

Q2) Explain Transmitter, Receiver, Message, Medium, Protocols & Standards

Transmitter :- A device that converts information into a signals & sends it over communication.

Receiver :- A device that receives the transmitted signal, decodes it & extracts the original information.

Message :- The information or data being sent from transmitter or the receiver.

Protocols :- sets of rules governing communication, defining message format, error handling & authentication.

Medium :- The physical pathway or channel through which the message travels.

Standards :- Established norms that ensure devices, system or protocols operate uniformly for compatibility & interoperability.

Q3) Compare on any eight points between Analog & Digital signal

Analog Communication	Digital communication
In analog communication analog signal is used for information transmission.	In digital communication digital signal is used for information transmission.
communication error probability is high.	communication error probability is low.
noise immunity is poor.	noise immunity is high.
system is low cost.	system is high cost.
It's less portable.	probability is high.
doesn't assure accurate data transmission.	It assures accurate data transmission.
power consumption is high.	power consumption is low.
It requires low bandwidth.	It requires high bandwidth.

Q5) Why the conversion is required between Analog to Digital & vice versa

→ while some systems operate only on digital data others have to interact with analog world. It may be necessary to convert an analog input into a form that can be manipulated the digital system or to transform an output from a digital system into the analog realm.

Q5 List any eight advantages of computer network

- Enhancement of communication & information availability
- Convenient sharing of resources
- Easy file / data sharing in a computer network
- Highly flexible hence allows anyone to share data
- The software & networking devices are available at very affordable rates
- It is highly cost effective
- Networking boosts storage capacity as it uses internet for storage
- It is very scalable & can accommodate a lot of users

Q6 List any four disadvantages of computer network

- They lack independence & rely on interconnected devices if one goes wrong / disconnects the whole network is disrupted
- It poses security difficulties as a lot of people use it is hard to track all operations
- It lacks robustness as whole globe is connected to a primary server which risks blackout
- presence of computer viruses & malware

Q7 List any five Applications of Computer Network

- Resource sharing is one of the important application as one software can be shared among multiple users
- Communication it means various ways through which we can communicate like email
- It has access to remote information from end users
- Online education as it provides learning platforms, distance education & virtual classrooms
- E-commerce it allows business to sell their products & services online & reach a global market.

7/8/23