

DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

POWER ELECTRONICS LAB

LIST OF EQUIPMENT

S.No	Name of Equipment	Unit Price	Quantity	Cost
1	Analog oscilloscope 30MHz	14000	5	70000
2	DSO 25MHz	14000	5	70000
3	5kVA Servo stabilizer	9768	1	9768
4	Study of SCR/MOSFET/IGBT/TRIAC/DIAC Characteristics	5087	1	5087
5	1 ph AC voltage controller	4071	1	4071
6	Force commutation circuits	12206	1	12206
7	1ph cyclo converter with r and rl loads	12206	1	12206
8	1 ph half controlled Bridge converter with R and RL loads	6103	1	6103
9	R, RC and UJT firing circuits	8138	1	8138
10	1 ph fully controlled Bidge converter	6103	1	6103
11	DC Jones choper with r and rl loads	10678	1	10678
12	1 ph parallel inverter with r and rl loads	13257	1	13257
13	1 ph series inverter with r and rl loads	14749	1	14749
14	Characteristics of SCR,MOSFET,IGBT	7428.57	1	7428.57
15	Speed Control of DC Motor(PMDC Motor)-Fully	12091.43	1	12091.43
16	Speed Control of DC Motor using Chopper	7885.71	1	7885.71
17	Speed Control of 1 ph Induction Motor	13142.86	1	13142.86
18	24V PMDC Motor	4419.05	2	8838.1
19	Tachometer (Non Contact Type)	2133.33	1	2133.33
20	Tachometer (Contact Type)	2133.33	2	4266.66
21	DC Ammeter 0-2A	899.05	3	2697.15
22	DC Voltmeter 0-60V	899.05	2	1798.1
23	Boost Chopper Trainer Kit	8624.76	1	8624.76

24	1-Ph IGBT Based PWM Inverter	26285.71	1	26285.71
25	Regulated Power supply 30V/2A	4205.71	1	4205.71
26	Rheostat-100/2A	1600	1	1600
27	1-ph MCMurry Bridge with accessories	19977.14	1	19977.14
28	1-Ph Induction motor	7885.71	1	7885.71
29	PLC Trainer Kit	45257.14	1	45257.14
30	PLC Minic Panels	1714.29	4	6857.16
Total Cost				423341.24

LIST OF EXPERIMENTS

S No	Name of the Experiment
1	Characteristics of SCR - Power MOSFET & Power IGBT Gate firing circuits for SCR's
2	R - RC & UJT firing circuits for SCR
3	Single -Phase semi-converter with R & RL loads.
4	Single -Phase full-converter with R & RL loads
5	Single-Phase AC Voltage Regulator with R & RL Loads
6	Single-phase step down Cycloconverter with R & RL Loads
7	Boost converter in Continuous Conduction Mode operation
8	Buck converter in Continuous Conduction Mode operation
9	Single -Phase square wave bridge inverter with R & RL Loads
10	Single Phase PWM Inverter

Faculty Incharge

Head of Dept