

Explain adaptive equalizers.

- These are located in the receiver section of the modem.
- It automatically adjusts the gain and delay of the input received to compensate for the phase and amplitude impairments.
- It determines the quality of the received signal.
- It continuously vary its settings to achieve bandwidth characteristics for the circuit.
- Because of their adjusting property they are called adaptive equalizers

Issues for data interfacing in physical layer.

- Raw data is to be converted into binary form 0 and 1 to be sent to the next layer.
- Different voltages are required for representing 0(0 to 1.5 volts) and 1(3 to 5 volts).
- How many nano seconds a bit should last.
- How transmission may proceed from physical layer to data link layer or from communication channel to physical layer .
- How many pins network connectors may use for serial communication.

Which physical property of information is changed for transmission?

- Current or Voltage of signal is changed for transmitting it in the form of zeros and ones.
- Signal broken into harmonics called frequency using Fourier transform.
- Amplitude of signals due to Fourier transform may be reduced.
- A filter is attached before the transmission medium which allows only required harmonics to pass through the medium.
- Signal at the receiver end can be reconstructed from harmonics using inverse Fourier transform