

1

What subnet mask would be used if a company using 172.16.0.0 wants to leave 6 bits for host bits?

- ☐ 255.255.0.0
 - ☐ 255.255.240.0
 - ☐ 255.255.255.240
 - ☒ 255.255.255.192
-

2

What is the function of a CSU/DSU?

- ☒ It converts user data into an acceptable form to be sent over a WAN link.
 - ☐ It protects user data from unauthorized access when transmitted over a WAN.
 - ☐ It limits the geographic area in which a WAN operates.
 - ☐ It converts between temporary and permanent WAN connections.
-

3

A company is planning to subnet its network for a maximum of 27 hosts. Which subnet mask would provide the needed hosts and leave the fewest unused addresses in each subnet?

- ☐ 255.255.255.0
 - ☐ 255.255.255.192
 - ☒ 255.255.255.224
 - ☐ 255.255.255.240
 - ☐ 255.255.255.248
-

4

What are three characteristics of UTP cabling? (Choose three.)

- ☐ inexpensive
 - ☐ easy to install
 - ☐ requires an AUI adapter
 - ☐ normally used in a WAN environment
 - ☒ normally used in a star topology
 - ☐ distance limitation of 185 meters
-

5

A network administrator is required to use media in the network that can run up to 100 meters in cable length without using repeaters. The chosen media must be inexpensive and easily installed. The installation will be in a pre-existing building with limited cabling space. Which type of media would best meet these requirements?

- ☐ STP
 - ☒ UTP
 - ☐ coaxial
 - ☐ single-mode fiber
 - ☐ multimode fiber
-

6

What type of network cable is used between a terminal and a console port?

- ☐ cross-over
 - ☐ straight-through
 - ☒ rollover
 - ☐ patch cable
-

7

Which device is used to create or divide broadcast domains?

- ☐ hub
 - ☐ switch
 - ☐ bridge
 - ☒ router
 - ☐ repeater
-

8

How many host addresses may be assigned on each subnetwork when using the 130.68.0.0 network address with a subnet mask of 255.255.248.0?

- ☐ 30
 - ☐ 256
 - ☒ 2046
 - ☐ 2048
 - ☐ 4094
 - ☐ 4096
-

9

Which option identifies the primary interface which would be used for initial configuration of a Cisco router?

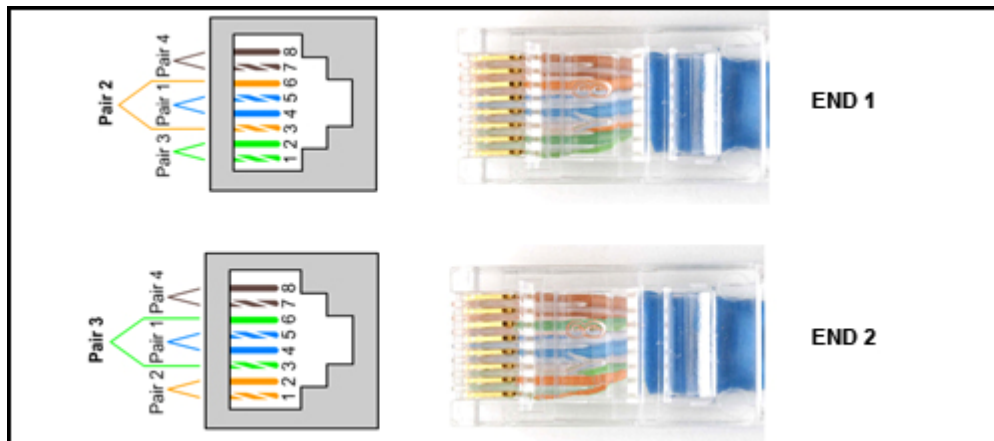
- ☐ AUX interface
 - ☐ Ethernet interface
 - ☐ serial interface
 - ☒ console interface
-

10

Which subnet mask would be assigned to the network address of 192.168.32.0 to provide 254 useable host addresses per subnetwork?

- ☐ 255.255.0.0
 - ☒ 255.255.255.0
 - ☐ 255.255.254.0
 - ☐ 255.255.248.0
-

11



Refer to the exhibit. A student working in the lab selects a cable that is wired as shown. Which connection types can successfully be made with this cable? (Choose two.)

- ☐ connecting a PC to a router's console port
- ☒ connecting two routers together via their fast ethernet ports
- ☒ connecting two switches together at gigabit speeds
- ☐ connecting a PC to a switch at Gigabit Ethernet speeds
- ☐ connecting two devices with the same interface type at Fast Ethernet speeds

12

What makes fiber preferable to copper cabling for interconnecting buildings? (Choose three.)

- ☒ greater distances per cable run
- ☐ lower installation cost
- ☒ limited susceptibility to EMI/RFI
- ☐ durable connections
- ☒ greater bandwidth potential
- ☐ easily terminated

13

What does the term "attenuation" mean in data communication?

- ☒ loss of signal strength as distance increases
- ☐ time for a signal to reach its destination
- ☐ leakage of signals from one cable pair to another
- ☐ strengthening of a signal by a networking device