap level, which log messages will the router send ?**

- A. informational messages only
- B. warning and error conditions only
- C. normal but significant conditions only
- D. error conditions only
- E. all levels except debugging

**Correct Answer: E**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 175**

**Which three options are benefits of using TACACS+ on a device? (Choose three)**

- A. It ensures that user activity is untraceable.
- B. It provides a secure accounting facility on the device.
- C. device-administration packets are encrypted in their entirety.
- D. It allows the user to remotely access devices from other vendors.
- E. It allows the users to be authenticated against a remote server.
- F. It supports access-level authorization for commands.

**Correct Answer:** CEF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

[http://tacacs.net/docs/TACACS\\_Advantages.pdf](http://tacacs.net/docs/TACACS_Advantages.pdf)

<http://www.cisco.com/c/en/us/support/docs/security-vpn/remote-authentication-dial-user-serviceradius/13838-10.html>

#### **QUESTION 176**

**What layer of the OSI Model is included in TCP/IP Model's INTERNET layer ?**

- A. Application
- B. Session
- C. Data Link
- D. Presentation
- E. Network

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

NOT SURE ABOUT THE CHOICES. NOT SURE ABOUT THE QUESTION EITHER.

#### **QUESTION 177**

**Which two of these are characteristics of the 802.1Q protocol? (Choose two.)**

- A. It is used exclusively for tagging VLAN frames and does not address network reconvergence following switched network topology changes.
- B. It modifies the 802.3 frame header, and thus requires that the FCS be recomputed.
- C. It is a Layer 2 messaging protocol which maintains VLAN configurations across networks.
- D. It includes an 8-bit field which specifies the priority of a frame.
- E. It is a trunking protocol capable of carrying untagged frames.

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 178**

**Which two features can dynamically assign IPv6 addresses? (Choose two.)**

- A. IPv6 stateless autoconfiguration
- B. DHCP
- C. NHRP

- D. IPv6 stateful autoconfiguration
- E. ISATAP tunneling

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 179**

**A security administrator wants to profile endpoints and gain visibility into attempted authentications. Which 802.1x mode allows these actions ?**

- A. Monitor mode
- B. High-Security mode
- C. Low-impact mode
- D. Closed mode

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

#### **QUESTION 180**

**How to verify strong and secured SSH connection ?**

- A. ssh -v 1 -l admin 10.1.1.1
- B. ssh -v 2 -l admin 10.1.1.1
- C. ssh -l admin 10.1.1.1
- D. ssh v 2 admin 10.1.1.1

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Section: (none)

Explanation

Explanation/Reference:

Sorry for the question but they said it was something like that.

#### **QUESTION 181**

**How many usable host are there per subnet if you have the address of 192.168.10.0 with a subnet mask of 255.255.255.240 ?**

- A. 4
- B. 8
- C. 16
- D. 14



**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 182**

**What interconnection cable can you use when you use a MDI connection ?**

- A. cut-through
- B. straight-through
- C. crossover
- D. rollover

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 183**

**Which cisco platform can verify ACLs ?**

- A. Cisco Prime Infrastructure
- B. Cisco Wireless LAN Controller
- C. Cisco APIC-EM
- D. Cisco IOS-XE

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 184**

**In order to comply with new auditing standards, a security administrator must be able to correlate system security alert logs directly with the employee who triggers the alert. Which of the following should the security administrator implement in order to meet this requirement?**

- A. Access control lists on file servers
- B. Elimination of shared accounts
- C. Group-based privileges for accounts
- D. Periodic user account access reviews

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 185**

**When you deploy multilink PPP on your network, where must you configure the**

**group IP Address on each device ?**

- A. In the global config
- B. Under serial interface
- C. Under the routing protocol
- D. Under the multilink interface

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 186**

**If you want multiple hosts on a network, where do you configure the setting ?**

- A. in the IP protocol
- B. in the multicast interface
- C. in the serial interface
- D. in the global configuration

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 187**

**Which option is the benefit of implementing an intelligent DNS for a cloud computing solution ?**

- A. It reduces the need for a backup data center.
- B. It can redirect user requests to locations that are using fewer network resources.
- C. It enables the ISP to maintain DNS records automatically.
- D. It eliminates the need for a GSS.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 188**

**Which statement about the IP SLAs ICMP Echo operation is true?**

- A. The frequency of the operation .s specified in milliseconds.
- B. It is used to identify the best source interface from which to send traffic.
- C. It is configured in enable mode.
- D. It is used to determine the frequency of ICMP packets.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 189**

**Which action can change the order of entries in a named access-list ?**

- A. removing an entry
- B. opening the access-list in notepad
- C. adding an entry
- D. resequencing

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 190**

**How does a router handle an incoming packet whose destination network is missing from the routing table ?**

- A. it broadcast the packet to each interface on the router
- B. it discards the packet
- C. it broadcasts the packet to each network on the router
- D. it routes the packet to the default

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 191**

**Which two components are used to identify a neighbor in a BGP configuration? (Choose two.)**

- A. autonomous system number
- B. version number
- C. router ID
- D. subnet mask
- E. IP address

**Correct Answer: AE**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 192**

**Which three statements about HSRP operation are true? (Choose three.) ?**

- A. The virtual IP address and virtual MAC address are active on the HSRP Master router.
- B. The HSRP default timers are a 3 second hello interval and a 10 second dead interval.
- C. HSRP supports only clear-text authentication
- D. The HSRP virtual IP address must be on a different subnet than the routers' interfaces on the same LAN.

- E. The HSRP virtual IP address must be the same as one of the router's interface addresses on the LAN.
- F. HSRP supports up to 255 groups per interface, enabling an administrative form of load balancing.

**Correct Answer:** ABF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/support/docs/ip/hot-standby-router-protocol-hsrp/10583-62.html#topic5>

"The active router sources hello packets from its configured IP address and the HSRP virtual MAC address. The standby router sources hellos from its configured IP address and the burned-in MAC address (BIA)."

<http://www.cisco.com/c/en/us/support/docs/ip/hot-standby-router-protocol-hsrp/10583-62.html#topic14>

"By default, these timers are set to 3 and 10 seconds, respectively..."

<http://www.cisco.com/c/en/us/support/docs/switches/catalyst-6000-series-switches/29545-168.html#q1>

Load Sharing with HSRP

<http://www.cisco.com/c/en/us/support/docs/ip/hot-standby-router-protocol-hsrp/13781-7.html#conf>

"...has a 256 unique HSRP group ID limit."

"...the allowed group ID range (0-255). ... MSFC2A (Supervisor Engine 32) can use any number of group IDs from that range."

### QUESTION 193

**Which two options describe benefits of aggregated chassis technology ( choose 2 ) ?**

- A. it reduces management overhead.
- B. switches can be located anywhere regardless of there physical location.
- C. it requires only 1 IP add per VLAN.
- D. it requires only 3 IP add per VLAN.
- E. it supports HSRP VRRP GLBP.
- F. it support redundant configuration files.

**Correct Answer:** AC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 194

**How to trouble DNS issue ( choose two ) ?**

- A. Ping a public website IP address.
- B. Ping the DNS Server.
- C. Determine whether a DHCP address has been assigned.
- D. Determine whether the hardware address is correct.
- E. Determine whether the name servers have been configured.

**Correct Answer:** BC

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.cisco.com%2Fen%2FUS%2Fdocs%2Finternetworking%2Ftroubleshooting%2Fguide%2Ftr1907.html%23wp1021264&h=ATMT6hWMWKar6G3cbMd8vYoG64obKG4CluxXlmCWtCLencP9vUG0hrC3C0azv18aRsmIsdrKko8ew\\_O6UkUwYCVqgYvxTz3TFquXNKyrnrAa1arE1V4HBFjg4\\_E2gJSawoz2\\_g](https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.cisco.com%2Fen%2FUS%2Fdocs%2Finternetworking%2Ftroubleshooting%2Fguide%2Ftr1907.html%23wp1021264&h=ATMT6hWMWKar6G3cbMd8vYoG64obKG4CluxXlmCWtCLencP9vUG0hrC3C0azv18aRsmIsdrKko8ew_O6UkUwYCVqgYvxTz3TFquXNKyrnrAa1arE1V4HBFjg4_E2gJSawoz2_g)

Ping the destination by name  
perform a DNS lookup on the destination

**QUESTION 195**

**Which utility can you use to identify redundant or shadow rules ?**

- A. The ACL trace tool in Cisco APIC-EM.
- B. The ACL analysis tool in Cisco APIC-EM.
- C. The Cisco APIC-EM automation scheduler.
- D. The Cisco IWAN application.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 196**

**What does traffic shaping do to reduce congestion in a network?**

- A. buffers and queues packets.
- B. buffers without queuing packets.
- C. queues without buffering packets.
- D. drops packets.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 197**

**Which 2 statements about extended traceroute command is true?**

- A. it can send packets from specified interface or ip add.
- B. it can use a specified TTL value.
- C. it can validate the reply data.
- D. it can use a specified TOS.
- E. it can repeated automatically to a specified interval.

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13730-ext-pingtrace.html#ext\\_troute](http://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13730-ext-pingtrace.html#ext_troute)

"This table lists the traceroute command field descriptions:

Source address: The interface or IP address of the router to use as a source address for the probes. The router normally picks the IP address of the outbound interface to use.

Minimum Time to Live [1]: The TTL value for the first probes. The default is 1, but it can be set to a higher value to suppress the display of known hops.

Maximum Time to Live [30]: The largest TTL value that can be used. The default is 30. The traceroute command terminates when the destination is reached or when this value is reached.

**QUESTION 198**

**A BPDU guard is configured on an interface that has PortFast Enable. Which state does the interface enter when it recives a BPDU ?**

- A. Blocking.
- B. Shutdown.
- C. Listening.
- D. Errdisable.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 199

**Which command can you enter to determine the addresses that have been assigned on a DHCP Server?**

- A. Show ip DHCP database.
- B. Show ip DHCP pool.
- C. Show ip DHCP binding.
- D. Show ip DHCP server statistic.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.aubrett.com/InformationTechnology/RoutingandSwitching/Cisco/CiscoRouters/DHCPBindings.aspx>

"Router#show ip dhcp binding

Bindings from all pools not associated with VRF:

IP address Client-ID/ Lease expiration Type

10.16.173.0 24d9.2141.0ddd Jan 12 2013 03:42 AM Automatic"

#### QUESTION 200

**Which statement about SNMPv2 is true ?**

- A. Its privacy algorithms use MD5 encryption by default.
- B. it requires passwords to be encrypted.
- C. Its authentication and privacy algorithms are enable without default values.
- D. It requires passwords at least eight characters en length.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/td/docs/ios/12\\_2/configfun/configuration/guide/ffun\\_c/fcf014.html#wp1010901](http://www.cisco.com/c/en/us/td/docs/ios/12_2/configfun/configuration/guide/ffun_c/fcf014.html#wp1010901)

"Model \_\_\_ Level \_\_\_ Authentication \_\_\_ Encryption \_\_\_ What Happens

v2c \_\_\_ noAuthNoPriv \_\_\_ Community String \_\_\_ No \_\_\_ Uses a community string match for authentication."

So B & D must be wrong, because there is no "password" in SNMPv2. A is wrong because there is no encryption in SNMPv2.

#### QUESTION 201

**which type of IP address of ipv6 that also exist in IPv4 but barely used?**

- A. unicast.

- B. multicast.
- C. anycast.
- D. broadcast.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 202

**Which symptom most commonly indicates that 2 connecting interface are configured with a duplex mismatch?**

- A. an int with up/down state.
- B. an int with down/down state.
- C. late collisions on the interface.
- D. the spanning tree process shutting down.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 203

**How Eigrp for ipv6 configuration done? ( choose 2)**

- A. uses process number.
- B. neighbor configured directly.
- C. configured driectly on interface.
- D. configured globally interface.
- E. have shutdown feature.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 204

**Which VTP mode can not make a change to vlan?**

- A. Server.
- B. Client.
- C. Transparent.
- D. Off

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

VTP Client

· VTP clients function the same way as VTP servers, but you cannot create, change, or delete VLANs on a

VTP client.

- A VTP client only stores the VLAN information for the entire domain while the switch is on.
- A switch reset deletes the VLAN information.
- You must configure VTP client mode on a switch.

#### **QUESTION 205**

**Which function does IP SLA ICMP ECHO operation perform to assist with troubleshooting?**

- A. one way jitter measurement.
- B. congestion detection.
- C. hop-by-hop response time.
- D. packet-loss detection.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipsla/configuration/15-mt/sla-15-mt-book/sla\\_icmp\\_pathjitter.html](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipsla/configuration/15-mt/sla-15-mt-book/sla_icmp_pathjitter.html)

#### **QUESTION 206**

**Which mode are in PAgP? (choose two)**

- A. Auto.
- B. Desirable.
- C. Active.
- D. Passive.
- E. On.

**Correct Answer: AB**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

<http://www.omnisecon.com/cisco-certified-network-associate-ccna/etherchannel-pagp-and-lacp-modes.php>

#### **QUESTION 207**

**What routing protocol use first-hand information from peers?**

- A. link state.
- B. distance-vector.
- C. path-vector.
- D. other.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

<http://www.ciscopress.com/articles/article.asp?p=24090&seqNum=4>

#### **QUESTION 208**

**In an Ethernet network, under what two scenarios can devices transmit? (Choose two.)**

- A. when they receive a special token.



- B. when there is a carrier.
- C. when they detect no other devices are sending.
- D. when the server grants access.
- E. when the medium is idle.

**Correct Answer:** CE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 209**

**Which two protocols are used by bridges and/or switches to prevent loops in a layer 2 network? (Choose two.)**

- A. 802.1d
- B. VTP
- C. 802.1q
- D. SAP
- E. STP

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 210**

**At which layer of the OSI model does PPP perform?**

- A. Layer 2
- B. Layer 3
- C. Layer 4
- D. Layer 5
- E. Layer 1

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 211**

**What are three reasons that an organization with multiple branch offices and roaming users might implement a Cisco VPN solution instead of point-to-point WAN links?(Choose three.)**

- A. reduced cost.
- B. better throughput.
- C. broadband incompatibility.
- D. increased security.
- E. scalability.
- F. reduced latency.

**Correct Answer:** ADE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 212**

**Which two statements about IPv4 multicast traffic are true? (Choose two.)**

- A. It burdens the source host without affecting remote hosts.
- B. It uses a minimum amount of network bandwidth.
- C. It is bandwidth-intensive.
- D. It simultaneously delivers multiple streams of data.
- E. It is the most efficient way to deliver data to multiple receivers.

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

IP multicast is a bandwidth-conserving technology that reduces traffic by simultaneously delivering a single stream of information to potentially thousands of corporate recipients and homes.

[http://www.cisco.com/c/en/us/td/docs/ios/solutions\\_docs/ip\\_multicast/White\\_papers/mcst\\_ovr.html](http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/ip_multicast/White_papers/mcst_ovr.html)

#### **QUESTION 213**

**Which IPv6 header field is equivalent to the TTL?**

- A. Scan Timer.
- B. TTD.
- C. Flow Label.
- D. Hop Limit.
- E. Hop Count.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Time To Live (TTL)/Hop Limit (8 bits)

<http://ipv6.com/articles/general/IPv6-Header.htm>

#### **QUESTION 214**

**which port security mode can assist with troubleshooting by keeping count of violations?**

- A. access.
- B. protect.
- C. restrict.
- D. shutdown.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 215**

**which 2 optns are requirements for configuring ripv2 for ipv4 (choose 2) ?**

- A. enabling RIP authentication.
- B. connecting RIP to a WAN Interface.
- C. enabling auto route sumamrization.
- D. allowing unicast updates for RIP.
- E. enabling RIP on the router.

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/td/docs/ios/12\\_2/ip/configuration/guide/fipr\\_c/1cfrip.html#wp1000889](http://www.cisco.com/c/en/us/td/docs/ios/12_2/ip/configuration/guide/fipr_c/1cfrip.html#wp1000889)

"Enabling RIP (Required)

Allowing Unicast Updates for RIP (Required)"

RIP Version 1 and Version 2 have the same basic requirements!

**QUESTION 216**

**which configuration command can u apply to a hsrp router so that its local interface becomes ?**

- A. active if all other routers in the group fail
- B. no additional config is required
- C. standby 1 track ethernet
- D. standby 1 preempt
- E. standby 1 priority 250

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/support/docs/ip/enhanced-interior-gateway-routing-protocol-eigrp/113267-eigrp-ipv6-00.html>

**QUESTION 217**

**which 2 statements about extended traceroute command is true ?**

- A. it can use a specified TTL value
- B. it can send packets from specified interface or ip add
- C. it can validate the reply data
- D. it can use a specificed TOS
- E. it can repeated automatically to a specified interval

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13730-ext-pingtrace.html#ext\\_troute](http://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13730-ext-pingtrace.html#ext_troute)

"This table lists the traceroute command field descriptions:

Source address: The interface or IP address of the router to use as a source address for the probes. The router normally picks the IP address of the outbound interface to use.

Minimum Time to Live [1]: The TTL value for the first probes. The default is 1, but it can be set to a higher value to suppress the display of known hops.

Maximum Time to Live [30]: The largest TTL value that can be used. The default is 30. The traceroute

command terminates when the destination is reached or when this value is reached.”

**QUESTION 218**

**which statement about EIGRP on IPv6 device is true ?**

- A. It is configured on the interface .
- B. It is globally configured .
- C. It is configured using a network statement .
- D. It is vendor agnostic.
- E. It supports a shutdown feature.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/support/docs/ip/enhanced-interior-gateway-routing-protocol-eigrp/113267-eigrp-ipv6-00.html>

**QUESTION 219**

**which command can you enter to troubleshoot the failure of address assignment ?**

- A. sh ip dhcp database
- B. sh ip dhcp pool
- C. sh ip dhcp import
- D. sh ip dhcp server statistics

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 220**

**which three technical services support cloud computing ?**

- A. network-monitored power sources
- B. layer 3 network routing
- C. ip localization
- D. redundant connections
- E. VPN connectivity
- F. extended SAN services

**Correct Answer:** DEF

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 221**

**which two steps must you perform to enable router- on- stick on a switch ?**

- A. connect the router to a trunk port
- B. config the subint number exactly the same as the matching VLAN
- C. config full duplex
- D. configure an ip route to the vlan destn net

E. assign the access port to the vlan

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 222**

**which add prefix does OSPFv3 use when multiple IPv6 address are configured on a single interface ?**

- A. all prefix on the interface
- B. the prefix that the administrator configure for OSPFv3 use
- C. the lowest prefix on the interface
- D. the highest prefix on the interface

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

[http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute\\_ospf/configuration/15-sy/iro-15-sy-book/ip6-routeospfv3.html#GUID-05F3F09C-FE3E-41D6-9845-111FB17AD030](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_ospf/configuration/15-sy/iro-15-sy-book/ip6-routeospfv3.html#GUID-05F3F09C-FE3E-41D6-9845-111FB17AD030)

"In IPv6, you can configure many address prefixes on an interface. In OSPFv3, all address prefixes on an interface are included by default. You cannot select some address prefixes to be imported into OSPFv3; either all address prefixes on an interface are imported, or no address prefixes on an interface are imported."

#### **QUESTION 223**

**which IP configuration does the CIDR notation 192.168.1.1/25 refer ?**

- A. 192.168.1.1 255.255.255.64
- B. 192.168.1.1 255.255.255.1
- C. 192.168.1.1 255.255.255.32
- D. 192.168.1.1 255.255.255.256
- E. 192.168.1.1 255.255.255.128

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 224**

**CIDR notation (255.255.255.252 ) / notation ?**

- A. 30
- B. 31
- C. 32
- D. 33

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 225**

**Which two of these statements regarding RSTP are correct ? (Choose two)**

- A. RSTP cannot operate with PVST+.
- B. RSTP defines new port roles.
- C. RSTP defines no new port states.
- D. RSTP is a proprietary implementation of IEEE 802.1D STP.
- E. RSTP is compatible with the original IEEE 802.1D STP.

**Correct Answer:** BE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 226**

**What is known as —one-to-nearest addressing in IPv6 ?**

- A. global unicast
- B. anycast
- C. multicast
- D. unspecified address

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 227**

**When a device learns multiple routes to a specific network, it installs the route with :**

- A. Longest bit Match (highest subnet Mask)
- B. lowest AD
- C. lowest metric
- D. equal load balancing

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

<http://www.ciscopress.com/articles/article.asp?p=2180208&seqNum=9>

**QUESTION 228**

**Requirement to configure DHCP binding ( 2 options)**

- A. DHCP pool
- B. ip address
- C. Hardware address
- D. other option

**Correct Answer:** BC  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 229**  
**how to see dhcp conflict ?**

- A. show ip dhcp pool
- B. show dhcp database
- C. show ip dhcp conflict
- D. Other Option.

**Correct Answer:** C  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

Router# show ip dhcp conflict

IP address	Detection method	Detection time
172.16.1.32	Ping	Feb 16 1998 12:28 PM
172.16.1.64	Gratuitous ARP	Feb 23 1998 08:12 AM

**QUESTION 230**  
**Which Cisco platform can verify ACLs ?**

- A. Cisco Prime Infrastructure
- B. Cisco Wireless LAN Controller
- C. Cisco APIC-EM
- D. Cisco IOS-XE

**Correct Answer:** C  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 231**  
**Which type of mac address learning age out?**

- A. Dynamic
- B. Static
- C. Auto
- D. one more option

**Correct Answer:** A  
**Section:** (none)  
**Explanation**

**Explanation/Reference:**

**QUESTION 232**  
**Which major component of the network virtualization architecture isolate users**

**according to policy?**

- A. policy enforcement
- B. network access control
- C. network services virtualization
- D. path isolation

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Network access control and segmentation of classes of users:

Users are authenticated and either allowed or denied into a logical partition. Users are segmented into employees, contractors and consultants, and guests, with respective access to IT assets. This component identifies users who are authorized to access the network and then places them into the appropriate logical partition.

**QUESTION 233**

**Which two statements about firewalls are true ?**

- A. They can be used with an intrusion prevention system.
- B. They can limit unauthorized user access to protect data.
- C. Each wireless access point requires its own firewall.
- D. They must be placed only at locations where the private network connects to the internet.
- E. They can prevent attacks from the internet only.

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 234**

**Which two statements about data VLANs on access ports are true ? ( Choose two)**

- A. They can be configured as trunk ports.
- B. Two or more VLANs can be configured on the interface.
- C. 802.1Q encapsulation must be configured on the interface.
- D. Exactly one VLAN can be configured on the interface.
- E. They can be configured as host ports.

**Correct Answer:** DE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 235**

**Where does the configuration reside when a helper address is configured to support DHCP ?**

- A. on the switch trunk interface.
- B. on the router closest to the client.
- C. on the router closest to the server.
- D. on every router along the path.



**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 236**

**Which command can you enter to configure an IPV6 floating static route?**

- A. Router(config)# ipv6 route static resolve default
- B. Router(config)# ipv6 route::/0 serial0/1
- C. Router(config)# ipv6 route FE80:0202::/32 serial 0/1 201
- D. Router(config)# ipv6 route FE80:0202::/32 serial 0/1 1

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 237**

**How does NAT overloading provide one-to-many address translation?**

- A. It uses a pool of addresses
- B. It converts IPV4 addresses to unused IPv6 Addresses
- C. assigns a unique TCP/UDP port to each session
- D. It uses virtual MAC Address and Virtual IP Addresses

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 238**

**Which three options are types of Layer 2 network attack ? (Choose three)**

- A. Spoofing attacks
- B. Vlan Hopping
- C. botnet attacks
- D. DDOS attacks
- E. ARP Attacks
- F. Brute force attacks

**Correct Answer:** ABE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 239**

**What does split-horizon do?**

- A. Prevent routing loop in distance vector protocol

- B. Prevent switching loop in distance vector protocol
- C. Prevent switching loop in link-state protocol
- D. Prevent routing loop in link-state protocol

**Correct Answer:** A

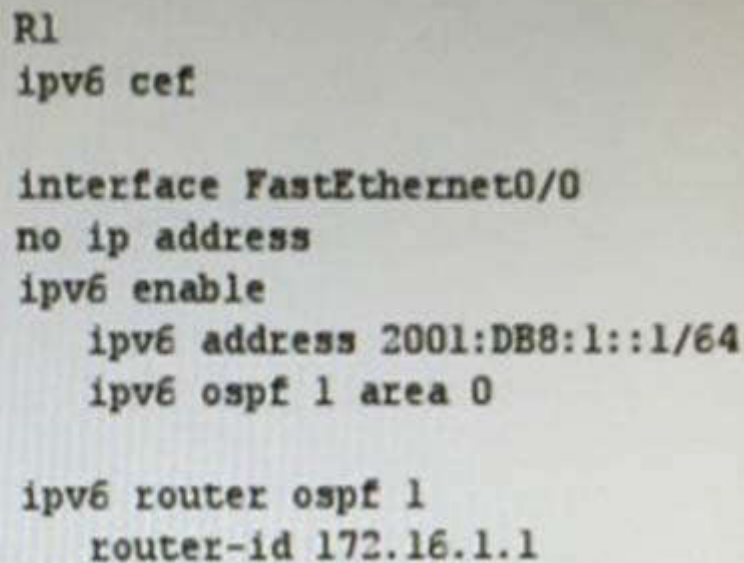
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 240

**Afar you apply the given configuration to R1, you notice that it failed to enable OSPF Which action can you take to correct the problem?**



```
R1
ipv6 cef

interface FastEthernet0/0
no ip address
ipv6 enable
    ipv6 address 2001:DB8:1::1/64
    ipv6 ospf 1 area 0

ipv6 router ospf 1
    router-id 172.16.1.1
```

- A. Configure a loopback interface on R1
- B. Enable IPv6 unicast routing on R1.
- C. Configure an IPv4 address on interface FO/0.
- D. Configure an autonomous system number on OSPF.

**Correct Answer:** C

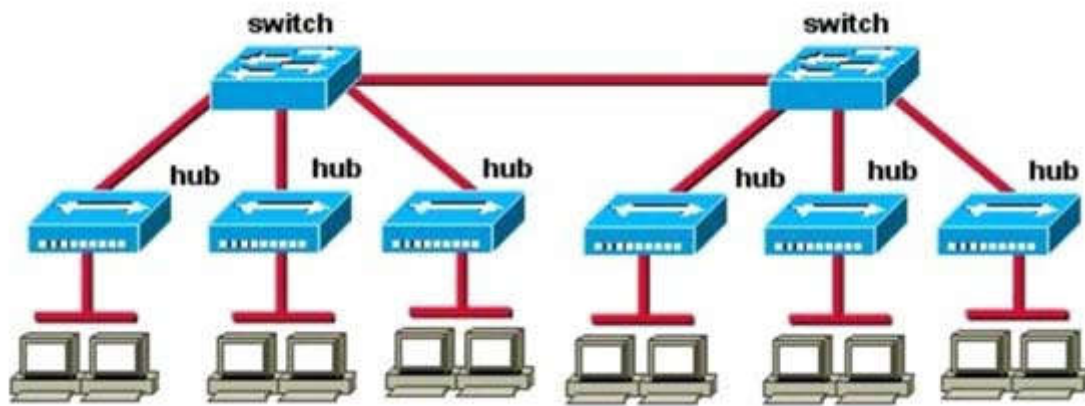
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 241

**How many broadcast domains are shown in the graphic assuming only the default VLAN is configured on the switches?**



- A. one
- B. two
- C. six
- D. twelve

**Correct Answer:** A

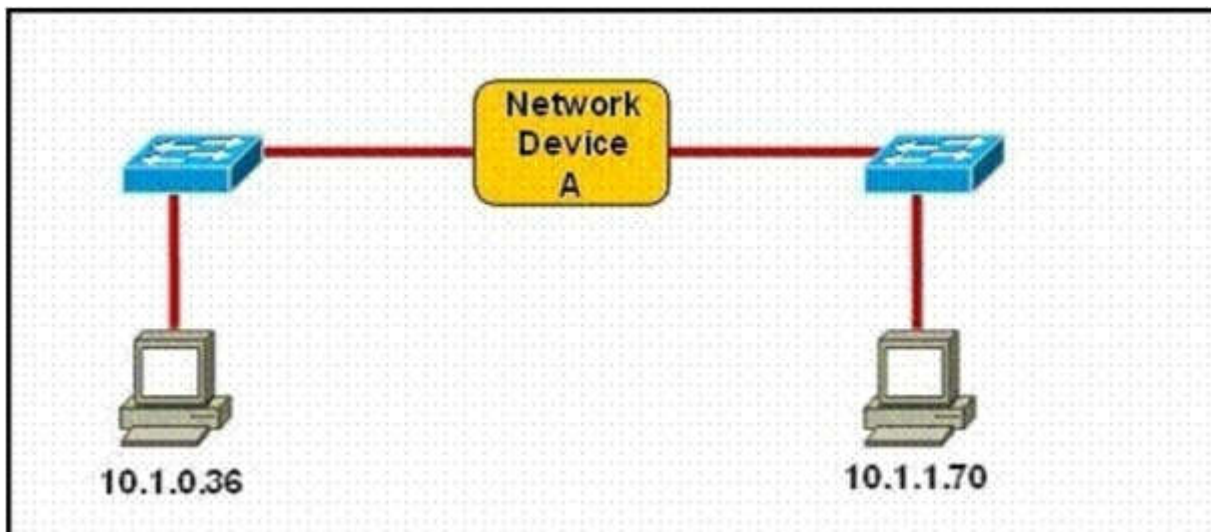
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 242

**Which three statements correctly describe Network Device A? (Choose three.)**



- A. With a network wide mask of 255.255.255.128, each interface does not require an IP address.
- B. With a network wide mask of 255.255.255.128, each interface does require an IP address on a unique IP subnet.
- C. With a network wide mask of 255.255.255.0, must be a Layer 2 device for the PCs to communicate with each other.
- D. With a network wide mask of 255.255.255.0, must be a Layer 3 device for the PCs to communicate with each other.
- E. With a network wide mask of 255.255.254.0, each interface does not require an IP address.

**Correct Answer:** BDE

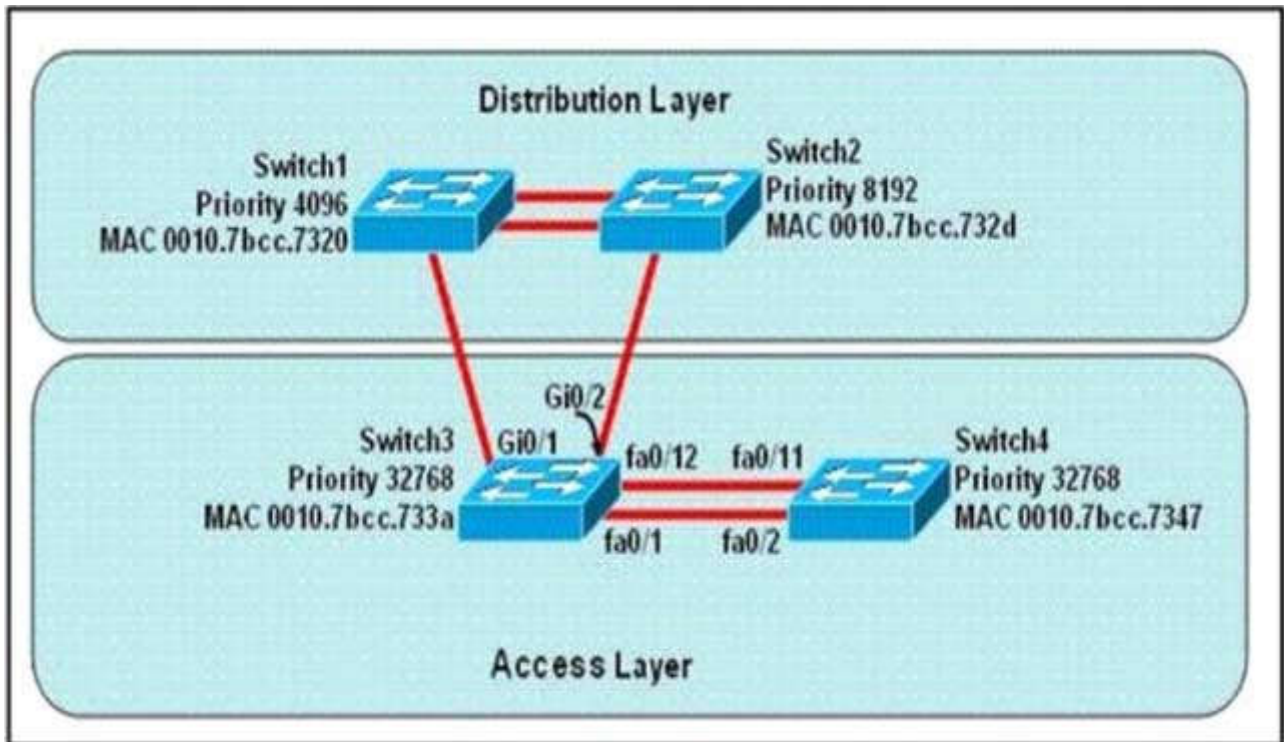
Section: (none)

Explanation

Explanation/Reference:

**QUESTION 243**

At the end of an RSTP election process, which access layer switch port will assume the discarding role?



- A. Switch3, port fa0/1
- B. Switch3, port fa0/12
- C. Switch4, port fa0/11
- D. Switch4, port fa0/2
- E. Switch3, port Gi0/1
- F. Switch3, port Gi0/2

**Correct Answer: C**

Section: (none)

Explanation

Explanation/Reference:

**QUESTION 244**

Why is flash memory erased prior to upgrading the IOS image from the TFTP server?

```

Router# copy ftp flash
Address or name of remote host []? 192.168.2.167
Source filename []? cl600-k8osy-mz.123-16a.bin
Destination filename [cl600-k8osy-mz.123-16a.bin]?
Accessing tftp://192.168.2.167/cl600-k8osy-mz.123-16a.bin...
Erase flash: before copying? [confirm]
Erasing the flash filesystem will remove all files! Continue? [confirm]
Erasing device...
=====
.....erased
Erase of flash: complete
Loading cl600-k8osy-mz.123-16a.bin from 192.168.2.167 (via Ethernet0):
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
[OK - 6888962/13777920 bytes]

Verifying checksum... OK (0x7BF3)
6888962 bytes copied in 209.920 secs (32961 bytes/sec)
Router#

```

- A. The router cannot verify that the Cisco IOS image currently in flash is valid.
- B. Flash memory on Cisco routers can contain only a single IOS image.
- C. Erasing current flash content is requested during the copy dialog.
- D. In order for the router to use the new image as the default, it must be the only IOS image in flash.

**Correct Answer:** C

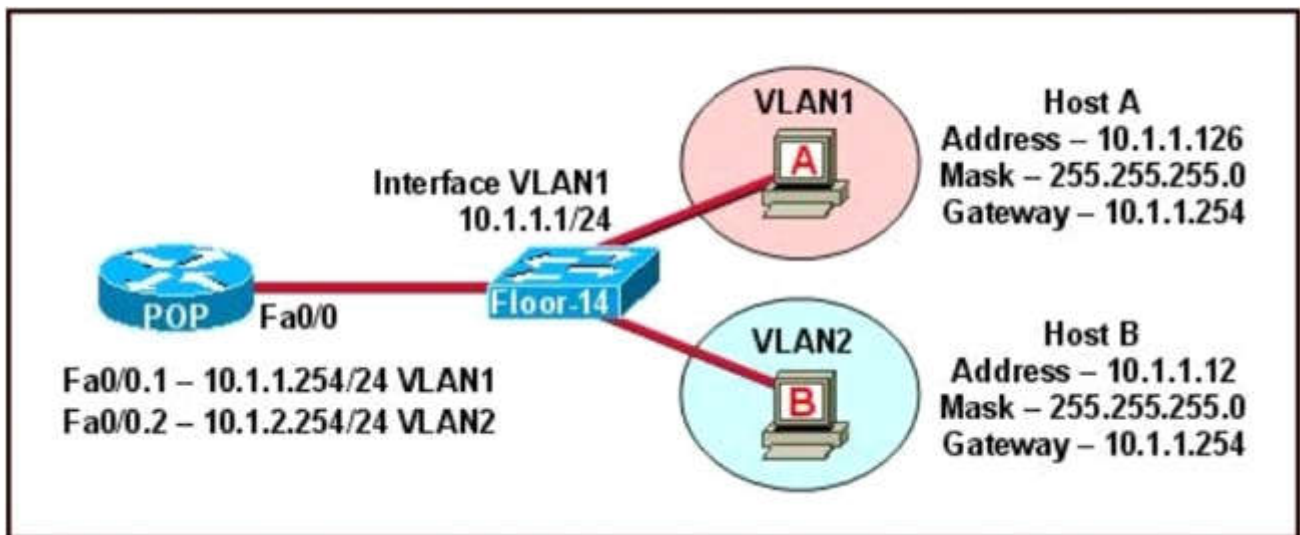
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 245

The network shown in the diagram is experiencing connectivity problems. Which of the following will correct the problems? (Choose two.)



- A. Configure the gateway on Host A as 10.1.1.1
- B. Configure the gateway on Host B as 10.1.2.254
- C. Configure the IP address of Host A as 10.1.2.2
- D. Configure the IP address of Host B as 10.1.2.2
- E. Configure the masks on both hosts to be 255.255.255.224
- F. Configure the masks on both hosts to be 255.255.255.240

**Correct Answer:** BD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 246

Which utility can you use to identify the cause of a traffic-flow blockage between the two devices in a network?

- A. ACL path analysis tool in APIC-EM
- B. I WAN application
- C. ACL analysis tool in APIC-EM
- D. APIC-EM automation scheduler

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 247

Which IEEE mechanism is responsible for the authentication of devices when they attempt to connect to a local network?

- A. 802.1x
- B. 802.11
- C. 802.2x
- D. 802.3x



**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

IEEE 802.1X is an IEEE Standard for port-based Network Access Control (PNAC). It is part of the IEEE 802.1 group of networking protocols. It provides an authentication mechanism to devices wishing to attach to a LAN or WLAN

#### **QUESTION 248**

**When a router is unable to find a known route in the routing table, how does it handle the packet?**

- A. It discards the packet
- B. It sends the packet over the route with the best metric
- C. It sends the packet to the next hop address
- D. It sends the packet to the gateway of last resort

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### **QUESTION 249**

**If router R1 knows a static route to a destination network and then learns about the same destination network through a dynamic routing protocol, how does R1 respond?**

- A. It refuses to advertise the dynamic route to other neighbors
- B. It sends a withdrawal signal to the neighboring router
- C. It disables the routing protocol
- D. It prefers the static route

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

By default the administrative distance of a static route is 1, meaning it will be preferred over all dynamic routing protocols. If you want to have the dynamic routing protocol used and have the static route be used only as a backup, you need to increase the AD of the static route so that it is higher than the dynamic routing protocol.

#### **QUESTION 250**

**Which two statements about floating static routes are true? (Choose two)**

- A. They are routes to the exact /32 destination address
- B. They are used when a route to the destination network is missing
- C. They have a higher administrative distance than the default static route administrative distance
- D. They are used as back-up routes when the primary route goes down
- E. They are dynamic routes that are learned from a server

**Correct Answer:** CD

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 251**

**Which port security mode can assist with troubleshooting by keeping count of violations?**

- A. Restrict
- B. Shutdown
- C. Access
- D. Protect

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 252**

**What type of MAC address is aged automatically by the switch?**

- A. Dynamic
- B. Manual
- C. Automatic
- D. Static

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

<http://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/MACAddress.htm>

**QUESTION 253**

**What are the two minimum required components of a DHCP binding? (choose two)**

- A. An exclusion list
- B. A hardware address
- C. An IP address
- D. A DHCP pool
- E. An ip-helper statement

**Correct Answer: BC**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

An address binding is the mapping between the client's IP and hardware addresses.

[http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr\\_dhcp/configuration/15-mt/dhcp-15-mt-book/dhcpoverview.html](http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_dhcp/configuration/15-mt/dhcp-15-mt-book/dhcpoverview.html)



#### QUESTION 254

Refer to the exhibit. If R1 receives a packet destined to 172.16.1.1, to which IP address does it send the packet ?

```
R1#show ip route
Codes: C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       I - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route

Gateway of last resort is 192.168.14.4 to network 0.0.0.0

C    192.168.12.0/24 is directly connected, FastEthernet0/0
C    192.168.13.0/24 is directly connected, FastEthernet0/1
C    192.168.14.0/24 is directly connected, FastEthernet1/0
O    192.168.10.0/24 is variably subnetted, 3 subnets, 3 masks
O      192.168.10.0/24 [110/2] via 192.168.14.4, 00:02:01, FastEthernet1/0
O      192.168.10.32/27 [110/11] via 192.168.13.3, 00:00:52, FastEthernet0/1
O      192.168.0.0/16 [110/2] via 192.168.15.5, 00:05:01, FastEthernet1/1
D    192.168.10.1/32 [90/5778] via 192.168.12.2, 00:03:44, FastEthernet0/0
O*E2 0.0.0.0/0 [110/1] via 192.168.14.4, 00:00:10, FastEthernet1/0
```

- A. 192.168.14.4
- B. 192.168.12.2
- C. 192.168.13.3
- D. 192.168.15.5

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

It can't find the address 172.16.1.1 so it will be directed to the Gate of last resort 192.168.14.4

#### QUESTION 255

What is the danger of the permit any entry in a NAT access list?

- A. It can lead to overloaded resources on the router.
- B. It can cause too many addresses to be assigned to the same interface.
- C. It can disable the overload command.
- D. It prevents the correct translation of IP addresses on the inside network.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 256

How does a DHCP server dynamically assign IP addresses to hosts ?

- A. Addresses are permanently assigned so that the host uses the same address at all times.

- B. Addresses are assigned for a fixed period of time.
- C. Addresses are leased to hosts. A host will usually keep the same address by periodically contacting the DHCP server to renew the lease.
- D. Addresses are allocated after a negotiation between the server and the host to determine the length of the agreement.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

The DHCP lifecycle consists of the following:

Release: The client may decide at any time that it no longer wishes to use the IP address it was assigned, and may terminate the lease, releasing the IP address.

**QUESTION 257**

**What two results would occur if the hub were to be replaced with a switch that is configured with one Ethernet VLAN? (Choose two.)**

- A. The number of collision domains would remain the same.
- B. The number of collision domains would decrease.
- C. The number of collision domains would increase.
- D. The number of broadcast domains would remain the same.
- E. The number of broadcast domains would decrease.
- F. The number of broadcast domains would increase.

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 258**

**which configuration command can u apply to a HSRP router so that its local interface becomes active if all other routers in the group fail?**

- A. no additional config is required
- B. standby 1 track ethernet
- C. standby 1 preempt
- D. standby 1 priority 250

**Correct Answer:** A

**Section:** (none)

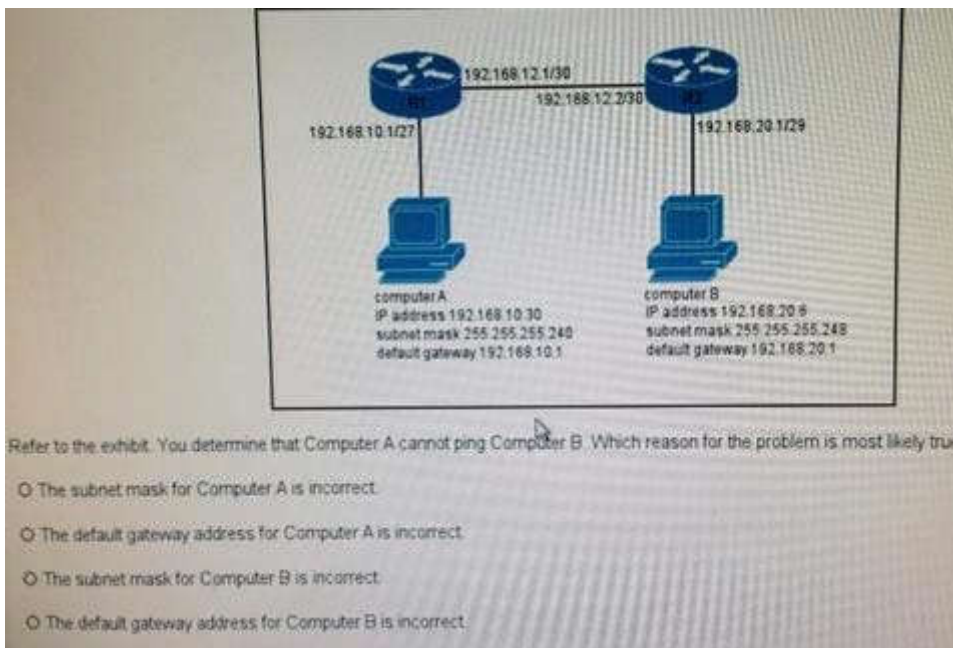
**Explanation**

**Explanation/Reference:**

**QUESTION 259**

Refer to the exhibit, you determine that Computer A cannot ping Computer

**Which reason for the problem is most likely true?**



- A. The Subnet mask for Computer A is incorrect.
- B. The default gateway address for Computer A is incorrect.
- C. The subnet mask for computer B is incorrect.
- D. The default gateway address for computer B is incorrect.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

255.255.255.224 =/27

#### QUESTION 260

Which effect of the **passive-interface** command on R1 is true?

Which effect of the **passive-interface** command on R1 is true?

```

R1
interface FastEthernet0/0
  description site id:14254489
  ip address 172.16.0.1 255.255.0.0

interface FastEthernet0/1
  description site id:14254489
  ip address 172.17.0.1 255.255.0.0

router rip
  passive-interface FastEthernet0/0
  network 172.16.0.0
  network 172.17.0.0
  version 2
  
```

- ☒ It prevents interface Fa0/0 from sending updates.
- ☐ Interface Fa0/0 operates in RIPv1 mode.
- ☐ It removes the 172.16.0.0 network from all updates on all interfaces on R1.
- ☐ It removes the 172.17.0.0 network from all updates on all interfaces on R1.

- A. It prevents interface Fa0/0 from sending updates.
- B. Interface Fa 0/0 operates in RIPv1 mode.
- C. It removes the 172.16.0.0 network from all updates on all interfaces on R1.
- D. It removes the 172.17.0.0 network from all updates on all interfaces on R1.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

With most routing protocols, the passive-interface command restricts outgoing advertisements only. But, when used with Enhanced Interior Gateway Routing Protocol (EIGRP), the effect is slightly different.

#### QUESTION 261

**Which three encapsulation layers in the OSI model are combined into the TCP/IP application layer? (Choose three)**

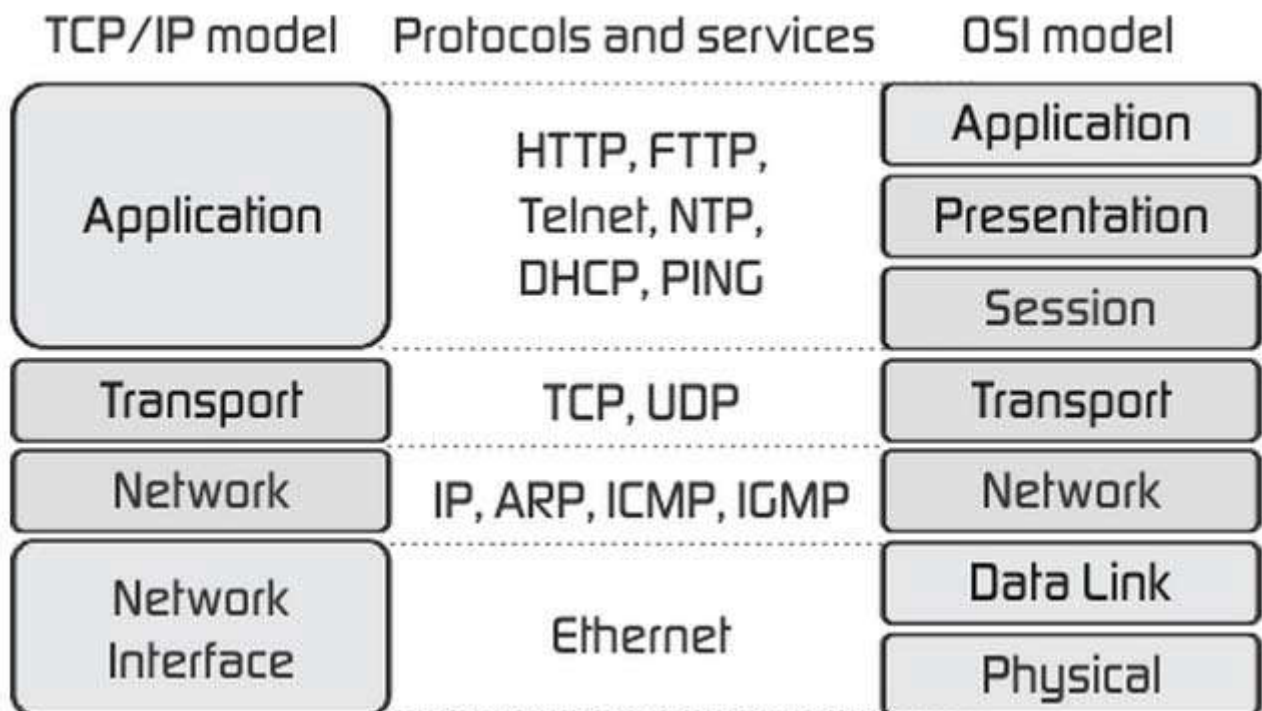
- A. Session
- B. transport
- C. presentation
- D. application
- E. data-link
- F. network

**Correct Answer:** ACD

**Section:** (none)

**Explanation**

**Explanation/Reference:**



#### QUESTION 262

**Which function does traffic shaping perform?**

- A. It buffers and queues excess packets.

- B. It buffers traffic without queuing it.
- C. It queues traffic without buffering it.
- D. It drops packets to control the output rate.

**Correct Answer:** A

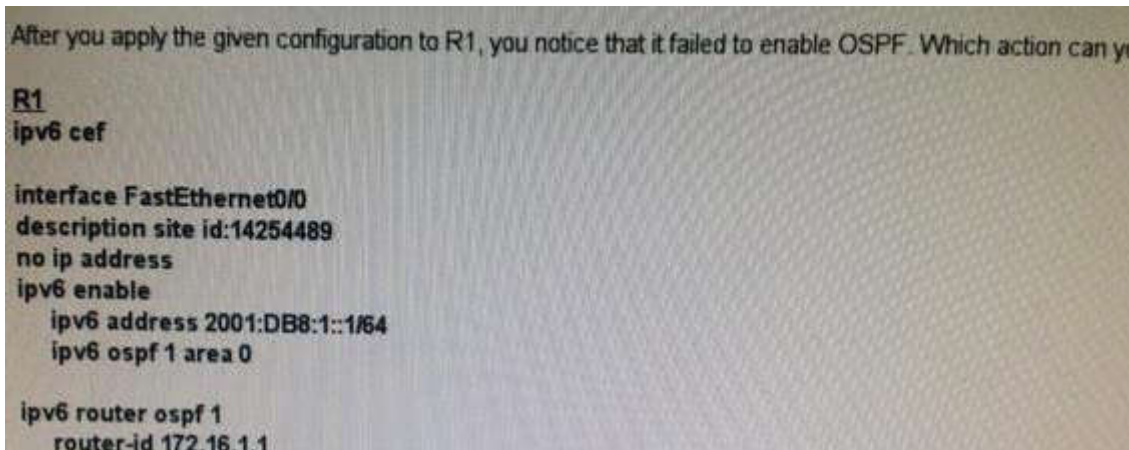
**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 263

After you apply the given configuration to R1, you notice that it failed to enable OSPF .Which action can you...



- A. Configure an IPv4 address on interface F0/0.
- B. Enable IPV6 unicast routing on R1.
- C. Configure a loopback interface on R1.
- D. Configure an autonomous system number an OSPF.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 264

**When is the most appropriate time to escalate an issue that you troubleshooting?**

- A. When you lack the proper to resolve the issue.
- B. When a more urgent issue that requires your intervention is detected.
- C. When you have gathered all information about an issue.
- D. When you have been unable to resolve the issue after 30 min.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 265

Which two command can you enter to display the current time sources statistics on devices ? (Choose TWO)

- A. Show ntp associations.
- B. Show clock details.
- C. Show clock.
- D. Show time.
- E. Show ntp status.

**Correct Answer:** AE

**Section:** (none)

**Explanation**

**Explanation/Reference:**

```
VPN-ASA# show ntp associations
      address      ref clock      st  when  poll reach  delay  offset  disp
*-10.0.0.3        127.127.7.1      8   23    64    7    45.1  -87.11  3948.2
 * master (syncd), # master (unsyncd), + selected, - candidate, ~ configured
VPN-ASA#
VPN-ASA# show ntp status
Clock is synchronized stratum 9, reference is 10.0.0.3
nominal freq is 99.9984 Hz, actual freq is 99.9984 Hz, precision is 2**6
reference time is d683a633.7dcebed8 (12:53:07.491 UTC Fri Jan 17 2014)
clock offset is -87.1116 msec, root delay is 45.06 msec
root dispersion is 4035.29 msec, peer dispersion is 3948.15 msec
VPN-ASA#
```

### QUESTION 266

When you enable PortFast on a switch port, the port immediately transitions to which state?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

PortFast causes a switch or trunk port to enter the spanning tree forwarding state immediately, bypassing the listening and learning states. You can use PortFast on switch or trunk ports that are connected to a single workstation, switch, or server to allow those devices to connect to the network immediately, instead of waiting for the port to transition from the listening and learning states to the forwarding state.