SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

(Autonomous)

Department of Electronics & Communication Engineering

Vishnupur, Bhimavaram - 534202

COMMUNICATIONS LAB

Lab-In-Charge : Mr. P.Ravi Kumar

Lab-Technician : Mr. G. Padma Rao

Objective:

The main objective of this lab is to understand basic theories of Communication system to design and implement Analog & Digital modulators and demodulators and understand the applications of Analog& Digital modulator and demodulator circuits, and to investigate signals in time and frequency domain.

Students construct and analyze circuits on Communication System transmitter and receiver. Students conduct experiments to understand the signals available at different stages of AM and FM receivers. The objective of this course is to familiarize the students with different blocks in Digital communication by constructing and then testing different Digital modems and codec.

LAB EQUIPMENT:

S.No.	Item Description	Qty
1	LCRQ Meter	1
2	Spectrum Analyzer , (0.15-500 MHz)	1
3	Stabilizer-(5 KVA)	1
4	Dual Trace Oscilloscope (30 MHz)	12
5	Digital Multimeter - 3.5 Dig(Hand Held)	2
6	Digital Storage Oscilloscope(25 MHz)	5
7	Function Generator (10 MHz)	20
8	**Analog Communication Lab Trainer Kits:** AM Mod. & Demod. Kit FM Mod. & Demod. Kit PLL Characteristic Kit Optical Fiber Tx & Rx Kits DSB/SSB AM Receiver Kit Mixer Characteristics Kit Receiver Measurements Kit PAM Mod. & Demod. Kit PWM Mod. & Demod. Kit PPM Mod & Demod Kit Diode Detector Characteristics Digital Phase Detector Squelch Circuit Frequency Synthesiser AGC Characteristics	36
9	**Digital Communication Lab Trainer Kits:** TDM & Pulse Code Mod. Kits Delta Modulation Kit FSK & PSK Kits Differential PSK Module PCM Mod. & Demod. Kit DPSK Mod. & Demod. Kit Companding Kit (Digital Companding) Source Encoder & Decoder Kit Linear Block Code - Encoder & Decoder Kit Binary Cycle Code-Encoder &Decoder Kit Convolution Code-Encoder &Decoder Kit	28