

കേന്ദ്രീയ വിദ്യാലയം, കൊല്ലം केन्द्रीय विद्यालय, कोल्लम KENDRIYA VIDYALAYA, KOLLAM

Dated: 07.12.2020

रामनकुनंगरा. कावनाड (पोस्ट) कोल्लम ६९१०० 3Ramankulangara,Kavanad P O,Kollam 691003 Telephone: 0474 2799494, 2799696 School Affiliation no. 900030 Station Code: 628 Region 27 E-mail: kvkollam@yahoo.co.in https://kollam.kvs-ac.in station code: 2098 (भारत सरकार मानव संसाधन विकास मंत्रात्य के अधीन स्वायत संस्था) (Autonomous Body under the Ministry of HRD, Govt. of India)

F .No. 310313/2020-21/KVK /

To M/s		
141/5		
	Tender Invitation Form	

Sub: Quotation for supply of consumable and non-consumable items in Physics, Chemistry and Biology laboratories of KV Kollam.

- The Kendriya Vidyalaya Sangathan, centrally funded Autonomous Body, is a Society registered under Societies Registration Act, 1860. The Sangathan administers the Scheme of Kendriya Vidyalayas set up for imparting education to the children of transferable Central Govt. Employees.
- 2) Sealed quotations for supply of consumable and non-consumable items in Physics, Chemistry and Biology laboratories are invited from registered firms by the undersigned on behalf of the Kendriya Vidyalaya, Kollam up to 2pm on 02.01.2021. The quotations will be opened in the office of the undersigned on the same day at 2:30pm.
- 3) The Agency or their representatives (with valid ID proofs) can be present at the time of opening the quotations.
- 4) Quotations should be submitted to the Principal, Kendriya Vidyalaya, Kollam in strong double sealed envelope / cover marked as 'Quotation for supply of consumable and consumable items for <u>Labs</u>' and not by name, through Registered Post/Speed Post/couriers. Under no circumstances quotation will be accepted by hand.
- 5) The quotations shall be submitted according to the terms and conditions specified as below. Unless specified otherwise in the quotation, it shall be construed that the terms and conditions stipulated hereunder have been agreed to. The quoted amount in the tender should not include any hidden costs.
- 6) The rates should be F.O.R and should include excise duty, GST sales tax, freight charges, any other taxes, rates or imposition whatever liable in respect of the supplies. The Kendriya Vidyalaya shall not be liable to pay any tax, freight etc. which has not been expressively stipulated in the quotation in the event of acceptance of the quotation.

- 7) The firm should enclose supporting documents regarding authorization of dealership/ISO Certificate service center registration of GST/ST/ITPAN or and any relevant document.
- 8) The total price quoted include the supply of items on the site.
- 9) Terms of warranty/guarantee to be specified separately along with details of charges applicable, if any.
- 10) The prices should be quoted in Indian Rupees only
- 11) E-mail, Telex or Facsimile quotations are not acceptable
- 12) The rate quoted should include all Taxes, Labour, transportation, loading & unloading as required.
- 13) The rate quoted should not involve any hidden costs.
- 14) The supply of materials, its loading, unloading will be the sole responsibility of the bidder.
- 15) The Evaluation by the Technical experts & Purchase committee will be treated as final. The PRINCIPAL, KENDRIYA VIDYALAYA, KOLLAM reserves the right to reject any tender or all the tenders without assigning any reasons.
- 16) Payment shall be made within 30 days after the delivery of the items & their acceptance by the Science Department after inspection by the committee appointed for this purpose.
- 17) Notwithstanding the above, the Principal reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time without assigning any reasons thereof
- 18) It will be the sole responsibility of the party to deliver the items on the site as required by the Vidyalaya, for which no charges /levies will be given by the Vidyalaya
- 19) There should not be any overwriting or corrections in the quotation. If a figure is to be amended, it should be neatly scored out, the revised figure written above and the same attested with full signature and date. In the absence of the attested signature the quotation is liable to be rejected.
- 20) The undersigned does not bind himself to accept the quotation in whole or in part, i.e with respect to all the articles mentioned in the attached statement or in respect of any one or more than on article specified in the attached statement as he may decide.
- 21) On acceptance of the quotation it will become a contract and the contractor shall be bound by the terms and conditions of the quotation.
 - a) The person/persons, whose quotation is accepted, hereinafter called the contractor, shall deposit an EMD of Rs. 1000/-(Rupees One Thousand only) along with the quotation, by means of Demand Draft in favour of the Kendriya Vidyalaya, Vidyalaya Vikas Nidhi A/c payable at Kollam, which shall be refunded in the event of rejection of the quotation. The earnest money will be forfeited in the event of failure to comply with the contract.

If the contractor is not agreeable to pay EMD/Security Deposit the reasons therefore should be specified and the undersigned reserves the right to accept or reject the request.

22) If the contractor fails to deliver the items within the stipulated time as stated in the letter of

acceptance by the undersigned, the undersigned shall be at liberty to give the job, or get the rest of

the contract completed by any other person or firm and the difference of price, if any, shall be

deducted from the earnest money/security deposit and in case any amount in excess of the security

deposit is paid by the undersigned the contractor shall be liable to pay this amount.

23) Prior to the acceptance of the quotation, the undersigned reserves the right to call for samples or

demonstration and the contractor shall be liable to supply the samples or give the demonstration

free of cost.

24) In the event of acceptance of the quotation and placing of the order for the completion of job, the

job ordered for, would be subjected to an inspection by the undersigned or his representative and

are liable to be rejected if the job completed is not according to approved specifications or do not

confirm to the specifications prescribed.

25) The rates quoted by the contractor shall hold good for a period of one year. The validity of the

quotation may be extended. No amendment in the rate contract will be accepted till the validity of

the quotation.

26) In the event of receipt of any broken equipment, the firm shall be liable to replace it with a new

equipment of the same specification.

27) List of items required in Physics, Chemistry and Biology labs with specification and approximate

number is attached herewith in Annexure-I, II and III respectively.

Station: Kollam

Date: 07.12/2020

PRINCIPAL Kendriya Vidyalaya, Kollam.

Page 3 of 16

REQUIREMENTS OF PHYSICS LABORATORY

NON CONSUMABLES

SL NO	NAME OF EQUIPMENT	SPECIFICATION	QUANTITY REQUIRED	RATE PER UNIT/No	TOTAL AMOUNT
1	HOOKES LAW APPARATUS	With mirror scale ,Support spring , slotted Weight	5		
2	INCLINED PLANE WITH SCALE PAN	Metal Base length 600mm length of base 450mm Weight pan included	3		
3	TRAVELLING MICROSCOPE	Movement of microscope X Y Z direction, LC 0.01mm Objective lens: Achromatic 2" to 3" focal length Eye piece: Ramsaden eyepiece with cross wire attached reading lens, Stainless steel Vernier	3		
4	POTENTIOMETER	10m 24SWG bar Constantan wire Sun Mica Wood base with jockey, plated Brass ends	4		
5	METER BRIDGE	Plated copper strips ,SunMica woden base Constantan wire with jockey	4		
6	BATTERY ELIMINATOR	0 to 12 V, 1 to 3Amp Metal Body COMET	3		
7	RHEOSTAT (500 OHM)	50W ,0 to 500ohm ,Sliding Bakelite with phosphor bronze contact , Hollow porcelain tube core , Copper -Nickel Alloy wire diameter 50mm length 30cm	5		
8	RESISTANCE BOX (0 - 100000HM)	Housed box with brass knobs , 4mm socket terminals accuracy +- 1%	3		
9	SONOMETER	With Aluminium fitting and knife edge, Tuning fork set and rubber pad Graduated wooden scale Brass and steel wires	2		
10	SIMPLE PENDULUM	Metallic Base with rod and special clamp, Brass Bobs	5		
11	WEIGHT BOX	1mg to 200g, Nickel plated Brass, Analytical Density 9.9Kg/cm3	3		
12	STOP CLOCK	Smith type	3		
13	VOLTMETER (0-1V)	Dollar . Weston type DC	5		
14	VOLTMETER (0-3V)	Dollar . Weston type DC	5		
15	GALVANOMETER	Dollar . Weston type	5		
16	AMMETER(0-2A)	Dollar . Weston type DC	5		
17	ONE WAY KEY	2 Brass Block with socket terminals on insulating base	5		

18	BAR MAGNET 2"	Neodymium	5	
19	COMPASS NEEDLE			
19	BOTH SIDE GLASS	20mm small light weight	10	
		230V 25W Rod Solder, Iron chisel		
20	SOLDERING IRON	Tip	_	
		metal and insulating material	1	
		Made of chromium steel ,with		
21	SCREW GUAGE	rachted top ,machined	_	
		SS rod ,Range 0-25 x 0.01mm Steel with wheel motion chrome	5	
22	VERNIER CALIPERS	plated		
	VERNIER CALIFERS	depth gauge	5	
23	METER SCALE	Teak wood Superior quality	<u>5</u> 	
25	IVILIEN SCALE	insulated copper wire 700 turns	<u> </u>	
24	SOLENOID	4mm sockets ,Terminals on stand		
		·	2	
25	SCREW DRIVER	Taparia 903i long insulated	2	
26	SCREW DRIVER AND	Taparia Insulated		
	ANALOG TESTER		1	
27	WIRE STRIPPER	Taparia WS 6	2	
28	HAMMER	Taparia WH 110 B with handle	1	
		Copper vessel and Zinc rod		
29	DANIEL CELL	provided with terminal socket	_	
		Empty porous pot	5	
		Rim shaped container, Porous		
30	LECLANCHE CELL	pot with carbon rod and socket terminal , Zinc rod with terminal		
		socket	5	
		wooden box with fork holders on		
	RESONANCE BOX WITH	top for 4 forks		
31	TUNING FORK	with rubber hammer	2	
	SLOTTED WEIGHTS	Iron Chrome plated		
22	(20GM)	•	-	
32	,	and the description of the state of the stat	5	
	RESISTANCE COILS WITH	non inductively wound coil ,constantan wire		
22	BELL TERMINALS	,constantan wire	_	
33	1 OHM		5	
	RESISTANCE COILS WITH	non inductively wound coil		
	BELL TERMINALS	,constantan wire	_	
34	2 OHM	nancinal cations	5	
	RESISTANCE COILS WITH	non inductively wound coil		
25	BELL TERMINALS	,constantan wire	_	
35	3 OHM	non industivaly ways death	5	
	RESISTANCE COILS WITH	non inductively wound coil		
	BELL TERMINALS	,constantan wire	_	
36	5 OHM	naminal advertised	5	
	RESISTANCE COILS WITH	non inductively wound coil		
	BELL TERMINALS	,constantan wire	_	
37	10 OHM		5	
	RESISTANCE COILS WITH	non inductively wound coil		
38	BELL TERMINALS 20 OHM	,constantan wire	5	
36	OTHVI	Ray deviation 90degree	J	
39	RIGHT ANGLED PRISM	nay actiation Jouegiee	5	
	1	i l		

1	I	with along compling the with and	1	1	I
	DACIC ELECTROCTATIC	with glass, acrylic ,ebonite rod			
40	BASIC ELECTROSTATIC	wool, cotton, silk fur cloths ;	4		
40	KIT	Stand for rods	4		
		2 polariser discs and optic holder			
41	POLARISER SET		2		
	SPECTROMETER UNIT	with inbuilt telescope ,collimator			
		circular scales			
		vernier 1" of arc ,stainless steel			
42		circle , 1" objective			
		ramsden eyepiece with cross wire			
		Diffraction grating mounted,			
		125W mercury lamp	1		
	STAINLESS STEEL	Fixed in rubber cork . For	_		
43	ELECTRODES	electrolysis of water	3		
		with brass terminals ,of varying			
		plate area and length of plate			
	COPPER PLATE	1.5mm thicknes, (lxb)-50x50,			
44	ELECTRODES	50x100 , 100x 50, 100x100	5		
		with brass terminals ,of varying			
		plate area and length of plate			
	ZINC PLATE	1.5mm thicknes, (lxb)-50x50,			
45	ELECTRODES	50x100 , 100x 50, 100x101	5		
		with brass terminals ,of varying			
		plate area and length of plate			
	ALUMINIUM PLATE	1.5mm thicknes, (lxb)-50x50,			
46	ELECTRODES	50x100 , 100x 50, 100x102	5		
		with brass terminals ,of varying			
		plate area and length of plate			
	NICKEL PLATE	1.5mm thicknes, (lxb)-50x50,			
47	ELECTRODES	50x100 , 100x 50, 100x103	5		
		with brass terminals ,of varying			
		plate area and length of plate			
		1.5mm thicknes, (lxb)-50x50,			
48	TIN PLATE ELECTRODES	50x100 , 100x 50, 100x104	5		
		with brass terminals ,of varying			
		plate area and length of plate			
	IRON PLATE	1.5mm thicknes, (lxb)-50x50,	_		
49	ELECTRODES	50x100 , 100x 50, 100x105	5		
_	BIMETAL RODS WITH	Iron-Aluminium, to show varying	_		
50	HOLDER	expansion	3		
		250ML , White plastic ,			
51	MEASURING CYLINDER	Graduated ,Hex based	5		
		500ML , White plastic ,			
52	MEASURING CYLINDER	Graduated ,Hex based	5		
53	OVERFLOW JAR	200ml plastic	5		

REQUIREMENTS OF CHEMISTRY LAB LIST OF NON-CONSUMABLES

S No	Name of the article	Specification	Approx Quantity	Rate per Unit/No	Total amount
1	Alcohol Thermometer (Min 0 degree, Max-100 degree)	Superior quality	2		
2	Beaker	250 ml Borosil	10		
3	Beaker	100 ml Borosil	10		
4	Beaker	500 ml Plastic	2		
5	Beaker	501 ml Borosil	2		
6	Beaker	25 ml Borosil	5		
7	Boiling tubes	20ml Borosil	10		
8	Bunsen burners	Superior quality	Nil		
9	Burette stand with clamp	Superior quality	10		
10	Burettes with teflon knob	50 ml Borosil	10		
11	Chemistry Printed Charts	Vinyl Printed	5		
12	China dish	Superior quality	10		
13	Conical flask	250 ml borosil	10		
14	Distillation set	Normal glass	Nil		
15	Droppers with rubber teat (long)	Superior quality	10		
16	Droppers with rubber teat (small)	Superior quality	10		
17	Droppers	Plastic	10		
18	First Aid Box	As per the medical standards	1		
19	Electronic balance	Superior quality	1		
20	Funnel	3" diameter Normal Glass	10		
21	Funnel Stand	Dual Type Plastic	5		
22	Fusion tube	Normal Glass	500g		
23	Gas Lighter	Superior quality	2		
24	Glass rod	Superior quality	1 kg		
25	Glass tube	Superior quality	1 kg		
26	Glass trough	Normal glass-	2		
27	Graduated Measuring Cylinder	1 lit Borosil	1		
28	Graduated Measuring Cylinder	500 ml Borosil	4		
29	Graduated Measuring Cylinder	250 ml Borosil	5		

30	Graduated Measuring Cylinder	100 ml Borosil	5	
31	Models of solid state (simple,	Superior quality	1 set	
31	BCC and FCC	Superior quanty	1 set	
32	Mortar and pestle	Superior quality	2	
33	Pipettes with safety bulb in the	20 ml Borosil	10	
33	upper arm	20 IIII BOIOSII	10	
34	Pipette Stand	Plastic	3	
35	Pipette graduated	20ml Borosil	4	
36	Reagent bottle	5 lit Normal Glass	4	
37	Reagent bottle NM	250 ml Normal glass	100	
38	Reagent bottle NM	100 ml Normal Glass	100	
39	Reagent bottle WM	250 ml Normal glass	50	
40	Separating funnel	250 ml Borosil	1	
41	Spatula	Superior quality	20	
42	Stop watch	Superior quality	4	
43	Standard flask with lid	100 ml Borosil	10	
44	Test tube	20 ml Borosil	100	
45	Test tube brush	Superior quality	15	
46	Test tube holder	Superior quality	15	
47	Tongs	Stainless steel	15	
48	Transparent Tray	Medium size Plastic	5	
49	Triangular file (for cutting glass)	Superior quality	4	
17	with wooden handle	Superior quanty		
50	Volumetric flask with lid	5 lit Normal glass	2	
51	Wash bottles	500ml Plastic	15	
52	Watch glasses	4 inch diameter-Borosil	15	
53	Water voltammeter for	Superior quality	1	
33	electrolysis of water	Superior quanty		
54	Weighing bottle with cap	Borosil	10	
55	White glazed tile (Square)	Superior quality	25	
56	Wire gauge with steel frame	Superior quality	15	

REQUIREMENTS OF CHEMISTRY LAB LIST OF CONSUMABLES

S No	Name of the Chemical	Specification	Approx. Quantity	Rate	Total amount
1	Acetic anhydride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g		
2	Acetic acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 500ml		
3	Acetone	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500ml		
4	Aluminium chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g		
5	Aluminium powder	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	100g		
6	Aluminium Sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	3 x 500g		
7	Ammonia solution	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x500ml		
8	Ammonium acetate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	3 x500g		
9	Ammonium bromide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x500g		
10	Ammonium Carbonate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x500g		
11	Ammonium Chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x500g		
12	Ammonium Molybdate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g		
13	Ammonium nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500g		
14	Ammonium Oxalate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g		
15	Ammonium sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	3 x500g		
16	Ammonium Sulphide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g		
17	Aniline	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml		
18	Barium Chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 500g		
19	Barium hydroxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g		
20	Barium nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500g		

21	Benedict's Reagent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250ml	
22	Benzaldehyde	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
23	Benzoic acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
24	Benzophenone	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
25	Borax	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
26	Borsche's Reagent (2,4-DNP)	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 125ml	
27	Bromine Water	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
28	Calcium nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
29	Calcium oxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
30	Calcium Sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
31	Carbon disulphide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
32	Carbon Tetrachloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
33	Chlorine water	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
34	Chromatography paper	Whattman No. 1	10 sheets	
35	Citric acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
36	Cobalt chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
37	Cobalt Nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
38	Copper Turnings	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
39	Cupric sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
40	Distilled Water	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	15 lit	
41	Hand wash	Lifebuoy/ Dettol	2 x 500ml	
42	Hydrochloric Acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x 500ml	
43	Nitric Acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x 500ml	

44	Sulphuric Acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x 500ml	
45	Dimethyl Glyoxime (DMG)	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	125g	
46	Di-sodium Hydrogen Phosphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
47	Ethanol	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500ml	
48	Fehling's Solution – A	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
49	Fehling's Solution- B	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
50	Ferrous Sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
51	Ferrous Sulphide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
52	Formaldehyde	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
53	Glucose	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
54	Glycerin	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250ml	
55	Hydrogen peroxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
56	Iodine solid resublimed	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	125g	
57	Iron filings	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
58	Label book	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 Nos	
59	Lead acetate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2x 500g	
60	Lead nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x500g	
61	Lead peroxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
62	Lime Water	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250ml	
63	Litmus Solution Blue	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
64	Litmus Solution Red	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
65	Litmus paper Blue	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 Pkts	
66	Litmus paper Red	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 Pkts	

67	Magnesium ribbon	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 pkts	
68	Magneson Reagent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	125ml	
69	Magnesium chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
70	Magnesium iodide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
71	Magnesium sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500g	
72	Manganese chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x500g	
73	Manganese Dioxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
74	Methanol	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
75	Methyl Orange	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
76	Molisch's regaent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	125 ml	
77	Nessler's reagent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
78	Ferric Chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
79	Filter paper	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	10 Pkts	
80	Nickel carbonate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
81	Nickel chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
82	Nickel sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
83	Nitric acid	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	5 x 500ml	
84	pH paper	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 Pkts	
85	Phenolphthalein	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
86	Potassium Chromate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
87	Potassium Dichromate Crystals	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
88	Potassium Ferricyanide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
89	Potassium Ferrocyanide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	

90	Potassium Hydroxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
91	Potassium Iodide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
92	Potassium nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
93	Sodium thiosulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
94	Potassium Permangante	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x500g	
95	Potassium Thiocyanate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
96	Saffranine stain	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	125ml	
97	Sulphur powder	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
98	Schiff's reagent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
99	Silver nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	4 x 125ml	
100	Sodium Bicarbonate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
101	Sodium Carbonate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
102	Sodium Hydroxide	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	2 x 500g	
103	Sodium Nitrite	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
104	Sodium Nitroprusside	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
105	Sodium sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
106	Spirit for spirit lamp	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500ml	
107	Starch powder	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
108	Strontium chloride	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
109	Strontium nitrate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	
110	Tollen's reagent	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	3 x 125ml	
111	Towel	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	3 Nos	
112	Universal indicator solution	Big size	2 x 125ml	

113	Wick for spirit lamp	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	1 Pkt	
114	Zinc granules	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	250g	
115	Zinc phosphate	Thread type	250g	
116	Zinc sulphate	Nice/CDH/BDH/Qualichems/Qualigems/Isochem/Merch	500g	

Requirements of Biology Lab NON-CONSUMABLES

Sl	Name of Items	Cracification		Rate per	Total
No	Name of Items	Specification	Quantity	Unit/No	Amount
1	Compound Microscope	Olympus/Equivalent	4		
2	Dissection microscope	Olympus /equivalent	2		
3	Human Torso model	with removable and dissectible parts 3D	1		
	Human skeleton model	5 feet articulated human skeleton model with stand and glass case	1		
4	Beakers 250 mL	Borosil	10		
5	Beakers 500 mL	Borosil	5		
6	Measuring cylinder 100mL	Borosil	20		
7	Conical flask 250mL	Borosil	10		
8	Funnel	8cm width Borosil	20		
9	Test tubes 20 mL	Borosil	100		
10	Watch glass	9 cm diameterBorosil	20		
11	Petri dish	9 cm diameterBorosil	20		
12	Plain Slide	Regular size	5 boxes		
13	Cover Slip	Round Regular size	10 Boxes		
- 10	- C - C - C - C - C - C - C - C - C - C	Trouma reagaint sile	10 2 0.10		
	BIOVISUAL CHARTS				
	Pollen germination and				
14	growth of pollen tube	125x100cms Good quality	1		
	Controlled pollination -				
15	Emasculation and bagging	125x100cms Good quality	1		
16	Pedigree chart-Colour blindness	125x100cms Good quality	1		
17	Pedigree chart-Inability to roll tongue	125x100cms Good quality	1		
18	Mitosis-stages	125x100cms Good quality	1		
19	Meiosis -Stages	125x100cms Good quality	1		
20	Phosphorus cycle	125x100cms Good quality	1		
21	Types of Placentation	125x100cms Good quality	1		
22	Type of aestivation	125x100cms Good quality	1		
23	T S of Dicot root	125x100cms Good quality	1		
24	T S of Monocot root	125x100cms Good quality	1		
25	T S of Dicot stem	125x100cms Good quality	1		
26	T S of Monocot Stem	125x100cms Good quality	1		
27	T S of Dorsiventral leaf	125x100cms Good quality	1		
28	Secondary growth in Dicot Stem	125x100cms Good quality	1		
29	Plant cell	125x100cms Good quality	1		
30	Animal cell	125x100cms Good quality	1		
31	Endocrine system in Human	125x100cms Good quality	1		
32	Nitrogen cycle	125x100cms Good quality	1		

Requirements of Biology Lab CONSUMABLES

Sl	Name of Items	Specification	Quantity	Rate per	Total
No		-	-	Unit/No	Amount
1	Distilled water	NICE/MERCK/QUALICHEM	10litres		
2	Ethanol	NICE/MERCK/QUALICHEM	2litres		
3	Glycerine	NICE/MERCK/QUALICHEM	500 ml		
4	Safranine	NICE/MERCK/QUALICHEM	100ml		
5	Acetocarmine	NICE/MERCK/QUALICHEM	100ml		
6	Benedict reagent	NICE/MERCK/QUALICHEM	250ml		
7	Methylene blue	NICE/MERCK/QUALICHEM	100ml		
8	Starch	NICE/MERCK/QUALICHEM	500gm		
9	Iodine solution	NICE/MERCK/QUALICHEM	500ml		
10	Millons reagent	NICE/MERCK/QUALICHEM	500ml		
11	Sudan III	NICE/MERCK/QUALICHEM	100ml		
12	Nitric acid	NICE/MERCK/QUALICHEM	500ml		
13	Hydrochloric acid	NICE/MERCK/QUALICHEM	500ml		
14	Propanol	NICE/MERCK/QUALICHEM	2 litres		
15	Petrolium ether	NICE/MERCK/QUALICHEM	500ml		
16	Acetone	NICE/MERCK/QUALICHEM	500ml		
17	Chromatographic paper	Whatman No 1	10 sheets		
18	Filter paper		10pkt		
19	Blotting paper		20sheets		
20	pH paper	NICE/MERCK/QUALICHEM	10pkt		
21	Sodium chloride	NICE/MERCK/QUALICHEM	500gm		
22	Cotton	Medical Purpose	500gm		