

Name of Lab: Electrical Machines Lab

Floor Area: 192 Sq. m.

Sr. No	Name of the Equipment	Specification	Make	Qty.
1	D.C. Shunt Motor coupled with D.C. Compound Generator	D.C. shunt motor – 5 H.p , 230 V , 1500 rpm , screen protected horizontal foot mounted class 'B' insulation internally fan cooled , Coupled with D.C. compound generator 2.5 KW , 230 V , 1500 rpm screen protected horizontal foot mounted , self excited type , Class 'B' insulation internally fan cooled , coupled with control panel above motor generator set with analog voltmeter , Ammeter (one for line current and other for field current) one set each for motor & generator shunt field regulator 2 Nos , one for motor & one for generator .D.C. 3 point starter switch rear & protection .		1
2	Single phase Induction motor	230 V , 1440 rpm , 50 Hz , 1.0 H.P. , horizontal foot mounted TEFC enclosure with DOL starter , with control panel for above motor with Analog voltmeter , Ammeter , wattmeter , DOL starter , switch gear , 1 – phase variac 0 – 270 V , 8 Amp , indicating light and MCB etc.		1
3	Transformer (Core type)	Single phase transformer for Scott connection 2 KVA, 230/230 V with taping 50 % , 86.6 %		2
4	Synchronous motor	Self synchronizing auto synchronous induction start motor 3 H.P. , 440 V with built in separate D.C. exciter directly coupled to D.C. generator 1.5 KW , 230 V for electrical loading purpose , motor provided with auto-transformer starter with interlocking arrangement , with single phase loading rheostats 2.5 KW		1
5	D.C shunt motor coupled with synchronous generator	2 H.P., 1440 rpm with rotor resistance starter and braking arrangement for mechanical loading		1
6	DC motor coupled with alternator with exciter	Complete experimental set up with DC motor 5HP coupled to 3KVA alternator with exciter 2 set with panel. DC motor & Exciter, DC stator Frequency Meter, Phase sequence indicator.		1
7	C.R.O	20 MHz, Multi channel, 2 trace	Sciencetech	2
8	Function Generator	2 MHz.	Sciencetech	1
9	Power Factor Meter	Single Phase 250 V		3
10	Rheostat	5 A, 100Ω		8
11	Rheostat	15 A, 35Ω		8
12	Rheostat	2 A, 600Ω		6
13	AC to DC Power supply rectifier with transformer	Input 440 V, 3 phase DC, O/P 250 V, 30 A with 0 to 230 Volt variable and 230V constant output		1
14	DC Compound Motor- DC Compound	2 HP/ 1 KVA, 220 Volt, 1500rpm, 1 KW, with control panel		1

	generator fitted on MS channel base			
15	DC Series Motor with mechanical loading fitted on MS Channel base	2 HP, 220 V, 1500rpm, Fitted on MS channel base with mechanical loading system.		1
16	Universal Motor coupled with DC shunt generator fitted on MS channel base	1HP, 1 KVA with operating panel to perform load test on AC and DC supply.		1
17	Extension Board (Power Strip)	5 outlet, 240 V, 6A With Fuses		10
18	Extension Board (Power Strip)	5 outlet, 240 V, 15A With Fuses		10
19	Three Phase Slip ring Motor	Fitted on MS Channel base with Mechanical loading system		01
20	DC Shunt Motor	2 HP		01
21	Steeper Motor	.25 HP to .50 HP		01
22	Servo Motor	.25 HP to .50 HP		01