



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)  
Dundigal, Hyderabad - 500 043

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### POWER ELECTRONICS LABORATORY

| S No   | Item   | Make              | Quantity | Cost per unit (Rs.) | Total cost (Rs.) |
|--|--|-------------------|----------|---------------------|------------------|
| 1  | Single phase Semi Converter drive (30V/0-15VDC)  | Powertronics      | 01       | 69,500              | 69,500           |
| 2  | Desktop computer systems, Intel i3 - 4150 core processor, 4 GB RAM, 500 GB hard disk     | Dell vostro 3902  | 03       | 21,154              | 63,462           |
| 3  | Synchronous motor drive (415V/ 0-415V, 50Hz)   | Techno systems    | 01       | 50,600              | 50,600           |
| 4  | Four quadrant Chopper drive (0-15VDC, 0.5HP)   | Powertronics      | 01       | 38,500              | 38,500           |
| 5  | Thyristorized drive for PMDC motor(230V / 0-15V DC, 0.5 HP)                              | Powertronics      | 01       | 28,000              | 28,000           |
| 6  | MATLAB 9.0   | MathWorks, USA    | 03       | 6,284               | 18,852           |
| 7  | Single phase isolation transformer with tapings(230V/ 0-30V, 60V, 90V, 120V, 150V, 180V) | SS Lab Equipments | 03       | 5,500               | 16,500           |
| 8  | Single phase cycloconverter230V / (30V - 0 - 30V, 2A)                                    | SS Lab Equipments | 01       | 14,190              | 14,190           |
| 9  | Induction motor drive (230V/ 230V-0-230V, 50Hz)  | SS Lab Equipments | 01       | 10,450              | 10,450           |
| 10   | Single phase full bridge converter - 30V/ (0 -15V) DC                                    | SS Lab Equipments | 01       | 9,652               | 9,652            |
| 11   | Inductive load (0 - 50 - 100 - 150 mH / 5A)  | SS Lab Equipments | 03       | 3,025               | 9,075            |
| 12   | Single phase Parallel Inverter (0-15V DC/0-15AC)   | SS Lab Equipments | 01       | 8,305               | 8,305            |
| 13   | Forced commutation circuits - 230V, 2A, 50Hz   | SS Lab Equipments | 01       | 7,700               | 7,700            |
| 14   | Single phase Series Inverter (0-15V DC/0-15AC)   | SS Lab Equipments | 01       | 7,535               | 7,535            |
| 15   | Single phase midpoint transformer230V / (230V - 0 - 230V)                                | SS Lab Equipments | 01       | 7,205               | 7,205            |
| 16   | Single phase AC voltage controller230V / (30V-0 - 30V), 2A                               | SS Lab Equipments | 01       | 4,950               | 4,950            |
| 17   | Inductive load (0 - 50 - 100 - 150 mH / 2A)  | SS Lab Equipments | 02       | 935                 | 1,870            |
| 18   | UJT firing unit - 230V, 2A, 50Hz   | SS Lab Equipments | 01       | 1,622               | 1,622            |
| 19   | R and RC firing unit - 230V, 2A, 50 Hz   | SS Lab Equipments | 01       | 935                 | 935              |
| <b>Total cost</b>  |  |                   |          |                     | <b>3,68,903</b>  |
| In words - rupees three lakhs sixty-eight thousand nine hundred and three only |  |                   |          |                     |                  |

Date:

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