MAR ATHANASIUS COLLEGE (AUTONOMOUS)

Kothamangalam College P O - 686666

Ph: 0485 2822378, 2822512 Web: www.macollege.in email: mac@macollege.in

TENDER DOCUMENT

Tender No. MAC40/CHE/2024 Dated: 31.12.2024

Tender documents for

Procurement of

Laboratory Items

Mar Athanasius College (Autonomous), Kothamangalam



Tender No. MAC40/CHE/2024 Dated: 31.12.2024

Tender Submitted by:	

Section-1 Bid Synopsis

1. 2.	Tender No. Name & Address of Client	:	MAC40/CHE/2024 Dated: 31.12.2024 Principal Mar Athanasius College (Autonomous), Kothamangalam - 686666
3.	Name of Project	:	Laboratory Items, Mar Athanasius College, Kothamangalam - 686666
4.	Type of Tender	:	Item rate
5.	Date of sale of Tender Document	:	from 31.12.2024 to 27.01.2025
6.	Tender documents issuing authority	:	Principal, Mar Athanasius College (Autonomous)
7.	Last date and Time of receipt of tende	r:	27.01.2025, 4.00 p.m.
8.	Date and time of Tender opening	:	28.01.2025, 10.00 a.m.
9.	Earnest Money Deposit	:	2.5 % in the form of DD
10.	Security deposit	:	5% of quoted amount as Demand Draft
11.	Defect liability period	:	Minimum 12 calendar months from the commissioning of the entire system.
12.	Date of Issue of DD with date & Amount	:	(to be filled by Tenderer)
13.	Issue in favor of	:	(to be filled by Tenderer)

Signature & Seal of the Tenderer

K.F.C. FORM – 14 (See Chapter VI, Article 130) FORM OF TENDER

To The Principal Mar Athanasius College (Autonomou Kothamangalam College P. O Kothamangalam, Ernakulam, Kerala, India - 686666	ıs)
Sir,	
whole of the articles referred to and descr the rates quoted against each item. The ar places specified in the schedule.	er the annexed general conditions of contract, the libed in the attached specification and schedule at rticles will be delivered within the time and at the separately remitted the required amount of
Yours faithfu	ılly,
(Signature)	
(Address)	

Date:

^{*}To be scored off in case where no Earnest Money Deposit is furnished

TERMS AND CONDITIONS

Sealed tenders are invited for supplying as specified in the schedule below/attached:

- 1. The tenders should be addressed to The Principal, Mar Athanasius College, Kothamangalam College P. O, Kothamangalam, Ernakulam, Kerala, India 686666 in a sealed cover with the Tender number and name duly superscribed on the cover.
- 2. The tenders should be in the prescribed form which can be obtained from Principal, Mar Athanasius College, Kothamangalam College P. O, Kothamangalam, Ernakulam, Kerala, India on payment as per the superscription. The cost of tender forms once paid will not be refunded. Tenders which are not in the prescribed form are liable to be rejected.
- 3. Intending tenderers should send their tenders so as to reach the Principal, Mar AthanasiusCollege(Autonomous),
- Kothamangalam on due date, within time. No tender received after the specified date and time will be accepted on any account. Tenders not stipulating period of firmness and tenders with price variation clause and or subject to prior sale condition are liable to be rejected.
- 4. Every tenderer should send along with his tender, an earnest money of 1% of the amount quoted. The amount may be paid by crossed demand draft drawn in favour of the Principal, Mar Athanasius College, Kothamangalam, payable at Ernakulam. Cheques will not be accepted. The earnest money of the tenders will be returned as soon as possible after the tenders are settled, but that of the successful tenderer will be adjusted towards the security that will have to be deposited for satisfactory fulfillment of the contract. No interest will be paid for the earnest money deposited. The registered firms will have to quote invariably in every tender they

- submit the registration number assigned to them by the Stores Purchase Department.
- 5. The tenders will be opened on the appointed day and time in the Office of the Principal, Mar Athanasius College, Kothamangalam in the presence of such of those tenderers or their nominees who may be present at that time.
- 6. If any tenderer withdraws from his tender before the expiry of the period fixed for keeping the rates firm for acceptance, the earnest money, if any deposited by him will be forfeited to the Principal, M A College or such action taken against him as the Principal, M A College thinks fit.
- 7(a). Tenderers shall invariably specify in their tenders the delivery conditions, including the time required for the supply of articles tendered for.
- (b). The successful tenderer should supply the items at Mar Athanasius College at Kothamangalam within the time period specified in the contract, at their own cost.
- 8. The final acceptance of the tenders rest entirely with the Principal, Mar Athanasius College, Kothamangalam who do not bind himself/herself to accept the lowest or any tender. But the tenderers on their part should be prepared to carry out such portion of the supplies included in their tenders as may be allotted to them.
- 9(a). In the case of materials of technical nature the successful tenderer should be prepared to guarantee satisfactory performance for a definite period under a definite penalty.
- (b). The guarantee provisions contained in the Kerala Financial Code are applicable.
- 10. Communication of acceptance of the tender normally constitutes a concluded contract. Nevertheless the successful tenderer shall also execute an agreement for the due fulfillment of the contract within the period to be specified in the letter of acceptance. The contractor shall

have to pay all stamp duty and other expense incidental to the execution of the agreement.

- 11.(a) The successful tenderer shall before signing the agreement and within the period specified in the letter of acceptance of his tender, shall deposit a sum equivalent to 5 percent of the value of the contract as security for the satisfactory fulfillment of the contract less the amount of money deposited by him along with his tender. Letters of guarantee in the prescribed form for the amount of security from an approved Bank will also be considered enough at the discretion of The Principal, Mar Athanasius College, Kothamangalam College P. O. Kothamangalam, Ernakulam, Kerala, India - 686666. If the successful tenderer fails to deposit the security and execute the agreement within the period specified, the earnest money deposited by him will be forfeited to the Principal, M A College and the contract arranged elsewhere at the defaulter's risk and any loss incurred will be recovered from the defaulter who will, however not be entitled to any gain accruing thereby.
- (b) In case where a successful tenderer, after having made partial supplies fails to fulfill the contracts in full, all or any of the materials, not supplied may at discretion of the purchasing Officer, be purchased bv means of another tender/quotation or by negotiation or from the next higher tenderer who had offered to supply already and the loss, if any, caused the M Α College(Autonomous), Kothamangalam shall thereby together with such sums as may be fixed by the Kerala State Legal Services Authority towards damages be recovered from the defaulting tenderer.
- (c) Even in cases where no alternate purchases are arranged for the materials not supplied, the proportionate portion of the security deposit based on the cost of the

- materials not supplied at the rate shown in the tender of the defaulter shall be forfeited and balance alone shall be refunded.
- (d) If the contractor fails to deliver all or any of the stores or perform the service within the time/period specified in the contract, the purchaser shall without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damages, a sum equivalent to 0.5% or 1% of the delivered price of the delayed stores or unperformed services for each week of delay until actual delivery or performance, up to a maximum deduction of 10% of the contract prices of the delayed stores or services. Once the maximum amount is reached, the purchaser may consider termination of the contract at the risk and cost of the contractor.
- 12. The security deposit shall, subject to the conditions specified herein be returned to the contractor within three months after the expiration of the contract, but in the event of any dispute arising between the Athanasius College(Autonomous), Kothamangalam and the contractor, Mar Athanasius College(Autonomous), Kothamangalam shall be entitled to deduct out of the deposits or the balance thereof, until such dispute is determined, the amount of such damages, costs, charges and expenses as any be claimed. In all cases where there are guarantee/warranty for the goods supplied the security deposit will be released only after the expiry of the guarantee/warranty period.
- 13. All payments to the contractor will be made by Mar Athanasius College(Autonomous), Kothamangalam in due course.
- 14. The tenderers shall also quote the percentage of rebate(discount) offered by them in case the payment is made promptly within fifteen days/within one month of taking delivery of stores.
- 15. Ordinarily payments will be made only

after the supplies are actually verified and taken to stock, at concerned places. The firm will produce stamped pre-receipted invoices before the Principal, Mar Athanasius College (Autonomous), Kothamangalam. The payments will be made on satisfactory supply of the above said materials at the concerned places and on production of the bills/invoices. Mar AthanasiusCollege (Autonomous),

Kothamangalam will make the payment as and when the amount is released from the Treasury.

16. The contractors shall not assign or make over the contract on the benefits or burdens thereof to any other person or body corporate. The contractors shall not underlet or sublet to any person or persons or body or any part thereof without the consent in writing of the The Principal, Mar AthanasiusCollege(Autonomous),

Kothamangalam who shall have absolute power to refuse such consent or to rescind such consent (if given) at any time if he is not satisfied with the manner in which the contract is being executed and no allowance or compensation shall be made to the contractor or the sub-contractor upon such rescission, provided always that if such consent be given at any time, the contractor shall not be relieved from any obligation, duty or responsibility under this contract.

17. All expenses and damages caused to Mar Athanasius College(Autonomous), Kothamangalam by any breach of contract by the contractor shall be paid by the contractor to Mar Athanasius College(Autonomous), Kothamangalam and may be recovered from him under the provisions of the Revenue Recovery Act in force in the State.

18. In case any difference or disputes arise in connection with the contract all legal proceedings relating to the matter shall be instituted in the Courts within the

jurisdiction of Ernakulam District.

19. Any amount due and payable to the successful tenderer from Mar Athanasius College shall be adjusted against any sum of money due to Mar Athanasius College from him under any other contracts.

20. Every notice hereby required or authorized to be given may be either given to the contractor personally or left at his residence or last known place or abode or business or may be handed over to his agent personally or may be addressed to the contractor by post at his usual or last known place or abode or business and if so addressed and posted shall deemed to have been served on the contractor on the date on which in the ordinary course of posting a letter so addressed and posted would reach his place of abode or business.

21. The tenderer shall undertake to supply materials according to the standard sample and/or specifications.

22. No representation for enhancement of rates once accepted will be considered during the contract period. In the case of imported goods when the price accepted is the ex-site price quoted by the tenderer, the benefit of any reduction in the c.i.f. price should accrue to the Mar Athanasius College(Autonomous), Kothamangalam.

23. Telegraphic quotations will not be considered.

24. Any attempt on the part of the tenderer or their agents to influence the Mar AthanasiusCollege(Autonomous),

Kothamangalam/Store Purchase Department in their favor, by personal canvassing with the officers concerned, will disqualify the tenders.

25. Tenderers should be prepared to accept orders subject to the penalty clause for forfeiture of security in the event of default in supplies or failure to supply within the stipulated period.

26. The finalization of tenders shall be made in accordance with the supply upon

the rates quoted and according to the other formalities and performance. The Principal, Mar Athanasius College (Autonomous), Kothamangalam has all rights to reject a tender without giving any reasons.

- 27. The tenderers have to quote the expiry of the guarantee/warranty period.
- 28. Special conditions, if any, of the tenderers, attached with the tender will not be applicable to the contract unless they are expressly accepted in writing by the Principal, Mar Athanasius College, (Autonomous) Kothamangalam.
- 29. The Tenderer should produce along with his tender a preliminary agreement executed and signed in Kerala Stamp Paper of value Rs.200/-. A specimen form of the agreement is given as Annexure B to this tender. The tenders without the agreement in stamped paper will be rejected outright. 30. The tenderer will invariably furnish the following certificates with their bills for payment:

"Certified that the goods on which the sales tax has been charged have not been exempted under the Central Sales Tax Act GST or the State Sales Tax Act or the Rules made there under and charges on account of sales tax on these goods are correct under the provisions of the relevant act or the rules made there under. Certified further that we (or our Branch or Agent)

Address:

31. The price quoted shall be inclusive of all taxes, duties, cesses, etc., which are or may become payable by the contractor under existing or future laws or rules of the country of origin/supply or delivery during the course of execution of the contract.

32. All conditions laid in the Store Purchase Rules are applicable.

ANNEXURE

AGREEMENT

Articles of agreement executed on this the day of (month) (year)
BETWEEN the Principal, Mar Athanasius College(Autonomous), Kothamangalam (Hereafter
referred to as the Principal) of the one part and
(Name and address of the tenderer), (hereinafter referred to as the Bounden) of the other
part.
WHEREAS in response to the Notification No dated the Bounden
has submitted to the Principal a tender for supplying specified
therein subject to the terms and conditions contained in the said tender.
WHEREAS the Bounden has also deposited with the Principal a sum of Rs.
as earnest money for execution of an agreement undertaking the due fulfillment
of the contract in case his tender is accepted by the Principal.

Now THESE PRESENTS WITNESS and it is hereby mutually agreed as follows:-1. In case the tender submitted by the bounden is accepted by the Principal and the contract for supplying is awarded to the bounden, the bounden shall within days of acceptance of his tender execute an agreement with the Principal incorporating all the terms and conditions under which the Principal accepts his tender. 2. In case the Bounden fails to execute the agreement as aforesaid incorporating the terms and conditions governing the contract, the Principal shall have power and authority to recover from the bounden any loss or damage caused to the Principal by such breach as may be determined by the Principal by appropriating the earnest money deposited by the bounden and if the earnest money is found to be inadequate the deficit amount may be recovered from the bounden and his properties movable and immovable in the manner hereinafter contained. 3. All sums found due to the Principal under or by virtue of this agreement shall be recoverable from the bounden and his properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue and in such other manner as the Principal may deem fit. In witness whereof (H.E name and designation) for and on behalf of the Principal and the Bounden have hereinto set their hands the day and year shown against their respective signatures. Signed by Date........ In the presence of witnesses: 1. 2. Signed by Sri.Date

In the presence of witnesses:

1.

2.

Superscription

Tender No. MAC40/CHE/2024 Dated: 31.12.2024 for Procurement of Laboratory Items to Mar Athanasius College (Autonomous), Kothamangalam.

Last date and time for the receipt of tender : 27.01.2025, 4.00 P.M.

Date and time for opening tender : 28.01.2025, 10.00 A.M.

Price of tender form : Rs. 800/-

Address of the Officer from whom tender forms are to be obtained and to whom tenders are to be sent

Dr. Manju Kurian,

Principal,

Mar Athanasius College (Autonomous),

Kothamangalam College P. O,

Ernakulam Dist., Kerala, India - 686666.

Name of Office: Mar Athanasius College (Autonomous), Kothamangalam

Station: Kothamangalam

Date: 31.12.2024

Name and Designation of Purchasing Officer

Dr. Manju Kurian,

Principal,

Mar Athanasius College (Autonomous),

Kothamangalam College P. O,

Ernakulam Dist., Kerala, India - 686666.

TENDER

MAC40/CHE/2024 Dated: 31.12.2024

Sealed tenders are invited from reputed firms for the procurement of **Laboratory Items** to Mar Athanasius College, Kothamangalam. **The detailed specification as follows**.

List of Laboratory Items

Department of Botany

Sl.no Items		Make	Pack
1	2,2-Diphenyl-1-Picrylhydrazyl (DPPH) extrapure 95%	SRL	25mg
2	2.4 DINITRO PHENYL HYDRAZINE	Nice	25g
3	2-PROPANOL EMPLURA	Nice/Merck	500ml
4	3,5-DINITRO SALICYLIC ACID	Nice/Merck	250g
5	ACETIC ACID GLACIAL L.R	Nice	500ml
6	ACETO CARMINE	Nice	100ml
7	ACETONE L.R.	Nice	500ml
8	AGAR AGAR BACTERIOLOGICAL	Nice	250g
9	AGAROSE FOR ELECTROPHORESIS	Nice	210g
10	AMMONIUM FERROUS SULPHATE L.R.	Nice	500g
11	AMYL ALCOHOL (ISO)	Nice	500ml
12	ANTHRONE	Nice	25g
13	BEEF EXTRACT	Nice	250g
14	BENEDICT'S REAGENT	Nice	500ml
15	BIURET REAGENT	Nice	125ml
16	BROMOPHENOL BLUE SOLUTION	Nice	125ml
17	CALCIUM NITRATE L.R.	Nice	500g
18	CEDAR WOOD OIL	Nice	25ml
19	CHLOROFORM L.R.	Nice	500ml
20	CITRIC ACID MONOHYDRATE-99%	Nice	500g
21	CLEANSOL(LABORATORY DETERGENT)	Nice	500ml
22	CLOVE OIL	Nice	100ml
23	COPPER SULPHATE L.R.	Nice	500g
24	COTTON ABSORBANT ROLL	-	Roll
25	CTAB	Himedia	100g
26	D.P.X.MOUNTANT	Nice	250ml
27	D-GLUCOSE ANHYDROUS.L.R.	Nice	500g
28	DIMETHYL SULFOXIDE EMPLURA	Merck	500ml
29	DI-SODIUM HYDROGEN PHOSPHATE Anhydrous L.R.	Nice	500g
30	DRAGENDROFF'S REAGENT	Nice	125ml
31	ETHIDIUM BROMIDE	Himedia/Nice/ Merck	1g

32	EXAMINATION GLOVES MEDIUM	_	Box
33	FAST GREEN FOR MICROSCOPY	Merck	5g
34	FEHLING'S SOLUTION NO.1	Nice	500ml
35	FEHLING'S SOLUTION NO.2	Nice	500ml
36	FERRIC CHLORIDE ANHYDROUS	Nice	500g
37	FERROIN INDICATOR SOLUTION	Nice	25ml
38	FILTER PAPER NO.1 460X570MM	Whatman	Nos
39	GLYCERINE L.R. (GLYCEROL)	Nice	500ml
40	GLYCINE (AMINO ACETIC ACID)	Nice	250g
41	GRAM STAINS - KIT	Himedia	Kit
42	HYDROCHLORIC ACID L.R.	Nice	500ml
43	IODINE RESUBLIMED L.R.	Nice	100g
44	ISO PROPYL ALCOHOL.L.R.	Nice	500ml
45	LAMPOSOLV, 500ML	Nice	Nos
46	LEAD ACETATE L.R.	Nice	500g
47	METHYL ORANGE SOLUTION	Nice	125ml
48	Mueller Hinton Agar	Himedia	100g
49	NINHYDRIN A.R.	Nice	10g
50	NINHYDRIN SOLUTION	Nice	125ml
51	NITRIC ACID L.R.	Nice	500ml
52	Nutrient Agar	Himedia	100g
53	ORTHO PHOSPHORIC ACID L.R.	Nice	500ml
54	PARAFFIN WAX 58-60C LR	Merck	500g
55	PEPTONE L.R.	Nice	250g
56	PERCHLORIC ACID 60% A.R.	Nice	250ml
57	PETROLEUM ETHER 40-60 LR	Nice	500ml
58	PHENOL L.R.	Nice	500g
59	PHENOL REAGENT	Nice	125ml
60	PHOSPHOMOLYBDIC ACID A.R	Nice	25g
61	POLYVINYL PYRROLIDONE-K-30	Loba	500g
62	POTASSIUM ACETATE LR	Merck/ Nice	500g
63	POTASSIUM BICARBONATE 99.5%	Nice	500g
64	POTASSIUM CHROMATE L.R.	Nice	500g
65	POTASSIUM DICHROMATE L.R.	Nice	500g
66	POTASSIUM DIHYDROGEN ORTHOPHOSPHATE Anhydrous L.R.	Nice	500g
67	POTASSIUM HYDROXIDE PELLETS	Nice	500g
68	POTASSIUM PERMANGANATE L.R.	Nice	500g
69	POTASSIUM SODIUM TARTRATE	Merck/ Nice	500g
70	Potato Dextrose Agar	Himedia	100g
71	SILVER CHLORIDE ANHYDROUS	Nice	25g
72	SILVER NITRATE	Nice	10g
73	SODIUM ACETATE ANHYDROUS	Nice	500g
74	SODIUM ALGINATE	Merck	250g
75	SODIUM BENZOATE	Nice	500g
76	SODIUM BICARBONATE L.R.	Nice	500g

77	SODIUM CARBONATE ANHYDROUS L.R	Nice	500g
78	SODIUM CHLORIDE L.R.	Nice	500g
79	SODIUM DIHYDROGEN ORTHOPHOSPHATE L.R.	Nice	500g
80	SODIUM HYDROXIDE PELLETS L.R.	Nice	500g
81	SODIUM IODIDE	Nice	100G
82	SODIUM MOLYBDATE L.R.	Nice	100G
83	SODIUM THIOSULPHATE L.R	Nice	500g
84	STANNOUS CHLORIDE L.R.	Nice	100G
85	STARCH SOLUBLE L.R.	Nice	500g
86	SUCROSE	Nice	500g
87	SULPHOSALICYLIC ACID L.R.	Nice	100G
88	SULPHURIC ACID L.R.	Nice	500ml
89	TAE 10X	Himedia	100ml
90	TE Buffer (10x)		
91	TEMED	Himedia	100ML
92	TOLUENE RECTIFIED L.R.	Nice	500ml
93	TOLUIDINE BLUE(M.S)	Nice	25g
94	TRICHLORO ACETIC ACID.L.R.	Nice	100g
95	TRIS HYDROCHLORIDE AR 99.5%	Nice	100g
96	TRI-SODIUM CITRATE L.R.	Nice	500g
97	Tryptone Soya Agar (Soyabean Casein Digest Agar)	Himedia	100g
98	WAGNER REAGENT	Nice	125ml
99	XYLENE (SULPHUR FREE)	Nice	500ml
100	Proline (L-Proline)	Nice	5g
101	Sodium alginate	Merck/ Himedia	100g
102	Leishmans's stain solution	Nice	500 ml
t-	•	•	

Laboratory items for PD purchase

Sl.no	Items	Make	Pack
	Microscopic slide (Plain, ground edges)		5
	Cover glass (Round)		3

Equipment

Sl. No.	Item	Specification	Quantity
1	Commonad	Managular inclined viewing tube retable.	
1	Compound	Monocular, inclined viewing tube, rotatable;	2
	microscope	Eye Piece: 10x / 15x; Revolving nose piece	
		and iris diaphragm, ABBE condenser N.A	
		1.25; Objectives: 10x, 40x, 100x with	
		antifungal coating; Mechanical stage, Coaxial	
		coarse and fine focussing system;	
		Illumination: Variable illumination, Halogen	
		or LED with inbuilt rechargeable battery, A/C	
		adapter; One year warranty	

DEPARTMENT OF CHEMISTRY MAR ATHANASIUS COLLEGE, KOTHAMANGALAM

<u>List of Laboratory Items</u>

Sl.	Laboratory Items	Company	Voume/Wight	Quantity
No				
1	HCL	Nice	2.5 L	5
2	NH ₃ Solution	Nice	2.5 L	2
3	HNO3	Nice	2.5L	5
4	Glacial Acetic Acid	Nice	2.5 L	1
5	Toluene	Nice	2.5L	1
6	Nitrobenzene	Nice	500ml	4
7	Ether	Nice	2.5 L	1
8	Ether	Nice	500 ml	13
9	Hexane	Nice	2.5 L	2
10	Ethyl Acetate	Nice	1 L	1
11	Ethyl Acetate	Nice	500ml	2
12	NaOH	Nice	500g	10
13	Sodium carbonate	Nice	500g	3
14	Oxalic acid	Nice	500g	1
15	Ammonium	Nice	250g	1
	thiocyanate			
16	KMnO4	Nice	500g	1
17	K2Cr2O7	Nice	500g	1
18	Phenol	Nice	500ml	4
19	Silver Nitrate	Nice	25g	1

List of Glassware

Sl. No	Glassware	Company	Volume	Quantity
1	Beaker	Borosil	250 ml	10
2	Beaker	Borosil	100ml	10
3	TLC jar	Borosil	150ml	10
4	Semi micro test-tube	Borosil	3ml	200
5	Pipette	Borosil	10 ml	5
6	Round bottom flask	Borosil	250 ml	10
7	Round bottom flask	Borosil	100ml	10
8	Watch glass	Borosil	8cm	50
9	Distillation Apparatus	Borosil		5
10	Glass dropper	Borosil	medium	50

<u>Others</u>

Sl.No	Item needed	Size	Quantity
1	Silica crucible	25mm	20

2	Clay pipe triangle		10
3	Whatman Filter paper- 41	110mm	1pkt
4	Whatman Filter paper- 41	90mm	1pkt
5	Whatman Filterpaper - 40	110mm	1pkt
6	Whatman Filterpaper - 40	90mm	1pkt
7	Whatman Filterpapeer-1	90mm	1pkt
8	Thermometer	110°C	20
9	Thermometer	310°C	10

Department of Physics

1	NUMERCIAL APERTURE and ACCEPTANCE ANGLE Complete kit consisting of Light Source, Fibre Optic Cable of ½m & NA Jig-FOT2	
2	Elliptical & Hyperbolic fringes- To determine Y & sigma material of the given specimen(Glass & perspex) by observing the elliptical & hyperbolic fringes formed in an interference setup a) Bending stand -NESA- with movable knife edges for Cornu's experiment with plane glass plate at 45° for reflection, bending glass plate & perspex sheet with two weight hangers, Optical quality D.convex lens 5cms dia 100cms FL for elliptical fringes & plane glass plate (38X25mm) for hyperbolic fringes,-tested	
3	Co-ordinate measuring microscope with heavy base for X & Y planes with finely divided lead screws with micrometer heads-wooden bench for the microscope - Tested -ELFO	
4	PAM, PPM, PWM Trainer Kit-PAM PPM PWM Modulation and Demodulation- Scientific tech	
5	Ultrasonic Interferometer-Ultrasonic Diffraction – Acoustic Grating- Consisting of Ultrasonic Signal Generator, with DIGITAL FREQUENCY METER, Crystal holder and tank- BL 05	
6	Sodium Vapour Lamp: - 35 W Stamina UK, With Transformer & Wooden stand with slits, lamp holder, flex wire, plug etc Complete set- NESA -	
7	BH Curve Apparatus With One Toroid Sample built in power supply and Standard Resistors and Capacitors- PIC-34	
8	DSO-100Mhz-Dual-HTC	
9	Function Generator -2Mhz-Scientictech- FG-2000 DDS-0.2hz to 2Mhz selected in 7 steps, Operating modes- sine, square, triangle, pulse and TTL. Accuracy 100hz, 0.5%-100hz to 500hz, 0.1%> 500hz, Resolution 1Hz, Accuracy +/- 0.5%	
10	e/m By Thomson's Method -The apparatus is designed to work on mains, with Built-in-Power Supply. It is provided with other accessories such as C.R.T wooden stand, Deflection magnetometer, pair of bar magnet. Very easy to handle and compact in size fully self contained- EL-200	

11	NanoVNA-F Vector Network Analyzer HF VHF UHF VNA Antenna Analyzer 50kHz-1000MHz 4.3"LCD Touching Screen, Measuring S-Parameter Voltage SWR, Phase, delay, Smith Chart
12	Solar light / bulb making kit

Statement of requirements in the department of Zoology (UG)

Sl	items	Quantity	Specifications if any
No.		required	
1	Soluble Starch	2 x 500 gm	Nice/Merk
2	Glucose	3 x 500 gm	Nice/Merk
3	Sodium hydroxide	2x 500 gm	Nice/Merk
4	Potassium iodide	5 x 100 gm	Nice/Merk
5	Leishman's stain	3 bottles	Nice/Merk
6	Rose Bengal stain	3 bottles	Nice/Merk
7	WBC diluting fluid	3 bottles	Nice/Merk
8	RBC diluting fluid	3 bottles	Nice/Merk
9	Antibody Kit for blood grouping	4 nos	Nice/Merk
10	Methylene blue stain	2 bottles	Nice/Merk
11	Rubber tubes for RBC and WBC	10 nos	Nice/Merk
	pipettes		
12	Isopropyl alcohol	5 x 250ml	Nice/Merk
13	Homogenizer cup	1	
14	Haemocytometer	10 nos	Neuber chamber
15	Cover slips	2 pkt	
16	Cavity slides	2 pkt	
17	Digital weighing balance up to 100kg	1 nos	
18	Sedgwick Rafter chamber	5 nos	Plankton counting chamber
19	Stage micrometer for micrometry	5 nos	
20	Ocular micrometer for	5 nos	
	micrometry		
21	Permanent slides	One each	Biological hub
	Bone, adipose tissue T.S.,		
	Cartilage T.S., Nervous Tissue,		
	Human Sperm and Ova, Human		
	Blood smear, Different stages of		
	Mitosis and meiosis		
21	Digital Sphygmomanometer	1 no	Omron
22	Stethoscope	1 no	Elko
23	Painting brush for plankton	20 nos	
	sorting		
24	Watch glass	20 nos	
25	RBC pipette	10 nos	
26	Chamber for paper	2 nos	Glass
	chromatography		
27	Test tubes 15 ml	100nos	Borosil
28	Test tube stands	1 nos	Borosil

29	Beakers 100ml, 200ml, 500ml	3 each	Borosil
30	Conical flasks, 250ml, 500ml	10 each	Borosil
31	Wash bottles	5 nos	Plastic
32	Specimen samples fishes in jars Catla, Rohu, Mrigal, grass carp, silver carp and common carp	One ach	SATMED
33	Specimen samples honey bees Apis cerana indica, Queen, worker and dorone	One each	SATMED
34	Specimen samples earthworms Eisenia foetida and Eudrillus eugeniae	One each	SATMED
35	Specimen samples silkworms/insect	1 each	SATMED
36	DO bottles/BOD bottles 250 ml	25	Borosil
37	Preserved Plankton samples	2 bottles	Borosil
38	Reinforced Fiber Tanks	6 nos	Rectangular 25 litre capacity
39	Trays (Plastic, white)	20 nos	
40	Lancet	200 nos	
41	Formalin	5 litre	Nice
42	Wright's stain	2 bottles	Nice
43	Acetocarmine	2 bottles	Nice
44	D L Alanine	100 g	Hi media
45	Alpha ketoglutaric acid	100g	Nice
46	Standard cholesterol	5ml	Nice
47	Standard creatinine	50g	Nice
48	2,4 dinitrophenyl hydrazine	10g	Nice
49	Glacial acetic acid	2 x 500ml	Nice
50	Starch Casein agar	2 x 250 g	Himedia
51	M H Agar	2x 250g	Himedia
52	Nutrient Agar	3x 500g	Himedia
53	Zobell Agar	2 x 250g	Himedia
54	Simple dissection microscope	5 nos	olympus
55	Alcohol Thermometer	3 nos	Labworld
56	Brix Honey Refractometer	1 no	Labart
57	Indole 3- acetic acid	25g	RPI
58	Ammonia	250 ml	Nice
59	Pikovskavya's agar	250g	Himedia
60	Calcium phosphate	500g	Nice