

## Chap-05

### Chapter 05

1. What device is used to connect hosts to an Ethernet LAN and requires a straight-through UTP cable between the hosts and this device?
  - a. NIC
  - b. router
  - \* c. switch
  - d. server
2. Users with systems that are attached to a hub are complaining about poor response time. What device could replace the hub and provide immediate response time improvement?
  - a. router
  - \* b. switch
  - c. bridge
  - d. repeater
3. Refer to the exhibit. How many collision domains exist in the network?
  - a. 1
  - \* b. 2
  - c. 4
  - d. 7
  - e. 8
4. At which layer of the OSI model does the MAC address of a NIC reside?
  - a. physical
  - b. application
  - c. network
  - d. transport
  - \* e. data link
  - f. session
5. Which statement describes a typical use of Gigabit Ethernet?
  - a. to provide high-speed desktop connectivity for average users
  - b. to provide connectivity to low to medium volume applications
  - c. to provide medium volume connectivity to workgroup servers
  - \* d. to provide high-speed connectivity for backbones and cross connects
6. Refer to the exhibit. A technician measured the lengths of the CAT 5e structured cable runs in the exhibit. How should the technician evaluate the cabling shown in the diagram to the network administrator?
  - a. All cabling to work areas are within specifications.
  - b. Station A and B may experience intermittent problems because the length exceeds the recommended standard.
  - \* c. Station B may experience intermittent problems because the length exceeds the recommended standard.
  - d. Station C may experience intermittent network connectivity because the length is less than the recommended standard.
  - e. Station A and B will have intermittent problems because the length exceeds the recommended standard.
  - f. Station C will not have network connectivity because the length is less than the recommended standard.
7. What is the most common type of cabling used in LANs?
  - a. STP
  - \* b. UTP
  - c. coax
  - d. fiber
8. In which situations would a crossover cable be used to connect devices in a network? (Choose two.)
  - a. switch to PC

- \* b.switch to hub
- c.switch to router
- d.switch to server
- \* e.switch to switch

9. Refer to the exhibit. what is the appropriate cable to use at each of the numbered network connections?

- a.1-crossover; 2-straight-through; 3-crossover; 4-straight-through
- b.1-straight-through; 2-crossover; 3-straight-through; 4-straight-through
- c.1-straight-through; 2-crossover; 3-crossover; 4-straight-through
- \* d.1-rollover; 2-crossover; 3-straight-through; 4-straight-through
- e.1-rollover; 2-straight-through; 3-straight-through; 4-straight-through

10. The ends of a UTP cable are shown in the exhibit. which cable configuration is shown?

- a.crossover
- b.rollover
- c.reversed-pair
- \* d.straight-through
- e.split-pair
- f.console

11. which of the following are benefits of a wireless network? (Choose two.)

- a.higher data speeds
- b.better security
- \* c.mobility
- d.less expensive NIC cards
- \* e.no need to run cables to hosts

12. The ends of a UTP cable are shown in the exhibit. which cable configuration is shown?

- a.console
- \* b.crossover
- c.rollover
- d.reversed-pair
- e.split-pair
- f.straight-through

13. which two devices are considered OSI Layer 1 devices? (Choose two.)

- \* a.hubs
- b.routers
- c.bridges
- d.switches
- \* e.repeaters

14. which statement is accurate about a WAN link?

- \* a.The link transmits data serially.
- b.The link uses a maximum distance of 100 meters.
- c.The link uses the same transmission rate as all other WAN links use.
- d.The link uses the same standardized connector style that is used for all

WAN technologies.

15. which items in the exhibit are DTE devices?

- a.A and B
- b.B and C
- c.C and D
- \* d.A and D
- e.A, B, C, and D

16. which function is a unique responsibility of the DCE devices shown in the exhibit?

- a.transmission of data
- b.reception of data

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- \* c.clocking for the synchronous link
- d.noise cancellation in transmitted data

17. What type of cable would be used to make the connection between the console port of a router and a workstation?

- a.crossover
- \* b.rollover
- c.straight-through
- d.patch

18. What is characteristic of the operation of a hub?

- a.selectively drops packets that represent potential security risks
- \* b.forwards a frame out all interfaces except the inbound interface
- c.based on IP address, dynamically learns the interfaces to which all devices are attached
- d.upon power on, queries the devices on all interface to learn the MAC addresses of the attached devices
- e.transmits a frame to the specific interface to which the device with the MAC destination address is attached

19. Which of the following are benefits of peer-to-peer networks? (Choose three.)

- a.centralized security
- \* b.easy to create
- c.very scalable
- \* d.no centralized equipment required
- \* e.centralized administrator not required
- f.centralized control of assets

20. Which address does a bridge use to make filtering and switching decisions?

- a.source MAC
- b.source IP
- \* c.destination MAC
- d.destination IP
- e.network IP address