

ANURAG ENGINEERING COLLEGE

(An Autonomous Institution)

II Year B.Tech. ECE – II Sem

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(EC407PC)ANALOG COMMUNICATIONS LAB

Prerequisites: Analog communications

Note: Minimum 12 experiments should be conducted:

All these experiments are to be simulated first either using MATLAB, Comsim or any other simulation package and then to be realized in hardware.

1. Amplitude modulation and demodulation.
2. DSB-SC Modulator & Detector
3. SSB-SC Modulator & Detector
4. Frequency modulation and demodulation.
5. Study of spectrum analyzer and analysis of AM and FM Signals
6. Pre-emphasis & de-emphasis.
7. Time Division Multiplexing & De multiplexing
8. Frequency Division Multiplexing & De multiplexing
9. Verification of Sampling Theorem
10. Pulse Amplitude Modulation & Demodulation
11. Pulse Width Modulation & Demodulation
12. Pulse Position Modulation & Demodulation
13. Frequency Synthesizer.
14. AGC Characteristics
15. PLL as FM Demodulator

Equipment required for Laboratories:

1. RPS - 0 – 30 V
2. CRO - 0 – 20 M Hz.
3. Function Generators - 0 – 1 M Hz
4. RF Generators - 0 – 1000 M Hz./0 – 100 M Hz.
5. Multimeters
6. Lab Experimental kits for Analog Communication
7. Components
8. Radio Receiver kits
9. Spectrum Analyzer - 60 M Hz
10. Any one simulation package