

**Exam** : **640-821**

**Title** : Introduction to Cisco  
Networking Technologies

**Version** : DEMO

1. Refer to the exhibit. Why was this message received?

```
WG1R2#telnet 10.3.1.2
Trying 10.3.1.2 ... Open

Password required, but none set

[Connection to 10.3.1.2 closed by foreign host]
WG1R2#_
```

- A. No VTY password has been set.
- B. No enable password has been set.
- C. No console password has been set.
- D. No enable secret password has been set.
- E. The login command has not been set on CON 0.
- F. The login command has not been set on the VTY ports.

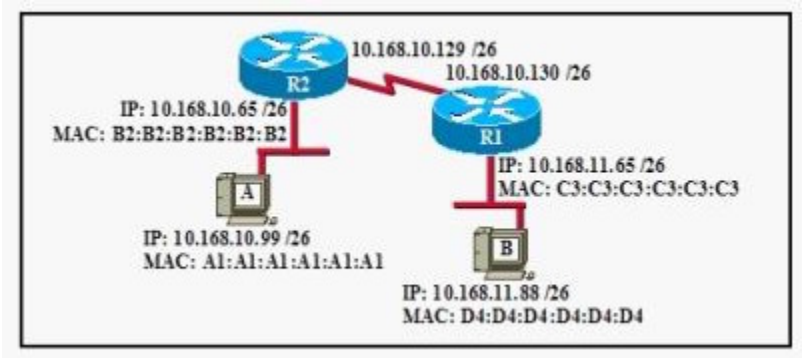
**Answer: A**

2. A network administrator needs to create 29 subnetworks while maximizing the number of host addresses available on each subnet. How many bits must be borrowed from the host field of the network address to provide the required number of subnets with the most hosts per subnet?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6
- F. 7

**Answer: D**

3. Refer to the exhibit. If host A sends an IP packet to host B, what will the OSI Layer 3 source address be in the packet when it reaches host B?



- A. 10.168.10.99
- B. 10.168.11.88
- C. 10.168.11.65
- D. A1:A1:A1:A1:A1:A1
- E. B2:B2:B2:B2:B2:B2
- F. C3:C3:C3:C3:C3:C3

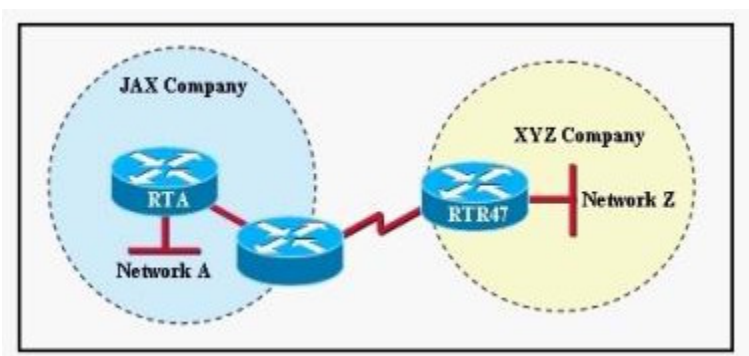
**Answer: A**

4. What is the difference between the Cisco router IOS commands show cdp neighbor detail and show cdp entry?

- A. The show cdp neighbor detail command shows all neighbor information, while show cdp entry displays only one line of output for each neighbor.
- B. The show cdp entry command shows neighbor information for specific neighbors only, while show cdp neighbor detail lists each neighbor with detailed output on each.
- C. The show cdp entry command shows neighbor information for all neighbors with one line of output for each, while show cdp neighbor detail lists each neighbor with detailed output on each.
- D. The show cdp neighbor detail command shows neighbor information for a single neighbor only, while show cdp entry displays detailed output on each neighbor known.

**Answer: B**

5. Refer to the exhibit. A person is trying to send a file from a host on Network A of the JAX Company to a server on Network Z of the XYZ Company. The file transfer fails. The host on Network A can communicate with other hosts on Network A. Which command, issued from router RTA, would be the most useful for troubleshooting this problem?



- A. show flash:
- B. show history
- C. show version
- D. show interfaces
- E. show controllers serial

**Answer: D**

6. Which Layer 4 protocol is used for a Telnet connection?

- A. IP
- B. TCP
- C. UDP
- D. ICMP
- E. DNS

**Answer: B**

7. What is the subnet address of 172.16.159.159/22?

- A. 172.16.0.0
- B. 172.16.128.0
- C. 172.16.156.0
- D. 172.16.159.0
- E. 172.16.159.128
- F. 172.16.192.0

**Answer: C**

8. What is the purpose of flow control?

- A. to ensure data is retransmitted if an acknowledgment is not received
- B. to reassemble segments in the correct order at the destination device
- C. to provide a means for the receiver to govern the amount of data sent by the sender
- D. to regulate the size of each segment

**Answer: C**

9. During the boot sequence, a 2600 series router needs to locate and load an operating system. What is the default order the router uses to find an operating system?

- A. Flash, TFTP server, ROM
- B. Flash, TFTP server, RAM
- C. Flash, NVRAM, TFTP server
- D. ROM, TFTP server, Flash
- E. Flash, ROM, TFTP server

**Answer: A**

10. What is the subnet address for the IP address 172.19.20.23/28?

- A. 172.19.20.0
- B. 172.19.20.15
- C. 172.19.20.16
- D. 172.19.20.20
- E. 172.19.20.32

**Answer: C**

11. Which two statements describe the IP address 10.16.3.65/23? (Choose two.)

- A. The subnet address is 10.16.3.0 255.255.254.0.
- B. The lowest host address in the subnet is 10.16.2.1 255.255.254.0.
- C. The last valid host address in the subnet is 10.16.2.254 255.255.254.0
- D. The broadcast address of the subnet is 10.16.3.255 255.255.254.0.
- E. The network is not subnetted.

**Answer: BD**

12. An administrator issues the show ip interface s0/0 command and the output displays the line Serial0/0 is up, line protocol is up. What does "line protocol is up" specifically indicate about the interface?

- A. Keepalives are being received on the interface.
- B. The cable is attached properly.
- C. CDP has discovered the connected device.
- D. A carrier detect signal has been received from the connected device.
- E. IP is correctly configured on the interface.

**Answer: A**

13. The Hub and Spoke routers are directly connected through their serial interfaces for purposes of testing. Based on the output shown in the exhibit, what must be done to make the serial line operational?

```
Hub# show controllers s0/0
Interface Serial0/0
Hardware is PowerQUICC MPC860
DTE V.35 clocks stopped.
idb at 0x81DE2098, driver data structure at 0x81DE4DF4
SCC Registers:

Hub# show ip interface s0/0
Serial0/0 is up, line protocol is down
Internet address is 192.168.1.2/24
Broadcast address is 255.255.255.255
.
.
<some output omitted>
```

- A. Start the clock on the Hub router.
- B. Change the IP address on the Spoke router.
- C. Configure the serial 0/0 interface on the Spoke router with a clockrate.
- D. Replace the broken cable between the two devices.
- E. Use the no shutdown command on the Hub router.

**Answer: C**

14. Which command will reinitialize the router and totally replace the running configuration with the current startup configuration?

- A. router# reload
- B. router# copy tftp startup-config
- C. router# copy startup-config running-config
- D. router# copy running-config flash
- E. router# setup
- F. router# restart

**Answer: A**

15. Refer to the graphic. What is the purpose of the two numbers shown following the exec-timeout command?

```
R1#show running-config
<<output omitted>>
line console 0
  exec-timeout 1 55
  password 7 094F60C0B1C1B
  login
  transport input none
<<output omitted>>
```

- A. If no commands have been typed in 55 seconds, the console connection will be closed.
- B. If no router activity has been detected in one hour and 55 minutes, the console will be locked out.
- C. If no commands have been typed in one minute and 55 seconds, the console connection will be closed.
- D. If connected to the router by Telnet, input must be detected within one hour and 55 seconds or the connection will be closed.
- E. If connected to the router by Telnet, input must be detected within one minute and 55 seconds or the connection will be closed.

**Answer: C**

16. How will a Cisco 2600 series router respond if the conditions listed below exist during the boot process?

- 1) The IOS image in flash is missing.
  - 2) No network connectivity is available.
  - 3) The router fallback IOS image is corrupt.
- A. The router will enter setup mode.

- B. The router will enter ROM monitor mode.
- C. The router will enter global configuration mode.
- D. The boot will hang until an IOS is available.
- E. The router will enter the prompted setup dialog.

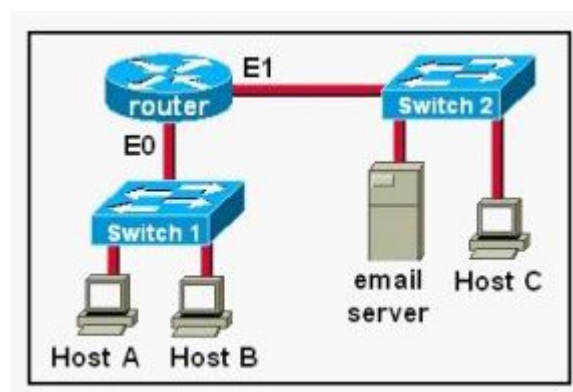
**Answer: B**

17. A router receives a packet on interface 172.16.45.66/26. The source IP of the packet is 172.16.45.126/26 and the destination is 172.16.46.191/26. How will the router handle the packet?

- A. The destination is a host on another subnet, so the router will not forward the packet.
- B. The destination is a host on the same subnet, so the router will forward the packet.
- C. The destination is a broadcast address, so the router will not forward the packet.
- D. The destination is a network address, so the router will forward the packet.

**Answer: C**

18. Host A needs to communicate with the email server shown in the graphic. What address will be placed in the destination address field of the frame when it leaves Host A?



- A. the MAC address of Host A
- B. the MAC address of Switch 1
- C. the MAC address of E0 of the router
- D. the MAC address of E1 of the router
- E. the MAC address of Switch 2
- F. the MAC address of the email server

**Answer: C**

19. What is the default configuration register setting on most Cisco routers?

- A. 0x2210
- B. 0x2104
- C. 0x2102
- D. 0x2012
- E. 0x2142

**Answer: C**

20. Which statements accurately describe CDP? (Choose three.)

- A. CDP is an IEEE standard protocol.
- B. CDP is a Cisco proprietary protocol.
- C. CDP is a datalink layer protocol.
- D. CDP is a network layer protocol.
- E. CDP can discover directly connected neighboring Cisco devices.
- F. CDP can discover Cisco devices that are not directly connected.

**Answer: BCE**