

Durgapur Women's College

Requisition for Laboratory Instruments/Equipments

Name of the Department: PHYSICS

Sl No	Name of Item to be procured	Make with Specification	Unit Price
01	Thermocouple (Copper-constantan joint to be fused together)		
02	Set up for the determination of coefficient of linear expansion using Pullinger's apparatus		
03	Set up for the determination of coefficient of linear expansion using travelling microscope		
04	To analyze elliptically polarized Light by using a Babinet's compensator (Complete Set up)		
05	Spectrometer heavy cast base and a pillar for collimator support, vernier constant 30'		
06	Dual Trace Cathode ray oscilloscope (CRO)	Aplab/Tektronix/Systronix	
07	Frank Hertz experimental set up	Filament Power Supply : 2.6-3.4V continuously variable Grids Power Supplies V _{G1K} : 1.3-5V continuously variable V _{G2A} : 1.3 - 12V continuously variable V _{G2K} : 0 - 95V continuously variable Multirange Digital Ammeter Display : 3½ digit 7 segment LED Range Multiplier : 10 ⁻⁷ , 10 ⁻⁸ & 10 ⁻⁹	
08	Breadboard (Good quality)		
09	Logic gate Compact set up		
10	5V-1A constant power supply	Aplab	
11	Single Slit & Double Slit with micrometer arrangements		
12	Single Core Wire		
13	D.C.C wire		
14	Op-amp set up		
15	Planck constant set up using black body radiation and photodetector		
16	Set up for measuring Photoelectric effect		
17	Semiconductor laser set up for determination of grating element		
18	Construction of flip flop using NAND gates		
19	Astable multivibrator set up using 555 timer		
20	Set up for building 4 bit counter using flip flop ICs		
21	Potentiometer	Wooden Good Quality	
22	Biquartz Polarimeter		
23	Meter Bridge	Wooden Good Quality	
24	Apparatus for verification of Malus's law (Complete Set Up)		
25	Set up for DAC converter		
26	Platinum resistance thermometer		
27	Determination of Young's Modulus of a wire by optical lever		
28	Discharge Tubes (He, Hg, H ₂)		
29	Jacket for discharge tube		
30	Stand for discharge tube		
31	Electronic and Electrical Components: Inductance (10mH, 20mH); Capacitance (0.1uF, 0.01 uF), Key, Resistance components, OP Amp components, Logic ICs, LEDs of different colour		

32	Replica Grating (100, 300, 600 lines/mm)		
33	Copper boiler (2L & 3L)		
34	Heating mantle with thermostatic control (Different Dia)		
35	Microammeter (0-200 μ A digital)		
36	Prism (Crown and Flit)	Good Quality	
37	Function Generator	Aplab Made 0.01Hz to 1MHZ in 8 decade range (DC,Sine, Triangle, Square,Ramp, Pulse, TTL(Sync)	
38	Na-Vapour Lamp		
39	Vapour Lamp Housing	Wooden	
40	Hot Plate	Warmex 1500W	
41	Thermometer	$\frac{1}{2}$ degree	

Servicing/Repairing:

SI No	Name of Item to be Repaired	Make with Specification	Unit Price
1	Travelling Microscopes		
2	Spectrometer		
3	Logic Gate Set Up		
4	I-V Characteristic Set Up		
5	Meter Bridge		
6	Potentiometer		
7	Op-Amp Set up		

Name of the Department: ELECTRONICS

SI No	Name of Item to be procured	Make with Specification	Unit Price
01	CE Transistor Trainer Kit		
02	CB Transistor Trainer Kit		
03	FET Transistor Trainer Kit		
04	Digital Trainer Kit for verification of Basic logic gates		
05	Digital Trainer Kit for verification of Universal logic gates		
06	Digital Trainer Kit for performing SOP/POS simplification		
07	Digital Trainer Kit for performing Half & Full adder		
08	Trainer Kit to study LCR resonance		
09	Anderson Bridge		

Name of the Department: CHEMISTRY

A) Glass Apparatus and Instruments

SI No	Name of Item to be procured	Make with Specification	Unit Price
1	Burette 50cc	Borosil, Tarson	
2	Burette Micro	„	
3	Brush for tt wash	local	
4	Bunsen Burner, LPG	best	
5	Burette brush	local	
6	Conical flask, 100 cc	Borosil	
7	Conical flask, 250 cc	„	

8	Conical flask, 150 cc	..	
9	Conical flask, 500 cc	..	
10	Charcoal block	best	
11	Crucible Gooch		
12	Crucible lead		
13	Dropper(long glass)	best	
14	Graduated pipette 10x1/10	Borosil	
15	Litmus paper	best	
16	Measuring cylinder, 5 cc	Tarson	
17	Measuring cylinder, 10 cc	
18	Measuring cylinder, 100 cc	..	
19	Measuring cylinder, 500 cc	..	
20	Mortal pestle, 75 cc	best	
21	Mortal pestle, 100 cc	..	
22	Mouth glow pipe	..	
23	Pipette, 5 cc	Borosil	
24	Pipette, 10 cc	..	
25	Pipette, 20 cc	..	
26	Pipette, 25 cc	..	
26	Porcelain basin, 3"	best	
27	Porcelain basin, 4"	..	
28	Pressure tube	For L.P.G	
29	Rubber tube	best	
30	Reagent bottle, 250 cc	Borosil	
31	Reagent bottle, 500 cc	..	
32	Spatula horn, 6"	best	
33	Specific gravity bottle, 25 cc	Borosil	
34	Test tube holder, brush	best	
35	Test tube	Borosil	
36	Thermometer, 0-100 C	best	
37	Thermometer, 0-360 C		
38	Volumetric flask, 100 cc	Borosil	
39	Volumetric flask, 250 cc	Borosil	
40	Volumetric flask, 500 cc	..	
41	Volumetric flask, 1000 cc	..	
42	Ostwald Viscometer	..	
43	Wire gauge with asbestos	best	
44	Wattmann filter paper, 41 cm	best	
45	Wattmann filter paper, 42 cm	..	
46	Digital Potentiometer, Model-118 E	Electronics India	
47	Digital Conductivitymeter, Model-304	Systronics	
48	Digital Colorimeter, Model-112	Systronics	
49	Digital Balance (0.001-100 gm)	K Roy	
50	Libic Condensor, 16/19	Best	

B) Chemicals & Reagents:

SI No	Name of Item to be procured	Make with Specification	Unit Price
1	Ammonia(liquor)	Merk	
2	Ammonium Ferrous sulphate	..	
3	Amm. Sulphide yellow	..	
4	Amm.chloride	Merck	
5	Amm.Ferric sulphate	..	
6	Amm.carbonate	..	
7	Amm./Perpurate	..	

8	Conc.Acid-Hydro chloric	Merck	
9	Conc.acid Sulfuric	..	
10	Conc. Acid phosphric	..	
11	Conc. Acid Acetic acid	..	
12	Acetone	..	
13	Aniline	..	
14	Aniline Hcl	..	
15	Anthranilic acid	..	
16	Bromine water	..	
17	Benzoyl chloride	..	
18	Benzene	..	
19	Benzamide	..	
20	Chromium sulphate	..	
21	Chloroform	..	
22	Carbon tetrachloride	..	
23	Catechol	..	
24	2,4-dinitro phenyl hydrazene	..	
25	m-dinitrobenzene	..	
26	Dimethyl glyoxime	..	
27	E.D.T.A.	..	
28	Erichrom Black T	..	
29	Ethanol/dehydrated alc./waterabsolute/solu.A	..	
30	Ferrous i) sulphide(stick)	..	
31	ii) sulphate	..	
32	Ferric chloride	..	
33	Glucose	..	
34	Glycerol	Merck	
35	Hydrogen peroxide	..	
36	Iodine	..	
37	amyl alchool	..	
38	Manganese dioxide	..	
39	Magnesium nitrate	..	
40	Methanol	..	
41	Methyl orange	..	
42	Oxalic acid	..	
43	Potassium permanganate	..	
44	Pot.chromate	..	
45	Pot.chloride	..	
46	Pot.sulphate	..	
46	Pot. nitrate	..	
47	Pot. alum[KAl(SO ₄) 2.12H ₂ O]	..	
48	Pot.Sodium tartarate	..	
49	Pot.iodide	..	
50	Resorcinol	..	
51	Rectified water/spirit	..	
52	Sodium nitrite	..	
53	Sod.nitrate	..	
54	Sod.Sulphide flake	..	
55	Sod.silicate	..	
56	Sod.Bi carbonate	..	
57	Sod.carbonate	..	
58	Sod.chloride	..	
59	Sod. floride	..	
60	Sod.bismuthate	..	
61	Sod. Nitropruside	..	
62	Sod.stannate	..	
63	Sod.sulphate	..	

64	Sod.Sulphite	..	
65	Sod.acetate	..	
66	Sod. phosphate	..	
67	Sod. Dihydrogen phosphate	..	
68	Sod.hydroxide	..	
69	Sod.Diphenylamine sulphonate	..	
70	Sod.thiosulphate	..	
71	Sod.metal	..	
72	Sod.oxalate	..	
73	Sod.Peroxide	..	
74	Sod.Arsenate	..	
75	Stannous chloride	..	
76	Strontium sulphate	..	
77	Silver nitrate	..	
78	Toluene	..	
79	Vanilin	..	
80	Zinc dust	..	
81	Zirconyl nitrate	..	
82	Quinohydrone	best	
83	Formic acid	best	
84	Pot. Bromate	Merck	
85	Pot. Bromide	Merck	

Name of the Department: BOTANY

Sl No	Name of Item to be procured	Make with Specification	Unit Price
01	Stem of immature Maize plant (Workout material)	[Biosco/Biocraft]	
02	Root of Chick Pea plant (Workout material)	[Biosco/Biocraft]	
03	Root of Canna plant (Workout material)	[Biosco/Biocraft]	
04	Stomata (Permanent Slide)	[Biosco/Biocraft]	
05	Cystolith (Permanent Slide)	[Biosco/Biocraft]	
06	Raphides (Permanent Slide)	[Biosco/Biocraft]	
07	Stone Cells (Permanent Slide)	[Biosco/Biocraft]	
08	Lenticels (Permanent Slide)	[Biosco/Biocraft]	
09	Fruit types Berry (Glass material)	[Biosco/Biocraft]	
10	Pome (Glass material)	[Biosco/Biocraft]	
11	Capsule (Glass material)	[Biosco/Biocraft]	
12	Pepo (Glass material)	[Biosco/Biocraft]	
13	Hesperidium (Glass material)	[Biosco/Biocraft]	
14	Inflorescence Verticillastor (Glass material)	[Biosco/Biocraft]	
15	Cyathium (Glass material)	[Biosco/Biocraft]	
16	Spike (Glass material)	[Biosco/Biocraft]	
17	Hypanthodium (Glass material)	[Biosco/Biocraft]	
18	Simple Microscope	(Make: Instavission)	
19	Sucrose extrapure AR, ACS 500gm	(SRL, 90701)	
20	Sodium Bicarbonate extrapure AR, ACS, ExiPlus, 99.5% 500gm	(SRL, 89399)	
21	Potassium hydroxide pellets extrapure, 85% 500 gm	(SRL, 84749)	
22	Eosin Yellow 25gm	(SRL, 29391)	
23	Tissue paper		
24	Blotting paper		
25	Plastic Petridish 60mm disposable	(Tarson, 960020)	
26	Pipettes 1ml	(Borosil,	

		7060P11)	
27	Conical flask 100ml	(Tarson, 441110)	
28	Beaker 600ml	(Borosil, 1000D25)	
29	Funnel 75mm diameter	(Borosil, 6140071)	
30	Test tube 20ml	(Borosil, 9820U18)	
31	Volumetric flask 500ml	(Borosil, 5641024)	
32	Flat bottom flask 500ml	(Borosil, 4060024)	
33	Cork for Flat bottom flask 500ml		
34	Stand for Flat bottom flask 500ml		
35	Wash bottle 500ml	(Borosil, 0166024)	
36	Measuring cylinder 10ml	(Borosil, 3027006)	
37	Measuring cylinder 50ml	(Borosil, 3027012)	
38	Measuring cylinder 100ml	(Borosil, 3027016)	
39	Distilled water container 5lt		
40	Spatula		
41	Stem of <i>Casuarina</i> plant (Workout material)	[Biosco/Biocraft]	
42	Stem of <i>Anhydra</i> plant (Workout material)	[Biosco/Biocraft]	
43	Refrigerator 165lt		
44	Wooden Almirah		
45	Nutrient Agar Medium, 500gm	(Himedia)	
46	Nutrient Broth, 500gm	(Himedia)	
47	Agar Agar, 500gm	(Himedia)	
48	Molt Extract Broth, 500gm	(Himedia)	
49	Bacterial loop		
50	Occular meter		
51	Stage meter		
52	Glass Petridish 90mm	(Borosil)	
53	Prophase stage of Mitosis of <i>Allium cepa</i>	[Biosco/Biocraft]	
54	Metaphase stage of Mitosis of <i>Allium cepa</i>	[Biosco/Biocraft]	
55	Anaphase stage of Mitosis of <i>Allium cepa</i>	[Biosco/Biocraft]	
56	Telophase stage of Mitosis of <i>Allium cepa</i>	[Biosco/Biocraft]	
57	Metaphase stage of Meiosis of <i>Rhoeo</i> leaf	[Biosco/Biocraft]	
58	Autoclave (small)		
59	Laminar air flow		

Name of the Department: GEOGRAPHY

Sl No	Name of Item to be procured	Make with Specification	Unit Price
01	Barometer with glass box	(B.M. India)	
02	Hygrometer	(Zeal)	
03	Maximum and Minimum Thermometer	(Zeal)	
04	Soil testing kit	(A/O Model)	
05	Mirror Stereoscope		
06	Aerial Photographs		
07	GPS	(Garmin)	

Name of the Department: COMPUTER SCIENCE

Sl No	Name of Item to be procured	Make with Specification	Unit Price
01	Switch-16 port		
02	Switch-08 port		
03	Lan setup		
04	Digital Bread Board		

Name of the Department: ZOOLOGY

Requirements of Instruments

Sl. No.	Name of Item to be procured	Make with Specification	Unit Price	
1.	Spectrophotometer	Systronics		
2.	Refrigerator	LG (260L)		
3.	Moist Chamber	Remi equivalent		
4.	ELISA Kit	Sigma-Aldrich		
5.	Gel apparatus	Laborate		
6.	Centrifuge with cooling cards and without cooling cards	Remi		
7.	Laminar air flow (small)	Remi equivalent		
8.	Autoclave	mLabs/ Labgo		
9.	UV torch	Any brand		
10.	Microscope	Magnus (Olympus)		
11.	Inverted microscope (for studying ELISA) with 10×, 20×, 40× lenses)	Olympus/Zeiss equivalent		
12.	Micro pipettes	1–10 μ L	Tarson	
		10–100 μ L	”	
		20–200 μ L	”	
		100–1000 μ L	”	
		1000–5000 μ L	”	
13.	Cuvette	3.5 mL	mLabs	
14.	ELISA Reader		Any brand	
15.	ELISA Plate		Any brand	

Requirements of Glass goods and models

Sl. No.	Name of Item to be procured	Make with Specification	Unit Price
1.	Testubes with rim (15mL)	Tarson/Pyrex/Borosil	
2.	Petridishes	”	
3.	Glass slides	Abdos/Omega	
4.	Cover slips	Blue star	
5.	Manual glass pipettes	1 mL	Borosil
		2mL	”
		5mL	”
		10mL	”
6.	Watch glasses	”	
7.	Micro Tips	1–10 μ L	Tarson
		10–100 μ L	”
		20–200 μ L	”
		100–1000 μ L	”
		1000–5000 μ L	”

Estimation of Chemicals

Sl. No.	Items	Volume/ Weight	Qty	Brand	Unit price
1.	Ethanol (Abs.)	500mL	10	Merck/ Sigma- Aldrich	
2.	Leishman’s stain	250mL	2	”	
3.	Methyl alcohol	500mL	4	”	
4.	Copper sulphate	500G	2	”	
5.	Potassium tartrate	500G	1	”	
6.	Glucose	-	1	”	
7.	Fructose	-	2 vials	”	
8.	Sucrose	-	2 vials	”	
9.	Sodium carboanate	500G	2	”	
10.	Sodium hydroxide	500G	2	”	
11.	Potassium-sodium tartarate	500G	1	”	
12.	Folin Ciocalteu	100mL	1	”	
13.	Bovine Serum Albumin	100G	1	”	
14.	Eosin	500mL	2	”	
15.	Hematoxylin	25G	2	”	
16.	Wright Giemsa	16 Oz	1	”	

Sl. No.	Items	Volum e	Brand	Unit price
17.	Whatman paper	No.1	Tarson equivalent	
		No. 3	Tarson equivalent	
18.	Acetic acid	500mL	Merck/ Sigma- Aldrich	
19.	Ammonium hydroxide	1L	”	
20.	n- Butanol	1L	”	
21.	Pyridine	500mL	”	
22.	Nin hydrine	25G	”	
23.	Acetone	2.5 L	”	
24.	Alkaline Silver nitrate	25G	”	
25.	Starch	500G	”	
26.	Iodine	10G	”	
27.	NaCl	500G	”	
28.	Choloroform	500mL	”	
29.	Acetocarmine	100mL	”	
30.	Feulgen stain kit	100mL	”	
31.	HCl	500mL	”	
32.	Orcein powder	10G	”	
33.	Glycerine	1L	”	
34.	Formalin	1L	”	
35.	Picric acid	500G	”	
36.	Formaldehyde	500mL	”	
37.	Xylene	2.5L	”	
38.	DPX	500G	”	