

1. List down the types of printer and explain briefly.
  - Dot-matrix - A type of printer that forms each character as a group of small dots, using a group of wires located in the printing element. Also known as dot character printer.
  - Laser printer - A printer that uses a laser to produce an image on a rotating drum before electro statically transferring the image to paper.

2. What are the stages we need to know when troubleshooting laser printer?

3. Why are we still using DOT matrix printer?
  - It have low cost of printing
  - It can print wide paper for the spreadsheet
  - It will not stop in the middle if the ink is running out.

4. What types of ports or interface used to connect our printer and PC?
  - Parallel port
  - USB

5. What is PRINT server?

A computer or device that is connected to one or more printers and to client computers over a network, and can accept print jobs from the computers and send the jobs to the appropriate printers.

6. What is computer network?

When two or more computers that are connected with one another for the purpose of exchanging data electronically. Two basic network types are local area networks (LANs) and wide-area networks(WANs).

7. Why using computer network (advantages)? Also explain the disadvantages?

Advantages:

- File Sharing
- Resource sharing
- Saving money
- Avoid file duplication and corruption

Disadvantages:

- Security Issue
- Expensive set-up
- Easy spread of virus
- Network loss causes loss of data

8. Explain what is peer to peer and Server based network?

A peer to peer connection is a computer network in which all computers in the network have identical capabilities. There is no server computer, with more capabilities or authorities, than the other computers in the network.

A server-based network consists of a group of user-oriented PCs that request and receive network services from specialized computers called server. Servers are generally higher-performance systems, optimized to provide network services to other PCs.

9. List down the operating system that use peer or server based network

Peer to peer:

- Windows98
- Windows 95
- Windows XP
- 2000 Pro

Server based network:

- 2003

10. Explain briefly 5 different services used in computer network.

- Local area network (LAN), which is usually a small network constrained to a small geographic area.
- Metropolitan area network (MAN), which is used for medium size area. Examples for a city or a state.
- Wide area network (WAN) that is usually a larger network that covers a large geographic area.
- Wireless LANs and WANs (WLAN & WWAN) are the wireless equivalent of the LAN and WAN.

11. What do we need if we want to set up small LAN.

- One Desktop
- Router
- Wire telephone

12. List down the network topology. Explain the advantages and disadvantages.

- Bus topology  
Advantages: It is easy to handle and implement.  
Disadvantages: The cable length is limited.
- Star topology  
Advantages: Due to its centralized nature, the topology offers simplicity of operation  
Disadvantages: The network operation depends on the functioning of the central hub.
- Ring topology  
Advantages: A central server is not required for the management of this topology.  
Disadvantages: The failure of a single node of the network can cause the entire network to fail.
- Mesh topology  
Advantages: The arrangement of the network nodes is such that it is possible to transmit data from one node to many other nodes at the same time.

Disadvantages: The arrangement wherein every network node is connected to every other node of the network, many of the connections serve no major purpose.

13. List down the networking devices used to create LAN and WAN.

- Modem
- Router
- Bridge
- Transmission Control Protocol

14. What media and connector used in BUS, STAR and RING topology?

BUS & STAR – Uses HUB

RING – MAU

15. What do mean by attenuation? How to reduce these effects?

The diminishing or reduction of something in thickness, density, or force occurs naturally as in optical fibers allow light, sound, electrical signals and computer data to be carried at the speed of light, but as the signals pass through other objects, and begin to disperse a weakening of effect occur.

16. List down the bandwidth for all the topology in LAN.

17. What is Simplex, Half and Full Duplex?

- Simplex – One way communication.
- Half Duplex – Two way communications but it only go from transmitter to receiver or receiver to transmitter. (e.g: walkie-talkie)
- Full Duplex – Two way communications. (e.g: telephone)