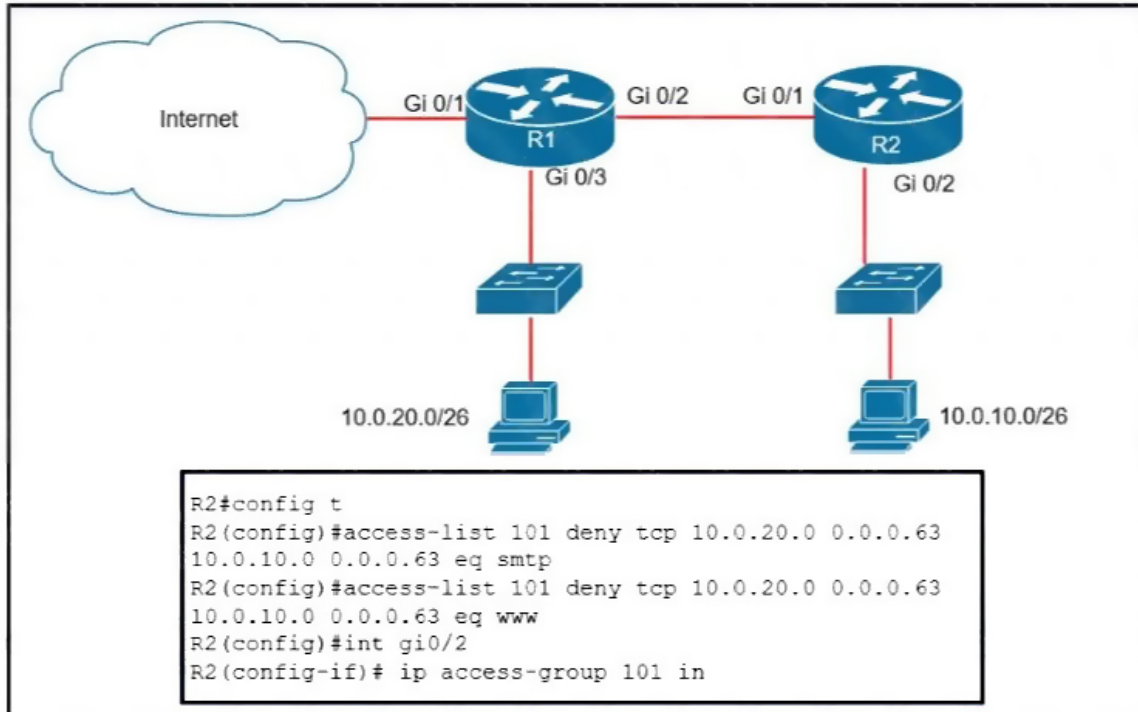A. The switch rewrites the source and destination MAC addresses with its own.
B. The source MAC address is changed.
C. The source and destination MAC addresses remain the same.
D. The destination MAC address is replaced with ffff.ffff.ffff.

Correct Answer: C

QUESTION 125
Refer to the exhibit. An extended ACL has been configured and applied to router R2 The
configuration failed to work as intended. Which two changes stop outbound traffic on TCP ports
25 and 80 to 10.0.20 0 26 from the 10.0.10 0/26 subnet while still allowing all other traffic?
(Choose two)

```
R2#config t
R2(config)#access-list 101 deny tcp 10.0.20.0 0.0.0.63
10.0.10.0 0.0.0.63 eq smtp
R2(config)#access-list 101 deny tcp 10.0.20.0 0.0.0.63
10.0.10.0 0.0.0.63 eq www
R2(config)#int gi0/2
R2(config-if)# ip access-group 101 in
```

A.   Add a "permit ip any any" statement to the begining of ACL 101 for allowed traffic.
B.   Add a "permit ip any any" statement at the end of ACL 101 for allowed traffic
C.   The source and destination IPs must be swapped in ACL 101
D.   The ACL must be configured the Gi0/2 interface inbound on R1
E.   The ACL must be moved to the Gi0/1 interface outbound on R2

Correct Answer: BC

QUESTION 126
What is the purpose of a southbound API in a control based networking architecture?

A.   Facilities communication between the controller and the applications
B.   Facilities communication between the controller and the networking hardware
C.   allows application developers to interact with the network
D.   integrates a controller with other automation and orchestration tools.

Correct Answer: B
Explanation:
https://www.ciscopress.com/articles/article.asp?p=2995354&seqNum=2#:~:text=The%20Southbo
und%20Interface,communicate%20to%20the%20networking%20devices.&text=The%20overall%
20goal%20is%20network,from%20being%20only%20a%20protocol.

The Southbound Interface
In a controller-based network architecture, the controller needs to communicate to the networking
devices.

QUESTION 127
Which virtual MAC address is used by VRRP group 1?

A. 0050.0c05.ad81
B. 0007.c061.bc01
C. 0000.5E00.0101
D. 0500.3976.6401

Correct Answer: C
Explanation:
The virtual router MAC address associated with a virtual router is an IEEE 802 MAC Address in the following format: 00-00-5E-00-01-{VRID} (in hex in internet standard bit-order)

QUESTION 128
How does HSRP provide first hop redundancy?

A. It load-balances traffic by assigning the same metric value to more than one route to the same destination m the IP routing table.
B. It load-balances Layer 2 traffic along the path by flooding traffic out all interfaces configured with the same VLAN.
C. It forwards multiple packets to the same destination over different routed links n the data path
D. It uses a shared virtual MAC and a virtual IP address to a group of routers that serve as the default gateway for hosts on a LAN

Correct Answer: D
Explanation:
https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipapp_fhrp/configuration/xe-16/fhp-xe-16-book/fhp-hsrp-mgo.html

QUESTION 129
What is the function of a controller in controller-based networking?

A. It serves as the centralized management point of an SDN architecture.
B. It centralizes the data plane for the network.
C. It is the card on a core router that maintains all routing decisions for a campus.
D. It is a pair of core routers that maintain all routing decisions for a campus

Correct Answer: A

QUESTION 130
Which action does the router take as it forwards a packet through the network?

A. The router replaces the original source and destination MAC addresses with the sending router MAC address as the source and neighbor MAC address as the destination
B. The router encapsulates the original packet and then includes a tag that identifies the source router MAC address and transmits it transparently to the destination
C. The router encapsulates the source and destination IP addresses with the sending router IP address as the source and the neighbor IP address as the destination
D. The router replaces the source and destination labels with the sending router interface label as a source and the next hop router label as a destination

Correct Answer: A

QUESTION 131
What is recommended for the wireless infrastructure design of an organization?

A. group access points together to increase throughput on a given channel
B. configure the first three access points are configured to use Channels 1, 6, and 11
C. include a least two access points on nonoverlapping channels to support load balancing
D. assign physically adjacent access points to the same Wi-Fi channel

Correct Answer: B

QUESTION 132
Where does the configuration reside when a helper address Is configured lo support DHCP?

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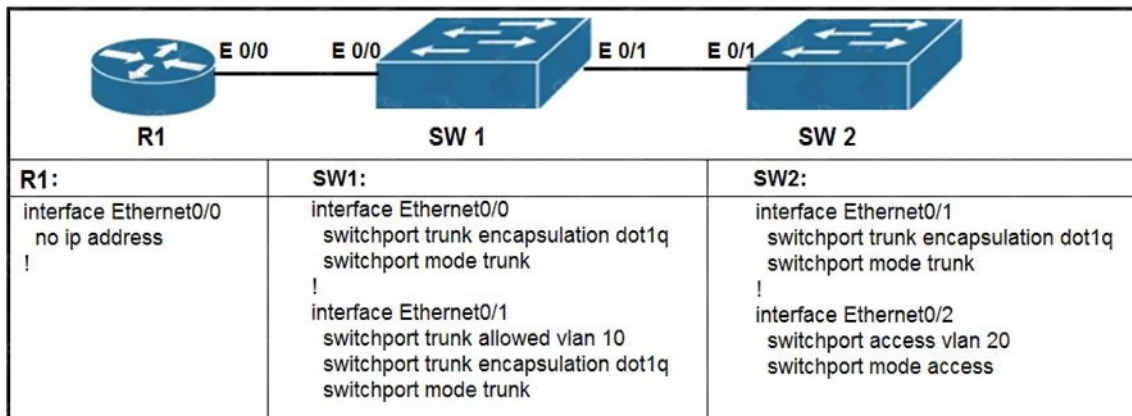
Correct Answer: B

QUESTION 133
An engineer is asked to protect unused ports that are configured in the default VLAN on a switch.
Which two steps will fulfill the request? (Choose two)

A. Configure the ports in an EtherChannel.
B. Administratively shut down the ports
C. Configure the port type as access and place in VLAN 99
D. Configure the ports as trunk ports
E. Enable the Cisco Discovery Protocol

Correct Answer: BC

QUESTION 134
Refer to the exhibit. What commands are needed to add a subinterface to Ethernet0/0 on R1 to
allow for VLAN 20, with IP address 10.20.20.1/24?

R1:	SW1:	SW2:

interface Ethernet0/0
  no ip address
!
	interface Ethernet0/0
	  switchport trunk encapsulation dot1q
	  switchport mode trunk
	!
	interface Ethernet0/1
	  switchport trunk allowed vlan 10
	  switchport trunk encapsulation dot1q
	  switchport mode trunk
		interface Ethernet0/1
		  switchport trunk encapsulation dot1q
		  switchport mode trunk
		!
		interface Ethernet0/2
		  switchport access vlan 20
		  switchport mode access

A. R1(config)#interface ethernet0/0
    R1(config)#encapsulation dot1q 20

R1(config)#ip address 10.20.20.1 255.255.255.0
B. R1(config)#interface ethernet0/0.20
   R1(config)#encapsulation dot1q 20
   R1(config)#ip address 10.20.20.1 255.255.255.0
C. R1(config)#interface ethernet0/0.20
   R1(config)#ip address 10.20.20.1 255.255.255.0
D. R1(config)#interface ethernet0/0
   R1(config)#ip address 10.20.20.1 255.255.255.0

Correct Answer: B

QUESTION 135
What protocol allows an engineer to back up 20 network router configurations globally while using the copy function?

A. SMTP
B. SNMP
C. TCP
D. FTP

Correct Answer: B

QUESTION 136
A port security violation has occurred on a switch port due to the maximum MAC address count being exceeded. Which command must be configured to increment the security-violation count and forward an SNMP trap?

A. switchport port-security violation access
B. switchport port-security violation protect
C. switchport port-security violation restrict
D. switchport port-security violation shutdown
Correct Answer: C
Explanation:
https://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst4500/12-2/25ew/configuration/guide/conf/port_sec.html

QUESTION 137
What are two functions of a Layer 2 switch? (Choose two)

A. acts as a central point for association and authentication servers
B. selects the best route between networks on a WAN
C. moves packets within a VLAN
D. moves packets between different VLANs
E. makes forwarding decisions based on the MAC address of a packet

Correct Answer: AE

QUESTION 138
When configuring IPv6 on an interface, which two IPv6 multicast groups are joined? (Choose two)

A. 2000::/3
B. 2002::5