

## PL-3 : Practical NO. 1.

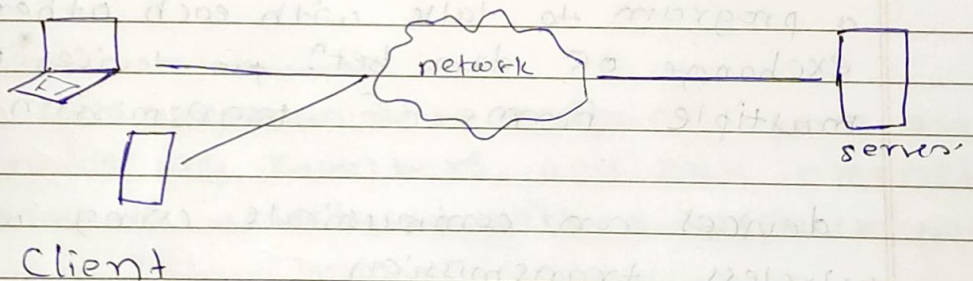
To describe the components of a network

## Problem statement 1.

## ① Client :-

client means a computer or workstation that is capable of obtaining information and application from a server.

Also we can say client a computer hardware or software that request or accesses a service made available by a server. client provide a user with access to a network.



In client-server networking, client send a request to the server. and server sends a response to the client



## ② Server :-

A server is a high-powered computer or a device that provides a resource that resource or functionality that can be used by any authorised client.

When client send a request to server, then server perform some actions and send back to client as response. ~~Now~~ this architecture is called client-server model.

There are many types of server like web server, Email server, File server and database server etc.

## ③ Communication :-

It defines a set of protocol that allow a program to talk with each other or the exchange of data bet<sup>n</sup> two devices using one or multiple forms of transmission medium.

devices can communicate using wired or wireless transmission.



#### ④ protocols :-

protocols are the set of action that exchange of information is an easy and secure way.

There are various types of protocol support different devices across the network

1) Transmission control protocol.

2) Internet protocol

3) User Datagram protocol.

4) Hyper Text Transfer protocol.

5) Address Resolution protocol.

Working :- network protocols takes large scale process & break them down into small, specific tasks or functions.

#### ⑤ ports :-

It is a communication endpoints. ports are designated by numbers, and each internet protocol is associated with a default port.

We use port to connect the external devices to the computer.

There are different types of port

① serial port : used for external modems.

② Parallel port : used to connect peripherals device

③ universal serial bus port :- It used to connect all types of external devices.

④ VGA port : To connect monitor to computer video card.



### 6) Network :-

Network is a system that connects two or more devices in order to share information/data and resources.

The devices on a network may be linked through cables, waves, satellite etc.

There are two types of network

(1) LAN (Local Area Network)

(2) WAN (Wide Area Network).

(1) LAN : Local Area Network.

LAN is a network that covers area of around 10-15 km.

For example:- a college network

(2) WAN: Wide Area network:-

WAN is a network that connects countries or continents.

For example: Internet across a distributed system (world) from anywhere the world.