Week3 assignments

1. What is transmission impairment. Discuss various types of transmission impairments.
2. what sampling rate is required for a signal with bandwidth of 10000Hz-2000 to 12ooo Hz.
3. A signal has four data levels with a pulse duration of 1 Ms. Calculate the pulse rate and bit rate of the signal.
4. We want to digitize the human voice. What is the bit rate, assuming 8 bits per sample?
5. What do you mean by line coding? For a signal represented by 01001110 draw the patterns using the schemes: NRZ-L & NRZ-I.
6. Sketch the waveform for the bit stream 10110010 in different Manchester encoding scheme.
7. A telephone line normally has BW of(300-3300 Hx) assigned for data communication . The signal to noise ratio is 3162 . Find the cannel capacity.
8. What is transparent bridge? How does a repeater extend the length of a LAN?
9. Define bandwidth of a media.