

PHYSICS LABORATORY

LIST OF REQUIREMENTS - FOR A CLASS OF 30 STUDENTS

CLASSES XI - XII

GENERAL APPARATUS

<u>APPARATUS</u>			<u>QUANTITY</u>
1.	Physical Balance with weight box	-	3
2.	Spring balance up to 250 gf	-	15
3.	Spiral spring with hook	-	10
4.	Gravesands's apparatus for law of triangles	-	5
5.	Horizontal friction table	-	15
6.	Inclined friction table (movable)	-	10
7.	Loose weight 100g	-	30
8.	Loose weight 50 g	-	15
9.	Loose weight 20 g	-	15
10.	Loose weight 10 g	-	15
11.	Loose weight 5 g	-	15
12.	Loose weight 2 g	-	15
13.	Glass capillary of different diameters	-	10
14.	Travelling microscope	-	2
15.	Half Meter Ruler (50 cm)	-	30
16.	Meter Ruler (100 cm)	-	30
17.	Measuring cylinder 200 ml	-	10
18.	Measuring cylinder 500 ml	-	10

NOTE: LABORATORY REQUIREMENTS ARE SUBJECT TO CHANGE BASED ON CHANGES IN THE SYLLABUS.

<u>APPARATUS</u>			<u>QUANTITY</u>
19.	Beaker 200 ml	-	15
20.	Test tube (big)	-	15
21.	Long glass jar	-	15
22.	Spherometer	-	10
23.	Vernier Calliper	-	15
24.	Screw Gauge	-	15
25.	Brass bob (for pendulum)	-	15
26.	Split Corks		15 pairs
27.	Retort stand	-	15
28.	Plane glass plate 10 cm x 10 cm	-	15
29.	Searle's apparatus to determine Young Modulus (for demonstration)	-	1
30.	Petri dish	-	15
31.	Mercury	-	1 kg
32.	(a) Drawing board	-	15
	(b) Drawing pins	-	60
33.	(a) Apparatus to verify parallelogram law of vector addition	-	2
	(b) Viscometer (<i>for demonstration</i>)	-	1
HEAT			
34.	Calorimeter with stirrer	-	10
35.	Newton's cooling apparatus	-	1
36.	Boyle's Law apparatus	-	3

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APPARATUS**QUANTITY****SOUND**

37.	Resonance tube complete	-	5
38.	Sonometer	-	5
39.	Complete set of tuning forks with hard rubber bungs for striking the tuning forks	-	10

LIGHT

40.	Plane mirror square 5cm x 5cm	-	15
41.	Plane mirror strip 10cmx 3cm	-	15
42.	Plane mirror holder (a pair of wood or hard rubber)	-	15
43.	Lens holder	-	30
44.	Object pin with holder	-	30
45.	Concave Mirror (focal length 15 cm)	-	15
46.	Concave lens (focal length 30 cm)	-	15
47.	Convex lens (focal length 10 cm)	-	15
48.	Convex lens (focal length 15 cm)	-	15
49.	Convex lens (focal length 20 cm)	-	15
50.	Equilateral glass prism (big)	-	15
51.	Right angled glass prism	-	3
52.	(a) Spectrometer (for demo)	-	1
	(b) Mercury bulb for spectrometer	-	1
	(c) Spectroscopic prism	-	1
53.	Optical bench with accessories	-	3
54.	Bi-prism (for demo)	-	1

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<u>APPARATUS</u>		<u>QUANTITY</u>
ELECTRICITY		
55.	Dry cell 1.5V	- 15
56.	Electronic battery 2V (or 2-4V dc supply)	- 15
57.	Leclanche cell	- 3
58.	Tapping key	- 10
59.	(a) Plug key	- 15
	(b) Two way key	- 3
60.	Jockey	- 15
61.	Resistance wire (Nichrome) 4 ohm m ⁻¹	- 20 m
62.	Rheostat (30 Ohm)	- 15
63.	Resistance box 1 – 10 Ohm	- 15
64.	One meter long resistance wire mounted on a meter scale (with terminals)	- 15
65.	½ meter long resistance wire mounted on a half meter scale (with terminals)	- 15
66.	50 cm long wire wound on a wooden cylinder (Resistance R ~2Ω)	- 15
67.	Galvanometer (Zero centred)	- 15
68.	Ammeter (0-2A)	- 15
69.	Voltmeter (0-3V)	- 15
70.	Connecting wire (40 cm length)	- 80
71.	Milli Ammeter	- 5
72.	Crocodile clip	- 15
73.	(a) Meter Bridge (for demo)	- 3
	(b) Post Office Box	- 3

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74.	10 Wire Potentiometer (for demo)	-	3
75.	Kelvin's bridge (optional for demo)	-	1
76.	(a) Diode characteristic demo set	-	1
	(b) Zener diode	-	1
77.	Transistor Characteristic demo set	-	1

MAGNETISM

78.	Bar magnet (small)	-	30 pc
79.	Bar magnet (big)	-	30 pc
80.	Magnetic compass	-	15
81.	Dip circle	-	2
82.	Electromagnet (for demo)	-	1

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