



Assessment System

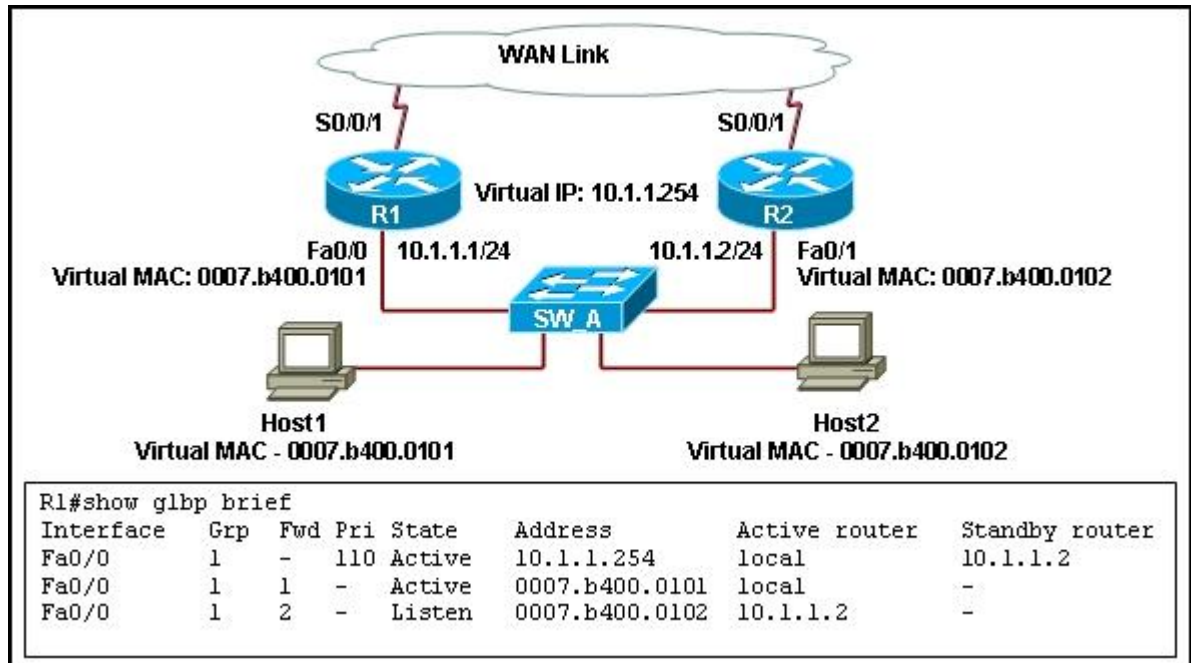
Take Assessment - SWITCH Final Exam - CCNP SWITCH (Version 6.0)

- 1 Which phase of the Cisco Lifecycle Services approach includes building a network according to the design and verifying that it performs according to specifications?
 - ☐ prepare phase
 - ☐ plan phase
 - ☐ design phase
 - ☒ implement phase
 - ☐ operate phase
 - ☐ optimize phase
- 2 What is required for SLA to capture one-way delays?
 - ☐ two IP SLA responders
 - ☐ a Round Trip Timer value
 - ☒ Network Time Protocol (NTP)
 - ☐ IP SLA source using TCP port 2020
- 3 What is the recommended maximum one-way latency when implementing video over IP for real-time video applications?
 - ☐ Latency is not a factor for a smooth video over IP implementation.
 - ☐ Latency should be defined for voice traffic only (not for video).
 - ☒ The recommended maximum one-way latency should not be more than 150 ms.
 - ☐ When mixed video and voice packets are included in the video stream, the latency should be 300 ms.
- 4 The TCAM defines three different match options that correlate to which three specific match regions? (Choose three.)
 - ☐ bifurcated match
 - ☒ longest match
 - ☐ second match
 - ☒ exact match
 - ☒ first match
 - ☐ third match

5 What device can be used to support Power over Ethernet (PoE) to power the access points?

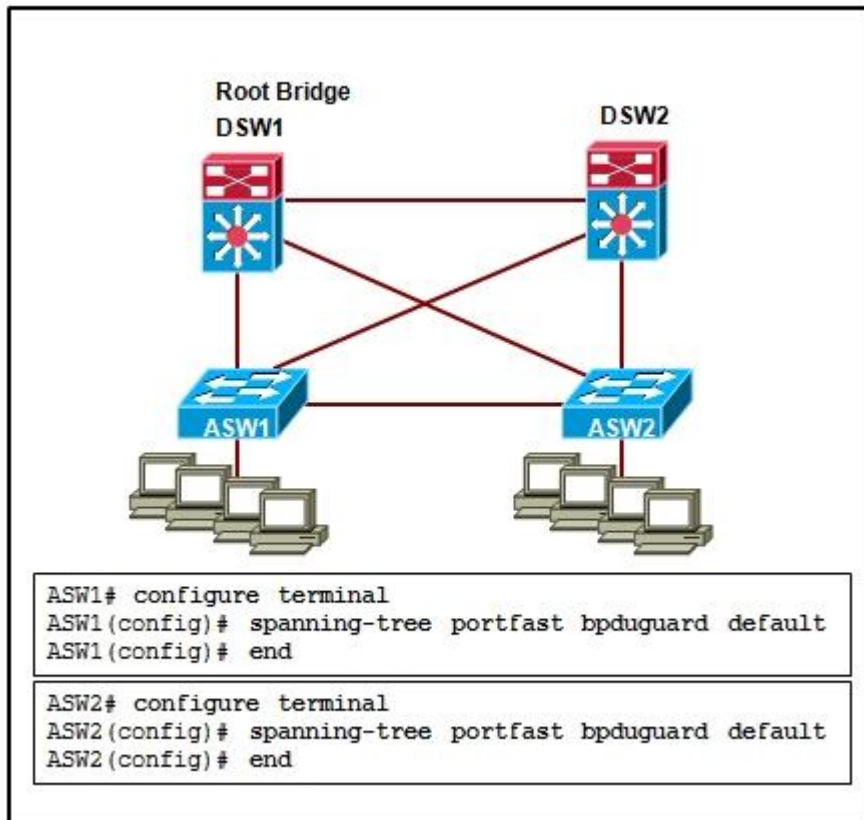
- ☐ a host computer
- ☐ an IP phone
- ☒ an Ethernet switch
- ☐ a lightweight access point

6



Refer to the exhibit. A network administrator wants to verify the proper operations of the packet load sharing between a group of redundant routers that are configured with GLBP. On the basis of the provided output, which router is the Active Virtual Forwarder (AVF) for Host2?

- ☐ the router with an IP address of 10.1.1.1
- ☒ the router with an IP address of 10.1.1.2
- ☐ the router with the virtual IP address of 10.1.1.254
- ☐ the router with the IP address 10.1.1.1 and the router with the IP address 10.1.1.2



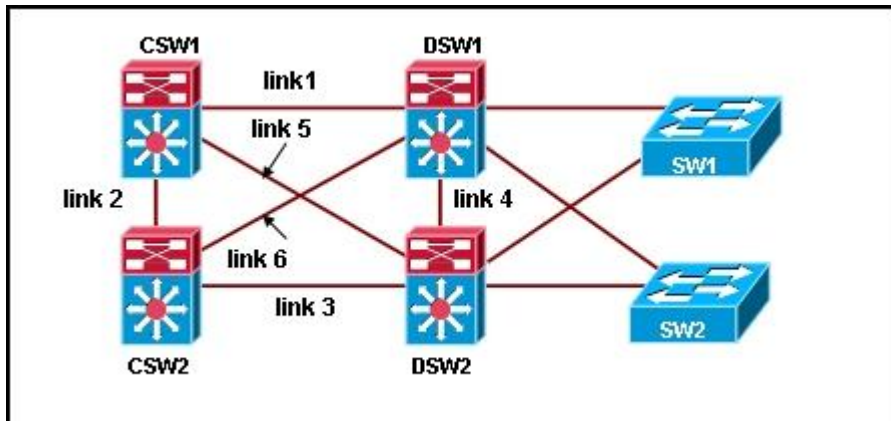
Refer to the exhibit. What is the result of the displayed configuration on switches ASW1 and ASW2?

- ☒ BPDU guard puts an interface that is configured for STP PortFast in the err-disable state upon receipt of a BPDU.
- ☐ BPDU guard overrides the PortFast configuration and reverts to the default spanning tree configuration on the access ports.
- ☐ BPDU guard forces the uplink ports on ASW1 and ASW2 to become designated ports to prevent DSW2 from becoming a root switch.
- ☐ BPDU guard places the uplink ports on a ASW1 and ASW2 into the STP loop-inconsistent blocking state when the ports stop receiving BPDUs.

8 Which benefit is provided by centralizing servers in a data center server farm?

- ☐ It keeps client-to-server traffic local to a single subnet.
- ☐ Servers that are located in a data center require less bandwidth.
- ☒ It is easier to filter and prioritize traffic to and from the data center.
- ☐ Server farms are not subject to denial of service attacks.

9



A network administrator wants to implement inter-VLAN routing in the network. Which interfaces should be configured as routed ports?

- ☐ all interfaces on links 5 and 6
- ☐ all interfaces on links 1, 2, 3, and 4
- ☒ all interfaces on links 1, 2, 3, 4, 5, and 6
- ☐ all interfaces between the distribution and the access switches

10 Which two statements are true about routed ports on a multilayer switch? (Choose two.)

- ☐ A routed port behaves like a regular router interface and supports VLAN subinterfaces.
- ☐ A routed port is a physical switch port with Layer 2 capability.
- ☒ A routed port is not associated with a particular VLAN.
- ☒ To create a routed port requires removal of Layer 2 port functionality with the **no switchport** interface configuration command.
- ☐ The **interface vlan** global configuration command is used to create a routed port.

11 How do FlexLink and STP operate together?

- ☐ If an active STP port is blocked, the active FlexLink port will take over.
- ☐ Both the active STP port and active FlexLink port can forward traffic simultaneously.
- ☐ Both the active STP port and active FlexLink port can forward traffic simultaneously but only for different VLANs.
- ☒ STP can be active in the distribution layer, but is unaware of any FlexLink updates in the access layer.

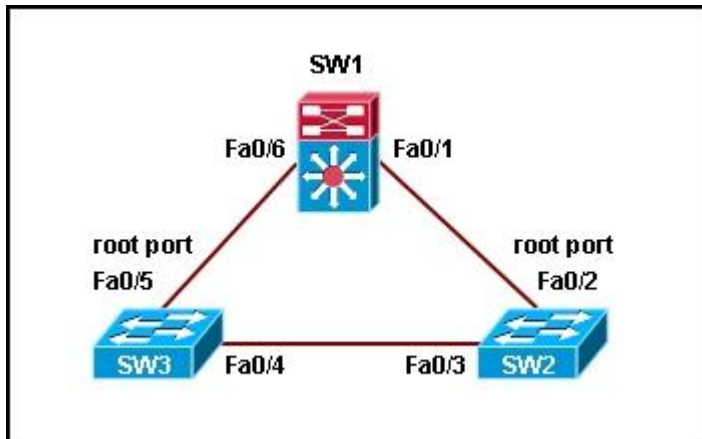
12 Which three parameters must be configured in order to enable SSH? (Choose three.)

- ☐ retries
- ☒ hostname
- ☐ timeouts
- ☒ domain name
- ☒ keys
- ☐ routing protocol

13 Which two statements are true about the default operation of STP in a Layer 2 switched environment that has redundant connections between switches? (Choose two.)

- ☐ The root switch is the switch with the highest speed ports.
- ☒ Decisions on which port to block when two ports have equal cost depend on the port priority and index.
- ☐ All trunking ports are designated and not blocked.
- ☐ Root switches have all ports set as root ports.
- ☒ Nonroot switches each have only one root port.

14



Refer to the exhibit. The link between switch SW1 and SW2 is manually configured as full duplex on SW2 and with half duplex on SW1. How could this impact the STP operations?

- ☒ Switch SW2 can move port Fa0/3 into a forwarding state, thereby creating a Layer 2 loop.
- ☐ Switch SW1 shuts down the Fa0/1 port and thus reinforces a new spanning-tree calculation.
- ☐ Switch SW2 negotiates the Fa0/1 port on SW1 to be in full-duplex mode which keeps SW1 as the root bridge for the spanning tree.
- ☐ Switch SW1 negotiates the Fa0/2 port on SW2 to be in half-duplex mode and thus forces SW2 to become the root bridge for the spanning tree.

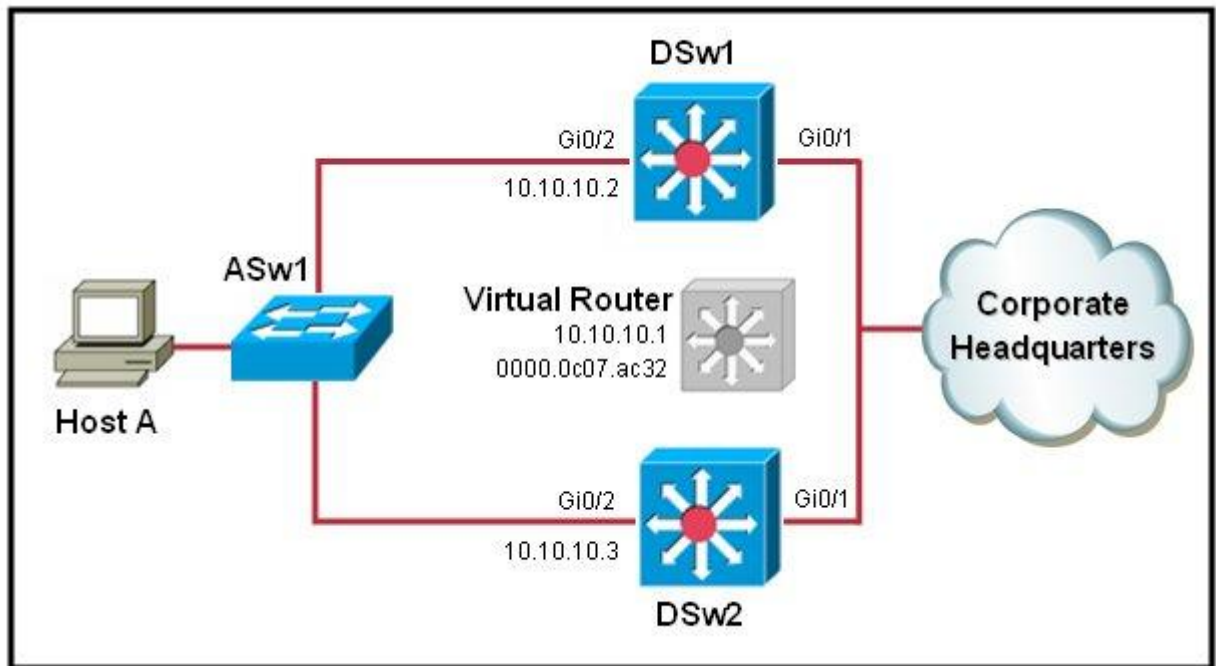
15 Which two types of attacks can be mitigated by port security? (Choose two.)

- ☐ dictionary
- ☒ denial of service (DoS)
- ☐ replay
- ☒ MAC-address flooding
- ☐ password

16 What is the most fundamental form of high availability when using Catalyst modular switches?

- ☐ Spanning Tree Protocol
- ☐ routing protocol
- ☐ First Hop Redundancy Protocol (FHRP)
- ☒ Supervisor Engine redundancy
- ☐ redundant switching modules

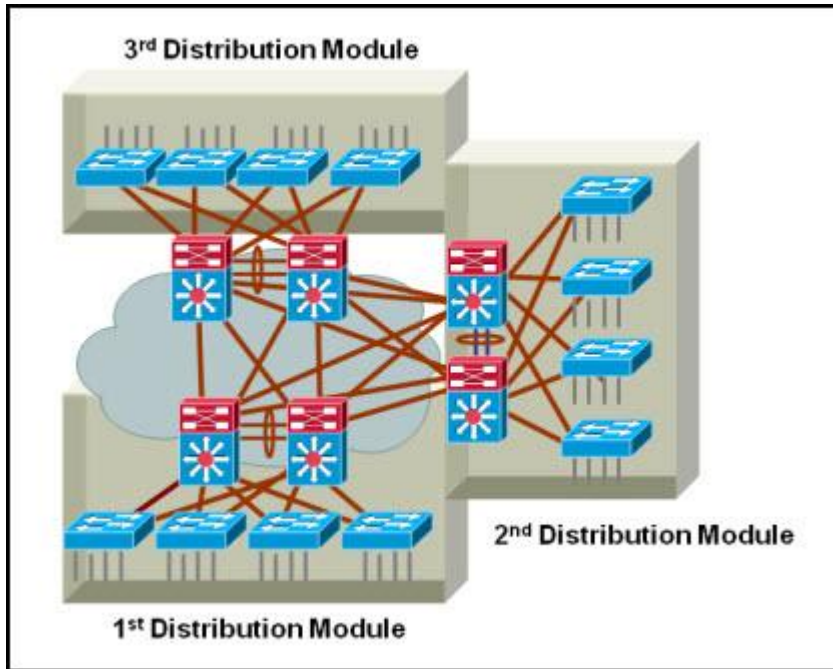
17



Refer to the exhibit. Switches DSw1 and DSw2 are configured with the HSRP virtual IP address 10.10.10.1, and standby priority is set to 100. Assume both switches finish booting at the same time and HSRP is operating as expected. On the basis of this information, which three HSRP statements are true? (Choose three.)

- ☐ Applying the **standby 32 timers 10 30** command on the Gi0/2 interfaces of each switch would decrease the failover time.
- ☒ If the DSw1 and DSw2 switches have been configured to preempt, then DSw2 will be the active router.
- ☐ If the DSw1 switch is configured with the **standby preempt** command and DSw2 is not, then DSw1 will be the active router.
- ☒ The HSRP group number in this HSRP configuration is HSRP group number 50.
- ☒ The **standby track** command is useful for tracking interfaces that are not configured for HSRP.
- ☐ When host A sends an ARP request for 10.10.10.1, Virtual Router replies with the MAC address of the active router.

18



Refer to the exhibit. What two effects will occur when a fourth distribution module is included in the campus enterprise network that is depicted in the exhibit? (Choose two.)

- ☒ The inclusion of the fourth module will increase the routing complexity.
- ☐ It will limit the traffic flow in the network.
- ☐ It will provide scalability for future growth.
- ☐ It will impact the security of the traffic between the distribution switches.
- ☒ It will increase the number of additional links that are required to provide redundant connectivity.

19 What is the recommended maximum one-way jitter when implementing video over IP for real-time video applications?

- ☐ 1 ms
- ☐ 2 ms
- ☐ 5 ms
- ☒ 10 ms

20 When should a proactive management be performed within the stages of the Cisco Lifecycle Services?

- ☐ prepare phase
- ☐ plan phase
- ☐ design phase
- ☐ implement phase
- ☐ operate phase
- ☒ optimize phase

- 21 When a port security violation occurs on a switch port, the switch sends a syslog message but does not shut down the port. What port security mode is in effect?
- ☐ sticky
 - ☐ shutdown
 - ☒ restrict
 - ☐ protect

- 22 What are two actions a hacker may take in a VLAN hopping attack? (Choose two.)
- ☐ replying to ARP requests that are intended for other recipients
 - ☒ sending malicious dynamic trunking protocol (DTP) frames
 - ☐ replying to DHCP requests that are intended for a DHCP server
 - ☐ sending a unicast flood of Ethernet frames with distinct source MAC addresses
 - ☒ sending frames with two 802.1Q headers

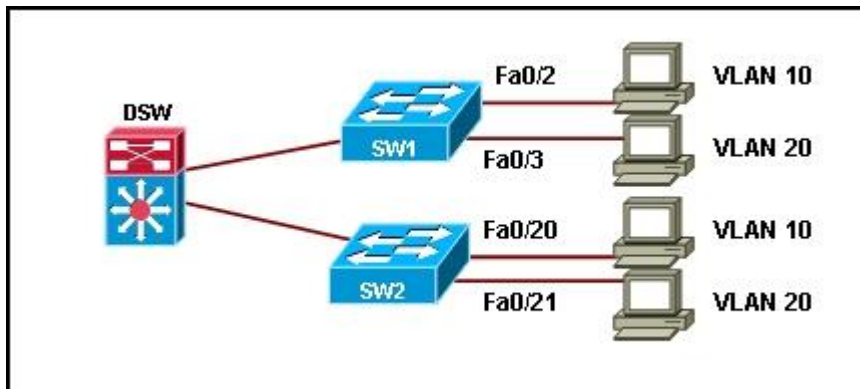
23

```
Switch#show spanning-tree interface FastEthernet 3/42 detail
Port 170 (FastEthernet3/42) of VLAN0001 is blocking
  Port path cost 19, Port priority 128, Port Identifier 128.170.
  Designated root has priority 8193, address 0009.e845.6480
  Designated bridge has priority 8193, address 0009.e845.6480
  Designated port id is 128.160, designated path cost 0
  Timers: message age 1, forward delay 0, hold 0
  Number of transitions to forwarding state: 0
  Link type is point-to-point by default
  Loop guard is enabled on the port
  BPDUs: sent 1, received 4501
```

Refer to the exhibit. Given that interface Fa3/42 is an active trunk port, what two conclusions can be made based on the displayed output? (Choose two.)

- ☒ Root guard is not enabled on interface Fa3/42.
 - ☒ Interface Fa3/42 will not pass data traffic if it detects that it is part of a spanning-tree loop caused by unidirectional link failure.
 - ☐ UDLD cannot be configured on interface Fa3/42.
 - ☐ If a spanning-tree loop is detected on VLAN 1, data traffic will be blocked for all VLANs on interface Fa3/42.
 - ☐ The difference in BPDUs sent and received indicates a loop caused by unidirectional link failure has been detected.
- 24 What is a characteristic of a standalone WLAN solution?
- ☐ has no centralized monitoring
 - ☐ has no centralized management
 - ☒ has no centralized operational control
 - ☐ has no centralized access authentication

25



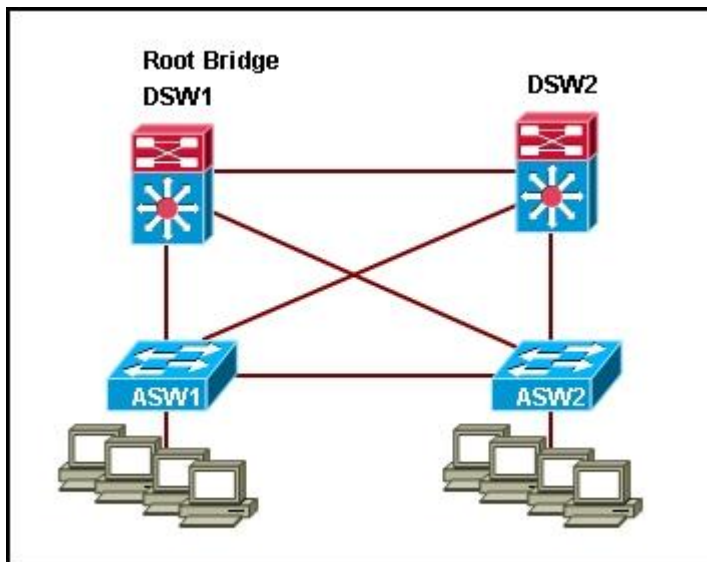
Refer to the exhibit. What configuration will be required on the DSW switch in order to perform inter-VLAN routing for all VLANs that are configured on the access switches?

- ☐ Configure the routing protocol.
- ☒ Configure SVI for each VLAN in the network.
- ☐ Configure the links between DSW and the access switches as access links.
- ☐ Configure as routed ports the DSW interfaces that face the access switches.

26 What is the purpose of the **debug condition standby vlan** *vlan-id group-number* command in troubleshooting HSRP?

- ☐ redirect the **debug standby** output for the referenced HSRP group to a syslog server on the specified VLAN
- ☐ block the **debug standby** output for the referenced VLAN and HSRP group
- ☐ display **debug standby** output only for HSRP traffic that is received by HSRP peers in the specified VLAN and group
- ☐ display **debug standby** output only for HSRP traffic that is sent to HSRP peers in the specified VLAN and group
- ☒ limit the output of the **debug standby** command to the specific VLAN interface and HSRP group

27



Which STP enhancement should be configured in the network to prevent a nondesignated port to transition to a forwarding state when a topology change occurs?

- ☐ Root guard should be implemented on the Layer 2 ports between the distribution switches.
- ☐ PortFast should be implemented on the uplink ports from the access switches to the distribution switches.
- ☒ Loop guard should be implemented on the Layer 2 ports between DSW1 and DSW2 and on the uplink ports from the access switches to the distribution switches.
- ☐ BPDU guard should be implemented on the Layer 2 ports between DSW1 and DSW2 and on the uplink ports from the access switches to the distribution switches.

28

```

DLS1# show spanning-tree mst configuration
Name      [CISCO]
Revision  1
Instance  Vlans mapped
-----
0          1-19,51-79,81-99,101-4094
1          20-50
2          80,100
-----

```

Refer to the exhibit. Assuming that the switch is running Multiple Spanning Tree (MST), which conclusion can be made based on the output?

- ☐ Spanning-tree load balancing is in effect.
- ☐ All VLANs are mapped to MST instance 2.
- ☐ PVRST+ is still operating on switch DLS1.
- ☐ PVST+ is still operating on switch DLS1.
- ☒ MST will require fewer resources than PVST+ or PVRST+.

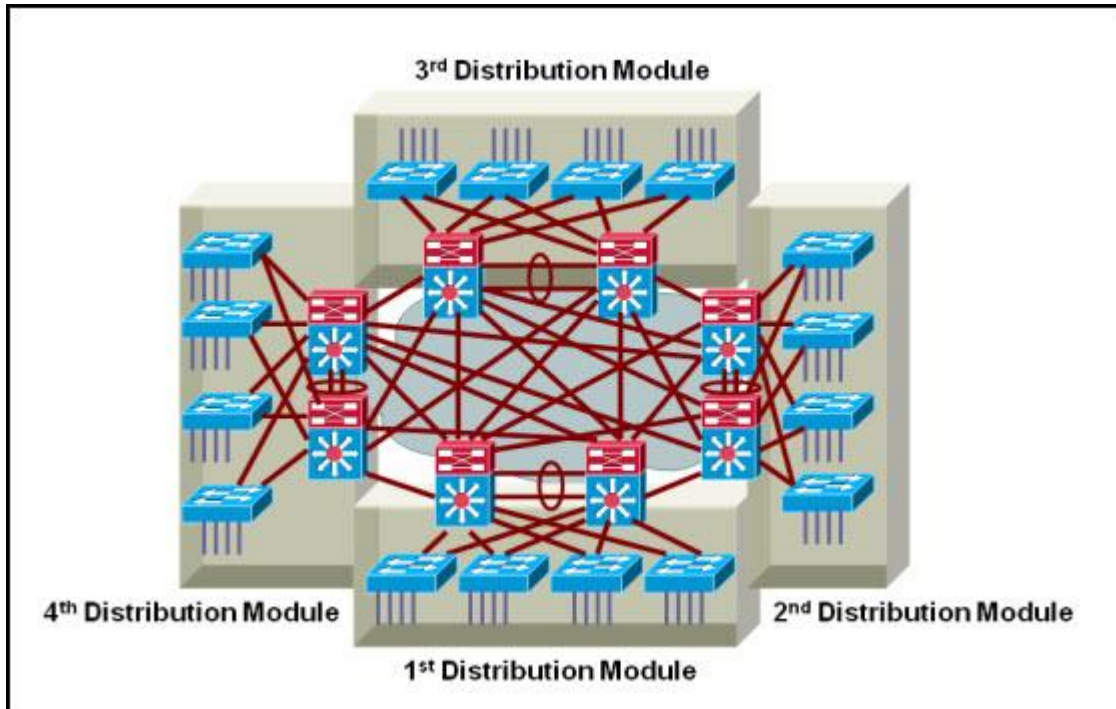
29

<pre> R1# show interface Fa0/0.1 FastEthernet 0/0.1 is up, line protocol is up Hardware is AadFE, address is 000d.65e3.23c0 Internet address is: 172.16.10.1/24 MTU 1500 bytes, BW 100000Kbit, DLY 100usec, reliability 255/255, txload 1/255, rxload 1/255 Encapsulation: 802.1Q Virtual LAN, Vlan ID 10 ARP type: ARPA, ARP Timeout 04:00:00 R1# show interface Fa0/0.2 FastEthernet 0/0.2 is up, line protocol is up Hardware is AadFE, address is 000d.65e3.23c0 Internet address is: 172.16.20.1/24 MTU 1500 bytes, BW 100000Kbit, DLY 100usec, reliability 255/255, txload 1/255, rxload 1/255 Encapsulation: 802.1Q Virtual LAN, Vlan ID 20 ARP type: ARPA, ARP Timeout 04:00:00 </pre>	<pre> SW1# show interface Fa0/1 switchport Switchport: Enabled Administrative Mode: static access Operational Mode: static access Administrative Trunking encapsulation: dot1q Operational Trunking Encapsulation: native Negotiation of Trunking: Off Access Mode VLAN: 100 Trunking Native Mode VLAN: 100 <output omitted> </pre>
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Refer to the exhibit. What additional configuration is required in order for users in VLAN 10 to communicate with the users in VLAN 20?

- ☒ Configure interface Fa0/1 on SW1 as a trunk.
- ☐ Remove the subinterfaces on R1 and configure interface Fa0/0 as a trunk.
- ☐ Configure interfaces Fa0/2 and Fa0/3 on SW1 as trunk links.
- ☐ Configure VLAN 100 as a data VLAN and VLAN 1 as the native VLAN.

- 30 Which statement is true concerning the core layer within the hierarchical design model?
- ☐ Remote users are granted access to the network through the core.
 - ☒ Routing should be configured without traffic filtering, address translation, or other packet manipulation at the core.
 - ☐ The core, which acts as the front door to a network, is designed to prevent unauthorized users from gaining entry.
 - ☐ The core provides an optimized and reliable transport structure by using a combination of route summaries, distribution lists, and route maps.
-
- 31 What is the most common method of configuring inter-VLAN routing on a Layer 3 switch?
- ☐ Configure the switch physical interface so that the router will have an interface in each VLAN.
 - ☐ For each VLAN, configure trunking between the router and the switch.
 - ☐ Configure a routing protocol on the Layer 3 switch to include each interface.
 - ☒ Configure switch virtual interfaces. The result is that the router will have a virtual interface in each VLAN.
-
- 32 What three features are provided by IEEE 802.1Q trunking? (Choose three.)
- ☐ security
 - ☐ resilience
 - ☒ QoS support
 - ☒ multivendor support
 - ☒ relatively small frame overhead
 - ☐ multicast support
-
- 33 Which multilayer switching forwarding method does Cisco Express Forwarding (CEF) use?
- ☐ route caching
 - ☐ process switching
 - ☐ silicon switching
 - ☐ topology-based switching
-



Refer to the exhibit. What restriction will be presented in a campus enterprise network that is designed with four large distribution building blocks?

- ☐ The implementation of link aggregation will be limited.
- ☐ The implementation of IGP routing protocols will be limited.
- ☐ The implementation of EtherChannels on redundant links will exceed the bandwidth.
- ☒ The implementation of scalability that is required during future growth will be limited.

35 Which two items in the TCAM table are referenced in the process of forwarding a packet? (Choose two.)

- ☐ VLAN ID
- ☒ ACL information
- ☐ destination MAC address
- ☒ QoS information
- ☐ source MAC address
- ☐ hash key

```

aaa new-model
aaa authentication login admins local
aaa authentication ppp dialins group radius local
aaa authorization network scoobee group radius local
aaa accounting network charley start-stop group radius group tacacs+
!
username root password ALongPassword
!
tacacs-server host 172.31.255.0
tacacs-server key goaway
!
radius-server host 172.16.2.7
radius-server key myRaDiUSpassWoRd

interface group-async 1
  group-range 1 16
  encapsulation ppp
  ppp authentication chap dialins
  ppp authorization scoobee
  ppp accounting charley
!
line 1 16
  autoselect ppp
  autoselect during-login
  login authentication admins
  modem dialin

```

Refer to the exhibit. The exhibit contains the configuration for a Cisco access device. How will someone dialing in be authenticated?

- ☐ local username and password
- ☐ TACACS+ server
- ☒ RADIUS server and, if that fails, local username and password
- ☐ TACACS+ server
- ☐ TACACS+ server and, if that fails, local username and password
- ☐ RADIUS server and, if that fails, TACACS+ server

37 Which three statements about RSTP edge ports are true? (Choose three.)

- ☐ Edge ports function similarly to UplinkFast ports.
- ☒ Edge ports should never connect to another switch.
- ☒ If an edge port receives a BPDU, it becomes a normal spanning-tree port.
- ☐ Edge ports immediately transition to learning mode and then forwarding mode when enabled.
- ☒ Edge ports never generate topology change notifications (TCNs) when the port transitions to a disabled or enabled status.
- ☐ Edge ports can have another switch connected to them as long as the link is operating in full duplex.

```

DLS1# show spanning-tree

VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000a.b8a9.d680
             Cost        19
             Port        13 (FastEthernet0/11)
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     000a.b8a9.d780
             Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time   300

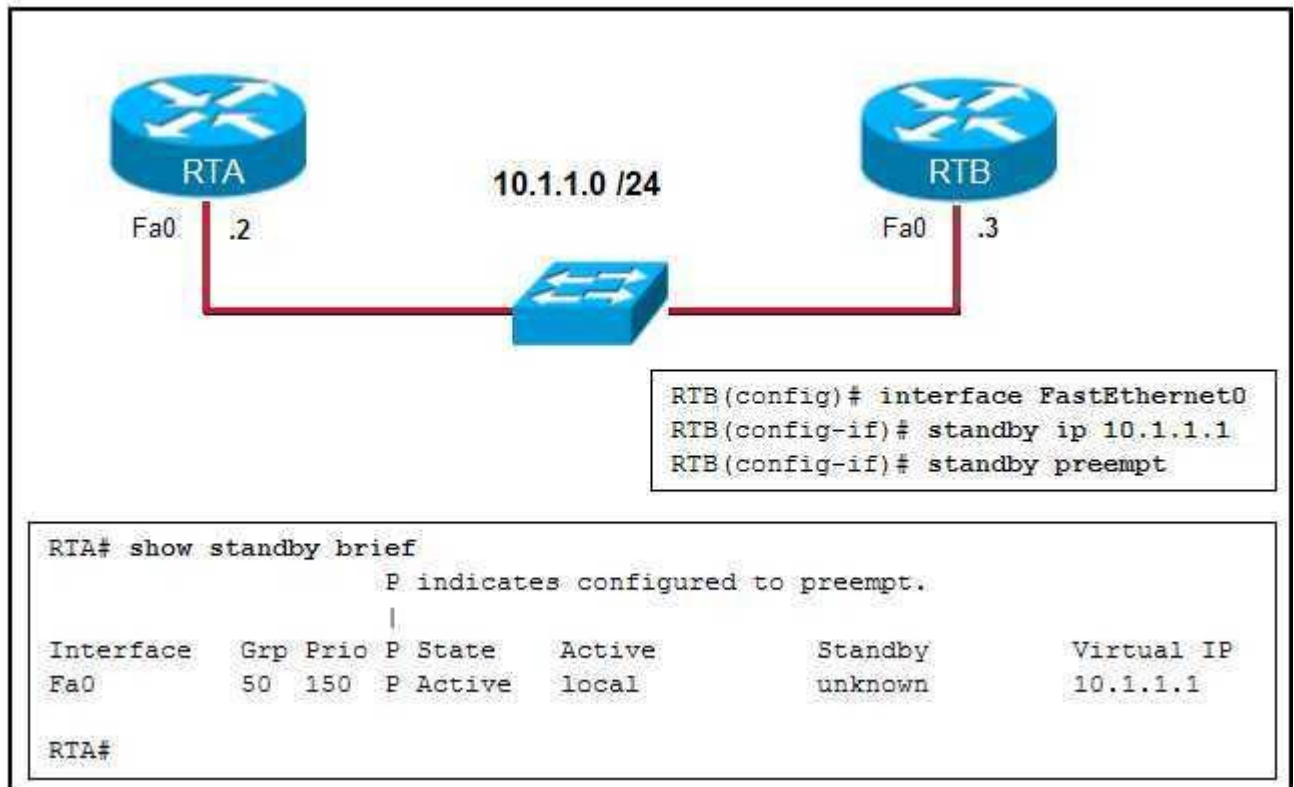
Interface                Role Sts Cost      Prio.Nbr Type
-----
Fa0/7                    Desg FWD 19        128.9    P2p
Fa0/8                    Desg FWD 19        128.10   P2p
Fa0/9                    Desg FWD 19        128.11   P2p
Fa0/10                   Desg FWD 19        128.12   P2p
Fa0/11                   Root FWD 19        128.13   P2p
Fa0/12                   Altn BLK 19        128.14   P2p

<output omitted>

```

Refer to the exhibit. What two conclusions can be made based on the output? (Choose two.)

- ☐ Interfaces Fa0/1 through Fa0/6 are trunk ports.
- ☒ Switch DLS1 is not the root bridge for VLAN 1.
- ☒ The Cost column in the lower part of the exhibit is not the cumulative root path cost.
- ☐ The default spanning-tree timers have been adjusted.
- ☐ That Fa0/12 is displaying the alternate port role indicates that PVRST+ is enabled.



Refer to the exhibit. The indicated configuration was established on the HSRP standby router RTB. However, the console message %IP-4-DUPADDR started appearing almost immediately on the RTB router. Given the output of the **show standby brief** command on RTA, what is the cause of the problem?

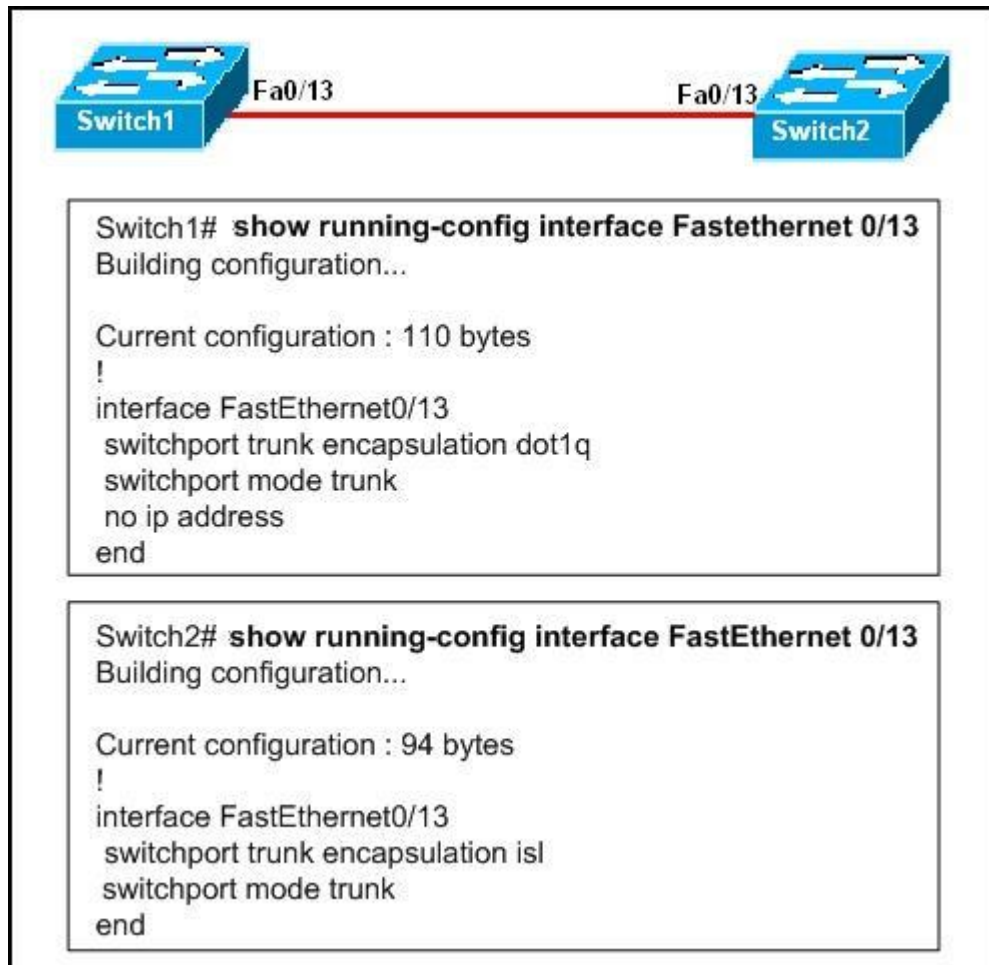
- ☐ The command **standby preempt** should only be applied on the active router.
 - ☐ The subnet mask is missing from the **standby ip 10.1.1.1** command.
 - ☒ The group number 50 is missing in the Router RTB configuration commands.
 - ☐ The priority number 150 is missing in the Router RTB configuration commands.
 - ☐ The virtual IP address should be the same as the active router.
 - ☐ The ports on the switch must be configured with the spanning-tree PortFast feature.
-
- 40 A bridging loop occurs in a network and disrupts user connectivity. What action should be taken by a network administrator to restore connectivity?
- ☐ Disable ports that should be in the blocking state.
 - ☐ Disable ports that should be in the forwarding state.
 - ☐ Disable and re-enable all ports on the distribution switches.
 - ☐ Disable all ports on the distribution switches and replace with new switches.
-
- 41 What are two benefits of local VLANs in the Enterprise Campus Network? (Choose two.)
- ☒ wide coverage because of the fact that a VLAN can be geographically dispersed throughout the network
 - ☒ ease of management because local VLANs are typically confined to the building access submodule
 - ☐ high availability because redundant paths exist at all infrastructure levels
 - ☐ broad expansion domain because the number of devices on each VLAN can easily be added to
 - ☐ IP address conservation because address blocks can be allocated to VLANs

42 How many physical links can comprise a single PAgP EtherChannel on a Catalyst 3560 switch? (Choose three.)

- ☒ 2
 - ☒ 5
 - ☒ 8
 - ☐ 10
 - ☐ 12
 - ☐ 13
 - ☐ 16
-

43 Catalyst Catalyst 6500 switches support which three Supervisor Engine redundancy features? (Choose three.)

- ☒ Route Processor Redundancy+ (RPR+)
 - ☐ distributed CEF (dCEF)
 - ☒ Stateful Switchover (SSO)
 - ☐ Resilient Packet Ring (RPR)
 - ☒ Nonstop Forwarding (NSF)
 - ☐ Per Line Card Traffic Policing
-



Refer to the exhibit. What is the problem between the connection on Switch1 and Switch2?

- ☐ native VLAN mismatch
- ☒ encapsulation mismatch
- ☐ switchport mode mismatch
- ☐ VTP mismatch
- ☐ DTP mismatch
- ☐ hardware failure

45 Which three actions can cause problems with a VTP implementation? (Choose three.)

- ☒ using a non-trunk link to connect switches
- ☒ using non-Cisco switches
- ☐ configuring all switches to be in VTP server mode
- ☐ not using any VTP passwords on any switches
- ☒ using lowercase on one switch and uppercase on another switch for domain names
- ☐ having a VTP transparent switch in between a VTP server switch and a VTP client switch (all switches in the same VTP domain)

46

```
ACSw1(config)# snmp-server community K33p0ut RO 43
ACSw1(config)# snmp-server community St0pTh@t RW 43
ACSw1(config)# snmp-server trap 172.16.128.50
ACSw1(config)# access-list 43 permit 192.168.0.0 0.0.0.255
```

Refer to the exhibit. What feature does an SNMP manager need to be able to set a parameter on ACSw1?

- ☐ a manager who is using an SNMP string of K44p0ut
- ☐ a manager who is using an Inform Request MIB
- ☒ a manager who is using host 192.168.0.5
- ☐ a manager who is using authPriv

47 Which architecture enables enterprises to offer important network services, such as security, new communication services, and improved application performance to every office, regardless of its size or proximity to headquarters?

- ☐ Cisco Enterprise Campus Architecture
- ☐ Cisco Enterprise Data Center Architecture
- ☒ Cisco Enterprise Branch Architecture
- ☐ Cisco Enterprise Teleworker Architecture

48 When troubleshooting GLBP in an environment with a VLAN that spans multiple access layer switches, a network engineer discovers that suboptimal paths are being used for upstream traffic. What is the recommended solution?

- ☒ Use HSRP instead of GLBP.
- ☐ Adjust the GLBP timers.
- ☐ Configure spanning tree so that the spanning-tree topology adjusts with the GLBP active virtual forwarder (AVF).
- ☐ Disable GLBP preemption on all route processors.

49 Which QoS requirement should be taken into account when implementing VoIP in a campus environment?

- ☐ The QoS requirements should accommodate the best effort delivery for voice traffic.
- ☐ The QoS requirements should accommodate the bursty nature of voice traffic.
- ☐ The QoS requirements should accommodate the intensive demand on bandwidth for voice traffic.
- ☒ The QoS requirements should accommodate the smooth demand on bandwidth, low latency, and delay for voice traffic.

50 Which three issues can cause devices to become disconnected across a trunk link? (Choose three.)

- ☒ native VLAN mismatch
- ☐ unassigned management VLAN
- ☒ Layer 2 interface mode incompatibilities
- ☐ missing default VLAN
- ☒ mismatched trunk encapsulations
- ☐ PAgP not enabled

- 51 Which statement correctly explains the process of mitigating ARP attacks on a switch where dynamic ARP inspection (DAI) has been configured?
- ☐ All intercepted packets that come from untrusted ports are dropped.
 - ☐ All intercepted packets that come from trusted ports are sent to untrusted ports only.
 - ☒ The intercepted packets are verified against the DHCP snooping binding table for valid IP-to-MAC bindings.
 - ☐ For all intercepted packets, an ARP request is sent to the DHCP server for IP-to-MAC address resolution.

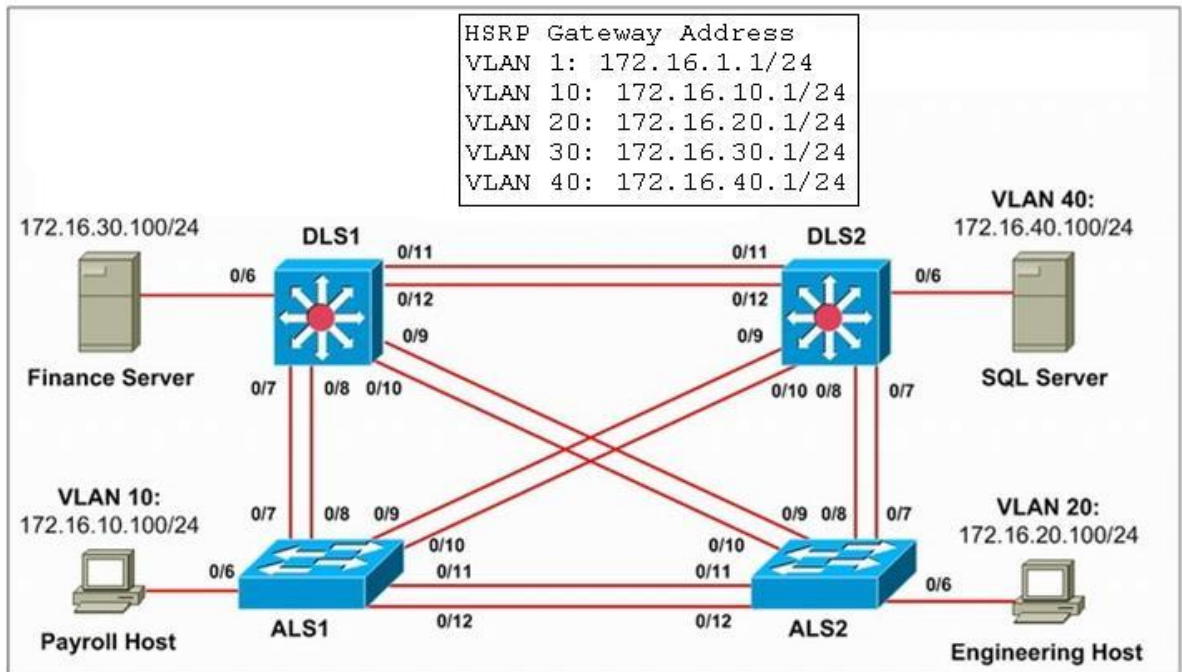
52

```
SW# show ip dhcp snooping
Switch DHCP snooping is enabled
DHCP snooping is configured on following VLANs:
10,20
DHCP snooping is operational on following VLANs:
10,20
DHCP snooping is configured on the following L3 Interfaces:
Insertion of option 82 is enabled
  circuit-id default format: vlan-mod-port
  remote-id: 001a.e372.ab00 (MAC)
Option 82 on untrusted port is not allowed
Verification of hwaddr field is enabled
Verification of giaddr field is enabled
DHCP snooping trust/rate is configured on the following
Interfaces:
```

Interface	Trusted	Allow option	Rate limit (pps)
FastEthernet0/1	no	no	50
FastEthernet0/2	no	no	50
FastEthernet0/24	yes	yes	unlimited

Refer to the exhibit. Based on the provided **show ip dhcp snooping** command, which statement is true?

- ☒ Only port Fa0/24 can send and receive all DHCP messages.
- ☐ Ports Fa0/1, Fa0/2, and Fa0/24 can send and receive all DHCP messages.
- ☐ Only ports Fa0/1 and Fa0/2 can send and receive all DHCP messages.
- ☐ Ports Fa0/1, Fa0/2, and Fa0/24 can send and receive only DHCP requests.



DLS1

```

ip routing
interface vlan 1
standby 1 ip 172.16.1.1
standby 1 preempt
standby 1 priority 150
!
interface vlan 10
ip address 172.16.10.3 255.255.255.0
standby 1 ip 172.16.10.1
standby 1 preempt
standby 1 priority 150
!
interface vlan 20
ip address 172.16.20.3 255.255.255.0
standby 1 ip 172.16.20.1
standby 1 preempt
standby 1 priority 150
!
interface vlan 30
ip address 172.16.30.3 255.255.255.0
standby 1 ip 172.16.30.1
standby 1 preempt
standby 1 priority 100
!
interface vlan 40
ip address 172.16.40.3 255.255.255.0
standby 1 ip 172.16.40.1
standby 1 preempt
standby 1 priority 100

```

DLS2

```

ip routing
interface vlan 1
standby 1 ip 172.16.1.1
standby 1 preempt
standby 1 priority 100
!
interface vlan 10
ip address 172.16.10.4 255.255.255.0
standby 1 ip 172.16.10.1
standby 1 preempt
standby 1 priority 100
!
interface vlan 20
ip address 172.16.20.4 255.255.255.0
standby 1 ip 172.16.20.1
standby 1 preempt
standby 1 priority 100
!
interface vlan 30
ip address 172.16.30.4 255.255.255.0
standby 1 ip 172.16.30.1
standby 1 preempt
standby 1 priority 150
!
interface vlan 40
ip address 172.16.40.4 255.255.255.0
standby 1 ip 172.16.40.1
standby 1 preempt
standby 1 priority 150

```

Refer to the exhibit. What statement is true about the way HSRP is configured?

- ☐ Switch DLS1 is the standby router for VLANs 1,10, and 20.
 - ☐ Switch DLS2 is the standby router for VLANs 30 and 40.
 - ☐ Issuing the **show standby** command on switch DSL1 will reveal that the HSRP state for VLAN 10 is standby.
 - ☐ Issuing the **show standby** command on switch DSL2 will reveal that the HSRP state for VLAN 30 is standby.
 - ☒ By setting different priorities on different VLANs, a type of load balancing is occurring.
 - ☐ If the Ethernet cables between switch DLS2 and switch ALS1 were severed, Payroll Host would not be able to reach SQL Server.
-

54 How should a switch port be configured for a connection to a standalone wireless access point that provides multiple VLAN-separated SSIDs?

- ☒ as a trunk port
 - ☐ as a routed port
 - ☐ as an access port
 - ☐ as a switched virtual interface
-

55 What are three possible misconfigurations or indicators of misconfigurations on a Layer 3 interface? (Choose three.)

- ☒ wrong IP address or subnet mask
 - ☐ ports in the wrong VLAN
 - ☒ mismatch between SVI and VLAN numbering
 - ☐ disabled VTP pruning
 - ☒ downed SVI
 - ☐ ACL on wrong interface
-

56 Which two procedures should be implemented and in place when deploying VoIP in a campus network? (Choose two.)

- ☐ Keep voice and data traffic in the same VLAN and mark the traffic for high priority treatment.
 - ☒ Create voice VLANs to keep voice traffic separate from other data to ensure special handling of the traffic.
 - ☐ Configure traffic shaping QoS policy to guarantee minimum delay for the voice traffic.
 - ☒ Configure QoS policy to classify the voice traffic in the priority queue to guarantee reserved bandwidth allocation for the traffic.
 - ☐ Configure the Weighted Random Early Detection (WRED) congestion avoidance mechanism to guarantee that the voice traffic will be placed in the priority queue.
-

```

SwitchA# show udld gigabitEthernet 5/1

Interface Gi5/1
---
Port enable administrative configuration setting: Enabled / in aggressive mode
Port enable operational state: Enabled / in aggressive mode
Current bidirectional state: Bidirectional
Current operational state: Advertisement - Single neighbor detected
Message interval: 15
Time out interval: 5

Entry 1
---
Expiration time: 38
Device ID: 1
Current neighbor state: Bidirectional
Device name: FOX06310RW1
Port ID: Gi1/1
Neighbor echo 1 device: FOX0627A001
Neighbor echo 1 port: Gi5/1

Message interval: 15
Time out interval: 5
CDP Device name: SwitchB

```

Refer to the exhibit. What happens if interface gigabitEthernet 5/1 on SwitchA stops receiving UDLD packets?

- ☐ UDLD stops trying to establish a connection with the neighbor.
- ☒ UDLD changes the port state to err-disable.
- ☐ UDLD changes the port to loop-inconsistent blocking state.
- ☐ UDLD sends hello messages to its neighbor at a rate of one per second to attempt to recover the connection.

58 Which three steps are required to configure interfaces as routed ports on a multilayer Catalyst switch? (Choose three.)

- ☒ Enable IP routing globally.
- ☒ Assign IP addresses to routed ports.
- ☐ Configure SVI for each VLAN in the network.
- ☐ Configure 802.1 Q encapsulation on routed ports.
- ☐ Disable Power over Ethernet (PoE) on the physical Layer 3 interfaces.
- ☐ Disable Layer 2 functionality on interfaces that will be configured as routed ports.

59 Which three actions are taken when the command **switchport host** is entered on a switch port? (Choose three.)

- ☐ BPDU guard is enabled.
 - ☐ Cisco Discovery Protocol (CDP) is disabled.
 - ☐ VLAN trunking protocol (VTP) is disabled.
 - ☒ PortFast is enabled.
 - ☒ Trunking is disabled.
 - ☒ Channel group is disabled.
-

60 What type of queuing provides the best quality for voice applications?

- ☐ custom queuing
 - ☐ FIFO queuing
 - ☒ priority queuing
 - ☐ weighted round robin (WRR) queuing
-