Assignment 5

Qn	List of Questions
1	**State and prove** Sampling Theorem for low pass band limited signal
2	**What** do you mean by alising. **How** it can be avoided ?
3	The signal V(t)=cos5πt + 0.5cos 10πt is instantaneously sampled. **Calculate** the Nyquist rate and Nyquist interval.
4	**Explain** with neat diagram and waveforms generation and detection of natural and flat top PAM
5	**Compare** Natural PAM and Flat Top PAM
6	Draw the block diagram of PWM generator and detector. **Explain** the working giving waveforms at the output of each block.
7	With the help of neat block diagram and waveforms **demonstrate** the working of PPM generation and degeneration.
8	**Compare** PAM , PWM and PPM
9	**Describe** quantization noise or quantization error
10	**What** is companding explain. **Show how** companding reduces the quantization error?
11	**Write** A-law and μ-law companding
12	Draw the block diagram of a PCM system and **explain** the function of each block
13	**Explain** the working of Delta Modulator Transmitter and Delta modulator receiver with neat block diagrams
14	**What** are the limitations of linear Delta Modulator? **How** they are overcome in Adaptive Delta Modulator
15	**Draw** the block diagram of ADM Transmitter and Receiver and **explain** their working
16	**Compare** PCM, DM and ADM