



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)
Dundigal, Hyderabad - 500 043

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING DC MACHINES LABORATORY

This laboratory provides various types of DC Machines and Software required to observe the characteristics. The configuration of hardware and software used are detailed as follows:

Server Configuration: Dell VOSTRO 3470, Form Factor: 2U Rack Server, Processor Series: Intel® Xeon® 7100 Product Family, Processor Sockets: 2, Max Memory Capacity: 4GB DDR4, Max Storage Capacity: 160TB HDD, Supports Intel C610 series chipset, Supported Power Supplies: 495W, 750W, 1100W.

S No	Item	Make	Quantity	Cost per unit ₹	Total cost ₹
1	DC shunt motor - DC shunt generator 3 kW, 220V, 13.6A, 1500 rpm	Benn Electricals Pvt. Ltd.	02	51,975	1,03,950
2	DC shunt motor - DC series generator 3 kW, 220V, 13.6A, 1500 rpm	Benn Electricals Pvt. Ltd.	01	52,745	52,745
3	DC shunt - DC compound generator 3 kW, 220V, 13.6A, 1500 rpm	Benn Electricals Pvt. Ltd.	01	52,745	52,745
4	Identical DC shunt machines 3 kW, 220V, 13.6 A, 1500 rpm	Benn Electricals Pvt. Ltd.	01	53,250	53,250
5	Identical DC series machines 3 kW, 220 V, 13.6 A, 1500 rpm	Benn Electricals Pvt. Ltd.	01	53,250	53,250
6	DC shunt motor 3 HP, 220V, 12A, 1500 rpm	Benn Electricals Pvt. Ltd.	01	27,945	27,945
7	DC compound motor 3 HP, 220V, 17 A, 1500 rpm	Arwa Electricals Pvt. Ltd.	01	19,776	19,776
8	Rheostats (0 - 50 Ω / 5 A)	SS Lab Equipments	04	3,000	12,000
9	Rheostats (0 - 100 Ω / 5 A)	SS Lab Equipments	01	2,800	2,800
10	Rheostats (0 - 150 Ω / 5 A)	SS Lab Equipments	02	3,025	6,050
11	Rheostats (0 - 100 Ω / 4.5A)	SS Lab Equipments	02	2,750	5,500
12	Rheostats (0 - 290 Ω / 2.4 A)	SS Lab Equipments	03	2,200	6,600
13	Rheostats (0 - 300 Ω / 2A)	SS Lab Equipments	02	3,200	6,400
14	Rheostats (0 - 370 Ω / 1.7 A)	Sun Seas Tech	13	5,100	66,300
15	Resistive loads (2 KW)	Future Tech Instruments Pvt. Ltd	02	12,320	24,640
16	Tachometers (0 - 9999 rpm)	International Instruments Industries	12	2,600	31,200
17	Ammeters (0 - 2 A) MC	Atlantic Electronics	09	800	7,200
18	Ammeters (0 - 10 / 20 A) MC	Atlantic Electronics	06	800	4,800
19	Ammeters (0 - 25 A) MC	Future tech instruments Pvt. Ltd.	08	800	6,400
20	Ammeters (0 - 5 / 10 A) MC	Future tech instruments Pvt. Ltd.	08	800	800
21	Voltmeters (0 - 600 V) MC	Future tech instruments Pvt. Ltd.	01	800	800
22	Voltmeters (0 - 150 / 300 V) MC	Future tech instruments Pvt. Ltd.	07	800	5,600
23	Voltmeters (0 - 300 V) MC	Future tech instruments Pvt. Ltd.	25	800	20,000
24	Voltmeters (0 - 250 / 500V) MC	Future tech instruments Pvt. Ltd.	02	800	1,600
25	Voltmeters (0 - 15 / 30 V) MC	Future tech instruments Pvt. Ltd.	02	800	1,600
26	Desktop computer systems, i3 - 8100 processor, 4 GB RAM, 1 TB hard disk	Dell Vostro 3470	04	24,750	99,000
27	MATLAB 9.0	MathWorks, USA	04	6,284	25,136
				Total cost	5,98,088

In words - rupees five lakhs ninety eight thousand and eighty eight only

Date:

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