

Assignment-2

PAGE NO.	XTRA
DATE.	/ /

Data Communications

Q.1) What are the different types of networks?

Ans:-

Types of network

- ① PAN - Personal Area network
- ② LAN - Local Area network
- ③ MAN - Metropolitan Area network
- ④ WAN - Wide Area network

Q.2) Explain the Shielded twisted Pair (STP) and Unshielded twisted pair (UTP)

Ans:-

STP- STP is also the type of twisted pair which stands for shielded twisted pair. In STP grounding cable is required but in UTP grounding cable is not required in shielded twisted pair much more maintenance is needed therefore it is costly than UTP.



Shielded twisted Pair

UTP- UTP is the type of twisted pair cable. It stands for unshielded twisted pair. Both data and voice are transmitted through UTP because its frequency range is suitable.



Unshielded twisted Pair

Q. ③ What is difference between baseband and broad band transmission ?

Ans. - Baseband trans.

- ① Digital Signaling
- ② Frequency division multi-plexing is not possible.
- ③ Baseband is the bi-directional trans.
- ④ A short distance signal travelling.

Broadband Trans.

- ① Analog Signaling
- ② The trans. data is unidirectional.
- ③ Signal travelling distance is long.
- ④ ~~For~~ Frequency division multi-plexing is possible.

Q. ④ What is the different between a hub, modem, router and switch ?

Ans. - Hub:- A Hub is a networking device. It helps to connect several devices to a single network and it also connects segments of LAN. Hub works at the Physical layer and contains many parts.

Modem:- It 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 - that a computer can recognize.

Router:- A router is a networking device that operates under the network layer of the OSI model and is used to connect two or more networks. It is a device that established a common link between networks to enable data flow between them.

Switch:- A switch is a networking device. It connects multiple devices together on a single network.

Q.5) When you move the NIC cards from one PC to another PC, does the MAC address gets transferred as well?

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

Q.6) When troubleshooting computer network problems, what common hardware-related problems can occur?

Ans:- The network consists of hardware. Problems can very from a defective network card or hard drive malfunctioning, a bad starting materials or in correct

configuration.

Most common hardware related problems are Pa.BX, Lan Card, Wi-Fi, App if it wireless, cables, switches, wireless controllers.

Q.⑦ In a network that contains two servers & twenty workstations, where is the best place to install an anti-virus program?

Ans- That's because individual users can access any workstation and introduce a computer virus when plugging in their removable hard drives or flash drives.

Q.⑧ Define static IP and Dynamic IP? Discuss the difference between IPv4 and IPv6.

Ans:- When a device is assigned a static IP address, the address does not change, most devices use dynamic IP address which are assigned by the network when they connect and change over time.

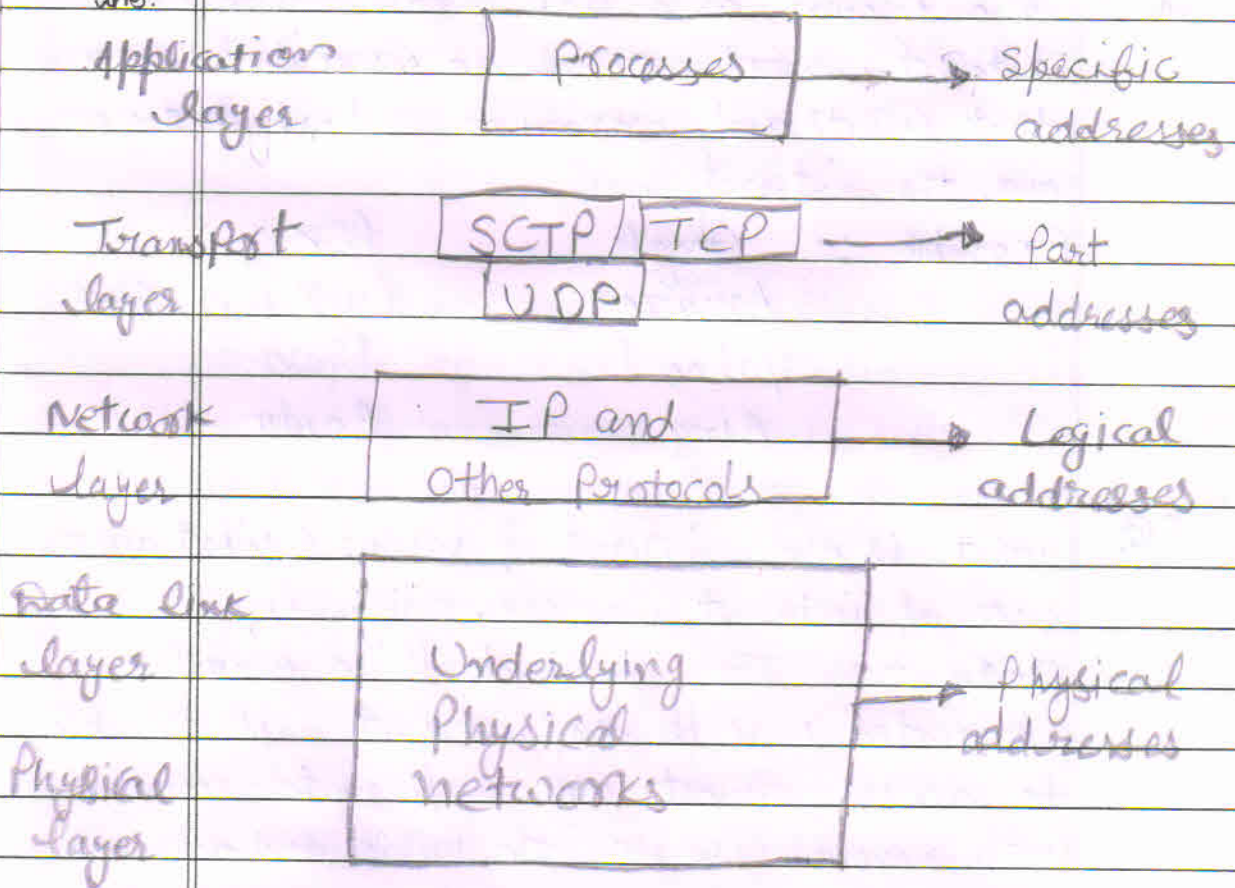
IPv4 :- It has a 32 bit address length. In IPv4 end to end connection integrity is unachievable. The security feature is ~~def~~ dependent on application. Checksum Field is available.

IPv4 can be converted to IPv6.

IPv6 :- It has a 128 bit address length. In IPv6 end to end connection, integrity is hievable. IPsec is an inbuilt security feature in the IPv6 Protocol. It is not be converted to IPv4.

Q.9. Discuss TCP/IP model in detail.

Ans:-



Q.10. What is a web Browser? Give some example of browsers?

Ans:- A web browser is a software application that is used to access the world wide web (www) or as known by everyone on the

internet. It is an interface between us and the information available on the web.

Example:- Mozilla

(i) Mozilla Firefox, Opera Browsers, Safari

Q. (11) What is a search engine? Give Example:-

Ans:- Also known as a web search engine and an internet search engine is a computer program that collects and organizes content from all over the internet.

Example :- Google, ASK
Amazon, Duck Duck Go
Yahoo!, Naver
Bing, Baidu

Q. (12) What is the internet & WWW? What are the uses of internet in our daily life?

Ans:- Internet:- The internet is a globally connected, with the internet it's possible to access almost any information, communicate with anyone else in the world and do much more.

You can do all of this by connecting computers to the internet, which is also called going online.

WWW:- The wide world wide web commonly known as the web, is an information system

The internet itself is a global, interconnected network of computing devices. The world wide web is a subset of these interactions and supports websites and URIs.

Uses of In -

- Education
- Banking
- Emails
- E-commerce
- job search
- Home

Q. 15) What is an internet ^{service} Provider? Give some example of ISP in india?

Ans:- The term internet service provider (ISP) refers to a company that provides access to the internet to both personal and business customers. ISP make it possible for their customers to surf the web, shop online, friends - all for a fee.

Example :-

Airtel	technologies
BSNL	MTNL
Atria convergence	Aircel
Jio	
Hathway	
Tikona	
idea celestia	

Q.14. Discuss the difference between MAC address, IP address and Port address.

Ans:- MAC address:- MAC address stands for media access control address. MAC address is a six byte hexadecimal address. NIC Card's manufacturer provides the MAC address. IP address:- The term IP address is an acronym for internet protocol address. This address is either an eight-byte or a six-byte. IP address primarily operates on the network layer.

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

Ans:- If you want to view your search history or delete or manage certain websites, you can easily do so by navigating to your browser's history setting. The steps may vary slightly depending on the platform you're using, such as Windows and MAC or iPhone and Android. This wiki how will teach you how to view your Google Chrome, Mozilla Firefox, Microsoft Edge and Safari history on both desktop and mobile platforms.