

## **Department of Electronics and Communication Engineering**

### **Communication System Laboratory**

In this lab the students learn about a number of modulation Techniques such as Amplitude Modulation, Frequency Modulation, Phase Modulation, Pulse Width Modulation and Pulse Position Modulation etc. The digital modulation Techniques such as ASK,FSK, PSK, QPSK, QAM are also being done here. Data encoding and decoding Techniques and various Sampling Techniques are also included in these Lab Courses.

This Lab is having a number of Trainer kits with the help of which students learn the Communication technology in detail and try to co-relate with the theoretical aspects. Many experiments are also done on Breadboards using IC's, resistors, and Capacitors.

#### **Utilization**

In this Lab two lab courses are being run in even and Odd semesters of B Tech Curriculum. These Lab courses are done by Electronics and Communication (ECE) Students. The Lab courses are:

1. Analog Communication Lab (10B17EC472).
2. Digital Communication Lab (10B17EC571).

#### **Major Equipments**

1. Arbitrary Function Generator.
2. Analog Communication Training System.
3. Digital Communication Kit.
4. Distortion and level Meter.
5. Digital Storage Oscilloscope.
6. Function Generator.
7. DC Regulated Power Supply

#### **Measuring Equipments/Instruments:**

1. Digital Storage Oscilloscope -18
2. Cathode Ray Oscilloscope-16
3. Function Generators- 42
4. DC Regulated Power supply-14
5. Digital Multimeter-15
6. Project bread board-10
7. Distortion & Level Meter-04
8. Arbitrary Function Generator-12
9. DDS Synthesized Function Generator-1.

### **Various Experimental Kits :**

1. Digital Communication Kits-12
2. Analog Communication Trainer kit-01
3. TDM/PAM emodulation Kit-01
4. Frequency modulation & Phase Modulation Kit-01
5. Noise Audio Amplifier Kit-01
6. PCM Modulation & Demodulation Kit-01 each
7. Delta Sigma Delta mod & Demod Kit-1
8. FDM Transmitter /Receiver Kit-01
9. PSK/DQPSK Mod & Demod Kit-01
10. BPSK/DPSK Mod & Demod kit-01
11. QAM/DQAM Mod & Demod Kit-01 each
12. TDM Pulse Amplitude Mod & Demod Kit-01
13. DPCM/ADPCM Mod & Demod Kit-1.