Chapter 3rd [Networking Concepts]

Network Criteria:- a network must be able to meet a certain number of criteria. The most important of these are performance, reliability and security.

Performance :-It can be measured in many ways, including transit time and response time. Transit time is the amount of time required for a message to travel from one device to another. Response time is the elapsed time between an inquiry and a response. The performance of a network depends on number of factors-
Number of users
  ➢ Type of transmission medium
  ➢ Capabilities of the connected hardware
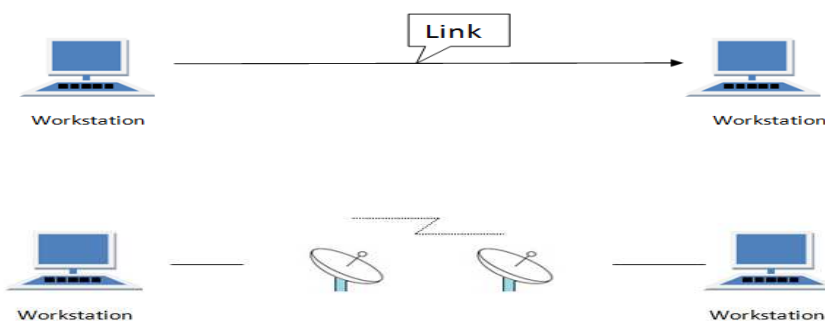 ➢ Efficiency of the software.

Reliability:-In addition to accuracy of delivery, network reliability is measured by the frequency of failure; the time is takes to a link to recover from failure and the network robustness in a catastrophe.

Security:-This is the network security issues including protecting data from unauthorized access.

Type of Connection:-A Network is nothing but a connection made through connection links between two or more devices. Devices can be a computer, printer or any other device that is capable to send and receive data. There are two ways to connect the devices :
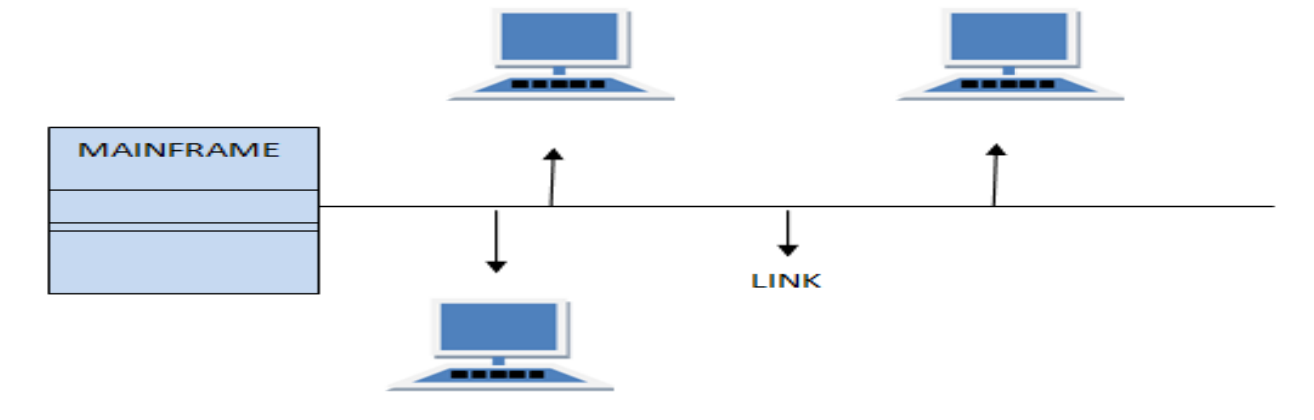 ➢   Point-to-Point connection
  ➢   Multipoint connection

Point-To-Point Connection:- Point to point connection provide a dedicated link between two devices. The entire capacity of link is reserved for transmission between two devices. The best example is cable or wire to connects the two ends, but other options such as microwave or satellite links are also possible . Point-to-Point connection between remote control and Television for changing the channels.

MultiPoint Connection

It is also called Multidrop configuration. In this connection two or more devices share a single link.There are two kinds of Multipoint Connections :

➢   If the links are used simultaneously between many devices, then it is spatially shared line configuration.
➢   If user takes turns while using the link, then it is time shared (temporal) line configuration.

Assignment:-

1-Why network is essential explain it?
2-Write down the factors which degrade the performance of network.