Cisco

Exam 200-120

CCNA Cisco Certified Network Associate CCNA

Version: 27.0

[Total Questions: 365]

Topic break down

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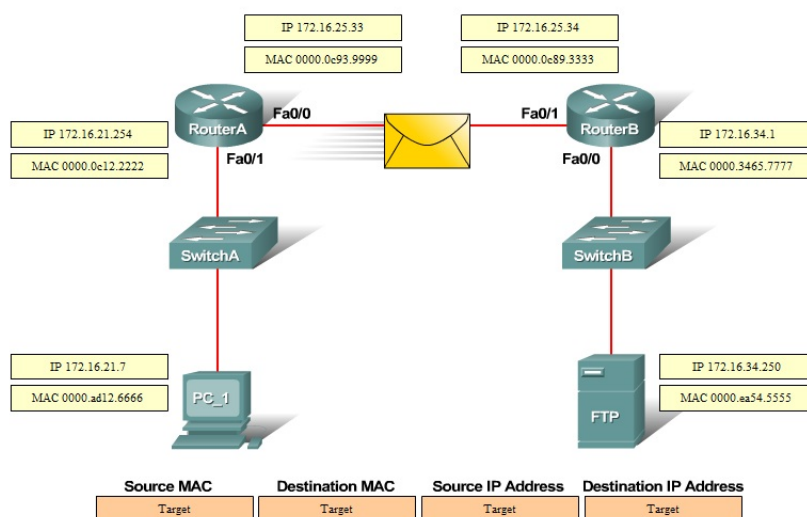## Topic 1, Operation of IP Data Networks

Question No : 1 - (Topic 1)

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.

Answer: B,D,E

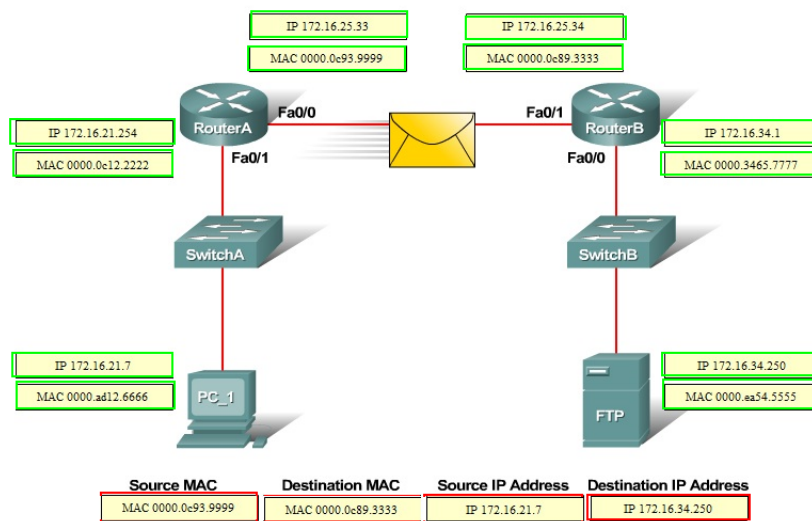### Question No : 2 DRAG DROP - (Topic 1)

Answer:

Refer to the exhibit. PC_1 is sending packets to the FTP server. Consider the packets as they leave RouterA interface Fa0/0 towards RouterB. Drag the correct frame and packet address to their place in the table.

IP 172.16.25.33		IP 172.16.25.34
MAC 0000.0c93.9999		MAC 0000.0c89.3333

RouterA Fa0/0   Fa0/1 **RouterB**

IP 172.16.21.254   Fa0/1   Fa0/0   IP 172.16.34.1
MAC 0000.0c12.2222   MAC 0000.3465.7777

SwitchA   **SwitchB**

IP 172.16.21.7   **PC_1**   IP 172.16.34.250
MAC 0000.ad12.6666   **FTP**   MAC 0000.ea54.5555

Source MAC	Destination MAC	Source IP Address	Destination IP Address
MAC 0000.0c93.9999	MAC 0000.0c89.3333	IP 172.16.21.7	IP 172.16.34.250

Question No : 3 - (Topic 1)

A receiving host computes the checksum on a frame and determines that the frame is damaged. The frame is then discarded. At which OSI layer did this happen?

A. session
B. transport
C. network
D. data link
**E.** physical

Answer: D

Question No : 4 - (Topic 1)

A network interface port has collision detection and carrier sensing enabled on a shared twisted pair network. From this statement, what is known about the network interface port?

A. This is a 10 Mb/s switch port.
B. This is a 100 Mb/s switch port.
C. This is an Ethernet port operating at half duplex.
D. This is an Ethernet port operating at full duplex.
E. This is a port on a network interface card in a PC.

Answer: C

Question No : 5 - (Topic 1)

Refer to the exhibit.
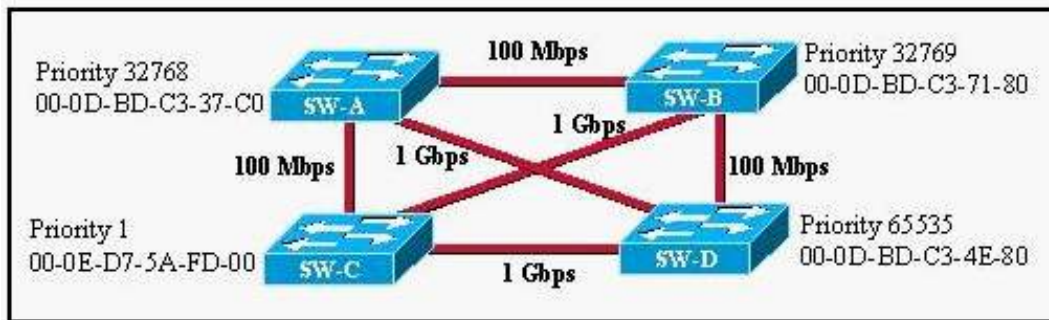
Based on the information given, which switch will be elected root bridge and why?

A. Switch A, because it has the lowest MAC address
B. Switch A, because it is the most centrally located switch
C. Switch B, because it has the highest MAC address
D. Switch C, because it is the most centrally located switch
E. Switch C, because it has the lowest priority
F. Switch D, because it has the highest priority

Answer: E

Question No : 6 - (Topic 1)

What is the difference between a CSU/DSU and a modem?

A. A CSU/DSU converts analog signals from a router to a leased line; a modem converts analog signals from a router to a leased line.
B. A CSU/DSU converts analog signals from a router to a phone line; a modem converts digital signals from a router to a leased line.
C. A CSU/DSU converts digital signals from a router to a phone line; a modem converts analog signals from a router to a phone line.
D. A CSU/DSU converts digital signals from a router to a leased line; a modem converts digital signals from a router to a phone line.

Answer: D

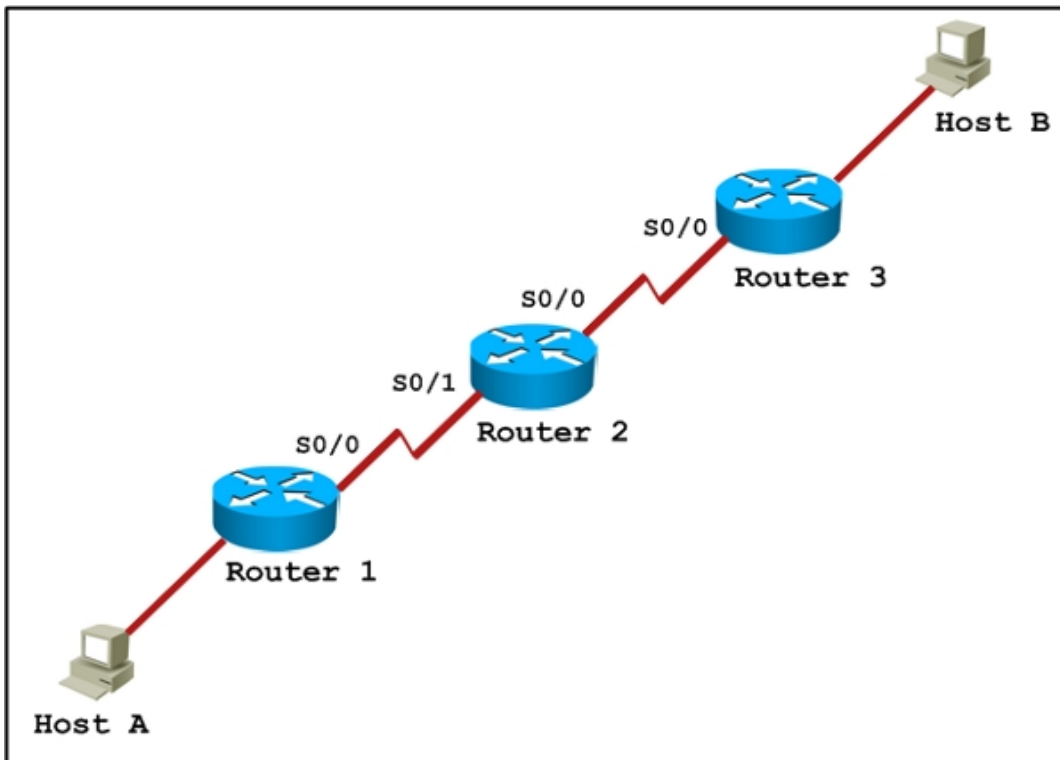**Question No : 7 - (Topic 1)**

Refer to exhibit:
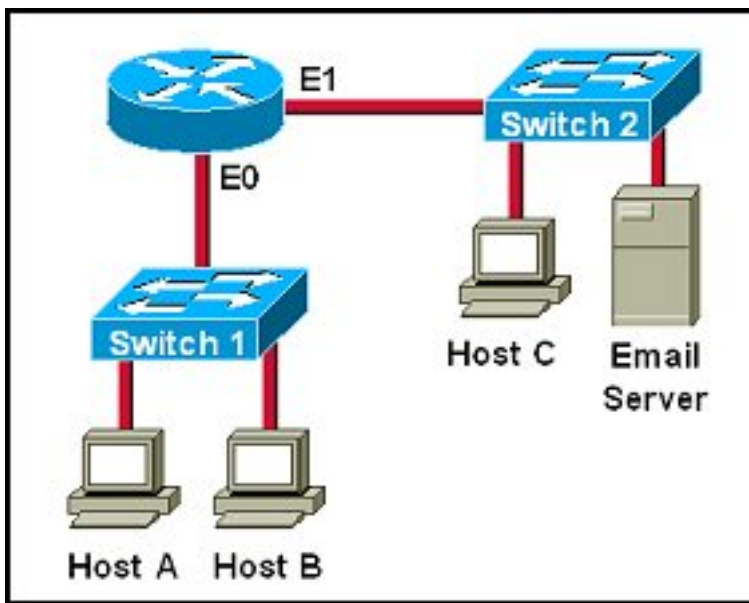
Which destination addresses will be used by Host A to send data to Host C? (Choose two.)

A. the IP address of Switch 1
B. the MAC address of Switch 1
C. the IP address of Host C
D. the MAC address of Host C
E. the IP address of the router's E0 interface
F. the MAC address of the router's E0 interface

Answer: C,F
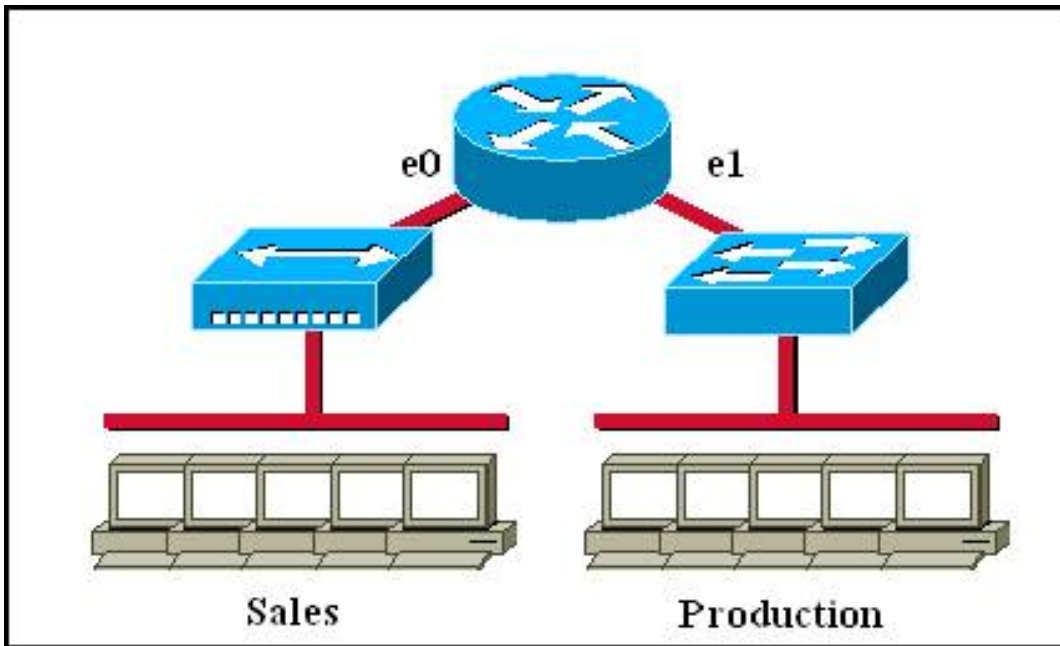

Question No : 8 - (Topic 1)

Refer to the exhibit.

Host A pings interface S0/0 on router 3. What is the TTL value for that ping?

A. 252
B. 253
C. 254
D. 255

Answer: B

Question No : 9 - (Topic 1)

Which of the following statements describe the network shown in the graphic? (Choose two.)

A. There are two broadcast domains in the network.
B. There are four broadcast domains in the network.
C. There are six broadcast domains in the network.
D. There are four collision domains in the network.
E. There are five collision domains in the network.
F. There are seven collision domains in the network.

Answer: A,F

Question No : 10 - (Topic 1)

A router has two Fast Ethernet interfaces and needs to connect to four VLANs in the local network. How can you accomplish this task, using the fewest physical interfaces and without decreasing network performance?

A. Use a hub to connect the four VLANS with a Fast Ethernet interface on the router.
B. Add a second router to handle the VLAN traffic.
C. Add two more Fast Ethernet interfaces.
D. Implement a router-on-a-stick configuration.

Answer: D

Question No : 11 - (Topic 1)

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 medium is idle
E. when the server grants access
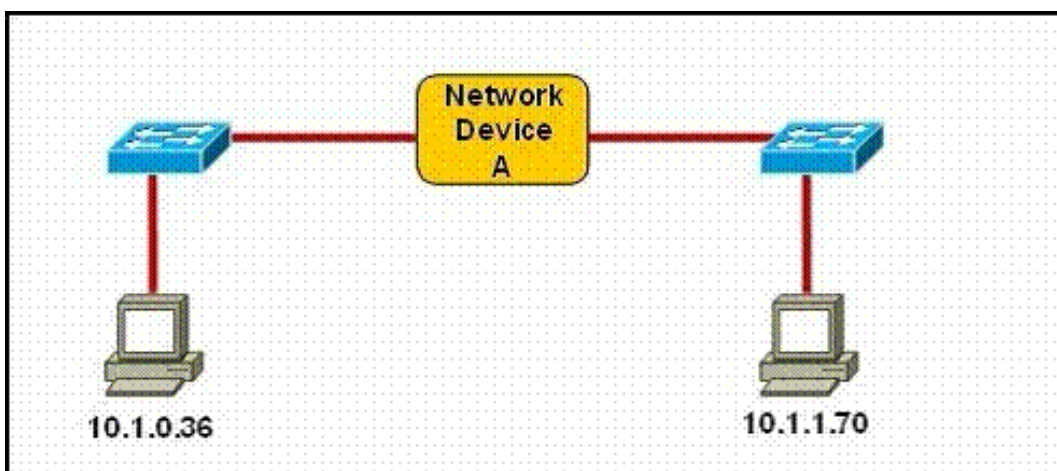
Answer: C,D

Question No : 12 - (Topic 1)

Where does routing occur within the DoD TCP/IP reference model?

A. application
B. internet
C. network
D. transport

Answer: B

Question No : 13 - (Topic 1)

Refer to the exhibit.

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.

Answer: B,D,E

Question No : 14 - (Topic 1)

For what two purposes does the Ethernet protocol use physical addresses? (Choose two.)

A. to uniquely identify devices at Layer 2
B. to allow communication with devices on a different network
C. to differentiate a Layer 2 frame from a Layer 3 packet
D. to establish a priority system to determine which device gets to transmit first
E. to allow communication between different devices on the same network
F. to allow detection of a remote device when its physical address is unknown

Answer: A,E

Question No : 15 - (Topic 1)

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

Answer: E