



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA**  
**KAKINADA – 533 003, Andhra Pradesh, India**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

<b>II Year-II Semester</b>		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>0</b>	<b>0</b>	<b>3</b>	<b>1.5</b>
<b>ANALOG COMMUNICATIONS LAB</b>					

**List of Experiments:**

(Twelve experiments to be done- **The students have to calculate the relevant parameters**)–

- (a. Hardware, b. MATLAB Simulink, c. MATLAB Communication toolbox)
- A. Amplitude Modulation - Modulation & Demodulation
  - B. AM - DSB SC - Modulation & Demodulation
  - C. Spectrum Analysis of Modulated signal using Spectrum Analyzer
  - D. Diode Detector
  - E. Pre-emphasis & De-emphasis
  - F. Frequency Modulation - Modulation & Demodulation
  - G. AGC Circuits
  - H. Verification of Sampling Theorem
  - I. Pulse Amplitude Modulation & Demodulation
  - J. PWM, PPM – Modulation & Demodulation
  - K. PLL IC-565 as FM demodulator
  - L. Radio receiver characteristics
  - M. Radio Receiver/TV Receiver Demo kits or Trainees.

Note: All the above experiments are to be executed/completed using hardware boards and also to be simulated on Mat lab.

**Equipment & Software required:**

**Software :**

- i) Computer Systems with latest specifications
- ii) Connected in LAN (Optional)
- iii) Operating system (Windows/Linux software)
- iv) Simulations software (Simulink & MATLAB)

**Equipment:**

1. RPS - 0 – 30V
2. CRO - 0 – 20 M Hz.
3. Function Generators - 0 – 1 MHz
4. Components and Breadboards
5. Multimeters and other meters
6. Spectrum Analyzer