Year & Semester : II-II

Lab In charge

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Lab Technician .

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Analog Communication Systems

Course Objectives:

1. To provide a real time experience for different analog modulation and demodulation schemes.
2. To understand the concept of the real time behavior of different elements available in analog communication system such as filters, amplifiers etc.
3. To perform radio receiver measurements and antenna measurements.

Course Outcomes:

1. After completion of the course the students will be able to experience real time behavior of different analog modulation schemes.
2. The students will be able to determine the different parameters related to modulation schemes.
3. The students are expected to design and analyze the radio receiver.

List of Experiments:

1. Amplitude modulation and demodulation.
2. Frequency modulation and demodulation.
3. a. Characteristics of Mixer.
   b. Pre-emphasis & de-emphasis.
4. Pulse amplitude modulation & demodulation.
5. Pulse width modulation & demodulation.
6. Pulse position modulation & demodulation.
7. Radio receiver measurements – sensitivity selectivity and fidelity.
8. Measurement of half power beam width (HPBW) and gain of a half wave dipole antenna.
9. Measurement of radiation pattern of a loop antenna in principal planes.

Equipment required for the Laboratory

1. Regulated Power Supply.
2. Cathode Ray Oscilloscope.
3. Function Generators.
4. Multi-meters.
5. Radio Receivers.
6. Dipole antennas.
7. Loop antenna.