



MOTHER TERESA
INSTITUTE OF SCIENCE & TECHNOLOGY
Permanently Affiliated to JNTUH, Hyderabad
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COMMUNICATION SYSTEMS LAB



COMMUNICATION SYSTEMS EQUIPMENT LIST

S.NO	Lab/Major Equipments
1	30 MHz Dual Trace Oscilloscope Model: HM203G
2	25MHz Dual Channel Digital Storage Oscilloscope Model: PDS 5022S
3	Spectrum Analyzer Model: MI5011A
4	1 MHz ,2 MHz Function Generators
5	10 MHz Function Generator Model: 8142B
6	5 KVA Servo Controlled Voltage Stabilizer
7	Regulated Transistorized DC Power Supply (Dual Channel)
8	3½ Digit Hand Held Digital Multimeter Model:CIE-122
9	Amplitude Modulation & Demodulation Trainer
10	Frequency Modulation & Demodulation Trainer
11	Balanced Modulator Trainer
12	Phase locked loop trainer using 565 IC
13	Pre-Emphasis & De-Emphasis Trainer
14	Synchronous Detector Trainer
15	Characteristics Mixer Trainer
16	SSB System Trainer
17	Sampling Theorem Verification
18	Fiber Optic Analog Link Transmitter& Receiver kit
19	Optical Fiber Trainer kit(Digital link)
20	Optical Fiber LASER trainer kit(Digital link)
21	Receiver Measurements
22	Squelch Circuit Trainer Model:ACT4108
23	AM Diode Detector

	Model:DCT-4113
24	Frequency Synthesizer
25	AGC Characteristics
26	Digital Phase Detector
27	Pulse Amplitude Modulation & Demodulation (PAM).Trainer
28	Pulse Width Modulation & Demodulation (PWM) Trainer Model:PWM-3205
29	Pulse Position Modulation & Demodulation (PPM) Trainer Model:PPM-3206
30	Time Division Multiplexing (TDM) Demultiplexing
31	Frequency division Multiplexing and Demultiplexing
32	PLL as FM Demodulator Kit
33	150MHz RF Signal Generator
34	LCR Meter
35	AC/DC Radio Receiver AM/FM Kit
36	Core 2 Duo Processor G31-Intel Chip set Mother board,2GB DDR2 RAM,ATX Cabinet,80GB HDD,17'' LCD Monitor
37	Dual core 2.2 GHz computer with 15.6 LED Monitor,2 GB, RAM
38	MATLAB Software

List of experiments:

- 1.a) To study the front panels of CRO and apply any wave form from function generator and measure amplitude & frequency
 - b) To use ADD mode and measure resultant wave form
2. Generate FM signal, demodulate FM signal and compare o/p signal with i/p signal
3. Generate AM signal, demodulate AM signal and compare o/p signal with i/p signal
4. Obtain the resonant curves of series resonance tuned circuit
5. Obtain the resonant curves of parallel resonance tuned circuit
6. Realize the positive clamper circuit and observe the i/p and o/p wave forms
7. Realize the negative clamper circuit and observe the i/p and o/p wave forms
8. To verify the Thevenin's theorem
9. To verify the Norton's theorem
10. To verify the maximum power transfer's theorem
11. To study the frequency response of INTEGRATOR circuit.
12. To study the frequency response of DIFFERENTIATOR circuit.
13. To study the Digital LCR meter & Digital multi meter
14. To study the response of positive clipper and negative clipper

List of experiments:

1. AM Modulation and Demodulation(Envelope Detector)
2. FM Modulation using PLL
3. Pulse Amplitude Modulation and Demodulation
4. Pre-emphasis and De-emphasis
5. Analog Multiplexing.
6. Study of FM detection
7. Amplitude Modulation using Pspice
8. AM Modulation using Matlab
9. FM Modulation using Matlab