

"ഭരണഭാഷ മാതൃഭാഷ"

കോളേജ് വിദ്യാഭ്യാസ ഡയറക്ടറുടെ നടപടിക്രമം

കോളേജ് വിദ്യാഭ്യാസ വകുപ്പ് - 2020-21 സാമ്പത്തിക വർഷം - 2202-03-103-76 Development of Libraries , Laboratories and Furniture - സർക്കാർ ആർട്സ് & സയൻസ് കോളേജുകളിലെ ഫിസിക്സ് വിഭാഗം ലാബുകൾക്ക് ഉയർന്ന പൊതുനിലവാരം കൈവരിക്കുന്നതിന് ഉപകരണങ്ങൾ വാങ്ങുന്നതിനായി ഭരണാനുമതി നൽകി - തുക അനുവദിച്ചു - ഉത്തരവാകുന്നു.

ഉത്തരവ് നമ്പർ:P3/27494/2020/DCEതിരുവനന്തപുരം

തീയതി:20.11.2020

പരാമർശം:-1.24.06.2020ലെ P3/22109/2019/DCE നം ഉത്തരവ്

2.അക്കാദമിക സമിതി (ഫിസിക്സ് വിഭാഗം) സമർപ്പിച്ച പ്രൊപ്പോസൽ

3.07.08.2020 ലെ സർക്കാർ വർക്കിങ് ഗ്രൂപ്പ് മീറ്റിംഗിന്റെ മിനുട്സ്

4.GO(Rt) 1062/2020/HEDN തീയതി 20.08.2020

ഉത്തരവ്

2020-21 സാമ്പത്തിക വർഷം സർക്കാർ കോളേജുകളിലെ ലൈബ്രറികളുടെയും ലബോറട്ടറികളുടെയും വികസനത്തിനും നവീകരണത്തിനുമായി "2202-03-103-76 Development of Libraries, Laboratories & Furniture " ശീർഷകത്തിൽ 850 ലക്ഷം രൂപ വകയിരുത്തിയിട്ടുണ്ട്.

സർക്കാർ ആർട്സ് ആൻഡ് സയൻസ് കോളേജുകളിലെ സയൻസ് ലാബുകൾക്ക് ഉയർന്ന പൊതുനിലവാരം കൈവരിക്കുന്നതുമായി ബന്ധപ്പെട്ട് കോളേജുകളിലെ ലാബ് സൗകര്യങ്ങൾ വിലയിരുത്തി പ്രൊപ്പോസലുകൾ സമർപ്പിക്കുന്നതിനായി പരാമർശം (1) പ്രകാരം അക്കാദമിക സമിതിയെ രൂപീകരിക്കുകയും വിവിധ സർക്കാർ ആർട്സ് & സയൻസ് കോളേജുകളിലെ ഫിസിക്സ് വിഭാഗം ലാബുകളുടെ നിലവാരം ഉയർത്തുന്നതുമായി ബന്ധപ്പെട്ട് പ്രസ്തുത സമിതി പരാമർശം (2) പ്രകാരം പ്രൊപ്പോസലുകൾ തയ്യാറാക്കി സമർപ്പിച്ചിരുന്നു. പ്രസ്തുത പ്രൊപ്പോസലുകൾ പരാമർശം (3) വർക്കിങ് ഗ്രൂപ്പ് യോഗത്തിൽ പരിഗണിച്ചു പരാമർശം (4) പ്രകാരം സർക്കാർ ഭരണാനുമതി അനുവദിച്ചു ഉത്തരവായിട്ടുണ്ട്. മേൽ സാഹചര്യത്തിൽ താഴെ പറയുന്ന കോളേജുകൾക്ക് ചുവടെ ചേർത്തിരിക്കുന്ന പട്ടിക പ്രകാരം തുക അനുവദിച്ചു ഉത്തരവാകുന്നു.

Sl.No	Name of College	Amount
1	Government Arts College , Thycaud Thiruvananthapuram	Rs.6,61,950/-
2	Government College, Attingal	Rs.3,59,230/-
3	KNM Government Arts & Science College, Kanjiramkulam	Rs.1,52,800/-
4	Government College, Nedumangad	Rs.4,21,740/-
5	BJM Government College, Chavara, Kollam	Rs.11,57,030/-
6	Government College, Ambalappuzha	Rs.1,05,000/-

7	Government College, Santhanpara, Idukki	Rs.1,05,000/-
8	TM Jacob Memorial Government College, Manimalakkunnu	Rs.11,91,490/-
9	Government College, Chittur	Rs.8,20,150/-
10	SNGS College, Pattambi	Rs. 11,91,695/-
11	CKG Memorial Government College, Perambra	Rs.9,33,290/-
12	Government College, Mokeri	Rs.2,98,650/-
13	NMSM Government College, Kalpetta	Rs.3,43,920/-
14	Government College, Mananthavady	Rs. 15,21,135/-
15	Government Arts & Science College, Nadapuram	Rs. 12,72,505/-
16	KMM Government Womens College, Kannur	Rs.3,14,060/-
17	Government College, Kasaragod	Rs. 11,87,620/-
18	EKNM Govt. College, Elerithattu	Rs.8,46,870/-
Total :		Rs.1,28,84,135/- (Rupees One Crore Twenty Eight Lakh Eight Four Thousand One Hundred and Thirty Five Only)

പദ്ധതി വിഹിതം തുക ചെലവഴിക്കുമ്പോൾ നിലവിലുള്ള നിയമങ്ങളും സർക്കാർ ഉത്തരവുകളും കർശനമായി പാലിക്കേണ്ടതും അനുവദിക്കുന്ന തുക അനുബന്ധമായി ചേർത്തിരിക്കുന്ന പട്ടികയിലെ ഉപകരണങ്ങൾ വാങ്ങുന്നതിന് മാത്രമാണ് വിനിയോഗിക്കുന്നതെന്ന് ബന്ധപ്പെട്ട സ്ഥാപന മേധാവികളും പരാമർശം (1) അക്കാദമിക് സമിതിയും ഉറപ്പ് വരുത്തേണ്ടതുമാണ്. പ്രസ്തുത ഉപകരണങ്ങളുടെ പർച്ചേസുമായി ബന്ധപ്പെട്ട് പരാമർശം (1) അക്കാദമിക് സമിതിയുടെ നിർദ്ദേശം സ്വീകരിക്കേണ്ടതാണ്. പ്രസ്തുത പർച്ചേസ് പൂർത്തീകരിച്ച് 2021 മാർച്ച് 31 ന് മുൻപായി വിനിയോഗ സാക്ഷ്യപത്രം ടി കാര്യലയത്തിൽ ലഭ്യമാക്കേണ്ടതാണ്.

പ്രസ്തുത തുക നടപ്പ് സാമ്പത്തിക വർഷം" 2202-03-103-76 Development of Libraries, Laboratories & Furniture" ശീർഷകത്തിൽ നിന്നും വഹിക്കേണ്ടതാണ്.

Approval Valid

Digitally Approved By
 ഗീത.എ ഐ.എ.എസ്സ്
 Date: 20/11/2020
 Reason: Approved

Sd/-
 ഗീത.എ ഐ.എ.എസ്സ്
 കോളേജ് വിദ്യാഭ്യാസ ഡയറക്ടർ (ഇൻ
 ചാർജ്)
 0471-2303548
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പകർപ്പ്,

1. ഡോ. പ്രിൻസ് പി ആർ (കൺവീനർ - അക്കാദമിക സമിതി - ഫിസിക്സ് വിഭാഗം)
അസിസ്റ്റന്റ് പ്രൊഫസർ , യൂണിവേഴ്സിറ്റി കോളേജ് തിരുവനന്തപുരം
- 2.ബന്ധപ്പെട്ട കോളേജ് പ്രിൻസിപ്പാൾമാർ
- 3.ബഡ്ജറ്റ് (കെ) സെക്ഷൻ
- 4.നടപ്പ് ഫയൽ / കരുതൽ ഫയൽ

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	13 Govt Arts College, TVM		
Lab:	UG	Physics	
University	KERALA		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	5	3000
2	Bar magnets	2	300
3	Bob, simple Pendulum	-5	-250
4	Boyle's Law apparatus	0	0
5	Bread board	-4	-800
6	Burette	2	600
7	Calorimeter	2	400
8	Capillary Tube	0	0
9	Cardboard disc	3	150
10	Carey Foster's Bridge	2	6000
11	Castor oil 1kg	0	0
12	Circuit board	12	2400
13	Circular coil apparatus	0	0
14	Common Balance	0	0
15	Commutator	10	3000
16	Compass box	7	2800
17	Compound bar pendulum	0	0
18	Computer	3	120000
19	Convex lens	10	3000
20	Cotton/ covered single strand copper wire30m	0	0
21	CRO	2	50000
22	CRO probes	-2	-700
23	Daniel cell	0	0
24	Deflection magnetometer	2	1600
25	Desoldering pump	1	200
26	Digital Multimeter	3	10500
27	Digital Screw Gauge	10	25000
28	Digital Vernier Callipers	10	25000
29	Digital Thermometer	10	5000
30	Dry cell (1.5V, 9V)	15	225
31	Electric Generator	0	0
32	Electric heater	2	3000
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	0	0
37	Fresnel biprism	0	0
38	Galvanometer	10	3000
39	Glass beakers	0	0
40	Glass jar(1m)	5	1500
41	Glass rods	0	0

42	Grating	0	0
43	Glycerine 100ml	1	600
44	Hares apparatus	0	0
45	High Resistance	5	3000
46	Horse shoe magnet	-2	-500
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	3	1050
49	Induction coil	0	0
50	Jockey	0	0
51	Katers pendulum with knife edge	2	4000
52	Knife edges, for young's modulus experiments	2	300
53	Kundts tube apparatus	2	1500
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	5	125
59	Lycopodium powder 500g	1	500
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	1	3600
62	Mercury Vapour lamp	1	3500
63	Metal pointers	3	450
64	Meter scale	0	0
65	Mirror strips	7	420
66	Modem	1	2500
67	Multipurpose stands and holder	3	1950
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	0	0
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	2	1300
72	Paraffin Wax -500g	0	0
73	Plane mirror	7	700
74	Plano-convex lens, For Newton's rings exptt,	5	1250
75	Plug Keys	8	1600
76	Potentiometer	2	13000
77	Power supply (dual and normal)	7	84000
78	Printer (Laser)	2	36000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	7	7000
81	Prism (hollow)	4	2600
82	Prism (Quartz)	0	0
83	Probes	0	0
84	Reading lens(simple microscope)	5	1750
85	Resistance coil- temperature coefficient expt	2	400
86	Resistance wire 10m	1	3500
87	Rheostat	5	3400

88	Rubber tube	0	0
89	Scale and telescope apparatus	2	9000
90	Scanner	2	7200
91	Screw gauge	4	2800
92	Signal/function generator	2	30000
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	2	7200
95	Soldering iron	4	1600
96	Soldering lead 500g	2	5000
97	Soldering wax-500g	2	400
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	1	4500
100	Spectrometer	4	40000
101	Spring constant apparatus	0	0
102	Standard Resistance	0	0
103	Standard resistance Boxes	4	4800
104	Stands for torsion pendulum	4	2400
105	Static torsion apparatus	1	4500
106	Steam generator	0	0
107	Step down transformer	8	2000
108	Stop watch, battery type	5	3250
109	Stop Watch, winding type	7	5600
110	Table lamp	2	700
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	0	0
113	Test tube	3	180
114	Thermometer	4	600
115	Torsion pendulum, with nichrome wire	2	5000
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	1	8500
118	Tuning forks (various frequencies)	0	0
119	Two way key	4	600
120	UPS for single computer	0	0
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	4	2600
123	Vibration magnetometer (box type)	3	7500
124	Vibration magnetometer (Searle's)	3	5400
125	Volt meter (various ranges)	6	3600
126	Voltage source (variable)	4	14000
127	Water bath	2	600
128	Weight Box (standard)	2	3000
129	Weight hanger	0	0
130	Wifi router	1	4500
131	Wooden scale	5	500
132	Fire extinguishers	2	5000
133	Repair and maintenance		25000
		Total	661950

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	14 GOVERNMENT COLLEGE ,ATTINGAL		
Lab:	UG	Physics	
University	KERALA		
Sl No	Item	No. required	Amount (Rs)
1	Ammeter (A, mA, micro A)	3	1800
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	4	12000
5	Bread board	0	0
6	Burette	0	0
7	Calorimeter	4	800
8	Capillary Tube	0	0
9	Cardboard disc	0	0
10	Carey Foster's Bridge	0	0
11	Castor oil 1kg	0	0
12	Circuit board	4	800
13	Circular coil apparatus	2	6000
14	Common Balance	0	0
15	Commutator	0	0
16	Compass box	0	0
17	Compound bar pendulum	0	0
18	Computer	1	40000
19	Convex lens	0	0
20	Cotton/ covered single strand copper wire30m	0	0
21	CRO	0	0
22	CRO probes	0	0
23	Daniel cell	0	0
24	Deflection magnetometer	0	0
25	Desoldering pump	0	0
26	Digital Multimeter	0	0
27	Digital Screw Gauge	4	10000
28	Digital Vernier Callipers	4	10000
29	Digital Thermometer	3	1500
30	Dry cell (1.5V, 9V)	2	30
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	0	0

37	Fresnel biprism	4	20000
38	Galvanometer	0	0
39	Glass beakers	0	0
40	Glass jar(1m)	2	600
41	Glass rods	0	0
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	4	8000
45	High Resistance	0	0
46	Horse shoe magnet	0	0
47	ICs (various)-sufficient	1	5000
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	0	0
50	Jockey	0	0
51	Katers pendulum with knife edge	4	8000
52	Knife edges, for young's modulus experiments	0	0
53	Kundts tube apparatus	2	1500
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	4	100
59	Lycopodium powder 500g	1	500
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	1	3500
63	Metal pointers	0	0
64	Meter scale	0	0
65	Mirror strips	0	0
66	Modem	0	0
67	Multipurpose stands and holder	5	3250
68	Newton's law of cooling apparatus	5	12500
69	Newton's ring apparatus	0	0
70	Oil Bath	5	18000
71	Optic lever with telescope	2	1300
72	Paraffin Wax -500g	2	400
73	Plane mirror	-4	-400
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	0	0
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	1	18000
79	Prism (crown glass)	4	4000
80	Prism (flint glass)	0	0
81	Prism (hollow)	4	2600
82	Prism (Quartz)	2	3200

83	Probes	2	300
84	Reading lens(simple microscope)	0	0
85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m	0	0
87	Rheostat	0	0
88	Rubber tube	1	100
89	Scale and telescope apparatus	4	18000
90	Scanner	1	3600
91	Screw gauge	0	0
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)	2	1600
94	Sodium vapour lamp	0	0
95	Soldering iron	1	400
96	Soldering lead 500g	0	0
97	Soldering wax-500g	0	0
98	Sonometer	3	13500
99	Sonometer, For measuring frequency of ac	3	13500
100	Spectrometer	0	0
101	Spring constant apparatus	1	1500
102	Standard Resistance	6	1500
103	Standard resistance Boxes	0	0
104	Stands for torsion pendulum	0	0
105	Static torsion apparatus	0	0
106	Steam generator	0	0
107	Step down transformer	0	0
108	Stop watch, battery type	1	650
109	Stop Watch, winding type	3	2400
110	Table lamp	0	0
111	Table model moving coil Galvanometer	4	3200
112	Tangent Galvanometer	4	10000
113	Test tube	0	0
114	Thermometer	0	0
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	0	0
119	Two way key	0	0
120	UPS for single computer	0	0
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	3	5400
125	Volt meter (various ranges)	0	0
126	Voltage source (variable)	0	0
127	Water bath	2	600
128	Weight Box (standard)	0	0
129	Weight hanger	0	0

130	Wifi router	0	0
131	Wooden scale	0	0
132	Fire extinguisher	2	5000
133	Repair and Maintenance		25000
		Total	359230

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
15 KNM GOVT. ARTS & SCIENCE COLLEGE KANJIRAMKULAM			
College:	UG		Physics
University :	KERALA		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	7	4200
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	0	0
6	Burette	0	0
7	Calorimeter	0	0
8	Capillary Tube	0	0
9	Cardboard disc	0	0
10	Carey Foster's Bridge	2	6000
11	Castor oil 1kg	0	0
12	Circuit board	0	0
13	Circular coil apparatus	0	0
14	Common Balance	0	0
15	Commutator	0	0
16	Compass box	0	0
17	Compound bar pendulum	0	0
18	Computer	1	40000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	0	0
21	CRO	0	0
22	CRO probes	0	0
23	Daniel cell	0	0
24	Deflection magnetometer	2	1600
25	Desoldering pump	0	0
26	Digital Multimeter	0	0
27	Digital Screw Gauge	0	0
28	Digital Vernier Callipers	0	0
29	Digital Thermometer	0	0
30	Dry cell (1.5V, 9V)	0	0
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	2	6000

37	Fresnel biprism	0	0
38	Galvanometer	2	600
39	Glass beakers	0	0
40	Glass jar(1m)	0	0
41	Glass rods	0	0
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	0	0
45	High Resistance	0	0
46	Horse shoe magnet	0	0
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	0	0
50	Jockey	0	0
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	2	300
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	2	7000
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	0	0
63	Metal pointers	0	0
64	Meter scale	0	0
65	Mirror strips	0	0
66	Modem	0	0
67	Multipurpose stands and holder	0	0
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	0	0
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	0	0
72	Paraffin Wax -500g	0	0
73	Plane mirror	0	0
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	1	6500
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	0	0
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	0	0

82	Prism (Quartz)	0	0
83	Probes	0	0
84	Reading lens(simple microscope)	0	0
85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m	0	0
87	Rheostat	5	3400
88	Rubber tube	0	0
89	Scale and telescope apparatus	0	0
90	Scanner	0	0
91	Screw gauge	0	0
92	Signal/function generator	0	0
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	0	0
95	Soldering iron	0	0
96	Soldering lead 500g	0	0
97	Soldering wax-500g	0	0
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	2	20000
101	Spring constant apparatus	0	0
102	Standard Resistance	0	0
103	Standard resistance Boxes	0	0
104	Stands for torsion pendulum	0	0
105	Static torsion apparatus	0	0
106	Steam generator	0	0
107	Step down transformer	0	0
108	Stop watch, battery type	4	2600
109	Stop Watch, winding type	5	4000
110	Table lamp	0	0
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	0	0
113	Test tube	0	0
114	Thermometer	0	0
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	2	17000
118	Tuning forks (various frequencies)	0	0
119	Two way key	0	0
120	UPS for single computer	0	0
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	6	3600
126	Voltage source (variable)	0	0
127	Water bath	0	0
128	Weight Box (standard)	0	0

129	Weight hanger	0	0
130	Wifi router	0	0
131	Wooden scale	0	0
132	Battery Charger	0	0
133	Fire extinguisher	2	5000
134	Repair and Maintenance		25000
		Total	152800

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	16 Govt. College. Nedumangad, Thiruvananthapuram		
Lab:	UG	Physics	
University :	KERALA		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	2	1200
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	4	800
6	Burette	0	0
7	Calorimeter	0	0
8	Capillary Tube	0	0
9	Cardboard disc	1	50
10	Carey Foster's Bridge	3	9000
11	Castor oil 1kg	0	0
12	Circuit board	0	0
13	Circular coil apparatus	3	9000
14	Common Balance	0	0
15	Commutator	0	0
16	Compass box	0	0
17	Compound bar pendulum	0	0
18	Computer	5	200000
19	Convex lens	1	300
20	Cotton/cloth covered single strand copper wire30m	0	0
21	CRO	0	0
22	CRO probes	0	0
23	Daniel cell	0	0
24	Deflection magnetometer	0	0
25	Desoldering pump	6	1200
26	Digital Multimeter	2	7000
27	Digital Screw Gauge	0	0
28	Digital Vernier Callipers	0	0
29	Digital Thermometer	0	0
30	Dry cell (1.5V, 9V)	6	90
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	0	0
37	Fresnel biprism	0	0
38	Galvanometer	0	0

39	Glass beakers	0	0
40	Glass jar(1m)	0	0
41	Glass rods	0	0
42	Grating	2	4000
43	Glycerine 100ml	0	0
44	Hares apparatus	0	0
45	High Resistance	2	1200
46	Horse shoe magnet	0	0
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	0	0
50	Jockey	0	0
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	0	0
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	1	3500
63	Metal pointers	0	0
64	Meter scale	0	0
65	Mirror strips	0	0
66	Modem	1	2500
67	Multipurpose stands and holder	0	0
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	1	6500
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	0	0
72	Paraffin Wax -500g	0	0
73	Plane mirror	0	0
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	0	0
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	1	18000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	0	0
82	Prism (Quartz)	0	0
83	Probes	0	0
84	Reading lens(simple microscope)	0	0

85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m	0	0
87	Rheostat	0	0
88	Rubber tube	2	200
89	Scale and telescope apparatus	0	0
90	Scanner	0	0
91	Screw gauge	0	0
92	Signal/function generator	0	0
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	0	0
95	Soldering iron	2	800
96	Soldering lead 500g	0	0
97	Soldering wax-500g	0	0
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	0	0
101	Spring constant apparatus	0	0
102	Standard Resistance	0	0
103	Standard resistance Boxes	0	0
104	Stands for torsion pendulum	0	0
105	Static torsion apparatus	0	0
106	Steam generator	0	0
107	Step down transformer	0	0
108	Stop watch, battery type	0	0
109	Stop Watch, winding type	0	0
110	Table lamp	0	0
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	0	0
113	Test tube	0	0
114	Thermometer	0	0
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	0	0
119	Two way key	0	0
120	UPS for single computer	5	22500
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	4	2400
126	Voltage source (variable)	0	0
127	Water bath	0	0
128	Weight Box (standard)	1	1500
129	Weight hanger	0	0
130	Wifi router	0	0
131	Wooden scale	0	0

132	Fire extinguisher	2	5000
133	Repair and Maintenance		25000
		Total	421740

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	17 BJM Govt College, Chavara		
Lab:	UG	Physics	
University :	KERALA		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	6	3600
2	Bar magnets	0	0
3	Bob, simple Pendulum	10	500
4	Boyle's Law apparatus	4	12000
5	Bread board	0	0
6	Burette	3	900
7	Calorimeter	5	1000
8	Capillary Tube	5	1500
9	Cardboard disc	0	0
10	Carey Foster's Bridge	2	6000
11	Castor oil 1kg	1	500
12	Circuit board	20	4000
13	Circular coil apparatus	-3	-9000
14	Common Balance	5	10000
15	Commutator	6	1800
16	Compass box	8	3200
17	Compound bar pendulum	0	0
18	Computer	9	360000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	0	0
21	CRO	4	100000
22	CRO probes	0	0
23	Daniel cell	10	15000
24	Deflection magnetometer	0	0
25	Desoldering pump	0	0
26	Digital Multimeter	0	0
27	Digital Screw Gauge	0	0
28	Digital Vernier Callipers	0	0
29	Digital Thermometer	0	0
30	Dry cell (1.5V, 9V)	0	0
31	Electric Generator	1	100000
32	Electric heater	2	3000
33	Electronic balance	1	5000
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0

36	Fly Wheel	0	0
37	Fresnel biprism	2	10000
38	Galvanometer	0	0
39	Glass beakers	5	1750
40	Glass jar(1m)	2	600
41	Glass rods	3	240
42	Grating	7	14000
43	Glycerine 100ml	0	0
44	Hares apparatus	3	6000
45	High Resistance	5	3000
46	Horse shoe magnet	3	750
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	4	1400
49	Induction coil	5	17500
50	Jockey	4	1000
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	16	2400
53	Kundts tube apparatus	2	1500
54	Lead accumulator	10	15000
55	Lead shots 500g	0	0
56	Leclanche cell	5	12500
57	Lee's disc apparatus	0	0
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	1	3500
63	Metal pointers	3	450
64	Meter scale	10	500
65	Mirror strips	19	1140
66	Modem	0	0
67	Multipurpose stands and holder	0	0
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	1	6500
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	5	3250
72	Paraffin Wax -500g	0	0
73	Plane mirror	8	800
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	4	26000
77	Power supply (dual and normal)	8	96000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	2	2000
80	Prism (flint glass)	0	0
81	Prism (hollow)	0	0

82	Prism (Quartz)	0	0
83	Probes	0	0
84	Reading lens(simple microscope)	1	350
85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m	0	0
87	Rheostat	5	3400
88	Rubber tube	0	0
89	Scale and telescope apparatus	2	9000
90	Scanner	1	3600
91	Screw gauge	0	0
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)	4	3200
94	Sodium vapour lamp	0	0
95	Soldering iron	0	0
96	Soldering lead 500g	0	0
97	Soldering wax-500g	0	0
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	2	20000
101	Spring constant apparatus	0	0
102	Standard Resistance	11	2750
103	Standard resistance Boxes	0	0
104	Stands for torsion pendulum	0	0
105	Static torsion apparatus	2	9000
106	Steam generator	0	0
107	Step down transformer	0	0
108	Stop watch, battery type	0	0
109	Stop Watch, winding type	0	0
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	3	7500
113	Test tube	10	600
114	Thermometer	5	750
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	8	2800
119	Two way key	5	750
120	UPS for single computer	3	13500
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	1	2500
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	0	0
126	Voltage source (variable)	3	10500
127	Water bath	0	0
128	Weight Box (standard)	7	10500

129	Weight hanger	0	0
130	Wifi router	0	0
131	Wooden scale	5	500
132	Fire extinguisher	2	5000
133	Repair and Maintenance		25000
		Total	1157030

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
18 Govt. College Ambalappuzha			
Lab: UG			
University: KERALA			Physics
SI No	Item/ Equipment	No. required	Amount (Rs.)
1	Stop Watch-Mechanical	1	400
2	Stop Watch-digital	0	
3	Capillary Tube	2	200
4	Carey Foster's Bridge	0	
5	Circuit board	20	2000
6	Compass box	3	300
7	Convex lens	1	50
8	Cotton/cloth covered single stand copper wire	1 roll	500
9	Deflection magnetometer	1	300
10	Digital Screw Gauge	5	2500
11	Digital Vernier Callipers	5	2500
12	Galvanometer	0	0
13	Knife edges, for young's modulus experiments	8	800
14	Leclanche cell	1	500
15	Mercury	250 g	1000
16	Mercury Vapour lamp	1	600
17	Metal pointers For liquid lens	0	
18	Newton's ring apparatus	1	3000
19	Plano-convex lens(For Newton's rings experiment)	1	100
21	Power supply(DUAL)	4	12000
22	Power supply(normal)	1	1000
23	Printer (Laser)	1	10000
24	Computer	1	33000
25	Rubber tube	12	1200
26	Screw gauge	0	0
27	Sodium vapour lamp with casing and slit	1	1000
28	Soldering iron	1	500
29	Step down transformer	3	300
30	UPS for single computer 500 kVA	1	5000
31	Wooden scale	7	350
32	MILLI AMMETER	3	900
33	Repair and maintenance		25000
		Total	105000

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED
19 Government Arts and Science College, Santhanpara

Lab: UG

University: **MG**

Physics

SI No	Item/ Equipment	No. required	Amount (Rs.)
1	Beam Balance weight box, forceps, two objects of different masses	1	5000
2	Spectrometer Prism, grating, lens, liquid prism,	1	25000
3	Laser setup	1	30000
4	Newton rings` sodium lamp, microscope, power supply	1	20000
5	Repair and maintenance		25000
		Total	105000

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	20 T M JACOB MEMORIAL GOVT COLLEGE, MANIMALAKUNNU		
Lab:	UG	Physics	
University :	MG		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	10	6000
2	Bar magnets	6	900
3	Bob, simple Pendulum	3	150
4	Boyle's Law apparatus	0	0
5	Bread board	5	1000
6	Burette	2	600
7	Calorimeter	3	600
8	Capillary Tube	3	900
9	Cardboard disc	1	50
10	Carey Foster's Bridge	0	0
11	Castor oil 1kg	0.5	250
12	Circuit board	3	600
13	Circular coil apparatus	3	9000
14	Common Balance	2	4000
15	Commutator	3	900
16	Compass box	4	1600
17	Compound bar pendulum	0	0
18	Computer	7	280000
19	Convex lens	2	600
20	Cotton/cloth covered single strand copper wire 30m	1	200
21	CRO	3	75000
22	CRO probes	16	5600
23	Daniel cell	4	6000
24	Deflection magnetometer	4	3200
25	Desoldering pump	1	200
26	Digital Multimeter	6	21000
27	Digital Screw Gauge	5	12500
28	Digital Vernier Callipers	5	12500
29	Digital Thermometer	3	1500
30	Dry cell (1.5V, 9V)	10	150
31	Electric Generator	1	100000
32	Electric heater	1	1500
33	Electronic balance	3	15000
34	Electronic components (various)-sufficient	1	5000
35	flannel	0	0
36	Fly Wheel	1	3000
37	Fresnel biprism	3	15000
38	Galvanometer	7	2100

39	Glass beakers	5	1750
40	Glass jar(1m)	3	900
41	Glass rods	3	240
42	Grating	3	6000
43	Glycerine 100ml	1	600
44	Hares apparatus	3	6000
45	High Resistance	6	3600
46	Horse shoe magnet	1	250
47	ICs (various)-sufficient	1	5000
48	Identical masses for torsion pendulum exp	1	350
49	Induction coil	0	0
50	Jockey	4	1000
51	Katers pendulum with knife edge	1	2000
52	Knife edges, for young's modulus experiments	6	900
53	Kundts tube apparatus	2	1500
54	Lead accumulator	0	0
55	Lead shots 500g	10	5000
56	Leclanche cell	3	7500
57	Lee's disc apparatus	1	6500
58	Long knitting needle	2	50
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	1	3500
61	Mercury 500 g	1	3600
62	Mercury Vapour lamp	1	3500
63	Metal pointers	3	450
64	Meter scale	5	250
65	Mirror strips	8	480
66	Modem	1	2500
67	Multipurpose stands and holder	3	1950
68	Newton's law of cooling apparatus	2	5000
69	Newton's ring apparatus	2	13000
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	4	2600
72	Paraffin Wax -500g	0.5	100
73	Plane mirror	4	400
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	4	800
76	Potentiometer	2	13000
77	Power supply (dual and normal)	8	96000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	3	1950
82	Prism (Quartz)	3	4800
83	Probes	6	900

84	Reading lens(simple microscope)	3	1050
85	Resistance coil- temperature coefficient expt	3	600
86	Resistance wire 10m	0.5	1750
87	Rheostat	11	7480
88	Rubber tube	6	600
89	Scale and telescope apparatus	4	18000
90	Scanner	1	3600
91	Screw gauge	3	2100
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)	4	3200
94	Sodium vapour lamp	0	0
95	Soldering iron	8	3200
96	Soldering lead 500g	0.1	250
97	Soldering wax-500g	3	600
98	Sonometer	1	4500
99	Sonometer, For measuring frequency of ac	1	4500
100	Spectrometer	3	30000
101	Spring constant apparatus	3	4500
102	Standard Resistance	4	1000
103	Standard resistance Boxes	3	3600
104	Stands for torsion pendulum	4	2400
105	Static torsion apparatus	1	4500
106	Steam generator	2	2000
107	Step down transformer	6	1500
108	Stop watch, battery type	9	5850
109	Stop Watch, winding type	3	2400
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	6	4800
112	Tangent Galvanometer	3	7500
113	Test tube	4	240
114	Thermometer	3	450
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0.5	500
117	Travelling microscope	3	25500
118	Tuning forks (various frequencies)	0	0
119	Two way key	4	600
120	UPS for single computer	1	4500
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers	1	650
123	Vibration magnetometer (box type)	1	2500
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	14	8400
126	Voltage source (variable)	6	21000
127	Water bath	0	0
128	Weight Box (standard)	1	1500
129	Weight hanger	2	200
130	Wifi router	2	9000

131	Wooden scale	4	400
132	Repair and maintenance		25000
		Total	1191490

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	21 Govt. College, Chittur		
Lab:	UG	Physics	
University :	Calicut		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	0	0
2	Bar magnets	4	600
3	Bob, simple Pendulum		
4	Boyle's Law apparatus		
5	Bread board	15	3000
6	Burette	1	300
7	Calorimeter		
8	Capillary Tube		
9	Cardboard disc		
10	Carey Foster's Bridge	3	9000
11	Castor oil 1kg		
12	Circuit board	5	1000
13	Circular coil apparatus	4	12000
14	Common Balance		
15	Commutator	2	600
16	Compass box	5	2000
17	Compound bar pendulum		
18	Computer	4	160000
19	Convex lens		
20	Cotton/cloth covered single strand copper wire30m		
21	CRO	3	75000
22	CRO probes		
23	Daniel cell	3	4500
24	Deflection magnetometer	2	1600
25	Desoldering pump		
26	Digital Multimeter	4	14000
27	Digital Screw Gauge	3	7500
28	Digital Vernier Callipers	3	7500
29	Digital Thermometer	3	1500
30	Dry cell (1.5V, 9V)	4	60
31	Electric Generator	1	100000
32	Electric heater	1	1500
33	Electronic balance	1	5000
34	Electronic components (various)-sufficient		
35	flannel		
36	Fly Wheel	1	3000

37	Fresnel biprism	0	0
38	Galvanometer	4	1200
39	Glass beakers	4	1400
40	Glass jar(1m)	3	900
41	Glass rods		
42	Grating	5	10000
43	Glycerine 100ml		
44	Hares apparatus	3	6000
45	High Resistance	1	600
46	Horse shoe magnet	2	500
47	ICs (various)-sufficient		
48	Identical masses for torsion pendulum exp	1	350
49	Induction coil	2	7000
50	Jockey	5	1250
51	Katers pendulum with knife edge	5	10000
52	Knife edges, for young's modulus experiments		
53	Kundts tube apparatus		
54	Lead accumulator		
55	Lead shots 500g		
56	Leclanche cell		
57	Lee's disc apparatus	2	13000
58	Long knitting needle		
59	Lycopodium powder 500g		
60	Meldes string apparatus with scale pan	2	7000
61	Mercury 500 g		
62	Mercury Vapour lamp	1	3500
63	Metal pointers		
64	Meter scale		
65	Mirror strips		
66	Modem		
67	Multipurpose stands and holder		
68	Newton's law of cooling apparatus		
69	Newton's ring apparatus	3	19500
70	Oil Bath		
71	Optic lever with clamp and holder to hold telescope	5	3250
72	Paraffin Wax -500g		
73	Plane mirror	4	400
74	Plano-convex lens, For Newton's rings experiment,	2	500
75	Plug Keys	8	1600
76	Potentiometer	2	13000
77	Power supply (dual and normal)	1	12000
78	Printer (Laser)		
79	Prism (crown glass)		
80	Prism (flint glass)	1	1000
81	Prism (hollow)		
82	Prism (Quartz)		

83	Probes		
84	Reading lens(simple microscope)	2	700
85	Resistance coil- temperature coefficient expt		
86	Resistance wire 10m		
87	Rheostat	3	2040
88	Rubber tube		
89	Scale and telescope apparatus	4	18000
90	Scanner		
91	Screw gauge	2	1400
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)		
94	Sodium vapour lamp		
95	Soldering iron	5	2000
96	Soldering lead 500g		
97	Soldering wax-500g		
98	Sonometer		
99	Sonometer, For measuring frequency of ac	1	4500
100	Spectrometer	2	20000
101	Spring constant apparatus		
102	Standard Resistance	3	750
103	Standard resistance Boxes	4	4800
104	Stands for torsion pendulum		
105	Static torsion apparatus		
106	Steam generator		
107	Step down transformer	3	750
108	Stop watch, battery type		
109	Stop Watch, winding type		
110	Table lamp	2	700
111	Table model moving coil Galvanometer		
112	Tangent Galvanometer	1	2500
113	Test tube		
114	Thermometer		
115	Torsion pendulum, with nichrome wire		
116	Torsion pendulum-wire 10m		
117	Travelling microscope	2	17000
118	Tuning forks (various frequencies)		
119	Two way key		
120	UPS for single computer	4	18000
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers		
123	Vibration magnetometer (box type)	1	2500
124	Vibration magnetometer (Searle's)		
125	Volt meter (various ranges)	2	1200
126	Voltage source (variable)	1	3500
127	Water bath		
128	Weight Box (standard)	1	1500
129	Weight hanger	2	200

130	Wifi router	1	4500
131	Wooden scale		0
132	Fire extinguisher	2	5000
133	Repair and Maintenance		25000
		Total	820150

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	22 SREE NEELAKANTA GOVERNMENT SANSKRIT COLLEGE PATTAMBI		
Lab:	UG	Physics	
University :	Calicut		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	20	12000
2	Bar magnets	4	600
3	Bob, simple Pendulum	1	50
4	Boyle's Law apparatus	1	3000
5	Bread board	15	3000
6	Burette	2	600
7	Calorimeter	2	400
8	Capillary Tube	6	1800
9	Cardboard disc	2	100
10	Carey Foster's Bridge	3	9000
11	Castor oil 1kg	1	500
12	Circuit board	18	3600
13	Circular coil apparatus	3	9000
14	Common Balance	0	0
15	Commutator	10	3000
16	Compass box	2	800
17	Compound bar pendulum	0	0
18	Computer	6	240000
19	Convex lens	2	600
20	Cotton/cloth covered single strand copper wire 30m	1	200
21	CRO	6	150000
22	CRO probes	20	7000
23	Daniel cell	2	3000
24	Deflection magnetometer	2	1600
25	Desoldering pump	10	2000
26	Digital Multimeter	11	38500
27	Digital Screw Gauge	3	7500
28	Digital Vernier Callipers	3	7500
29	Digital Thermometer	5	2500
30	Dry cell (1.5V, 9V)	2	30
31	Electric Generator	1	100000
32	Electric heater	1	1500
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	1	5000
35	flannel	2	200
36	Fly Wheel	0	0
37	Fresnel biprism	2	10000

38	Galvanometer	2	600
39	Glass beakers	5	1750
40	Glass jar(1m)	5	1500
41	Glass rods	5	400
42	Grating	2	4000
43	Glycerine 100ml	1	600
44	Hares apparatus	1	2000
45	High Resistance	1	600
46	Horse shoe magnet	1	250
47	ICs (various)-sufficient	1	5000
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	1	3500
50	Jockey	1	250
51	Katers pendulum with knife edge	5	10000
52	Knife edges, for young's modulus experiments	2	300
53	Kundts tube apparatus	0	0
54	Lead accumulator	10	15000
55	Lead shots 500g	0	0
56	Leclanche cell	4	10000
57	Lee's disc apparatus	1	6500
58	Long knitting needle	5	125
59	Lycopodium powder 500g	1	500
60	Meldes string apparatus with scale pan	1	3500
61	Mercury 500 g	1	3600
62	Mercury Vapour lamp	1	3500
63	Metal pointers	3	450
64	Meter scale	17	850
65	Mirror strips	6	360
66	Modem	0	0
67	Multipurpose stands and holder	10	6500
68	Newton's law of cooling apparatus	1	2500
69	Newton's ring apparatus	1	6500
70	Oil Bath	1	3600
71	Optic lever with clamp and holder to hold telescope	3	1950
72	Paraffin Wax -500g	0.5	100
73	Plane mirror	16	1600
74	Plano-convex lens, For Newton's rings experiment,	8	2000
75	Plug Keys	6	1200
76	Potentiometer	1	6500
77	Power supply (dual and normal)	4	48000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	2	2000
80	Prism (flint glass)	4	4000
81	Prism (hollow)	1	650

82	Prism (Quartz)	3	4800
83	Probes	0	0
84	Reading lens(simple microscope)	5	1750
85	Resistance coil- temperature coefficient expt	3	600
86	Resistance wire 10m	1	3500
87	Rheostat	6	4080
88	Rubber tube	9	900
89	Scale and telescope apparatus	2	9000
90	Scanner	0	0
91	Screw gauge	1	700
92	Signal/function generator	1	15000
93	Slotted weights (g and kg)	6	4800
94	Sodium vapour lamp	1	3600
95	Soldering iron	9	3600
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	1	200
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	4	18000
100	Spectrometer	5	50000
101	Spring constant apparatus	1	1500
102	Standard Resistance	18	4500
103	Standard resistance Boxes	1	1200
104	Stands for torsion pendulum	2	1200
105	Static torsion apparatus	3	13500
106	Steam generator	2	2000
107	Step down transformer	2	500
108	Stop watch, battery type	4	2600
109	Stop Watch, winding type	10	8000
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	6	4800
112	Tangent Galvanometer	2	5000
113	Test tube	2	120
114	Thermometer	3	450
115	Torsion pendulum, with nichrome wire	3	7500
116	Torsion pendulum-wire 10m	1	1000
117	Travelling microscope	1	8500
118	Tuning forks (various frequencies)	9	3150
119	Two way key	5	750
120	UPS for single computer	6	27000
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	3	7500
124	Vibration magnetometer (Searle's)	5	9000
125	Volt meter (various ranges)	10	6000

126	Voltage source (variable)	4	14000
127	Water bath	1	300
128	Weight Box (standard)	1	1500
129	Weight hanger	5	500
130	Wifi router	2	9000
131	Wooden scale	4	400
132	Thomson's e/m apparatus	2	13000
133	Ballistic Galvanometer Set up- with lamp and scale arrangement with adjustable stand, Power supply for BG	4	26000
134	Searle's Apparatus for Thermal Conductivity of Copper	2	12000
135	Dielectric Constant Of Liquids, DCL-01	2	20000
136	STUDY OF DIELECTRIC CONSTANT SETUP Model: DEC-01	2	24000
137	Thermo couple- (Copper- Iron)	2	600
138	Thermo couple- (Copper- Constantan)	2	800
139	Photo diode Pnz334	10	200
140	Repair and Maintenance		25000
		Total	1191965

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	23 CKGM Govt. College Perambra		
Lab:	UG	Physics	
University :	Calicut		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	8	4800
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	8	1600
6	Burette	2	600
7	Calorimeter	0	0
8	Capillary Tube	2	600
9	Cardboard disc	1	50
10	Carey Foster's Bridge	2	6000
11	Castor oil 1kg	0	0
12	Circuit board	0	0
13	Circular coil apparatus	2	6000
14	Common Balance	0	0
15	Commutator	9	2700
16	Compass box	0	0
17	Compound bar pendulum	0	0
18	Computer	6	240000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire30m	0	0
21	CRO	6	150000
22	CRO probes	0	0
23	Daniel cell	0	0
24	Deflection magnetometer	0	0
25	Desoldering pump	0	0
26	Digital Multimeter	5	17500
27	Digital Screw Gauge	0	0
28	Digital Vernier Callipers	0	0
29	Digital Thermometer	2	1000
30	Dry cell (1.5V, 9V)	0	0
31	Electric Generator	1	100000
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	2	6000

37	Fresnel biprism	0	0
38	Galvanometer	4	1200
39	Glass beakers	2	700
40	Glass jar(1m)	1	300
41	Glass rods	2	160
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	2	4000
45	High Resistance	9	5400
46	Horse shoe magnet	2	500
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	2	700
49	Induction coil	0	0
50	Jockey	4	1000
51	Katers pendulum with knife edge	2	4000
52	Knife edges, for young's modulus experiments	0	0
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	2	13000
58	Long knitting needle	4	100
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	4	14000
61	Mercury 500 g	0	2880
62	Mercury Vapour lamp	5	17500
63	Metal pointers	2	300
64	Meter scale	5	250
65	Mirror strips	6	360
66	Modem	1	2500
67	Multipurpose stands and holder	3	1950
68	Newton's law of cooling apparatus	1	2500
69	Newton's ring apparatus	1	6500
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	2	1300
72	Paraffin Wax -500g	0	0
73	Plane mirror	0	0
74	Plano-convex lens, For Newton's rings experiment,	2	500
75	Plug Keys	10	2000
76	Potentiometer	5	32500
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	1	18000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	2	1300
82	Prism (Quartz)	2	3200

83	Probes	0	0
84	Reading lens(simple microscope)	4	1400
85	Resistance coil- temperature coefficient expt	1	200
86	Resistance wire 10m	0	0
87	Rheostat	8	5440
88	Rubber tube	3	300
89	Scale and telescope apparatus	0	0
90	Scanner	1	3600
91	Screw gauge	0	0
92	Signal/function generator	0	0
93	Slotted weights (g and kg)	3	2400
94	Sodium vapour lamp	4	14400
95	Soldering iron	1	400
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	0	0
98	Sonometer	2	9000
99	Sonometer, For measuring frequency of ac	2	9000
100	Spectrometer	6	60000
101	Spring constant apparatus	0	0
102	Standard Resistance	12	3000
103	Standard resistance Boxes	6	7200
104	Stands for torsion pendulum	4	2400
105	Static torsion apparatus	2	9000
106	Steam generator	0	0
107	Step down transformer	5	1250
108	Stop watch, battery type	5	3250
109	Stop Watch, winding type	6	4800
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	1	800
112	Tangent Galvanometer	2	5000
113	Test tube	5	300
114	Thermometer	2	300
115	Torsion pendulum, with nichrome wire	2	5000
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	4	34000
118	Tuning forks (various frequencies)	0	0
119	Two way key	4	600
120	UPS for single computer	6	27000
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	5	3250
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	10	6000
126	Voltage source (variable)	0	0
127	Water bath	0	0
128	Weight Box (standard)	0	0
129	Weight hanger	0	0

130	Wifi router	1	4500
131	Wooden scale	5	500
132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	933290

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	24 Government College Mokeri		
Lab:	UG	Physics	
University :	Calicut		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	0	0
2	Bar magnets	4	600
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	5	1000
6	Burette	0	0
7	Calorimeter	0	0
8	Capillary Tube	3	900
9	Cardboard disc	0	0
10	Carey Foster's Bridge	1	3000
11	Castor oil 1kg	0	0
12	Circuit board	0	0
13	Circular coil apparatus	0	0
14	Common Balance	0	0
15	Commutator	3	900
16	Compass box	4	1600
17	Compound bar pendulum	0	0
18	Computer	1	40000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	9	1800
21	CRO	0	0
22	CRO probes	0	0
23	Daniel cell	2	3000
24	Deflection magnetometer	0	0
25	Desoldering pump	0	0
26	Digital Multimeter	4	14000
27	Digital Screw Gauge	0	0
28	Digital Vernier Callipers	0	0
29	Digital Thermometer	0	0
30	Dry cell (1.5V, 9V)	2	30
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	2	10000
35	flannel	0	0
36	Fly Wheel	0	0

37	Fresnel biprism	0	0
38	Galvanometer	2	600
39	Glass beakers	0	0
40	Glass jar(1m)	0	0
41	Glass rods	0	0
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	1	2000
45	High Resistance	3	1800
46	Horse shoe magnet	0	0
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	0	0
50	Jockey	1	250
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	4	600
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	1	2880
62	Mercury Vapour lamp	0	0
63	Metal pointers	0	0
64	Meter scale	4	200
65	Mirror strips	4	240
66	Modem	0	0
67	Multipurpose stands and holder	0	0
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	1	6500
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	2	1300
72	Paraffin Wax -500g	0	0
73	Plane mirror	5	500
74	Plano-convex lens, For Newton's rings experiment,	1	250
75	Plug Keys	5	1000
76	Potentiometer	0	0
77	Power supply (dual and normal)	1	12000
78	Printer (Laser)	0	0
79	Prism (crown glass)	1	1000
80	Prism (flint glass)	1	1000
81	Prism (hollow)	0	0
82	Prism (Quartz)	0	0

83	Probes	0	0
84	Reading lens(simple microscope)	0	0
85	Resistance coil- temperature coefficient expt	2	400
86	Resistance wire 10m	2	7000
87	Rheostat	0	0
88	Rubber tube	1	100
89	Scale and telescope apparatus	0	0
90	Scanner	0	0
91	Screw gauge	3	2100
92	Signal/function generator	0	0
93	Slotted weights (g and kg)	2	1600
94	Sodium vapour lamp	0	0
95	Soldering iron	1	400
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	1	200
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	0	0
101	Spring constant apparatus	0	0
102	Standard Resistance	1	250
103	Standard resistance Boxes	8	9600
104	Stands for torsion pendulum	1	600
105	Static torsion apparatus	0	0
106	Steam generator	0	0
107	Step down transformer	0	0
108	Stop watch, battery type	1	650
109	Stop Watch, winding type	0	0
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	1	2500
113	Test tube	5	300
114	Thermometer	0	0
115	Torsion pendulum, with nichrome wire	1	2500
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	0	0
119	Two way key	3	450
120	UPS for single computer	1	4500
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers	2	1300
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	0	0
125	Volt meter (various ranges)	5	3000
126	Voltage source (variable)	4	14000
127	Water bath	0	0
128	Weight Box (standard)	0	0
129	Weight hanger	2	200

130	Wifi router	1	4500
131	Wooden scale	0	0
132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	298650

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	25 NMS Govt College, Kalpetta		
Lab:	UG	Physics	
University :	Calicut		
SI No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	0	0
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	5	1000
6	Burette	0	0
7	Calorimeter	0	0
8	Capillary Tube	0	0
9	Cardboard disc	0	0
10	Carey Foster's Bridge	0	0
11	Castor oil 1kg	0	0
12	Circuit board	0	0
13	Circular coil apparatus	0	0
14	Common Balance	2	4000
15	Commutator	0	0
16	Compass box	4	1600
17	Compound bar pendulum	0	0
18	Computer	1	40000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	0	0
21	CRO	0	0
22	CRO probes	2	700
23	Daniel cell	2	3000
24	Deflection magnetometer	0	0
25	Desoldering pump	1	200
26	Digital Multimeter	2	7000
27	Digital Screw Gauge	4	10000
28	Digital Vernier Callipers	4	10000
29	Digital Thermometer	1	500
30	Dry cell (1.5V, 9V)	2	30
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	1	3000

37	Fresnel biprism	0	0
38	Galvanometer	0	0
39	Glass beakers	0	0
40	Glass jar(1m)	0	0
41	Glass rods	0	0
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	2	4000
45	High Resistance	2	1200
46	Horse shoe magnet	2	500
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	4	1400
49	Induction coil	1	3500
50	Jockey	0	0
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	0	0
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	2	5000
57	Lee's disc apparatus	1	6500
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	0	0
63	Metal pointers	0	0
64	Meter scale	0	0
65	Mirror strips	2	120
66	Modem	1	2500
67	Multipurpose stands and holder	2	1300
68	Newton's law of cooling apparatus	0	0
69	Newton's ring apparatus	0	0
70	Oil Bath	0	0
71	Optic lever with clamp and holder to hold telescope	1	650
72	Paraffin Wax -500g	0	0
73	Plane mirror	3	300
74	Plano-convex lens, For Newton's rings experiment,	2	500
75	Plug Keys	5	1000
76	Potentiometer	2	13000
77	Power supply (dual and normal)	5	60000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	0	0
82	Prism (Quartz)	0	0

83	Probes	0	0
84	Reading lens(simple microscope)	0	0
85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m		0
87	Rheostat	4	2720
88	Rubber tube	3	300
89	Scale and telescope apparatus	1	4500
90	Scanner	1	3600
91	Screw gauge	0	0
92	Signal/function generator	1	15000
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	1	3600
95	Soldering iron	1	400
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	1	200
98	Sonometer	1	4500
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	2	20000
101	Spring constant apparatus	0	0
102	Standard Resistance	2	500
103	Standard resistance Boxes	4	4800
104	Stands for torsion pendulum	2	1200
105	Static torsion apparatus	1	4500
106	Steam generator	0	0
107	Step down transformer	1	250
108	Stop watch, battery type	3	1950
109	Stop Watch, winding type	2	1600
110	Table lamp	1	350
111	Table model moving coil Galvanometer	1	800
112	Tangent Galvanometer	0	0
113	Test tube	0	0
114	Thermometer	1	150
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	1	1000
117	Travelling microscope	1	8500
118	Tuning forks (various frequencies)	0	0
119	Two way key	1	150
120	UPS for single computer	1	4500
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	5	3250
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	2	3600
125	Volt meter (various ranges)	5	3000
126	Voltage source (variable)	2	7000
127	Water bath	0	0
128	Weight Box (standard)	3	4500
129	Weight hanger	0	0

130	Wifi router	1	4500
131	Wooden scale	0	0
132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	343920

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	26 Government College Mananthavady		
Lab:	UG	Physics	
University :	Kannur		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	6	3600
2	Bar magnets	2	300
3	Bob, simple Pendulum	2	100
4	Boyle's Law apparatus	3	9000
5	Bread board	2	400
6	Burette	4	1200
7	Calorimeter	3	600
8	Capillary Tube	6	1800
9	Cardboard disc	3	150
10	Carey Foster's Bridge	2	6000
11	Castor oil 1kg	2	1000
12	Circuit board	4	800
13	Circular coil apparatus	3	9000
14	Common Balance	1	2000
15	Commutator	3	900
16	Compass box	2	800
17	Compound bar pendulum	1	1200
18	Computer	1	40000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire30m	1	200
21	CRO	2	50000
22	CRO probes	2	700
23	Daniel cell	0	0
24	Deflection magnetometer	1	800
25	Desoldering pump	1	200
26	Digital Multimeter	1	3500
27	Digital Screw Gauge	1	2500
28	Digital Vernier Callipers	1	2500
29	Digital Thermometer	1	500
30	Dry cell (1.5V, 9V)	5	75
31	Electric Generator	1	100000
32	Electric heater	1	1500
33	Electronic balance	1	5000
34	Electronic components (various)-sufficient	150	750000
35	flannel	0	0
36	Fly Wheel	2	6000

37	Fresnel biprism	0	0
38	Galvanometer	2	600
39	Glass beakers	4	1400
40	Glass jar(1m)	2	600
41	Glass rods	4	320
42	Grating	2	4000
43	Glycerine 100ml	2	1200
44	Hares apparatus	2	4000
45	High Resistance	6	3600
46	Horse shoe magnet	4	1000
47	ICs (various)-sufficient	13	65000
48	Identical masses for torsion pendulum exp	4	1400
49	Induction coil	2	7000
50	Jockey	4	1000
51	Katers pendulum with knife edge	0	0
52	Knife edges, for young's modulus experiments	4	600
53	Kundts tube apparatus	0	0
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	2	13000
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	#VALUE!	2880
62	Mercury Vapour lamp	2	7000
63	Metal pointers	8	1200
64	Meter scale	0	0
65	Mirror strips	0	0
66	Modem	1	2500
67	Multipurpose stands and holder	4	2600
68	Newton's law of cooling apparatus	3	7500
69	Newton's ring apparatus	3	19500
70	Oil Bath	3	10800
71	Optic lever with clamp and holder to hold telescope	3	1950
72	Paraffin Wax -500g	2	400
73	Plane mirror	2	200
74	Plano-convex lens, For Newton's rings experiment,	4	1000
75	Plug Keys	4	800
76	Potentiometer	2	13000
77	Power supply (dual and normal)	3	36000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	2	2000
80	Prism (flint glass)	4	4000
81	Prism (hollow)	2	1300
82	Prism (Quartz)	2	3200

83	Probes	1	150
84	Reading lens(simple microscope)	4	1400
85	Resistance coil- temperature coefficient expt	4	800
86	Resistance wire 10m	1	3500
87	Rheostat	4	2720
88	Rubber tube	2	200
89	Scale and telescope apparatus	3	13500
90	Scanner	1	3600
91	Screw gauge	5	3500
92	Signal/function generator	3	45000
93	Slotted weights (g and kg)	6	4800
94	Sodium vapour lamp	4	14400
95	Soldering iron	3	1200
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	1	200
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	0	0
100	Spectrometer	2	20000
101	Spring constant apparatus	4	6000
102	Standard Resistance	6	1500
103	Standard resistance Boxes	6	7200
104	Stands for torsion pendulum	5	3000
105	Static torsion apparatus	3	13500
106	Steam generator	1	1000
107	Step down transformer	2	500
108	Stop watch, battery type	4	2600
109	Stop Watch, winding type	4	3200
110	Table lamp	3	1050
111	Table model moving coil Galvanometer	0	0
112	Tangent Galvanometer	0	0
113	Test tube	4	240
114	Thermometer	1	150
115	Torsion pendulum, with nichrome wire	3	7500
116	Torsion pendulum-wire 10m	1	1000
117	Travelling microscope	3	25500
118	Tuning forks (various frequencies)	4	1400
119	Two way key	3	450
120	UPS for single computer	1	4500
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	6	3900
123	Vibration magnetometer (box type)	6	15000
124	Vibration magnetometer (Searle's)	2	3600
125	Volt meter (various ranges)	6	3600
126	Voltage source (variable)	4	14000
127	Water bath	3	900
128	Weight Box (standard)	3	4500
129	Weight hanger	3	300

130	Wifi router	1	4500
131	Wooden scale	2	200
132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	1521135

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	27 Govt. Arts and science college Nadapuram		
Lab:	UG	Physics	
University :	Calicut		
Sl No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	6	3600
2	Bar magnets	7	1050
3	Bob, simple Pendulum	2	100
4	Boyle's Law apparatus	2	6000
5	Bread board	7	1400
6	Burette	1	300
7	Calorimeter	5	1000
8	Capillary Tube	8	2400
9	Cardboard disc	2	100
10	Carey Foster's Bridge	4	12000
11	Castor oil 1kg	5	2500
12	Circuit board	4	800
13	Circular coil apparatus	3	9000
14	Common Balance	2	4000
15	Commutator	8	2400
16	Compass box	6	2400
17	Compound bar pendulum	4	4800
18	Computer	5	200000
19	Convex lens	10	3000
20	Cotton/cloth covered single strand copper wire 30m	0.8	160
21	CRO	2	50000
22	CRO probes	6	2100
23	Daniel cell	5	7500
24	Deflection magnetometer	3	2400
25	Desoldering pump	1	200
26	Digital Multimeter	3	10500
27	Digital Screw Gauge	5	12500
28	Digital Vernier Callipers	5	12500
29	Digital Thermometer	4	2000
30	Dry cell (1.5V, 9V)	4	60
31	Electric Generator	1	100000
32	Electric heater	2	3000
33	Electronic balance	2	10000
34	Electronic components (various)-sufficient	22	110000
35	flannel	1	100
36	Fly Wheel	3	9000

37	Fresnel biprism	2	10000
38	Galvanometer	3	900
39	Glass beakers	7	2450
40	Glass jar(1m)	4	1200
41	Glass rods	5	400
42	Grating	3	6000
43	Glycerine 100ml	0.5	300
44	Hares apparatus	3	6000
45	High Resistance	6	3600
46	Horse shoe magnet	5	1250
47	ICs (various)-sufficient	15	75000
48	Identical masses for torsion pendulum exp	4	1400
49	Induction coil	4	14000
50	Jockey	3	750
51	Katers pendulum with knife edge	2	4000
52	Knife edges, for young's modulus experiments	4	600
53	Kundts tube apparatus	2	1500
54	Lead accumulator	4	6000
55	Lead shots 500g	1	500
56	Leclanche cell	4	10000
57	Lee's disc apparatus	3	19500
58	Long knitting needle	5	125
59	Lycopodium powder 500g	1	500
60	Meldes string apparatus with scale pan	3	10500
61	Mercury 500 g	1	2880
62	Mercury Vapour lamp	3	10500
63	Metal pointers	4	600
64	Meter scale	10	500
65	Mirror strips	1	60
66	Modem	1	2500
67	Multipurpose stands and holder	4	2600
68	Newton's law of cooling apparatus	2	5000
69	Newton's ring apparatus	3	19500
70	Oil Bath	2	7200
71	Optic lever with clamp and holder to hold telescope	1	650
72	Paraffin Wax -500g	1	200
73	Plane mirror	4	400
74	Plano-convex lens, For Newton's rings experiment,	3	750
75	Plug Keys	17	3400
76	Potentiometer	3	19500
77	Power supply (dual and normal)	6	72000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	5	5000
80	Prism (flint glass)	8	8000
81	Prism (hollow)	3	1950
82	Prism (Quartz)	3	4800

83	Probes	0	0
84	Reading lens(simple microscope)	4	1400
85	Resistance coil- temperature coefficient expt	3	600
86	Resistance wire 10m	1.3	4550
87	Rheostat	5	3400
88	Rubber tube	3	300
89	Scale and telescope apparatus	3	13500
90	Scanner	1	3600
91	Screw gauge	8	5600
92	Signal/function generator	2	30000
93	Slotted weights (g and kg)	4	3200
94	Sodium vapour lamp	3	10800
95	Soldering iron	4	1600
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	1	200
98	Sonometer	3	13500
99	Sonometer, For measuring frequency of ac	3	13500
100	Spectrometer	3	30000
101	Spring constant apparatus	5	7500
102	Standard Resistance	7	1750
103	Standard resistance Boxes	8	9600
104	Stands for torsion pendulum	4	2400
105	Static torsion apparatus	5	22500
106	Steam generator	1	1000
107	Step down transformer	4	1000
108	Stop watch, battery type	4	2600
109	Stop Watch, winding type	2	1600
110	Table lamp	1	350
111	Table model moving coil Galvanometer	3	2400
112	Tangent Galvanometer	4	10000
113	Test tube	2	120
114	Thermometer	4	600
115	Torsion pendulum, with nichrome wire	2	5000
116	Torsion pendulum-wire 10m	1	1000
117	Travelling microscope	4	34000
118	Tuning forks (various frequencies)	2	700
119	Two way key	8	1200
120	UPS for single computer	1	4500
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	4	2600
123	Vibration magnetometer (box type)	3	7500
124	Vibration magnetometer (Searle's)	3	5400
125	Volt meter (various ranges)	8	4800
126	Voltage source (variable)	4	14000
127	Water bath	2	600
128	Weight Box (standard)	2	3000
129	Weight hanger	2	200

130	Wifi router	1	4500
131	Wooden scale	5	500
132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	1272505

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	28 K M M GOVT. WOMEN'S COLLEGE, KANNUR		
Lab:	UG	Physics	
University :	KANNUR		
SI No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	0	0
2	Bar magnets	0	0
3	Bob, simple Pendulum	1	50
4	Boyle's Law apparatus	2	6000
5	Bread board	0	0
6	Burette	3	900
7	Calorimeter	0	0
8	Capillary Tube	3	900
9	Cardboard disc	3	150
10	Carey Foster's Bridge	1	3000
11	Castor oil 1kg	1	500
12	Circuit board	10	2000
13	Circular coil apparatus	1	3000
14	Common Balance	0	0
15	Commutator	0	0
16	Compass box	0	0
17	Compound bar pendulum	0	0
18	Computer	2	80000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	3	600
21	CRO	0	0
22	CRO probes	6	2100
23	Daniel cell	0	0
24	Deflection magnetometer	0	0
25	Desoldering pump	5	1000
26	Digital Multimeter	0	0
27	Digital Screw Gauge	4	10000
28	Digital Vernier Callipers	4	10000
29	Digital Thermometer	2	1000
30	Dry cell (1.5V, 9V)	6	90
31	Electric Generator	0	0
32	Electric heater	0	0
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	1	5000
35	flannel	10	1000
36	Fly Wheel	1	3000
37	Fresnel biprism	2	10000

38	Galvanometer	0	0
39	Glass beakers	4	1400
40	Glass jar(1m)	2	600
41	Glass rods	4	320
42	Grating	0	0
43	Glycerine 100ml	1	600
44	Hares apparatus	1	2000
45	High Resistance	0	0
46	Horse shoe magnet	2	500
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	2	7000
50	Jockey	0	0
51	Katers pendulum with knife edge	1	2000
52	Knife edges, for young's modulus experiments	0	0
53	Kundts tube apparatus	1	750
54	Lead accumulator	0	0
55	Lead shots 500g	0	0
56	Leclanche cell	0	0
57	Lee's disc apparatus	0	0
58	Long knitting needle	2	50
59	Lycopodium powder 500g	1	500
60	Meldes string apparatus with scale pan	0	0
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	0	0
63	Metal pointers	0	0
64	Meter scale	0	0
65	Mirror strips	2	120
66	Modem	0	0
67	Multipurpose stands and holder	2	1300
68	Newton's law of cooling apparatus	1	2500
69	Newton's ring apparatus	0	0
70	Oil Bath	1	3600
71	Optic lever with clamp and holder to hold telescope	0	0
72	Paraffin Wax -500g	2	400
73	Plane mirror	0	0
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	0	0
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	0	0
79	Prism (crown glass)	2	2000
80	Prism (flint glass)	0	0
81	Prism (hollow)	2	1300
82	Prism (Quartz)	2	3200

83	Probes	0	0
84	Reading lens(simple microscope)	0	0
85	Resistance coil- temperature coefficient expt	5	1000
86	Resistance wire 10m	1	3500
87	Rheostat	0	0
88	Rubber tube	10	1000
89	Scale and telescope apparatus	0	0
90	Scanner	1	3600
91	Screw gauge	2	1400
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	1	3600
95	Soldering iron	0	0
96	Soldering lead 500g	3	7500
97	Soldering wax-500g	3	600
98	Sonometer	2	9000
99	Sonometer, For measuring frequency of ac	2	9000
100	Spectrometer	0	0
101	Spring constant apparatus	4	6000
102	Standard Resistance	0	0
103	Standard resistance Boxes	0	0
104	Stands for torsion pendulum	0	0
105	Static torsion apparatus	0	0
106	Steam generator	0	0
107	Step down transformer	2	500
108	Stop watch, battery type	0	0
109	Stop Watch, winding type	0	0
110	Table lamp	4	1400
111	Table model moving coil Galvanometer	1	800
112	Tangent Galvanometer	0	0
113	Test tube	8	480
114	Thermometer	2	300
115	Torsion pendulum, with nichrome wire	0	0
116	Torsion pendulum-wire 10m	0	0
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	1	350
119	Two way key	0	0
120	UPS for single computer	0	0
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	2	3600
125	Volt meter (various ranges)	0	0
126	Voltage source (variable)	0	0
127	Water bath	0	0
128	Weight Box (standard)	0	0
129	Weight hanger	0	0

130	Wifi router	0	0
131	Wooden scale	0	0
132	Fire extinguisher	2	5000
133	Repair and Maintenance		25000
		Total	314060

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	29 GOVERNMENT COLLEGE KASARAGOD		
Lab:	UG	Physics	
University :	KANNUR		
SI No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	15	9000
2	Bar magnets	0	0
3	Bob, simple Pendulum	0	0
4	Boyle's Law apparatus	0	0
5	Bread board	10	2000
6	Burette	0	0
7	Calorimeter	8	1600
8	Capillary Tube	10	3000
9	Cardboard disc	0	0
10	Carey Foster's Bridge	4	12000
11	Castor oil 1kg	0	0
12	Circuit board	40	8000
13	Circular coil apparatus	4	12000
14	Common Balance	0	0
15	Commutator	10	3000
16	Compass box	10	4000
17	Compound bar pendulum	4	4800
18	Computer	0	0
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	5	1000
21	CRO		0
22	CRO probes	12	4200
23	Daniel cell	5	7500
24	Deflection magnetometer	4	3200
25	Desoldering pump	6	1200
26	Digital Multimeter	10	35000
27	Digital Screw Gauge	4	10000
28	Digital Vernier Callipers	4	10000
29	Digital Thermometer	4	2000
30	Dry cell (1.5V, 9V)	0	0
31	Electric Generator	1	100000
32	Electric heater	4	6000
33	Electronic balance	2	10000
34	Electronic components (various)-sufficient	0	0
35	flannel	0	0
36	Fly Wheel	4	12000
37	Fresnel biprism	0	0

38	Galvanometer	0	0
39	Glass beakers	4	1400
40	Glass jar(1m)	-10	-3000
41	Glass rods	-5	-400
42	Grating	0	0
43	Glycerine 100ml	1	600
44	Hares apparatus	-4	-8000
45	High Resistance	5	3000
46	Horse shoe magnet	0	0
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	0	0
49	Induction coil	3	10500
50	Jockey	6	1500
51	Katers pendulum with knife edge	2	4000
52	Knife edges, for young's modulus experiments	8	1200
53	Kundts tube apparatus	2	1500
54	Lead accumulator	0	0
55	Lead shots 500g	10	5000
56	Leclanche cell	0	0
57	Lee's disc apparatus	2	13000
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	2	7000
61	Mercury 500 g	1	3600
62	Mercury Vapour lamp	2	7000
63	Metal pointers	4	600
64	Meter scale	0	0
65	Mirror strips	6	360
66	Modem	2	5000
67	Multipurpose stands and holder	6	3900
68	Newton's law of cooling apparatus	2	5000
69	Newton's ring apparatus	0	0
70	Oil Bath	4	14400
71	Optic lever with clamp and holder to hold telescope	2	1300
72	Paraffin Wax -500g	0	0
73	Plane mirror	-3	-300
74	Plano-convex lens, For Newton's rings experiment,	0	0
75	Plug Keys	0	0
76	Potentiometer	2	13000
77	Power supply (dual and normal)	5	60000
78	Printer (Laser)	1	18000
79	Prism (crown glass)	0	0
80	Prism (flint glass)	0	0
81	Prism (hollow)	0	0
82	Prism (Quartz)	4	6400
83	Probes	12	1800

84	Reading lens(simple microscope)	4	1400
85	Resistance coil- temperature coefficient expt	4	800
86	Resistance wire 10m	1	3500
87	Rheostat	10	6800
88	Rubber tube	0	0
89	Scale and telescope apparatus	2	9000
90	Scanner	0	0
91	Screw gauge	0	0
92	Signal/function generator	4	60000
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	2	7200
95	Soldering iron	6	2400
96	Soldering lead 500g	1	2500
97	Soldering wax-500g	10	2000
98	Sonometer	0	0
99	Sonometer, For measuring frequency of ac	1	4500
100	Spectrometer	0	0
101	Spring constant apparatus	0	0
102	Standard Resistance	10	2500
103	Standard resistance Boxes	10	12000
104	Stands for torsion pendulum	4	2400
105	Static torsion apparatus	2	9000
106	Steam generator	2	2000
107	Step down transformer	10	2500
108	Stop watch, battery type	8	5200
109	Stop Watch, winding type	4	3200
110	Table lamp	4	1400
111	Table model moving coil Galvanometer	6	4800
112	Tangent Galvanometer	4	10000
113	Test tube	6	360
114	Thermometer	6	900
115	Torsion pendulum, with nichrome wire	4	10000
116	Torsion pendulum-wire 10m	8	8000
117	Travelling microscope	4	34000
118	Tuning forks (various frequencies)	0	0
119	Two way key	0	0
120	UPS for single computer	0	0
121	UPS, and battery for the whole lab	1	100000
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	4	10000
124	Vibration magnetometer (Searle's)	4	7200
125	Volt meter (various ranges)	10	6000
126	Voltage source (variable)	6	21000
127	Water bath	0	0
128	Weight Box (standard)	0	0
129	Weight hanger	0	0
130	Wifi router	0	0

131	Wooden scale	0	0
132	50 MHz Digital Storage Oscilloscope	3	54000
133	Variac Dimmerstat	4	16000
134	Bosch Hand Tool Kit	1	1200
135	Laptop Computer for Computer Lab	10	300000
136	Repair and Maintenance		25000
		Total	1187620

ESTIMATE OF EQUIPMENTS AND OTHER ITEMS TO BE PURCHASED			
College:	30 EKNM GOVERNMENT COLLEGE, ELERITHATTU		
Lab:	UG	Physics	
University :	KANNUR		
SI No	Item	No. required	Amount (Rs.)
1	Ammeter (A, mA, micro A)	10	6000
2	Bar magnets	6	900
3	Bob, simple Pendulum	6	300
4	Boyle's Law apparatus	2	6000
5	Bread board	6	1200
6	Burette	2	600
7	Calorimeter	3	600
8	Capillary Tube	7	2100
9	Cardboard disc	2	100
10	Carey Foster's Bridge	3	9000
11	Castor oil 1kg	0	0
12	Circuit board	7	1400
13	Circular coil apparatus	2	6000
14	Common Balance	0	0
15	Commutator	8	2400
16	Compass box	5	2000
17	Compound bar pendulum	1	1200
18	Computer	4	160000
19	Convex lens	0	0
20	Cotton/cloth covered single strand copper wire 30m	8	1600
21	CRO	2	50000
22	CRO probes	2	700
23	Daniel cell	5	7500
24	Deflection magnetometer	0	0
25	Desoldering pump	3	600
26	Digital Multimeter	3	10500
27	Digital Screw Gauge	6	15000
28	Digital Vernier Callipers	6	15000
29	Digital Thermometer	0	0
30	Dry cell (1.5V, 9V)	6	90
31	Electric Generator	1	100000
32	Electric heater	2	3000
33	Electronic balance	0	0
34	Electronic components (various)-sufficient	0	0
35	flannel	1	100
36	Fly Wheel	0	0
37	Fresnel biprism	3	15000
38	Galvanometer	10	3000

39	Glass beakers	4	1400
40	Glass jar(1m)	3	900
41	Glass rods	9	720
42	Grating	0	0
43	Glycerine 100ml	0	0
44	Hares apparatus	2	4000
45	High Resistance	5	3000
46	Horse shoe magnet	3	750
47	ICs (various)-sufficient	0	0
48	Identical masses for torsion pendulum exp	4	1400
49	Induction coil	3	10500
50	Jockey	3	750
51	Katers pendulum with knife edge	2	4000
52	Knife edges, for young's modulus experiments	6	900
53	Kundts tube apparatus	2	1500
54	Lead accumulator	4	6000
55	Lead shots 500g	12	6000
56	Leclanche cell	6	15000
57	Lee's disc apparatus	2	13000
58	Long knitting needle	0	0
59	Lycopodium powder 500g	0	0
60	Meldes string apparatus with scale pan	2	7000
61	Mercury 500 g	0	0
62	Mercury Vapour lamp	2	7000
63	Metal pointers	2	300
64	Meter scale	0	0
65	Mirror strips	2	120
66	Modem	1	2500
67	Multipurpose stands and holder	7	4550
68	Newton's law of cooling apparatus	1	2500
69	Newton's ring apparatus	2	13000
70	Oil Bath	3	10800
71	Optic lever with clamp and holder to hold telescope	0	0
72	Paraffin Wax -500g	0	0
73	Plane mirror	2	200
74	Plano-convex lens, For Newton's rings experiment,	2	500
75	Plug Keys	5	1000
76	Potentiometer	2	13000
77	Power supply (dual and normal)	0	0
78	Printer (Laser)	1	18000
79	Prism (crown glass)	1	1000
80	Prism (flint glass)	7	7000
81	Prism (hollow)	0	0
82	Prism (Quartz)	4	6400
83	Probes	4	600
84	Reading lens(simple microscope)	2	700

85	Resistance coil- temperature coefficient expt	0	0
86	Resistance wire 10m	3	10500
87	Rheostat	5	3400
88	Rubber tube	0	0
89	Scale and telescope apparatus	2	9000
90	Scanner	1	3600
91	Screw gauge	0	0
92	Signal/function generator	2	30000
93	Slotted weights (g and kg)	0	0
94	Sodium vapour lamp	2	7200
95	Soldering iron	2	800
96	Soldering lead 500g	2	5000
97	Soldering wax-500g	3	600
98	Sonometer	4	18000
99	Sonometer, For measuring frequency of ac	3	13500
100	Spectrometer	3	30000
101	Spring constant apparatus	4	6000
102	Standard Resistance	6	1500
103	Standard resistance Boxes	5	6000
104	Stands for torsion pendulum	6	3600
105	Static torsion apparatus	3	13500
106	Steam generator	1	1000
107	Step down transformer	3	750
108	Stop watch, battery type	6	3900
109	Stop Watch, winding type	1	800
110	Table lamp	5	1750
111	Table model moving coil Galvanometer	2	1600
112	Tangent Galvanometer	3	7500
113	Test tube	4	240
114	Thermometer	5	750
115	Torsion pendulum, with nichrome wire	1	2500
116	Torsion pendulum-wire 10m	2	2000
117	Travelling microscope	0	0
118	Tuning forks (various frequencies)	2	700
119	Two way key	2	300
120	UPS for single computer	4	18000
121	UPS, and battery for the whole lab	0	0
122	Vernier callipers	0	0
123	Vibration magnetometer (box type)	0	0
124	Vibration magnetometer (Searle's)	2	3600
125	Volt meter (various ranges)	5	3000
126	Voltage source (variable)	2	7000
127	Water bath	4	1200
128	Weight Box (standard)	3	4500
129	Weight hanger	6	600
130	Wifi router	1	4500
131	Wooden scale	6	600

132	Fire extinguishers	2	5000
133	Repair and Maintenance		25000
		Total	846870