

Name of Lab: Basic Electrical Engineering

Floor Area: 192 Sq. m.

Sr. No	Name of the Equipment	Specification	Make	Quantity
1	D.C. Shunt Motor	230 V , 3 H.P. , 1500 rpm with starter and coupled to D.C. shunt generator 230 V , 2 KW , 1500 rpm		1
2	D.C. Shunt motor	230 v , 2 H.P. with Solid State starter and braking arrangement for mechanical loading		1
3	D.C. Series motor	230 V , 2 H.P. with starter and braking arrangement for mechanical loading		1
4	Three Phase Squirrel Cage Induction motor	415 V , 2 H.P. 50 Hz , 1440 rpm with star – delta startor and braking arrangement for mechanical loading		1
5	Three phase Induction motor (Slip Ring Type)	2 H.P. , 1440 rpm with rotor resistance starter and braking arrangement for mechanical loading		1
6	Two winding Transformer	Single phase 230 V / 110 v – 55 V , 50 Hz , 2 KVA core with air / natural cooling		2
7	Worn out parts of DC Machines	Such as stator frame , poles , pole shoe , armature core , brush , commutator etc.,		1
8	Voltmeters	a) Moving Iron i) 75/150/300 V ii) 30 V iii) 150/300/600 V b) PMMC i) 150/300 V ii) 15/30 V	Escorp Elex Elex	5 1 2 3 2
9	Ammeters	c) Moving Iron i) 5/10 A ii) 10/20 A iii) 2.5/5A iv) 10/15A d) PMMC i) 3 A	Nippen	5 5 5 5 5
10	Dynamometer Watt meter	Induction type energy meter		1
11	Wattmeter	Single phase Dynamometer wattmeter UPF 150/300/600 V , 5/10 A UPF 30 V 10/20 A LPF (0.2) , 300 V , 2.5 A	Nippen	5 2 4
12	Frequency meter	25 - 60 Hz Panel mounted Type		3
13	(i) Digital multimeters (ii) Multimeters (iii) Multimeters	Three & half digit Four & half digit		1 5 1
14	Analog millimeters			1
15	Megger			1
16	Digital stop watch	Least count of 1/ 100 sec.		3

17	Analog hand held tachometer	Contact type measuring upto 10000 rpm		3
18	Autotransformer	i) Single phase variac , 230 V , 10 A ii) Totally enclosed Type 230 V , 15 a		2 2
19	Rheostats Wire wound	Single /double and Hexagonal porcelain tubes with sliding contact i) 300 ohms,1 A ii) 100 ohms , 3 A iii) 30 ohms , 10 A		3 3 2
20	Knife switches	With copper contacts and sturdy springs Current rating 10 / 20 A i) S.P.S.T ii) S.P.D.T iii) D.P.S.T iv) D.P.D.T v) T.P.D.T.		2 2 2 2 2
21	Energy meter	Single Phase,240 V,5-20 A,R/KWh 750		1
22	C.R.O	20 MHz,multi channel, 2-Trace	Scientific	1
23	Frequency meter	110/230 V, range 40-100Hz	Escorp	1
24				
25	Techometer(Photocontact)	4 Digit range (0.5 to 9999 rpm)	Escorp	1
26	Variac	3 phase, Air cooled (415/470 V) Output current 1-600 A		1
27	Mili Voltmeter	0-10-20 V	Escorp	5
28	Mili Ammeter	0-20 mA 0-200 mA	Nippen Nippen	5 5
29	Bread board	4 inch x 8 inch		5
30	Network Theorem kit (DC)	Built in power supply	Vijayanta	3
31	Single Phase Transformer	1 KVA, 230/110/55/10 Volt step down		4
32	Single Phase Transformer	1 KVA, 110/230 Volt step up		4
33	Single Phase auto transformer	10 amp, 250 Volt		5
34	Energy Meter	Single Phase, 250 Volt, 6 amp		2
35	Calibration Panel of Single phase energy meter	With std. and sub std. energy meter mounted on bacalite sheets consisting of single element dynamo meter type (LPF) Lamp load 5 amp in step of 100 Watts.		02
36	Calibration panel of single phase ammeter and voltmeter	With std. and substd Ammeter and Voltmeter mounted on bacalite sheets.		02