

COURSE NAME: DIGITAL COMMUNICATION SYSTEMS

Branch : ECE
Year : III B.Tech
Semester : I Semester



Lab Instructor

Mrs. G.Sowmya, M. Tech
Assistant Professor,
E.C.E Department.



Lab Technician

Mr. K.Prem Kumar,
E.C.E Department.

Course Objectives:

1. To provide a real time experience for different digital modulation and demodulation schemes.
2. To understand the concept of the real time behavior of different elements available in digital communication system such as filters, encoder, decoder etc.

Course Outcomes:

1. After completion of the course the students will be able to experience real time behavior of different digital modulation schemes.
2. The students will be able to determine the different parameters related to modulation schemes like bandwidth, probability error etc.

List of Experiments:

Part-A Hardware

1. Time division multiplexing.
2. Pulse code modulation.
3. Differential pulse code modulation.
4. Delta modulation.
5. Frequency shift keying.
6. Differential phase shift keying.
7. QPSK modulation and demodulation

Part-A Hardware

1. Sampling Theorem – verification.
2. Pulse code modulation.
3. Differential pulse code modulation.
4. Frequency shift keying.
5. Phase shift keying.
6. Differential phase shift keying.
7. QPSK modulation and demodulation

Equipment required for the Laboratory:

Part-A

1. Regulated Power Supply.
2. Cathode Ray Oscilloscope's.
3. Function Generators.
4. RF Generators.
5. Lab Experimental kits.

Part-B

MATLAB software.

Note: - Minimum of Ten experiments to be conducted (Five from each Part-A&B)