

## Answer 1 – Different types of network –

Local area network

Metropolitan area network

Wide area network

## Answer 2 – Difference between Shielded twisted pair (STP) and Unshielded twisted pair(UTP) –

STP Cable has a metal foil or braided-mesh covering that encases each pair of insulated conductors and costly than UTP.

UTP cable is the most general type of telecommunication medium which is mostly used. Although most familiar from its use in telephone system, its frequency range is suitable for transmitting both data and voice

## Answer 3- Difference between baseband and broadband transmission –

**Broadband** systems use modulation techniques to reduce the effect of noise in the environment. In broadband transmission, the type of signaling used is analog.

**Baseband** is a digital signal transmitted on the medium using one of the signal codes. Baseband Transmission is bidirectional in nature.

## Answer 4 - difference between a hub, modem, router and a switch –

<b>Hub</b>	<b>Switch</b>	<b>Router</b>	<b>Modem</b>
Hub is a physical layer device that falls under layer 1 of the OSI model.	Switch is a data connection layer device since it is a member of layer 2 of the OSI model.	A router is a network layer device because it is a member of layer 3 of the OSI model.	A modem, which stands for "modulator-demodulator," is a device connecting your home to your internet service provider (ISP) through a physical connection. The modem translates the data from your ISP into a format that your home network devices can use.
A Hub operates using broadcasting.	Switches operate based on MAC addresses.	Routers operate based on IP address.	
Hubs are frequently used to connect LAN components.	A switch is used by LAN.	A router is used by both LAN and MAN.	

**Answer 5** - Yes, if we move the NIC cards from one PC to another PC, then the MAC address also gets transferred, because the MAC address is hard-wired into the NIC circuit, not the personal computer.

**Answer 6** - 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. Incorrectly hardware configuration is also one of those culprits to look into.

**Answer 7** – An anti-virus must be installed on all servers and workstations to ensure protection. That's because individual users can access any workstation and introduce a computer virus when plugging in their removable hard drives or flash drives.

### **Answer 8 – Static IP/ Dynamic IP / IPV4 and IPV6**

Static IP address does not change any time, it means if a static IP address is provided then it can't be changed or modified. It is provided by ISP.

Dynamic IP address change any time. It is provided by DHCP (Dynamic Host Configuration Protocol).

IPv4 address consists of two things that are the network address and the host address. It stands for Internet Protocol version four. IPv4 addresses are 32-bit integers that have to be expressed in Decimal Notation.

IPv6 is based on IPv4 and stands for Internet Protocol version 6. IP version 6 is the new version of Internet Protocol, which is way better than IP version 4 in terms of complexity and efficiency. IPv6 Address Format is a 128-bit IP Address.

### **Answer 9 – TCP/IP Module –**

TCP and IP are different protocols of Computer Networks. The basic difference between TCP (Transmission Control Protocol) and IP (Internet Protocol) is in the transmission of data. In simple words, IP finds the destination of the mail and TCP has the work to send and receive the mail.

### **Answer 10 – Web browser**

A web browser (commonly referred to as a browser) is a software application for accessing information on the World Wide Web. Chrome, Internet explorer, Edge, Firefox, safari and Opera are commonly used browser.

### **Answer 11 – Search Engine**

A search engine is a software program that helps people find the information they are looking for online using keywords or phrases. Google, Yahoo, Rediff and Bing are popular search engine.

### **Answer 12- WWW and Internet**

The World Wide Web, commonly known as the web, is a collection of websites or web pages stored in web servers and linked to local computers via the internet. These websites include text pages, digital photos, audio, and videos, among other things.

The internet is a global network of interconnected computer networks that use the TCP/IP protocol to connect devices worldwide.

We can use internet for shopping online, business promotion, communication, digital transactions, tour and travel, to know about anything, reading and many others.

### **Answer 13 - Internet Service Provider**

Internet service provider (ISP), company that provides Internet connections and services to individuals and organizations. Airtel, BSNL, Vodafone and reliance are popular ISP in India.

### **Answer 14. Difference between MAC address/IP address and Port address.**

The MAC address is a device's physical address, which uniquely identifies it on a specific network. MAC is short for Media Access Control and is also referred to as a hardware address, physical address.

An Internet Protocol (IP) address is the unique identifying number assigned to every device connected to the internet.

Port addressing refers to using the port numbers assigned to every process to exchange data between them.

### **Answer 15 – browser history**

Press Ctrl + H or go to setting and find History