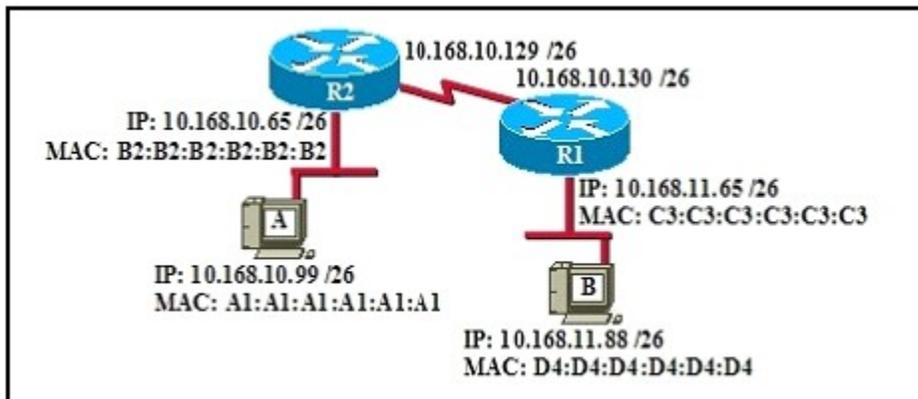**Vendor: Cisco**

Exam Code: 100-105

Exam Name: Interconnecting Cisco Networking Devices Part 1 v3.0 (ICND1)

QUESTION 1
Refer to the exhibit. If host A sends an IP packet to host B, what will the source physical address be in the frame when it reaches host B?

A. 10.168.10.99
B. 10.168.11.88
C. A1:A1:A1:A1:A1:A1
D. B2:B2:B2:B2:B2:B2
E. C3:C3:C3:C3:C3:C3
F. D4:D4:D4:D4:D4:D4

Correct Answer: E
Explanation:
When packets transfer from one host to another across a routed segment, the source IP address always remains the same source IP address, and the source physical (MAC) address will be the existing router's interface address. Similarly, the destination IP address always remains the same and the destination physical (MAC) address is the destination router's interface address.

QUESTION 2
Refer to the exhibit. What kind of cable should be used to make each connection that is identified by the numbers shown?
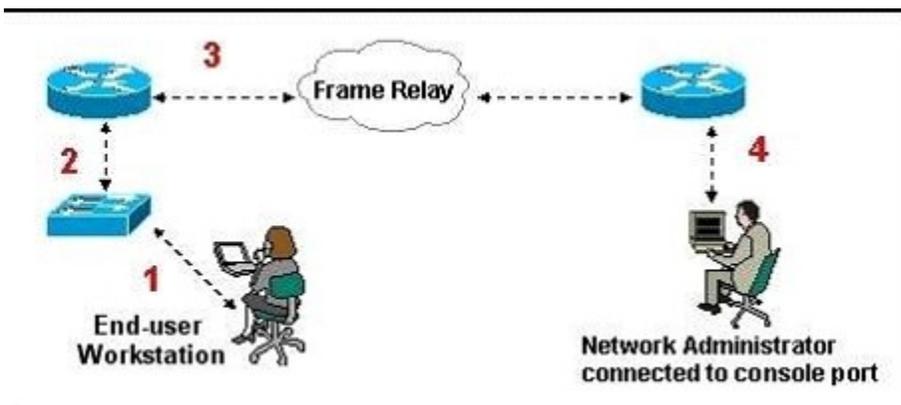
A. 1 - Ethernet Crossover cable
   2 - Ethernet straight-through cable
   3 - Fiber Optic cable
   4 - Rollover cable

B. 1 - Ethernet straight-through cable
   2 - Ethernet straight-through cable
   3 - Serial cable
   4 - Rollover cable
C. 1 - Ethernet rollover cable
   2 - Ethernet crossover cable
   3 - Serial cable
   4 - Null-modem cable
D. 1 - Ethernet straight-through cable
   2 - Ethernet Crossover cable
   3 - Serial cable
   4 - Rollover cable
E. 1 - Ethernet straight-through cable
   2 - Ethernet Crossover cable
   3 - Serial cable
   4 - Ethernet Straight-through cable

Correct Answer: B
Explanation:
When connecting a PC to a switch, a standard Ethernet straight through cable should be used.
This same cable should also be used for switch to router connections. Generally speaking,
crossover cables are only needed when connecting two like devices (PC-PC, switch-switch,
router-router, etc).
Routers connect to frame relay and other WAN networks using serial cables. Rollover cables are
special cables used for connecting to the console ports of Cisco devices.

QUESTION 3
Refer to the exhibit. What must be configured to establish a successful connection from Host A to
switch SW-A through router RT-A?
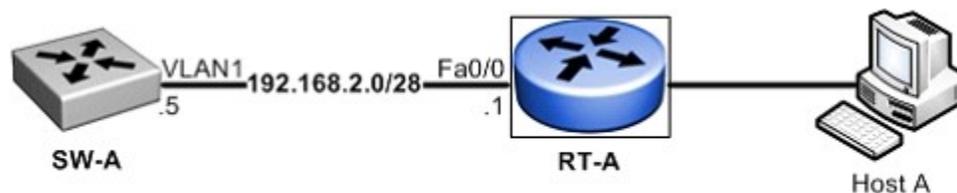
A. VLAN 1 on RT-A
B. IP routing on SW-A
C. default gateway on SW-A
D. crossover cable connecting SW-A and RT-A

Correct Answer: C
Explanation:
In order for the switch to reach networks that are not local, such as networks attached to different
interfaces of the router, it will need to set its default gateway to be the IP address of the attached
router.

QUESTION 4
Refer to the exhibit. SwitchA receives the frame with the addressing shown in the exhibit.

According to the command output also shown in the exhibit, how will SwitchA handle this frame?

```
SwitchA# show mac-address-table
< non-essential output omitted >
      Destination Address  Address Type  VLAN  Destination Port

      --------------------  ------------  ----  --------------------
      00b0.d056.fe4d        Dynamic       1     FastEthernet0/3
      00b0.d043.ac2e        Dynamic       1     FastEthernet0/4
      00b0.d0fe.ac32        Dynamic       1     FastEthernet0/5
      00b0.d0da.cb56        Dynamic       1     FastEthernet0/6
```

Frame received by SwitchA:

Source MAC	Destination MAC	Source IP	Destination IP
00b0.d056.fe4d	00b0.d0da.895a	192.168.40.5	192.168.40.6

A. It will drop the frame.
B. It will forward the frame out port Fa0/6 only.
C. It will forward the frame out port Fa0/3 only.
D. It will flood the frame out all ports.
E. It will flood the frame out all ports except Fa0/3.

Correct Answer: E
Explanation:
When frame receives the frame, it checks the source address on MAC table if MAC address found in MAC table it tries to forward if not in MAC table adds the Address on MAC table. After checking the source address, it checks the destination address on MAC table, if MAC address found on MAC table it forwards to proper ports otherwise floods on all ports except the source port.

QUESTION 5
Refer to the topology and switching table shown in the graphic. Host B sends a frame to Host C. What will the switch do with the frame?

Switch 1 switch table

Host A   Host B   Host C   Host D   Switch1

Host	MAC Address	Port
A	00-0A-8A-47-E6-12	0/5
D	01-00-CD-22-03-14	0/9
B	01-1B-25-AB-32-E8	0/2

A. Drop the frame
B. Send the frame out all ports except port 0/2
C. Return the frame to Host B