

**ADVANCED COMMUNICATION LABORATORY****Course Code: 13EC2118****L P C****0 3 2****Course Outcomes**

After completion of the course, the student is able to

CO1: Design Encoder and Decoder for single bit error correction.

CO2: Simulate and Analyze Digital Signals.

CO3: Generate and Detect Pass band modulation signals with Error controlling codes.

CO4: Analyze Performance of M-ary Digital Communication Techniques.

CO5: Analyze the error performance of Gaussian, Rician, and Rayleigh channels.

**List of Experiments**

1. Generation of Pulse Modulated signals: PAM, PWM and PPM
2. Time division Multiplexing
3. Generation of (7, 4) Hamming code and Error detection in different channels.
4. Generation and detection of ASK, FSK and PSK signals
5. Generation and detection of DPSK Signals
6. Generation and detection of QPSK Signals
7. Generation and detection of QAM signals
8. Generation and detection of M-aryASK, FSK and PSK signals
9. Generation and detection of MSK signal
10. Experimentally compare different forms of BPSK and QPSK and analyze their spectrum with spectrum analyzer.
11. Generation and Detection of ASK, FSK and PSK with (7, 4) hamming code
12. Generation of turbo code.
13. Obtain Gaussian, Rician PDF and CDF with PSK modulation.
14. Obtain Rayleigh PDF and CDF with PSK modulation.

*Note: Any TEN of the above experiments are to be conducted.*