

NETWORKS

MULTIPLE CHOICE QUESTIONS

1. A network is a group of two or more computers linked together to share resources such as hardware software and data and communicate with one another.
 - a. True.
 - b. False.

2. Computer Networks fall into one of the following groups:
 - a. Hardware, LAN, WANs, data.
 - b. Intranet, Software, Components, Information.
 - c. LANs, WANs, The Internet, Intranets.
 - d. Peer-to-peer, client\server, Twisted Pair, Server.

3. The acronym LANs stands for:
 - a. Local Area Networks.
 - b. Peer-to-Peer Networks.
 - c. Wide Area Networks.
 - d. Coaxial Cable.

4. The acronym WANs stands for:
 - a. Twisted Pair Cable.
 - b. Client\Server Networks.
 - c. The Internet.
 - d. Wide Area Networks.

5. A LANs is a collection of Microcomputers in a building, department or school that share peripherals, information and communicate with each other.
 - a. True.
 - b. False.
 - c.

6. A Server stores the network Operating System and software to manage users requests, data protection and system security.
 - a. True.
 - b. False.

7. Besides the Server Computer, other computers on the network are called clients.
 - a. True.
 - b. False.

8. Which Cable used in LANs is a hair-thin piece of glass tubing, with the inside of the tube acting as a mirror allowing a light beam to travel along it, transmit large volumes of digital data extremely fast and virtually error-free.
 - a. Twisted Pair Cable.
 - b. Fiber Optics Cable.
 - c. Coaxial Cable.
 - d. Client Cable.

9. How computers are connected together determines their what?
 - a. Backbone.
 - b. Topology or Configuration.
 - c. Servers
 - d. Clients.

10. LAN common topologies\configuration are:
 - a. Bus, Star, Ring.
 - b. Client, Server, OS.
 - c. Backbone, Access points, Telnet.
 - d. Simplex line, half-duplex line, full-duplex line.

11. A Server on a Network has a faster processor, more RAM, more memory.
 - a. True.
 - b. False.

12. Which cable is relatively expensive method of connection computers on a network?
- a. Fiber Optics cable.
 - b. Coaxial Cable.
 - c. Twisted Pair Cable.
 - d. Server Cable.

13. Which cable is used for home networking or on small sites?
- a. Fiber Optics Cable.
 - b. Twisted pair Cable.
 - c. Coaxial Cable.
 - d. Peer cable.

Name its other characteristics

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14. A Hub is hardware device to which a number of computers can be connected.
- a. True.
 - b. False.

15. NICs stands for:
- a. Network Interface Cards.
 - b. Networks Wide Area.
 - c. Networks Local Area.
 - d. Networks Communication Links.

16. An Access Point contains radio receiver, encryption and communication software that translates computer signals to wireless signals for broadcasting to NICs and wireless signals to computer signals for broadcasting NICs to Network.
- a. True.
 - b. False.

17. NICs equipped for wireless communication have fixed or detachable radio antenna instead of coaxial cables.
- a. True.
 - b. False.

18. Access Points and NICs use 2.4 GHz radio band.
- a. True.
 - b. False.

Draw a line to match the topology\configuration to their characteristics.

LINE\BUS
server.

one or more computer on the network act as a

STAR

- Clients are connected to the network through a central hub.
- Packets containing the sender address and the receiver address is sent to the central hub, which then sends the packet to the receiving client.
- More cabling is used to connect clients on network.
- Adding new devices is easy.

RING

* connects networks across large geographical area such as city, states or country.

- Data is transmitted using microwave links, high speed telephone lines, satellite links or a combination of all three.
- Used mainly by universities and research centers.
- LANs can be connected across countries to form one.

WANs

* every computer on the network can act as a client and server.

- Networks best performance is achieved when its maximum size is ten computers.
- Used in small business and departments.

LANs

- **Cables** are used to connect all clients on network, the ends of the cable is then connected together to form a **loop or ring**.
- A **Token** (electronic signal) is passed around the ring giving each client the opportunity to send data.
- **Data** can only be sent when clients are in possession of the token.
- Communication is usually faster than in line networks.
- If the main cable is damaged, the entire network goes down.

Peer-to-Peer Network

* use radio link to connect client to networks through the use of NICs and access points.

- Used where it's difficult or impractical to use cabled LAN.
- Provides users more flexibility in retrieving data.
- Operates at low speed, increased possibility of interference by others using the same 2.4 GHz band.
- Users can gain illegal access to network.

Wireless LAN

* a collection of microcomputers in a building, department or school that share peripherals, information and communication with each other.

- Each computer function both as a workstation with its own software and a server with the network operating system that allow resources to be shared.
- Resources shared by LAN include printer, hard-drives, disk-drives, modems and fax machines.
- Users can work on one document together.
- Initial set-up costs are high.

Client\Server Network

- A single line or cable called the **backbone** with nodes to connect server, clients and other devices to network.
- Packet of Data is sent down the line in any direction.
- Each client on the line examines packet of data to determine if its for them, if it is, it is retained for further processing, if not, it is sent along the line.
- Extending the network is easy.
- Problems with main line\cable cause the whole network to malfunction.