

1. Which OSI layer is responsible for managing optical signals used for data communication?
presentation
data link
transport
physical
2. Which type of cable run is most often associated with fiber-optic cable?
backbone cable
horizontal cable
patch cable
work area cable
3. Which characteristics describe fiber optic cable? (Choose two.)
It is not affected by EMI or RFI.
Each pair of cables is wrapped in metallic foil.
It combines the technique of cancellation, shielding and twisting to protect data.
It has a maximum speed of 100 Mbps.
It is the most expensive type of LAN cabling.
4. What is a possible effect of improperly applying a connector to a network cable?
Data will be forwarded to the wrong node.
Data transmitted through that cable may experience signal loss.
An improper signaling method will be implemented for data transmitted on that cable.
The encoding method for data sent on that cable will change to compensate for the improper connection.
5. What are three measures of data transfer? (Choose three.)
goodput
frequency
amplitude
throughput
crosstalk
bandwidth
6. Which of the following is a characteristic of single-mode fiber-optic cable?
generally uses LEDs as the light source
relatively larger core with multiple light paths
less expensive than multimode
generally uses lasers as the light source
7. Which connector is used with twisted-pair cabling in an Ethernet LAN?



8. With the use of unshielded twisted-pair copper wire in a network, what causes crosstalk within the cable pairs?

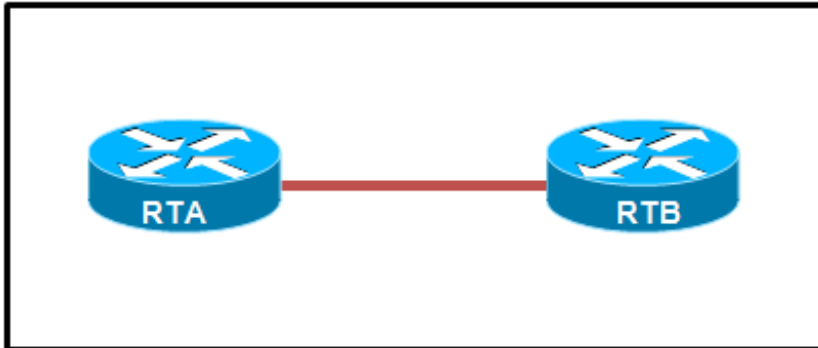
the magnetic field around the adjacent pairs of wire

the use of braided wire to shield the adjacent wire pairs

the reflection of the electrical wave back from the far end of the cable

the collision caused by two nodes trying to use the media simultaneously

9.



Refer to the exhibit. An ISP donates some decommissioned Cisco 2600 series routers to a local high school. The high school plans to use these routers in their networking classrooms for students to practice. Which type of cable is used to make an Ethernet connection between routers RTA and RTB?

coax cable

rollover cable

crossover cable

straight-through cable

10. In LAN installations where potential electrical hazards or electromagnetic interference may be present, what type of media is recommended for backbone cabling?

coax

fiber

Cat5e UTP

Cat6 UTP

STP

11. When is a rollover cable used in a network?

for connecting a host to a Fast Ethernet port on a switch

for connecting a router to another router through their serial ports

for connecting a switch to another switch through their console ports

for connecting to a switch through its console port

12. What is a purpose of the physical layer in data communication?

to wrap data packets into frames

to make sure that MAC addresses are unique in each frame

to control the access sequence of frames to the transmission media

to convert a frame into a series of signals to be transmitted on the local media

13. An installed fiber run can be checked for faults, integrity, and the performance of the media by using what device?

light injector

OTDR

TDR

multimeter

14. Which data communications standard provides broadband access in a wireless network?

GSM

Wi-Fi

WiMAX

Bluetooth

15. Which fiber connector supports full duplex Ethernet?



16. A customer installs a wireless access point at home in the closet next to the kitchen. The customer mentions that the wireless communication performance seems degraded when the cordless phone or the microwave oven is in use. What is the possible reason for this degradation?

The access point is close to walls.

The cordless phone joins the WLAN and shares the available bandwidth.

The wireless signal is in the same radio frequency range as the household devices are in.

The access point is on the same electrical circuit as the phone base unit and microwave oven are.

The surge of electricity when a microwave oven is in use disrupts the operation of the access point.

17. Compared with UTP cable, what extra characteristic of STP cable helps reduce the effects of interference?

the metal braiding in the shielding

the reflective cladding around the core

the twisting of the wires in the cable

the insulating material in the outer jacket