



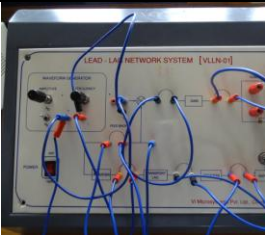

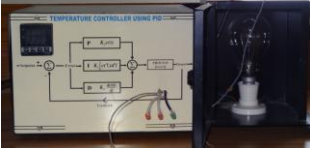










MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE










DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



Lab Name: Control Systems And Simulation Lab			
S. No.	Equipment Name	Quantity	Equipment Image
1	Transfer Function of DC Motor along with motor set	1	
2	DC Servo motor Controller	1	
3	Process Control Simulator	2	
4	Simulation of Transfer Function using Op-Amp Kit	2	
5	Lead-Lag Compensation	1	
6	Pulse Counting using DC motor	1	

7	Temperature Controller using PID	2	 <p>A photograph of a laboratory kit for a Temperature Controller using PID. The kit is housed in a black metal cabinet. On the left side, there is a white panel with a printed block diagram of a PID control system. The diagram shows a feedback loop with a controller block labeled 'PID', a plant block, and a feedback path. Various terminals and a small motor are visible on the right side of the cabinet.</p>
8	Magnetic amplifier	1	 <p>A photograph of a Magnetic Amplifier kit. The kit is a black metal cabinet with a white front panel. The panel features a large number of terminals and several control knobs. A blue banner at the top of the cabinet reads 'Characteristics of Magnetic Amplifier'.</p>
9	Basic PLC trainer kit with PC, trainer kit, traffic light controller, temperature controller, water level and DOL	1	 <p>A photograph of a Basic PLC trainer kit. The kit is a white metal cabinet with a front panel that includes a small LCD display, several buttons, and a large array of terminals for connecting external components. A black banner at the top of the cabinet reads 'Basic PLC Trainer'.</p>
10	Synchro transmitter receiver kit	2	 <p>A photograph of a Synchro transmitter receiver kit. The kit is a white metal cabinet with a front panel featuring two large circular meters, several control knobs, and a terminal block. A blue banner at the top of the cabinet reads 'Synchro Transmitter Receiver Kit'.</p>
11	AC servo motor	1	 <p>A photograph of an AC servo motor kit. The kit is a black metal cabinet with a front panel that includes a small digital display, several control knobs, and a terminal block. A blue banner at the top of the cabinet reads 'Characteristics of AC Servo Motor'.</p>
12	Regulated Power Supply unit (0-30)V	1	 <p>A photograph of a Regulated Power Supply unit. The unit is a white metal cabinet with a front panel featuring several control knobs, a digital display, and a terminal block. The unit is designed to provide a regulated DC output voltage ranging from 0 to 30V.</p>
13	Cathode Ray Oscilloscope 20 MHz	4	 <p>A photograph of a Cathode Ray Oscilloscope (CRO). The device has a white metal cabinet with a front panel that includes a CRT display screen, several control knobs, and a terminal block. The unit is designed for measuring the amplitude and frequency of electrical signals up to 20 MHz.</p>

14	Time Response of Second order System	1	
15	Storage Oscilloscope	1	
Total Equipment in the lab		22	















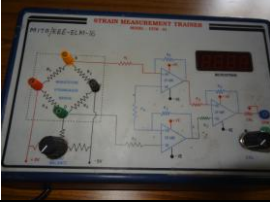



Lab Name: Electrical Circuits and Simulation Lab			
S. No.	Equipment Name	Quantity	Equipment Image
1	Bread Boards	15	
2	Function genertors	11	
3	Logic gates	6	
4	Decade Resistance boxes	3	
5	Capacitance boxes	3	
6	Inductance boxes	3	
7	Regulated Power Supply Units	10	
8	Cathode Ray Oscilloscopes	2	
9	Servo Stabilizer 10KVA	1	


10	Three Phase Auto transformer	1	
11	Single phase transformer-2KVA	1	
Total Equipment in the lab		56	










Lab Name: Electrical Measurements Lab








S. No.	Equipment Name	Quantity	Equipment Image
1	Transformer oil testing kit	1	
2	Schering bridge	3	
3	Anderson bridge	3	
4	Kelvin double bridge	3	
5	Single phase power factor meter	3	
6	Crompton DC Potentiometer	2	
7	Phase shifting transformer with stepless control	2	
8	Three phase auto transformer	1	








9	Single phase inductive load	1	
10	Three phase inductive load	1	
11	Three phase capacitive load	1	
12	Photo optical bench	1	
13	Strain guage	1	
14	Servo stabilizer	1	
15	Voltage ratio box	4	
16	Fire extinguisher	1	






17	Single phase auto transformer	4	
	Total Equipment in the lab	23	













Lab Name: ELECTRICAL MACHINES LAB			
S. No.	Equipment Name	Quantity	Equipment Image
1	DC Shunt Motor-DC Shunt Generator Set	3	
2	DC Shunt Motor-DC compound Generator Set	1	
3	3HP DC Series motor-DC Series Generator Set	1	
4	DC Shunt Motor with loading arrangement	3	
5	DC Compound Motor with loading arrangement	1	
6	DC Shunt Motor-DC Series Generator set	2	
7	1-Ø Induction motor, 1HP with loading arrangement	1	


8	3-Ø squirrel cage Induction motor with loading arrangement	2	
9	3-Ø slip ring Induction motor with loading arrangement	1	
10	DC Shunt Motor 3.7KW - 3-Ø Alternator 3.5KVA set with 3-Point starter	2	
11	DC Shunt Motor 3.7KW - 3-Ø Alternator 3.5KVA set with 3-Point starter cylindrical type	1	
12	1-Ø Transformer Closed Type 2KVA	4	
13	1-Ø Transformer open Type 2KVA	2	
14	1-Ø transformers 2KVA with 50%, 86.6% tapings	2	

15	1- Ø Autotransformers	4	
16	Booster Transformer 230v,50A	1	
17	3-Ø Autotransformers	5	
18	1- Ø Resistive load 5A	2	
19	3-Ø/1.5w Resistive load (6steps)	1	
20	Digital Contact Type Tachometers	15	
21	Tachometers Analog Type	3	


22	Energy Meter(5-10A,240V)	1	
23	Digital Multi Meters	5	
24	Tong tester(Clamp meter)	1	
25	Stop watch	1	
26	Fire Extinguishers DCP & CO2	4	
	Total Equipment in the lab	69	



Lab Name: Power Electronics & Simulation Lab			
S. No.	Equipment Name	Quantity	Equipment Image
1	1 – Ø Ac Voltage Controller	2	
2	Forced Commutation Circuits Unit	2	
3	Single phase Fully controlled Bridge converter		
4	Dc Jones Chopper	2	
5	1 – Ø Cyclo Converter	2	
6	1 – Ø Series Inverter	1	
7	1 – Ø Half Converter	1	
8	3 – Ø Half Controlled Bridge Converter	2	
9	1 – Ø Dual Converter	1	
10	1 – Ø Parallel Inverter	2	

11	Stabilizer	1	
Total Equipment in the lab		18	



Lab Name: SIMULATION LAB			
S. No.	Equipment Name	Quantity	Equipment Image
1	HCL INFINITI A380 PRO Processor : Intel Core i3-3220 3rd generation, 3.3GHz Chipset : Intel H61 RAM : 2 GB HDD : 500 GB Monitor : 18.5" TFT NIC : 10/100/1000 Mbps	30	
2	Fire Extinguisher	1	