



# MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthalkuppam, Madagadipet, Puducherry - 605 107

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

**Name of the lab: MEASUREMENT AND CONTROL LAB**

**Name of the Practical Course being Conducted:**

SI No.	Name of the Practical Course	Department	Semester
1	Measurement & Control Lab	EEE	V

**List Of Equipment Available:**

SI No	Name of the equipment	QTY	Price /Unit	Total Cost
1.	Kelvin Double Bridge with Conductivity attachment (OXFORD)	03 Nos	3185.00	9555.00
2.	Portable Wheat Stone Bridge (OXFORD)	03 Nos	5790.00	17370.00
3.	Instrumentation Amplifier trainer Kit	02 Nos	6730.00	13460.00
4.	Maxwell's Bridge Trainer kit	03 Nos	6520.00	19560.00
5.	Anderson bridge Trainer Kit	03 Nos	6195.00	18585.00
6.	Scheriens bridge Trainer Kit	03 Nos	6460.00	19380.00
7.	LVDT Kit	01 No	12130.00	12130.00
8.	Temperature controller Kit	02 Nos	64700.00	129400.00
9.	Pressure controller kit	01 No	77800.00	77800.00
10.	Level controller kit	01 No	99550.00	99550.00
11.	Galvanometer ( 30-0-30V)	02 Nos	650.00	1300.00
12.	Digital Multimeter	03 Nos	1200.00	3600.00
13.	LCR Multi Meter	05 Nos	2500.00	12500.00
14.	Digital Stop Watch (Racer)	03 Nos	800.00	2400.00
15.	Decade Resistance Box (5 dial)	10 Nos	1600.00	16000.00
16.	Decade Inductance Box (5 dial)	10 Nos	2350.00	23500.00
17.	Decade Capacitance Box (5 dial)	10 Nos	1950.00	19500.00
18.	Ammeter (0-1 mA)	10 Nos	490.00	4900.00
19.	Ammeter (0-10mA)	10 Nos	490.00	4900.00
20.	Ammeter (0-100mA)	5 Nos	490.00	2450.00
21.	Ammeter (0-250mA)	5 Nos	490.00	2450.00
22.	Ammeter (0- 20A)MI	05 Nos	1450.00	7250.00
23.	Ammeter(0-10A)MI	01 No	1450.00	1450.00
24.	Voltmeter (0-15V)	10 Nos	490.00	4900.00
25.	Voltmeter (0-30V) MC	10 Nos	1450.00	14500.00

26.	Voltmeter(0-100V)MC	03 Nos	1450.00	4350.00
27.	Voltmeter(0-50V)MC	02 Nos	1450.00	2900.00
28.	Voltmeter(0-200mV)	05 Nos	490.00	2450.00
29.	Ammeter (0-100 $\mu$ A)	03 Nos	525.00	1575.00
30.	Wattmeter(300V/10A,UPF)	05 Nos	2450.00	2450.00
31.	Wattmeter Dual type	02 Nos	4790.00	4790.00
32.	Battery - 9V	10 Nos	18.00	180.00
33.	Battery Charger	01 No	450.00	450.00
34.	1-phase energy meter(230V,10A)	02 Nos	700.00	1400.00
35.	3 $\phi$ Energy Meter (10A,415 V)	02 Nos	2300.00	4600.00
36.	1phase autotransformer(0-240v,20A)	02 Nos	9500.00	19000.00
37.	3-phase autotransformer(0-415,20A)	04 Nos	28500.00	114000.00
38.	1-phase resistive load(230V,20A)	04 Nos	16300.00	65200.00
39.	3-phase resistive load (415,20A)	03 Nos	20900.00	62700.00
40.	Megger	01 No	1800.00	1800.00
41.	ToungTester(clip on meter)	02 Nos	700.00	1400.00
42.	Earth tester	01 No	4800.00	4800.00
43.	3-phase Inductive load 10A(variable)	01 No	29800.00	29800.00
44.	Network Theorem trainer Kit (Superposition, Reciprocity)	02 Nos	2362.00	4725.00
45.	Network Theorem trainer Kit (Thevenins, Norton's)	02 Nos	3150.00	6300.00
46.	Air Compressor	01 No	25875.00	25875.00
47.	Bread board	04 Nos	187.50	750.00
48.	Flow Processor Controller kit	01 No	91795.11	91795.11
49.	DC Servo motor Controller( Tracking, Positioning)	02 Nos	16591.12	33182.24
50.	I-V Converter module	03 Nos	4045.79	12137.37
51.	V -I Converter module	03 Nos	4045.79	12137.37
52.	Hysteresis Measurement Module (BH Curve kit)	02 Nos	3998.19	7996.38
53.	Auto Transformer (BH Curve kit)	02 Nos	3699.00	7398.00
54.	Analog IC Trainer	01 No	3532.43	3532.43
55.	Instrumentation Trainer Kit Using Transducer.	01 No	45840.00	45840.00
56.	Desktop voltmeter(0-5V)	05 Nos	490.00	2450.00
57.	Portable AC Voltmeter (0-300/600V)MI	05 Nos	1450.00	7250.00
58.	Portable AC Ammeter (0-15/30A)MI	01 No	1450.00	1450.00
59.	Portable AC Ammeter (0-10/20A)MI	05 Nos	1450.00	7250.00
60.	Portable DC Ammeter (0-5/10A)MC	02 Nos	1450.00	2900.00
61.	Portable AC Ammeter (Rectifier type - 500mA)MI	10 Nos	550.00	5500.00
62.	Portable DC Voltmeter (15/30V)MC	10 Nos	1450.00	14500.00
63.	Position control system Kit	02 Nos	31150.00	62300.00
64.	Phase controlled thyristor converter Kit	01 No	14350.00	14350.00
65.	Portable AC Ammeter (0.5/1A)MI	02 Nos	1450.00	2900.00
66.	Wattmeter(300V/20A,UPF)	05 Nos	2450.00	12250.00
			Total cost of the lab	12,42,594