



Langat Singh College, Muzaffarpur
NAAC Grade 'A'
Under B. R. A. Bihar University, Muzaffarpur

Communication – L04

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- **Fidelity** : It is the receiver characteristics which determines the accuracy with which the output signal reproduces the original modulation signal is known as its fidelity . For high Fidelity (Hi-Fi) , a receiver should be given a sufficiently broad overall frequency response so that the various frequency components of the signal are adequately passed .
- **Selectivity** : The ability of a radio receiver to discriminate against signals having frequencies which are different from that to which the receiver is tuned is called selectivity.

- Limiter : It confines the amplitude of an FM carrier to a predetermined ,constant value , thereby eliminating noise .
- Modem : The name modem is short form of the terms modulator and demodulator .In fact a modem acts as a modulator in the transmitting mode and it acts as as a demodulator in the receiving mode .This device can connect one computer to another across ordinary telephone lines .

Types of communication systems

- There is no specific way to classify communication systems , But for the sake of sake of convenience ,we can classify them broadly on the basis of :
- Based on nature of information source : speech transmission as in radio, picture as well as speech transmission as in television , Facsimile transmission , as FAX , Data transmission as in computers .

- Based on mode of transmission :
 - **Analog communication** such as telegraphy telephony, radio network , radar ,television network, teleprinting ,telex etc.
 - **Digital communication** : Fax , Mobile phone network , E-mail , Teleconferencing ,telemetry, communication satellites and Global Positioning System (GPS)

- Based on type of transmission channel used :
 - Line communication : Two wire transmission line , Co-axial cable transmission , Optical fibre cable communication .
 - Space communication
- Based on type of modulation employed :
 - For sinusoidal continuous carrier waves :
 - Amplitude Modulation (AM)
 - Frequency Modulation (FM)
 - Phase Modulation (PM)