1. What are the different types of networks?

Ans:-

LAN

A local area network (LAN) is usually privately owned and links the device in a single office, building, or campus as shown in figure given below:

Depending on the needs of an organization and the type of technology used, a LAN can be as simple as two PCs and a printer in someone's home office; or it can extend throughout a company and include audio and video peripherals. Currently, LAN size is limited to a few Kms.Lans are designed to allow resources to be shared between personal computer or workstation. The resources to be shared can include hardware (e.g., a printer), software (e.g., an application program), or data.

WAN

A wide area network (WAN) provides long-distance of data, image, audio, and video information over large geographic areas that may comprise a country, a continent, or even the whole world. A WAN can be as complex as the backbone that connects a home computer to the internet. We normally refer to the first as a switched WAN and to the second as a point-to-point WAN.

MAN

A metropolitan area network is a computer network that interconnects users with computer resources in a geographic region of the size of a metropolitan area.

2. Explain the STP and UTP

Ans:- The basic difference between UTP and STP is UTP (Unshielded twisted pair) is a cable with wires that are twisted together to reduce

noise and crosstalk. On the contrary, STP (Shielded twisted pair) is a twisted pair cable confined in foil or mesh shield that guards the cable against electromagnetic interference.

3. What is difference between baseband and broadband transmission?

Ans:- Whereas baseband uses digital signaling, broadband uses analog signals in the form of optical or electromagnetic waves over multiple transmission frequencies. For signals to be both sent and received, the transmission media must be split into two channels.

4. What is Difference between a hub, modem, router and switch?
Ans:- modems are hardware devices that allow a computer or another device, such as a router or switch, to connect to the Internet. They convert or "modulate" an analog signal from a telephone or cable wire to digital data (1s and 0s) that a computer can recognize.

Router: A network router directs the data packets along networks. A router has a minimum of two networks, usually LANs or WANs or a LAN and its ISP. However unlike a modem, it cannot work single standing, however is able to connect to multiple nodes.

Switch: A network switch's primary function is to connect network segments on a single network. Therefore is quite different from a router and modem; it is used to expand the capability of the router, by providing additional posts. It connects many devices together on the same network; sending data to a device that needs or requests it. A switch is able to improve the performance of a network by increasing network capacity.

Hub: A hub is a device that allows several network devices to connect together to exchange data on a single network however, they have no management component. Network hubs are also known as repeaters. They are less 'intelligent' than switches. Unlike switches, which forward data to the intended devices, hubs merely send the data packets to all its ports. So as the name repeaters suggests, it only repeats the data from an incoming port to all the other devices; this leads to frequent collisions between packets.

5. When you move the NIC card from one PC to another PC does the MAC Address gets transferred as well?

Ans:- Yes, that's because MAC addresses are hard-wired into the NIC circuitry, not the PC. This also means that a PC can have a different MAC address when another one replaced the NIC card.

6. When troubleshooting computer network problems what common hardware related problems can occur?

Ans:- A large percentage of a network is made up of hardware. Problems in these areas can range from malfunctioning hard drives, broken NICs and even hardware startups.

7. In a network contains to server and workstations, where is the best to install an Anti-virus program?

Ans:- An anti-virus program must be installed on all servers and workstations to ensure protection.

8. Define static IP and Dynamic IP? Discuss the difference between ipv4 and ipv6.

ans:- *Dynamic* means "constantly changing." The prefix *dyna* means *power*; however, dynamic IP addresses aren't more powerful, but they can change (or be changed).
Static means staying the same. Static. Stand. Stable. Yes, static IP addresses don't change.

9. Discuss TCP/IP model in detail.

Ans:-The TCP/IP model was developed prior to the OSI model.
The TCP/IP model is not exactly similar to the OSI model. The TCP/IP model consists of five layers: the application layer, transport layer, network layer, data link layer and physical layer.

10 what is a web browser (browser) / give some example of browser.

Ans:- A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari. ... For example, Ajax enables a browser to dynamically update information on a webpage without the need to reload the page.

11. What is a search engine? Give example.

Ans :- A search engine is a web-based tool that enables users to locate information on the World Wide Web. Popular examples of search engines are Google, Yahoo!, and MSN Search. ... The information gathered by the spiders is used to create a searchable index of the Web.

12 what is the internet and WWW? What is the user of internet in our daily life?

Ans:- The Internet innovated our daily life. ... Positive use of the Internet makes our lives easy and simple. The Internet provides us useful data, information, and knowledge for personal, social, and economic development and it is up to us to utilize our time on the World Wide Web in a productive manner

13. what is an internet service provider? Give some example of ISP in India.

Ans:- An Internet Service Provider (ISP) is a company such as AT&T, Verizon, Comcast, or Bright House that provides Internet access to companies, families, and even mobile users. ISPs use fiber-optics, satellite, copper wire, and other forms to provide Internet access to its customers.

14. Discuss the difference between MAC address, IP address and port address.

Ans:- IP address is a number assigned to the connection in a network. The basic difference between MAC address and IP address is that a MAC address uniquely identifies a device that wants to take part in a network. On the other hand, an IP address uniquely defines a connection of a network with an interface of a device

15. How do we view my internet browser's history?

Ans:- To view the web history in Google Chrome, click to open the menu □ at the top-right of its window and select History, then click History a second time. Or press Ctrl+H on your keyboard. This shows the web history as a list of pages, organized by time and date, in the current tab.