



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Name of the lab: POWER ELECTRONICS LAB

Name of the Practical Course being Conducted:

| SI No. | Name of the Practical Course | Department | Semester |
|--------|------------------------------|------------|----------|
| 1      | POWER ELECTRONICS LAB        | EEE        | VI       |

List Of Equipment Available:

| S.N<br>O              | NAME OF THE EQUIPMENT  | QTY    | Price<br>/Unit | Total Cost |
|-----------------------|--|--------|----------------|------------|
| 1.                    | Universal motor with driver circuit  | 1 No   | 8970           | 8970       |
| 2.                    | Single phase MC murray firing ckt and single phase MC murray power ckt       | 1 No   | 55150          | 55150      |
| 3.                    | Study on Cyclo converters with Load  | 2 Nos  | 55150          | 110300     |
| 4.                    | Speed control of AC/DC motors using solid-state devices                      | 1 No   | 48950          | 48950      |
| 5.                    | SCR based motor soft starting circuits (starters) & static circuit breakers. | 2 Nos  | 12410          | 24820      |
| 6.                    | Single phase loading rheostat & inductive load                               | 1 No   | 37230          | 37230      |
| 7.                    | SCR trigger circuits (using RC, UJT, Counters)                               | 2 Nos  | 20680          | 41360      |
| 8.                    | Study on DC, choppers and forced commutation techniques                      | 2 Nos  | 20680          | 41360      |
| 9.                    | Study on single phase controlled rectifiers with R, RL & RLE loads           | 1 No   | 20680          | 20680      |
| 10.                   | Study on Three phase controlled rectifiers and 3ph, loading Rheostat         | 1 No   | 68940          | 68940      |
| 11.                   | Study on Inverters   | 2 Nos  | 19990          | 39980      |
| 12.                   | Regulated power supply   | 2 Nos  | 12410          | 24820      |
| 13.                   | Single phase loading Rheostat  | 2 Nos  | 16550          | 33100      |
| 14.                   | Study on AC choppers   | 2 Nos  | 13790          | 27580      |
| 15.                   | Three phase isolation transformer  | 2 Nos  | 16250          | 32500      |
| 16.                   | Single phase isolation transformer   | 2 Nos  | 10000          | 20000      |
| 17.                   | Multimeter   | 10 Nos | 1050           | 10500      |
| 18.                   | Dual Trace Oscilloscope with component Tester SM410 (30MHz)                  | 5 Nos  | 14857          | 74285      |
| 19.                   | DSO ( 60 MHz)  | 3 Nos  | 29714.28       | 89142.84   |
| Total cost of the lab |  |        |                | 8,09,667   |