

# ASSIGNMENT -II

## DATA - COMMUNICATION

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Date : 06.07.2024

# DATA COMMUNICATIONS

① What are the different type of networks?

PAN (personal area network)

LAN (local area network)

MAN (metropolitan area network)

WAN (wide area network)

② Shielded twisted pair (STP) and unshielded twisted pair cable?

STP has the individual pair of wire wrapped in foil, which are then wrapped again for double protection.

Most commonly used twisted cable.

③ D/B base band and broadband transmission

Base band transmission

Digital transmission

Transmit single at a time with very high speed

Broad band transmission

Analog transmission

Transmit several simultaneously using different frequency.

what is the difference between the hub, modem, router and a switch?

Hubs

unlike switches, hubs broadcast data to all ports, which is inefficient, so hubs are basically a multifast repeater.

Modem

Standards for modulating - demodulating  
modems are hardware devices that allow a computer or another device such as router or switch to connect to the internet.

Routers

Responsible for sending data from one network to another work at layers (network) of the OSI model which deals with ID address.

Switch

They use MAC address of a device to send data only to the port destination device is plugged into.

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

Yes, that's because MAC addresses are hard-wired in to 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.

- ⑥ When trouble shooting computer network problems what common hardware-related problem can occur?

POBx, LAN card, WLAN card and with AP if it is wireless, cable, switchless, readless and wireless, controllerless, most problems are hardware related or faulty power cable or power supply unit.

- ⑦ In a network that contains two servers and twenty workstations where is the best place of install an anti-virus program?

The best solution is to install anti-virus on the computers in the network.

⑧ Define static IP and dynamic IP? Discuss the difference between IPv4 and IPv6?

when a device is assigned a static IP address  
The address does not change most device we  
dynamic IP address, which are assigned by the  
network when they connect and change our time.

The main difference between IPv4 and  
the IPv6 is a 32-bit address, where as IPv6 is  
a 128 bit hexadecimal address.

⑨ Discuss TCP/IP model in detail?

TCP/IP stands for transmission control  
protocol Internet protocol and is suite of communication  
protocol used to interconnect network  
device on the internet.

⑩ what is a web browser is give some  
example of browsers

A web browser is an application  
used to access and view website.

Eg. Microsoft edge, Google chrome, Mozilla  
Firefox.

⑪ what is a search engine ? example ?

A search engine is a web-based tool that enables user to locate information on the world wide web.

Ex. google , yahoo , and MSN search.

⑫ what is an Internet www? what are the uses internet in our daily life?

The world wide web (www) is a combination of all resources and uses on the internet that are using the type text transfer protocol.

⑬ what is an Internet service provider ? give some example of ISP in India?

An internet service provider (ISP) is a company such as AT&T, Comcast or Spectrum that provide Internet access to companies, families and even mobile users.

Ex: Airtel , BSNL

14 Difference between MAC address ,ID address  
PORTAL address

A MAC address is assigned to the network interface card by the manufacturer and is used for communication within the local area network.

- \* An IP address is used for communication between networks
- \* port address are used as part of IP communication to determine which program the communication is to originate.

15 How do we view my Internet browser's history?

On your computer, open chrome. In the address bar, enter @ history press .tab (or) space you can also click search history in the suggestion. Enter key word for the page you previously visited. Select the page from the list.