



VIVEKANANDA GOVERNMENT DEGREE COLLEGE

VIDYANAGAR, HYDERABAD

DEPARTMENT OF PHYSICS

LAB EQUIPMENTS DETAILS

ELECTRONICS LAB EQUIPMENT

S.NO	DESCRIPTION	QTY
1.	Resistors 100K	96 Nos
2.	Resistors 10K	96 Nos
3.	Resistors 4.7K	96 Nos
4.	Resistors 3.3K	96 Nos
5.	Resistors 2.2K	96 Nos
6.	Resistors 1K	120 Nos
7.	Capacitors 0.022 μ f	96 Nos
8.	Capacitors 0.033 μ f	96 Nos
9.	Capacitors 0.047 μ f	96 Nos
10.	Capacitors 22 μ f	96 Nos
11.	Capacitors 330 μ f	24 Nos
12.	Potentiometer, 4,7 k	24 Nos
13.	Potentiometer, 10 k	24 Nos
14.	Glass diode	24 Nos
15.	1N 4007	144 Nos
16.	Zener 5.2v	72 Nos

17.	Colour LEDs Red,	24 Nos
18.	Colour LEDs yellow,	24 Nos
19.	Colour LEDs Green,	24 Nos
20.	Colour LEDs Violet,	24 Nos
21.	Colour LEDs Blue,	24 Nos
22.	BC 547	144 Nos
23.	A.C 6-0-6 Transformer with base	06Nos
24.	Regulater 7805	24 Nos
25.	7400 NAND gate ICs	48 Nos
26.	7404 NOT gas	48 Nos
27.	7408 AND gate ICs	48 Nos
28.	7432 OR gate ICs	48 Nos
29.	7402 NOR gate ICs	48 Nos
30.	741 OP-AmP ICs	24 Nos
31.	555 Timer ICs	12 Nos
32.	Bread Boards	14 Nos
33.	Multimeters	01 Nos
34.	Nose plier	6 Nos
35.	Cutter	6 Nos
36.	Soldering kit	03 Nos
37.	Connecting wire bundle	5 Nos
38.	Photo cell	2 Nos
39.	Screw driver	4 Nos
40.	Soldering lead	2 Nos

MECHANICS LAB EQUIPMENT

S.NO	NAME OF THE EQUIPMENT	QTY
1	Compound Bar Pendulum set	5
2	Stop Clock	5
3	Vernier Calipers	5
4	Screw Gauge	5
5	Pendulum bobs Brass	5
6	Pendulum bobs Iron	5
7	Spilt Rubber Cork	5
8	Torsion Pendulum	5
9	Capillary Tube	5
10	Breaker	5
11	Slotted weight	3

THERMAL PHYSICS LAB EQUIPMENT

S.NO.	NAME OF THE EQUIPMENT (WITH SPECIFICATIONS)	QUANTITY
1	Lees disc apparatus including 3 bad conductor discs	2
2	Steam generator (boiler) 1 Litr.	3
3	Thermometers (0.1 degree least count)	10
4	Pressure rubber tube (20 mts)	0
5	Stefan's Constant Apparatus	2
6	Newton's law of cooling apparatus	2
7	Heating Efficiency of an Electrical Kettle with varying voltages set	2
8	Potentiometer 10 wires 1 mt. long fully laminated $\frac{3}{4}$ " wooden board stretched, over pulleys. Total resistance 10 ohms with pencil jockey	2
9	Daniel cell	2
10	Rheostat (2.3 A, 100 ohms)	3
11	Resistance box 10000 ohms	3
12	High resistance Box 5 kilo ohms	1
13	Galvanometer	3
14	Borosil Beakers (500 ml)	3
15	Thermo couple (copper - iron)	3
16	4 way commutator	3
17	Hot plate with thermostat	3
18	Connecting wires multi stand	-
19	Copper Calorimeter with a wooden lid having two holes for inserting thermometer for cooling curve of metallic body	3
20	Rubber stoppers with holes (2)	6
21	Thermister characteristics setup with builtin calorimeter, variable resistance, power supply, Galvanometer and thermometer	3
22	Specific heat of solid rod (Graphite) sample in cylindrical shape	3
23	study mechanical energy to heat setup	-

OPTICS LAB EQUIPMENT

S.NO.	NAME OF THE EQUIPMENT (WITH SPECIFICATIONS)	QUANTITY
1	Frenel's Biprism setup	2
2	Sodium Vapor lamp setup	2
3	Spirit level	3
4	Magnifying glass (Reading lens)	5
5	Newton's Rings Apparatus (All in built)	2
6	Spherometer (to know the radius of convex lens)	1
7	Plane transmission grating	2
8	Mercury vapour lamp setup	2
9	Magnifying Torch light	-
10	Diode laser setup with built in power supply	3
11	Diffraction Grating 2500 l PI	3
12	Polarimeter Apparatus with bi-quartz system	2
13	Pulfrich refractometer Apparatus setup	0
14	Wedge method-thickness of wire setup	0
15	Crown Prism (Dispersive power of prism)	3
16	Spectrometer (60' and 175 mm scale with round adjustable slit)	3
17	Telescope for resolving power	-
18	Slit for resolving power with micrometer head	3
19	Wiremesh	-
20	Mercury (250 ml Bottle)	1
21	watch glass pack of 12	6

ELECTROMAGNETISM LAB EQUIPMENT

S.NO.	NAME OF THE EQUIPMENT (WITH SPECIFICATIONS)	QUANTITY
1	Thevenin's and Norton's Theorem circuit Board with 2 digital meters	3
6	Super Position Theorem circuit board with 2 digital meters	3
7	Maximum Power Transfer Theorem circuit Board	3
8	Carey Foster Bridge	3
9	Battery Eliminator	3
10	Variable Resistance Box (1000 ohms)	3
11	Galvanometer	3
12	High Resistance Box (15000 ohm)	3
13	Unknown resistance coil	3
16	A Dry Cell	-
17	A Plug Key	3
18	Function Generator/Signal Generator	3
19	Anderson's Bridge circuit Board with oscillator & Head phone	3
21	Ballistic Galvanometer	3
22	Lamp & Scale Arrangement	3
24	Fixed condenser	2
25	Digital multi meter	3
27	Commutator round four plugs	3
28	High resistance coil 10K ohms	3
29	Rheostat 2.3A 60 ohms	3
30	Desauty's bridge set-up with oscillator & Head phone	2
31	Rayleigh's Bridge set-up with oscillator & Head phone	2