TELECOM LAB

17ECMC1L1   **Credits: 2**
Lecture: ---   **Internal assessment: 25 marks**
Lab: 3 periods/week   **Semester end examination: 50 marks**

Course Objectives:
- To Study various pass band modulation and demodulation techniques
- To Understand depth analysis of Spread Spectrum modulation Techniques
- To implement different Source Coding and Channel Coding Techniques.

Learning Outcomes:
Student will be able to
- Design and implement different modulation Techniques
- Design different Source Coding algorithms for data compression
- Analyze and Implement different error control coding techniques.

List of Experiments

1. Phase shift keying modulation & Demodulation using MATLAB./LABVIEW
2. Differential phase shift keying modulation & Demodulation using MATLAB./LABVIEW
3. Frequency shift keying modulation & Demodulation using MATLAB./LABVIEW
4. QAM modulation and demodulation using MATLAB./LABVIEW
5. Direct sequence spread spectrum using MATLAB./LABVIEW
6. Frequency Hopping Spread Spectrum using MATLAB/LABVIEW
7. Implementation of Shannon Fano coding using MATLAB./LABVIEW
8. Implementation of Huffman coding algorithm using MATLAB./LABVIEW
9. Implementation of cyclic code encoder using MATLAB./LABVIEW.
10. Implementation of Syndrome Calculator using MATLAB/LABVIEW
11. Implementation of Convolutional Encoder using MATLAB./LABVIEW
12. Implementation Turbo encoder using MATLAB/LABVIEW