LALIT NARAYAN MITHILA UNIVERSITY

KAMESHWARANAGAR, DARBHANGA

Request for Proposal (RFP)

For

Supply of Chemicals, Plasticwares & Glasswares
&
Supply, Installation and Commissioning of Lab and ancillary equipments

Tender No: LNMU/MERU (PM-USHA)/01/2025

Date: 30/11/2025

Issuing Authority:

Dr. Divya Rani Hansda
Registrar
L.N. Mithila University
Darbhanga
registrar@lnmu.ac.in

Disclaimer

1. Lalit Narayan Mithila University (hereinafter referred to as 'LNMU') has issued this Request for Proposal (hereinafter referred to as "RFP") for Agency for Laboratory Chemical, Glassware, Plasticware & Equipment Supply, Installation and Services for its maintenance to LNMU, on such terms and conditions as set out in this RFP document, including the technical specifications set out in different parts of this RFP document.
2. This RFP has been prepared with an intention to invite prospective applicants/bidders and to assist them in understanding the requirements of the client and expectations from the system. It is hereby clarified that this RFP is not an agreement, and the purpose of this RFP is to provide the prospective bidder(s) with information to assist them in the formulation of their proposals. This RFP document does not purport to contain all the information bidders may require. This RFP document may not be appropriate for all persons, and it is not possible for LNMU to consider the investment objectives, financial situation and particular needs of each bidder.
3. LNMU has taken due care in preparation of information contained herein. However, this information is not intended to be exhaustive. The interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so, and they do not solely rely on the information contained in this RFP in submitting their proposal. This RFP includes statements, which reflect various assumptions and assessments arrived at by LNMU in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each bidder may require.
4. This RFP is not an agreement by or / and between LNMU and the prospective bidders or any other person. The information contained in this RFP is provided on the basis that it is non–binding on LNMU, any of its authorities or agencies, or any of their respective officers, employees, agents, or advisors. LNMU makes no representation or warranty and shall incur no liability under any law as to the accuracy, reliability or completeness of the information contained in the RFP document. Each bidder is advised to consider the RFP document as per his understanding and capacity. The bidders are also advised to do appropriate examination, enquiry and scrutiny of all aspects mentioned in the RFP document before bidding. The bidders are encouraged to take professional help from experts on financial, legal, technical, taxation, and any other matters / sectors appearing in the document or specified work. The bidders are also requested to go through the RFP document in detail and bring to notice of LNMU, any kind of error, misprint, inaccuracies, or omission in the document. LNMU reserves the right not to proceed with the project, to alter the timetable reflected in this document, or to change the process or procedure to be applied. LNMU also reserves the right to decline to discuss the project further with any party submitting a proposal.
5. No reimbursement of cost of any type will be paid to persons or entities submitting a proposal. The bidder shall bear all costs arising from, associated with or relating to the preparation and submission of its bid including but not limited to

preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by LNMU or any other costs incurred in connection with or relating to its bid.

6 The issue of this RFP does not imply that LNMU is bound to select and pre-qualify bids for bid stage or to appoint the selected bidder, as the case may be, for the project and LNMU reserves the right to reject all or any of the bids without assigning any reasons whatsoever.

7 LNMU may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

8 LNMU , its employees and advisors make no representation or warranty and shall have no liability (for any cost, damage, loss or expense which may arise from or is incurred or suffered on account of anything contained in this RFP or otherwise, including but not limited to the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to be part of this RFP or arising in any way with eligibility of bidder for participation in the Bidding Process) towards any Applicant or bidder or a third person, under any law, statute, rule, regulation or tort, principles of restitution for unjust enrichment or otherwise.

9 LNMU also accepts no liability of any nature whether resulting from negligence or otherwise whatsoever arising from reliance of any bidder upon the statements contained in this RFP.

30.11.25

Registrar
LNMU, Darbhanga

1. Background Information

1.1. Basic Information

Established in 1972, LNMU has been at the forefront of higher education, fostering academic excellence and research innovation. As one of the leading institutions in Bihar, the University is committed to shaping the future through quality education, cutting-edge research, and industry collaboration.

With a diverse range of disciplines and a strong network of 43 Constituent and 38 Affiliated colleges, LNMU provides a dynamic learning environment that nurtures both students and faculty. LNMU has continuously evolved to meet educational standards while addressing the local and regional needs of society. The all-round effort of the entire LNMU family has led the University B++ in the recent NAAC accreditation.

LNMU invites Agency for Chemicals, Plasticwares, Glasswares & Laboratory Equipment Supply, Installation and Services for its maintenance to LNMU. This will contribute towards advancement of knowledge and research.

2. Schedules of Events

Sl No.	Event Description	Timeline
1	Last date and time for downloading the RFP	Till 20/12/2025 up to 03:00 PM, on the e-Procurement Portal (https://www.eproc2.bihar.gov.in)
2	Last date and time for submission (upload) of online bidding document	Till 20/12/2025 up to 05:00 PM, on the e-Procurement Portal (https://www.eproc2.bihar.gov.in)
3	Time, Date of opening of Technical Bid	22/12/2025 at 11:30 AM on the e-Procurement Portal (https://www.eproc2.bihar.gov.in)
4	Time, Date of opening of Financial Bid	To be announced later on the e-Procurement Portal (https://www.eproc2.bihar.gov.in)
5	Pre-bid meeting (Date & time)	06/12/2025 (Saturday) at 11:00 AM onwards Venue: Conference Hall, Univ. Dept. of Physics, LNMU, Darbhanga
6	University Contact Person and Number	Mr. Amrit Jha 9679227085 (MERU Officer, LNMU, Darbhanga) Dr. Atanu Banerjee 9862283752 (ePROC Coordinator, LNMU, Darbhanga)

30.11.25

Registrar
LNMU, Darbhanga

3. Submission of Response/Proposal

A. Bidders are advised to visit LNMU and Eproc2 website on a regular basis for any updates. This RFP process will be administered through the state public procurement portal (SPP) (URL: https://eproc2.bihar.gov.in). The Bidders are required to submit soft copies of their proposals electronically on the SPP Portal, using valid digital signature certificates of officers duly authorized to submit the bid in e-files. More information for submitting the bids online on the SPP Portal may be obtained at https://eproc2.bihar.gov.in/EPSV2Web/

B. All the pages of the bid must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the bid. Failure to submit the bid on time could cause a bid to be rejected. The University will not accept delivery of the Bid by fax/e-mail or any other electronic/non- electronic means other than uploading on the procurement portal.

C. The addendum, corrigendum (if any) & clarifications to the queries from all Bidders will be posted on the www.eproc2.bihar.gov.in and LNMU website https://www.lnmu.ac.in/. Any such shall be deemed to be incorporated into this RFP.

D. If a format for a specific document is not provided for in this RFP, the document shall be submitted in a format that makes it legally valid / binding on the Bidder and that is acceptable to the University. In any event, the University shall have the right to seek clarifications, modifications etc. on the document submitted by the Bidder and the Bidder shall be obliged to provide such clarifications and modifications within the timelines specified by the University.

E. The bidders should submit their responses as per the format given in this RFP in the following manner:

i. Response to Pre-Qualification Criterion
ii. Technical Qualification Criterion
iii. Financial Proposal

F. Prices should not be indicated in the Pre-Qualification Proposal or Technical Qualification Criteria Proposal but should only be indicated in the Commercial/ Financial Proposal in the format given in e-procurement portal.

4. Site Inspection

Bidders are advised to inspect the site and its surroundings where the equipments are to be installed and satisfy themselves before submitting their tenders. A bidder shall be deemed to have full knowledge of the work whether he/she inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.

5. Acceptance

During bidding stage, the firm/supplier/dealer will arrange the demonstration of equipment /material for its quality/ specification check at LNMU's premises or online at its own cost if required by LNMU officials before placing the supply order. Acceptance Test shall be conducted, before commissioning. The tests to be carried out, test procedures, test schedules, test equipment and tools, and expected test results are to be provided by the vendor to meet all the specified parameters/ service requirements. The date on which Final Acceptance Certificate is issued shall be deemed to be the date of successful commissioning of the Equipment.

The Bidder shall provide such packing of the Equipment as is required to prevent damage or deterioration during shipment of the equipment. The Bidder shall promptly repair or replace any Equipment that gets damaged in transit. The packing, marking, and documentation within and outside the packages shall also comply strictly with the requirements. The Bidder shall insert in each case a packing list, fully itemized to show case number, contents, gross and net weight, and cubic measurement.

If the Equipment fails to meet the standards of performance for Acceptance Testing and during warranty period due to faulty part/component, the replacement of faulty part/component has to be carried out by the Bidder free of cost. Freight, insurance and other allied expenditure like customs duties etc. for such part/component shall be the liability of the Bidder. Bidder will reimburse to LNMU the cost incurred by the University, if any, on replacement of such faulty part/component.

If it becomes necessary for the Bidder to replace or renew any defective portions of the Equipment under this clause, the provisions of this clause shall apply to the portions of the Equipment so replaced or renewed until the expiration of the warranty period originally applicable to the Equipment. If any defects be not remedied within 15 (Fifteen) days from the date of communication thereof or within such other specific period as may be allowed by LNMU in his discretion on application made to that effect by the Bidder, the University may proceed to carry out the work at Bidder's risk and expense, but without prejudice to any other rights which the University may have against the Bidder in respect of such defects.

6. Training to LNMU

Bidder shall provide training to the personnel nominated by the University at respective locations to enable them to have sufficient knowledge and skill to effectively manage, maintain, use and operate Equipment and to change/modify programs during installation, warranty and O&M period.

On-site training during the installation of the Equipment shall be arranged by the Bidder. Arrangement of all training materials such as manuals, drawings, brochures etc. shall be the responsibility of the Bidder.

7. Preparation and Submission of Proposal

7.1. Proposal Preparation Costs

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by LNMU to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

LNMU will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

7.2 Language

The Proposal should be filled by the bidders in English language only. If any supporting documents submitted are in any language other than English and Hindi, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the documents, the English translation shall govern.

7.3. Pre-Bid Conference

a) LNMU shall hold a pre-bid meeting with the prospective Bidders as per information given in the schedules of events.
b) The Bidders will have to ensure that their queries for pre-bid meetings should reach the point of contact (Nodal Officer) in written form either mail or in form of letter in company's letter head only as mentioned in the schedule of events within the timelines given. Email Id – merulnmu@lnmu.ac.in. A separate google link will be created for the outstation bidders and shall be informed a day prior to the pre bid meet on the University website.
c) The email should necessarily have subject as per the following nomenclature: *"Pre-bid Query - RFP LNMU **{Company's Name}"*
d) The queries should necessarily be submitted in the following format in both PDF and Editable MS-Word/ Excel File Format:

S. No	Name of mobile number of the authorized contact person and address of the bidder	RFP document reference(s). (Section & page number)	Content of RFP requiring clarification	Bidders Query

7.4 Evaluation process

The Technical evaluation committee shall be constituted by the University. The Technical Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals.

The Technical Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.

Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

7.5 Tender Opening

The Proposals submitted by bidders will be opened online at Time, Date as mentioned in

schedules of events by LNMU officials or any other officer authorized by LNMU, in the presence of such of those Bidders or their representatives who may be present at the time of opening. In the event that no bidders are present, the tender will still be opened as scheduled. Thus, presence of bidders or their representatives during opening of technical bid is not compulsory.

The representatives of the bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafides for attending the opening of the proposal.

7.6 Tender Validity

The offer submitted by the Bidders should be valid for a period of 180 days from the date of submission of Tender.

7.7 Document and Tender Processing Fee:

All Applicants have to pay a non-refundable Document Fee of Rs.5,000/- (Five Thousand only) by demand draft in favour of "Registrar, Lalit Narayan Mithila University" payable at Punjab National Bank, Darbhanga and tender processing fees, as applicable through e-payment mode (i.e. NEFT/RTGS/Credit Card/Debit Card) on eProc2 Portal. A copy of proof of payment of the same must be attached with the technical bid documents.

7.8 Earnest Money Deposit (EMD):

- An EMD of Rs. 12,00,000/- (Rupees Twelve lakh only) through e-payment mode (i.e. NEFT/RTGS/Credit Card/Debit Card) on E-Proc2 Portal or in form of bank guarantee, well before the last date/time for submission/ uploading of offer/Bid, failing which the bid will be rejected. This EMD will be non-interest bearing and refundable. If the selected bidder fails to submit the requisite performance guarantee or to execute the agreement, this EMD will be forfeited. A copy of proof of payment of EMD must be attached with the technical bid documents.
- EMD must be submitted by all the bidders except those who are registered with the Central Purchase Organization/State Purchase Organization, National Small Industries Corporation (NSIC) for the exact items/equipments of the tender.

8. Criteria for Evaluation

8.1. Pre-Qualification (PQ) / Eligibility Criteria

Sr. No.	Basic Requirement	Specific Requirement	Documents Required
1	Registration Certificate	Bidder should be a Company/ firm registered under the Indian Companies Act (or) a firm registered under the Limited Liability Partnership Act, 2008 (or) a proprietorship firm (or) a firm registered under the Partnership Act, 1932 for the last 3 years.	Certificate of Incorporation required and Articles of Association of the Participant in case of Company / Limited Liability Partnership Agreement in case of LLP/ Shop and Establishment in case of Proprietorship/ Partnership agreement in case of Partnership firm.
2	Average Annual Sales Turnover in Lab Equipment Sales & Maintenance services	The bidder must have an average annual turnover of ₹1,50,00,000 (One crore fifty lakhs) in the last three financial years.	Extracts from Audited/Certified financial statements, GST and Balance sheet for last three financial years as per financial year of participating company/firm OR. Certificate from Chartered Accountant and Authorized Signatory.
3	Certificates	Apart from company / firm registration, Participant must have registered under the following: •Valid GST Registration and GST Registration in Bihar Certificate. •Income Tax Return of the last three financial year	Copy of all the mentioned certificates/ITR certified by authorized signatory

4	Letter of authorization from OEM	The bidder should be an OEM or their authorized dealer/ representative. In case of authorized dealer/ representative, a letter of authorization/dealership clearly stating that dealer is authorized to bid for this particular tender on behalf of the original equipment manufacturer (OEM) and offer OEM products and services.	Letter of authorization from OEM confirming participation for this tender.
5	Technical Capability	The bidder must have prior experience in supplying laboratory equipment to government colleges/ universities/ Government agency/ Educational Department/ Educational or Research Institutions. As proof of experience, the bidder must submit documents showing supply orders worth at least ₹2 crores in any single work order. Ongoing projects will also be considered.	Work Order/ Completion Certificates from the client. It is essential to include experience certificates from each client. If the agency's work is ongoing, please include the relevant supporting.
6	ISO Certificate	The Bidder must have valid ISO 9001:2008/2015 Certificate	Copy of Valid ISO 9001:2008/2015 certificate to be submitted certified by authorized signatory
7	Local Service Centers	The bidder should have technical manpower and preferably have local service center to provide service for support for supply of the Equipment this contract.	Self-Certified letter by authorized signatory to provide services
8	Participant should not be an entity which has been black- listed by Government	A notarized affidavit that the bidder has not been blacklisted by any Central / State Government (Central/State Government and Public Sector) or under a declaration of ineligibility for corrupt or fraudulent practices as on bid submission date.	A notarized affidavit on Rs. 1000/- Stamp paper.

8.2. Technical Qualification Criteria

Sr. No.	Basic Requirement	Specific Requirement	Documents Required	Maximum Marks
1	Age of firm/ company	• 3 Year to 5 Financial Years: **15 marks** • More than 5 Financial years: **20 marks**	Certificate of Incorporation and Articles of Association of the Participant in case of Company / Limited Liability Partnership Agreement in case of LLP /GST Registration Certificate	**20 marks**
2	Average Annual Turnover of the firm/company in the last three financial years.	• From 1.5 crore and up to 5 crores: **15 marks** • More than 5 crores: **20 marks**	Audited financial statement and a certificate from Statutory Auditor confirming the same	**20 marks**
3	Experience of working with Government agency/ Educational Department/ University/ College. Ongoing projects will be considered.	Bidders must have successfully undertaken the work/Ongoing projects will be considered. • 5 but up to 8 such assignments :**15 marks** • 9 but up to 10 such assignments :**20 marks** • More than 10: **25 marks**	Work Order/ Completion Certificates from the client	**25 marks**
4	Supply orders to the government colleges/ universities/ Government agency/ Educational Department/ Educational or Research Institutions, funded by State Government/ Central Government of India above Rs. 2 Crore in each work order.	Bidders must have successfully undertaken the work/Ongoing projects will be considered. • 1 but up to 3 such assignments :**5 marks** • More than 3 such assignments: **10 marks**	Work Order/ Completion Certificates from the client	**10 marks**

5	Service Centre	• Service Centre in Bihar: **5 Marks**	Rent document/Centre establishment/ Deed/establishment/ Deed/any other relevant documents	**5 Marks**
6	An undertaking (self-certificate) that the agency has Manpower having domain knowledge of Lab Equipment.	• Below 10 employees: **10 Marks** • 11 to 50 employees: **15 Marks** • More than 50: **20 Marks**	Bidder must furnish a declaration on the company letter head about actual number of employees. If number of employees is more than 20 then Manpower Certificate issued by the Chartered Accountant with PF/ESIC Certificate/TDS form/26AS of employee	**20 Marks**

Note: -

- Notwithstanding anything contained in this tender document, technical assessment shall be made at the sole discretion of the University and its decision shall be final and not challengeable.
- All the bidders to note that the bidder getting / securing minimum 60 marks and above out of the 100 marks as shown in evaluation table, will be considered as technically qualified and Commercial/financial bid of only those bidders shall be opened.
- In case of a tie in the L1 price, the technical evaluation score will be considered for the allotment of work. If there is a tie in both the L1 price and the technical evaluation score, the work will be awarded based on the highest annual turnover submitted in the tender.

8.2.1 Terms and conditions for qualifying technical evaluation:

i. For every quoted item, the bidder shall clearly specify the OEM's make and model. Further, relevant supporting documents like catalogue, brochure, or datasheet indicating the detailed technical specifications are required to be submitted with the bid.

ii. The Committee will review the quoted model with reference to its market acceptance, feedback from existing users, and brand reputation. It will also be checked against the tender requirements and technical parameters to confirm compliance. Bids lacking adequate product details or authentic supporting documents are liable to be rejected.

iii. The bidder is required to provide an undertaking stating that the equipment being

offered is in complete conformity with the technical requirements and specifications outlined in the tender. Any deviation from the declared specifications after giving such an undertaking will be treated as misrepresentation, and appropriate action, such as bid rejection, forfeiture of the Earnest Money Deposit (EMD), or blacklisting, may be taken against the bidder.

iv. Conditional bids shall be summarily rejected.

8.3. Financial Bid Evaluation

The Financial Bids of technically qualified bidders will be opened on the prescribed date in the presence of bidder representatives. In the event that no bidders are present, the tender will still be opened as scheduled. Thus, presence of bidders or their representatives during opening of financial bid is not compulsory.

9. Appointment of vendor

9.1. Right to reject Proposal

LNMU reserves the right to accept or reject any proposal, and to annul the tendering process / Public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for LNMU action.

9.2. Performance Guarantee

The University will require the selected bidder to provide an irrevocably, unconditionally Performance Bank Guarantee, within 21 days from the Notification of award, for a value equivalent to 5% of the total cost of ownership. The Performance Guarantee should be valid for a period of 12 months from the date of award of contract. The Performance Guarantee shall be kept valid till completion of the supply order and Warranty period. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the supply order and Warranty period. In case the selected bidder fails to submit performance guarantee within the stipulated time, LNMU at its discretion may cancel the order placed on the selected bidder without giving any notice. LNMU shall invoke the performance guarantee in case the selected Vendor fails to discharge their contractual obligations during the period or LNMU incurs any loss due to Vendor's negligence in carrying out the supply order implementation as per the agreed terms & conditions.

Further, failure to submit the performance guarantee within the stipulated time, LNMU will initiate the process for confiscation of EMD from the L1 bidder and initiate the award of contract to the next L2 bidder post-negotiation.

9.3. Signing of Contract

Post submission of Performance Guarantee by the successful bidder, LNMU shall enter into a contract, incorporating all clauses, pre-bid clarifications and the proposal of the bidder between LNMU and the successful bidder.

9.4. Sub-Contracting, Consortium and Joint Ventures

Consortium, Joint venture, AOP (Association of Persons), subletting, Subcontracting and Outsourcing will not be allowed.

9.5. Transition And Exit Plan:

- The Selected Vendor shall ensure that the transition is smooth in case the contract is terminated or foreclosed with mutual consent. In addition to the cancellation of contract, the University reserves the right to charge appropriate penalties and liquidated damages from the selected agency.
- All risks during the transition stage shall be properly documented to ensure smooth transition without any service disruption.
- The transition plan along with the period shall be mutually agreed between the firm and the University when the situation occurs. Selected Vendor shall be released from the project once successful transition is done meeting the parameters defined for the successful transition.

10. Terms and Conditions: Applicable Post Award of Contract

10.1. Right to Terminate the Process

LNMU may terminate the RFP process at any time and without assigning any reason. LNMU makes no commitments, express or implied, that this process will result in a business transaction with anyone.

This RFP does not constitute an offer by LNMU. The bidder's participation in this process may result in LNMU selecting the bidder to engage towards execution of the contract.

LNMU reserves the right to cancel the contract entered with the selected bidder and recover expenditure incurred by LNMU under the following circumstances: -

a) The selected bidder commits a breach of any of the terms and conditions of the bid.
b) The bidder goes into liquidation, voluntarily or otherwise.
c) If the selected bidder fails to complete the assignment as per the timelines prescribed in the RFP and the extension if any allowed, it will not be a breach of contract.
d) LNMU reserves its right to cancel the order in the event of delay and forfeit the bid security as liquidated damages for the delay.
e) If deductions of account of liquidated damages exceed more than 10% of the total contract price.
f) In case the selected bidder fails to deliver the quantity as stipulated in the delivery schedule, LNMU reserves the right to procure the same or similar product from alternate sources at the risk, cost and responsibility of the selected bidder.

10.2. Liquidated Damages

a) Notwithstanding LNMU's right to cancel the order, liquidated damages for late delivery at 1% (One percent) of the undelivered portion of order value per week will be charged for every week's delay in the specified delivery schedule subject to a maximum of 10% of the value of the order value.

b) Liquidated damages for late commissioning at 1% (One percent) of the order value per

week will be charged for every week's delay in commissioning to a maximum of 10% of the value of the order value.

c) Please note that the above LD for delay in delivery and delay in commissioning are independent of each other and shall be levied as the case may be.

d) LNMU reserves its right to recover these amounts by any mode such as adjusting from any payments to be made by LNMU to the bidder. Liquidated damages will be calculated on a per week basis.

10.3. Limitation of Liability

a) Neither party shall be liable to the other for any special, indirect, incidental, consequential (including loss of profit or revenue), exemplary or punitive damages whether in contract, tort or other theories of law, even if such party has been advised of the possibility of such damages.

b) The total cumulative liability of either party arising from or relating to this contract shall not exceed the total amount paid to the Bidder by the client under that applicable statement of work that gives rise to such liability (as of the date the liability arose); provided however, that this limitation shall not apply to any liability for damages arising from (a) Willful misconduct or (b) Indemnification against third party claims for infringement.

10.4. Penalty

a) The Bidder shall perform its obligations under the agreement entered into with LNMU, in a professional manner.

b) The Bidder should perform all the activities as per timelines and parameters stipulated by LNMU in this RFP, failing which LNMU may at its discretion impose penalties on the Bidder as defined in the RFP. The penalties on the delivery of the Lab Equipment will be deducted from the payment to the vendor @ 1% of the project cost per week subject to a maximum of 10% or termination of the contract.

10.5. Dispute Resolution Mechanism

In case any dispute between the Parties does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Bihar and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The Provisions of this RFP shall be governed and construed in accordance with the Laws of India and would come under the exclusive jurisdiction of the High Court, Patna, Bihar.

10.6. Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or LNMU as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics.
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
- Terrorist attack, public unrest in work area provided either party shall within 10 days from occurrence of such a cause, notifies the other in writing of such causes.

The bidder or LNMU shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

10.7. Fraud Or Corrupt Practices

a) The Bidders shall observe the highest standard of ethics during the Bidding Process and after the issue of the Letter of Intent (LOI)/Work Order (WO) and during the subsistence of the Agreement. Notwithstanding anything to the contrary contained in this RFP, or in LOI/WO or the Agreement, LNMU may reject a bid, withdraw the LOI/WO, debar the bidder for a period of one year from participating in the future projects of the University or terminate the Agreement, as the case may be without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices. In such an event, LNMU shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security as mutually agreed genuine pre- estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such Bidders Proposal.

b) Without prejudice to the rights of the University under Clause above and the rights and remedies which the University may have under the LOI /WO or the Agreement, if a Bidder, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI /WO or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by LNMU during a period of 1 (one) year from the date such Bidder is found by the University to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

c) For the purposes of this Section, the following terms shall have the meaning here in after respectively assigned to them:

    i. "**Corrupt practice**" means the offering, giving, receiving, or soliciting of anything of value, pressurizing to influence the action of a public official

in the process of tendering and execution of the project.

ii. "**Fraudulent practice**" means aim is representation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process.

iii. "**Coercive practice**" means impairing or harming or threatening to impaired harm, directly or indirectly, any person or property to influence any person's participation or action in the Selection Process.

iv. "**Undesirable practice**" means (I) establishing contact with any person connected with or employed or engaged by LNMU with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest.

v. "**Restrictive practice**" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection process.

11. Technical Requirements

i. The successful Bidder shall provide the Chemicals, Glasswares, Plasticwares and Lab Equipments as required from reputed OEMs. The Bidder shall supply all components as per requirements of the RFP. The Bidder shall be responsible for supply of the Lab Equipment and installation at site.

ii. All Lab Equipment proposed by the bidder shall be licensed to LNMU and will be the property of LNMU. The Bidder has to prepare and submit a delivery report including details of all components supplied. The delivery report will be validated by LNMU.

iii. The Lab Equipment provided by the Successful Bidder shall meet all the Service Level requirements as mentioned in the RFP.

iv. Successful bidders will be expected to bring all the installation equipment and tools required for the installation of the Equipment. All the work shall be done in a conscientious manner as per the OEM guidelines and best industry practices. The Chemicals, Plasticwares, Glasswares and Equipments shall be subjected to inspection at various stages. Local regulation/codes shall be followed at all times. The Successful Bidder shall follow all Safety Regulations and Practices at the time of installation and implementation.

v. The Successful Bidder shall not cause any damage to buildings/installation site and property and will perform restoration to the original condition to the satisfaction of Board authorities, if any damage occurs.

vi. LNMU shall perform the acceptance test (AT) ensuring that all the Lab Equipment supplied are performing as per the specification. LNMU would issue certification of completion after verifying availability of all the Lab Equipment.

vii. The bidder should provide all relevant documentation including:

- Original Manuals, Data Sheets, Installation Documents and any other documents

relevant to the hardware and peripherals supplied by the Bidder.

- Documentation should be provided by the selected Bidder on a regular basis as and when desired by LNMU during the entire period of Contract.

12. Service Level Agreement

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the Bidder to LNMU for the duration of this contract.

12.1. Implementation Service Levels

Measurement	Target
Installation and commissioning of Lab Equipment	Within 12 weeks from receipt of purchase order

12.2. Manpower Related Service Levels

The support personnel should be available over the phone. In critical situations or when directed by LNMU, the support personnel must be available on site within 4 Days of request from LNMU at the locations. Non-availability of the support personnel as stated above will be treated equivalent to a single occasion of non-conformity.

Measurement	Target	Penalty
No of Occasions of Non-Conformity	Up to 5 in year	No penalty
	More than 5 occasions of non-conformity in a year	0.2% of the Performance Bank Guarantee for every occasion of non-conformity exceeding 5
	More than 25 occasions of non-conformity in a year	0.5% of the Performance Bank Guarantee) for every occasion of non-conformity exceeding 25 (in addition to the penalty for exceeding 5 occasions of non-conformity as mentioned above)

13. Details on Scope of Work

The scope of work for this RFP will include the following activities:

i. The scope of the work for this Request for proposal (RFP) for Selection of Agency for Chemicals, Glasswares, Plasticwares and Laboratory Equipment Supply, Installation and Services for its maintenance to LNMU. It will enrich academic potential and vibrancy along with supporting and consolidating research. The purpose of this RFP is to on board potential agencies which have experience of supplying highly sophisticated scientific equipment manufactured in India or abroad for research purposes in the University.

ii. Maintenance of the supplied laboratory equipment for a period of 1 year, followed by Annual Maintenance Services (AMS) for an additional 2 years, as per the rates quoted

in the financial bid and stipulated in the final signed contract.

iii. The bidder will be responsible for providing Standard Laboratory Equipment for providing requisite equipment for the University as per their requirement and specification.

iv. Chemical, Glassware, Plasticware and Equipment to be supplied shall be latest branded models manufactured with 100% new OEM parts. All products to be supplied should be part of current production as on the date of award of the tender. For the purpose of this contract "current production" shall mean that the equipment model has been manufactured and introduced in the market as new equipment. Refurbished equipment is not acceptable in any case.

IMPORTANT NOTE: Do not mention Best Quality/Good Quality/Superior Quality, etc. Instead give the make and brand of items quoted.

14. Equipment:

List of Equipment to be procured is attached below in the Annexure A as per BOQ Document.

NOTE:

i. Technically qualified lowest bidder (L1) for total BOQ will be selected.

ii. In case of a tie at the L1 price, the work shall be awarded to the bidder who has obtained highest score in the technical bid and further tie then with the highest turnover as submitted in the bid.

14.1. Installation of Lab Equipment

The items should be installed and demonstrated by the supplier at the site of the consignee immediately after receipt of the item and the same will be put under operation to the satisfaction of LNMU who will test the performance of the items. No separate charges for installation/ demonstration will be paid to the party beyond the quoted prices.

14.2. Warranty period, maintenance & technical support

The warranty period of all capital items shall commence after receipt of the items in good working condition and from the date of its satisfactory installation and acceptance test by the consignee.

The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

All the Capital items / Lab Equipment shall be covered under One year onsite comprehensive warranty followed by 2 years AMS (Annual Maintenance Service) with Technical support services.

14.3. Deliverables & Timelines

The Bidder should deliver the Chemicals, Glasswares, Plasticwares, Lab Equipment, commissioning and Installation within 12 weeks from the date of issuance of purchase Order.

15. Payment Terms and Procedure

15.1. Payment Schedules

The payment amount will be equal to the amount specified in the financial bid of the bidder. Payments will be released only on satisfactory acceptance of the deliverables for each Lab at each location (as mentioned in this RFP) as per the following schedule:

i. 50% of the contract amount towards the respective lab shall become payable by LNMU after the delivery of the items as per the RFP.
ii. 40% of the contract amount towards respective lab shall become payable by LNMU upon completion of setup configuration and test acceptance.
iii. 10% of the contract amount shall become payable by LNMU after the submission of Successful completion Certificate from the user.

Annexure A- List and Technical Specification of Chemicals, Plasticwares, Glasswares, Equipment and ancillary items

Annexure B: TECHNICAL BID TEMPLATES

The bidders are expected to respond to the RFP using the forms given in this section and all documents supporting Technical Evaluation Criteria.

Form I: Particulars of the Bidders
Form II: Compliance Sheet for Pre-Qualification Criteria
Form III: Self Scoring by the Firm with document
Form IV: Letter of Proposal
Form V: Declaration by the bidder in case of non-submission of EMD
Form VI: Format of Bank guarantee for EMD submission
Form VII - Undertaking of Authenticity for Chemicals, Glasswares, Plasticwares and Lab Equipment
Form VIII: - Notarized affidavit about non-Black-Listing
Form IX:- Format of Bank guarantee for performance security deposit

Annexure C: FINANCIAL PROPOSAL TEMPLATE

Forms to be used in Financial Bid Proposal

Form 1: Financial Proposal

Annexure A - Technical Specification of Chemicals, Glasswares, Plasticwares and Equipments

S.No	Name of the Equipment/ Glasswares/ Plasticwares/ Chemicals	Quantity
1	Soil Testing Kit for Macronutrients NPK	1
2	Immersion Oil 30ml vial	5
3	Distilled Water 500ml	37
4	Conical Flask 100ml Glass	100
5	L-Serine, 100g	1
6	Benedict's solution 500ml	5
7	Conical Flask 250ml Glass	100
8	L-Glutamic Acid, 100g	1
9	L-Threonine, 100g	1
10	Kipp's Appratus	2
11	Starch 500 gm	2
12	Conical Flask 500ml Glass	100
13	Iodine Solution 100ml	8
14	D-Glucose (anhydrous) 250gm	2
15	Heidenhain's iron Haemotoxylin 250ml	1
16	Conical Flask 1000ml Glass	100
17	L-Glutamine, 100g	1
18	L-Tryptophan, 100g	1
19	Potassium ferrocyanide 500g	4
20	Aluminium chloride 500g	4
21	L-Cysteine, 100g	1
22	L-Tyrosine, 100g	1
23	Methylene Blue 125ml	5
24	Acetone 500ml	20
25	Measuring Cylinder 100ml Glass	50
26	Autoclave Teflon lined hydrothermal SHILPENT max operating temperature 220°C, Warranty: 12 Months, Working Pressure Range: ≤ 3MPA or 30Bar, Heating and Cooling Rate: ≤ 5 Degree C/min Material: Shell made of high quality stainless steel (SS) 316 Inner PTFE (Teflon Liner) Chamber	4
27	Laboratory Refrigerator Capacity: 310 to 350 ltrs Temperature Range: 2 to 8 C Cooling method – Frost Free Refrigerant type – nonCFC, non HCFC Microprocessor based Digital Temperature Controller Internal Dimension - 580x533x1122 mm External Dimension - 650x673x1762 mm Exterior Material - PCM Pre-coated Plate Interior Material - HIPS Shelf Matrial - Plastic steel wire Adjustable Shelf Height Door with lock Large display for better view Base with 4 castor wheels with brakes LED chamber light 4 or 5 wire mesh shelves or trays Glass/ transparent door.	1
28	Refrigerator Domestic type, Double door Product Dimension (WxHxD, mm): 913 x 1790 x 735 Product Weight (kg): 110 Door Cooling: Yes LINEAR Cooling: Yes ENERGY CONSUMPTION GRADE: 3 Star Compressor Type: Smart Inverter Compressor (BLDC) Finish (Door) : Urban Steel. At least 10 years warranty on compressor.	2
29	UV Water Purification System Part 1: High Quality Pre Filter Before Main Unit to counter the feed water contamination Manufactured by same equipment manufacture 1. High quality Prefilter with Low pressure switch cuts off system which can able to take care high TDS up to 5000 ppm and high SDI up to 50 having 5 Micron and 1 Micron with DC diaphragm pump to boost water pressure from 0 to minimum 2.5 bar at approximately 120 L/Hr with noise levels of Less	1

	than 50 Db. Two separate model should be there for Type-I and TYPE III systems Part 2: Main Unit Lab Grade Water purification System (Type III) Feed water acceptance capability Specifications for main unit- Conductivity: < 2000 µS/cm, Fouling Index (SDI): upto 5, TOC< 2000 ppb, LSI< 0.3 Product Water and main unit should meet or exceed Type III water quality • Pure water production rate > 40 Ltrs/Hr , • Organics and particulates > 99% rejection • RO recovery loop. • Rinsing valve • Twist and lock mechanism for all the cartridges , so that user itself can replace it. • Transparent 3.5 liter mobile water tank . • It should take only 6 min to fill the 3.5 liter tank. • Holder on tank for easy mobility. • Main machine foot print size - < A4 size paper for space management . Part 3: Ultra-Pure Water (Type I) should meet: Ultrapure (Type 1) water: Typical Water Delivery Flow Rate (L/min) ……..drop by drop to 1.6L/min Ultrapure Water Resistivity (MΩ.cm at 25°C) ..... 18.2 Microorganisms/bacteria (cfu/L) – < 1 Particulates < 0.22 µm (/mL) – None Pyrogen Levels (EU/mL) –< 0.001 RNase Level (pg/mL) –< 1 DNase Level (pg/mL) –..... < 5 Proteases < 0.15µg/mL TOC (ppb) ..... ≤ 5 ppb • Twist and lock mechanism for all the cartridges , so that user itself can replace it. • Automatic recirculation. • Transparent 3.5 liter switch water tank. • Holder on tank for easy mobility. • Main machine foot print size - < A4 size paper for space management . • UV lamp- 185 nm and no need to replace this lamp for life time of machine. • CE, cUL, FCC, All certificates need to be submitted along with tender • ISO 9001-2015 and ISO 14001-2015, and ISO 50001-2018	
30	Double Distillation Unit 2.5 LPH Distilled Water Output Capacity Bench Top Open Type Quartz with required accessories	1
31	Stopwatch- Digital with countdown timer and beep alarm	10
32	Kjeldahl digestion and distillation apparatus: System Consists of: Digestion Unit, Distillation Unit, Fume Hood Suitable Digestion/Distillation stand provided: Yes (Provided) Digestion/Distillation unit stand base material: Powder Coated Mild Steel Heating System (Digestion Unit) Type: Heating Mantle Total Heating Places (Digestion Unit): 6 Maximum Heating Temperature (Digestion Unit): 200 Deg C or better Heating System (Distillation Unit): Heating Mantle Condenser Duct Material : Stainless Steel Suitable Fume Hood Provided: No Type of Fume Hood: Ducted Fume Hood	1
33	UV/VIS Spectrophotometer- Nano, Micro-Volume • Stray Light <0.5% at 340nm and 220nm • Source Lamp Xenon lamp. • Beam Type Single • Bandwidth 5 nm • Min Wavelength (nm) 198 • Max Wavelength (nm) 1000 • Wavelength Accuracy ± 2nm • Wavelength Reproducibility ± 0.5nm • Pathlength (mm) 10-100 • Min Photometric - Transmittance (%T) 0 • Max Photometric - Transmittance (%T) 199.9 • Min Photometric - Absorbance (A) -0.3 • Max Photometric - Absorbance (A) 2.5 • Photometric Accuracy ±1%T, ±0.01Abs at 1.000 Absorbance • Detector Silicon photodiode • Concentration -300 to 9999 • Data Logging Capability 3.6GB • Output USB Type A x 2; USB Type B x 1; Ethernet RJ45 • Display Type Touchscreen • Materials of Construction White ABS Plastic • Power (VAC) 100 to 240 • Power (Hz) 50/60 • CE Certified • Nucleic acid dsDNA, ssDNA, RNA, Oligonucleotides, 260/280, 260/230, Variable Ratio • Protein BCA, Bradford, Lowry, Biuret, Direct UV • Maximum concentration 6000ng / µl (dsDNA) (at 0.2mm) • Detection limit 2ng/µl (dsDNA) (at 0.5mm)	1

	• Measurement time < 6.5 seconds • Minimum sample size 0.5µl (at 0.2mm),1.0µl (at 0.5mm) • Maximum sample size 5µl • 7" high-definition colour touchscreen and interface • Programmed measurement modes must include photometric for single wavelength measurement, concentration for measuring concentration using a standard or factor, spectrum for a high purity scan across the entire wavelength range, quantitation with the ability to create a calibration curve using up to 20 standards, kinetics to monitor change over time, as well as multi-wavelength mode. • Must be able to view scans and curves, zoom in and out, and select points right on the screen even when wearing gloves. The home screen must provide easy access to measurement modes as well as saved results and methods.	
34	Water Bath 1. It should have Tank size of aprox 320 x 300 x 150 mm (aprox 14Ltr). 2. The complete construction should be Fully stainless steel, including bottom 3. The Tank should be Seamless Tank for water bath 4. Stirring should be achieved by continuously rated self cooling motor with SS shaft & propeller of anticorrosive material. 5. It should have LOW & High Water level marking inside the tank. 6. It should have Temperature Range: Ambient +5°C to 90°C. 7. It should have Top mounted controller with flush but embossed button panel for easy setting, access and check up of operating status 8. Water bath should have microprocess based temerature controller with facility to timer & temperature by user. 9. It should have Energy efficient Top suspended tubular heater. 10. It should have Independent over-temperature self- resetting safety cut-off with alarm. 11. It should have Uniformity: + 0.2°C at 37°C. 12. It should have Resolution of : 0.1°C. 13. Water Bath should be CE certified 14. It should be supplied with A pack of float balls for containing evaporation loss. 15. Supply Voltage: 230 V AC, 50 HZ, Single phase. 16. Should be ISO Certified and should submit photocopy for the same.	4
35	Water Bath 1. It should have Tank size of aprox 300 x 150 x 150 mm (aprox 5Ltr). 2. The complete construction should be Fully stainless steel, including bottom 3. The Tank should be Seamless Tank for water bath 4. Stirring should be achieved by continuously rated self cooling motor with SS shaft & propeller of anticorrosive material. 5. It should have LOW & High Water level marking inside the tank. 6. It should have Temperature Range: Ambient +5°C to 90°C. 7. It should have Top mounted controller with flush but embossed button panel for easy setting, access and check up of operating status 8. Water bath should have microprocess based temperature controller with facility to timer & temperature by user. 9. It should have Energy efficient Top suspended tubular heater. 10. It should have Independent over-temperature self- resetting safety cut-off with alarm. 11. It should have Uniformity: + 0.2°C at 37°C. 12. It should have Resolution of : 0.1°C. 13. Water Bath should be CE certified 14. It should be supplied with A pack of float balls for containing evaporation loss. 15. Supply Voltage: 230 V AC, 50 HZ, Single phase. 16. Should be ISO Certified and should submit photocopy for the same.	6
36	Hot Plate with Magnetic Stirrer Stainless steel top with energy and speed regulator Power: 550 Max. stirring quantity(water)(Liters): 5 Stirring paddle (PTFE coated): Q-19A (9 X 35mm) Motor rating input (W):18 Motor rating output(W):10 Speed range (rpm): 150-1500 Speed/ Temperature display : LCD Speed Display resolution (rpm): 1 Top plate material:Stainless steel Dimension of top plate (mm):157 Heating power (W): 500 Temperature range: Upto 340 C Control accuracy of heating temperature: 1 C Residual heating warning alarm Above: 50 C Control accuracy of heating temperature with PT-1000: 0.2 C External temperature sensor: PT-1000	21
37	Hot Air Oven 1. Oven should have Chamber capacity of aprox 91 ltrs. 2. It should have Internal dimensions (WxDxH): 450x450x450 mm aprox. 3. It should have exterior construction of mild steel with heat cured epoxy coating. 4. It should have internal chamber of stainless steel with CNC Press Punched back panel for internal efficient circulation. 5. It should have door construction having double tempered glass window within the main door.	4

	6. It should have Incoloy sheathed spread out shaped heater for uniformity and efficient heating. 7. It should have Impeller type dynamically balanced aluminium blower for internal circulation. 8. It should have non contact type door switch for auto cut off when door opens. 9. It should be supplied with two Stainless steel Wire Mesh Shelves. 10. It should be fitted with stainless steel vertical channels (CNC Press Punched) for height adjustment of trays in steps of 25mm. 11. It should have seamless round cornered internal chamber ensures easy cleaning. 12. The bottom of internal chamber should be Solid and plain without any electrical fittings. 13. It should have digital PID temperature controller with flush but embossed button panel for easy setting, access and check up of operating status. 14. It should have Stainless steel sheathed PT100 sensor for precise monitoring & control. 15. The controller should have timer in format HH:MM / HHH:M mode with bypass 0 mode; auto tuning and alarms. 16. The controller should have Seven segment LED dual display. 17. It should have Temperature range: 50ºC to 200ºC 18. It should have control accuracy of ±0.5ºC at 120°C 19. It should have Over temperature safety protection. 20. Should be equipped with MCB for electrical safety. 21. Should be CE certified. 22. Should be ISO certified & should submit photocopy for the same. 23. Should work on power supply : 230Vac, Single Phase, 50Hz.	
38	Electronic Analytical Balance Display : LED Touch screen with optimized for users in laboratories Calibration : Internal calibration isoCAL, External calibration Special built-in lab applications : Mixing| Net Total, Components| Totalizing, Statistics, Weighing | Dosing, Density, Percentage weighing, Check weighing, Peak Hold, Counting, Unstable Conditions, Mass Unit conversion, Calculation| Free Factor| Animal Weighing Protection : Chemical resistant finish of the housing Assures SOP : With Self notification if the calibration is outside the normal range Password protection : Single Level password protection Anti-theft lock : Kensington lock and lockdown capability for cable or chain ID creation : Sample ID and Batch ID creation possible Protection : Chemical resistant finish of the top housing Glass parts of the draft shield are coated to reduce electrostatic influences In-use cover Dust cover for balances with draft shield Interface : Future Proof USB type C interface, Industry Proof RS232 9-pin interface; Backward Compatibility (by Using RS232 port) Data Transfer : Direct data transfer to Microsoft® Windows programs Weighing Pan : Best Repetability with rectangular weighing pan Draft Shield : Can be removed completely Language : Built In language, English, German, French, Spanish, Portuguese, Russian, Polish Weighing System & Technology: EMC, Monolithic Certification : CE & ISO Certified.	7
39	Precision Balance Maximum Capacity : 600 gm Readability : 0.01 gm Repeatability (sd) : 0.01 gm Linearity (+/-) : 0.02 gm Tare Range (Subtractive) : -600 gm Pan Size (mm) : 118 Ø Display : Red LED Response time : 2 - 3 sec Interface : RS 232C Application : Counting & Unit conversion Power Supply : AC230V, ± 10%, 50-60 Hz Standard Features • Advanced microprocessor based design • Rugged & reliable ABS hosing design. • Compact and space saving. • Stainless steel weighing platter • Built in rechargeable battery . • Foldable draft Shield interior. • Fast weighing response time. • Auto power off (Standby mode) • Bubble water indication for uniform surface level • Safety overload 150% of the scale capacity • Remote Display.	1
40	Electronic Weighing Balance Machine Capacity : 1200g; Readability : 0.01g; Repeatability (+/-) : 0.01g; Linearity (+/-) : 0.02g; Min. Weight As Per Usp ; 8.2g Calibration : Automatic Externat; Response Time : 2-3sec. Display : Alpha Numerical LCD Backlite Display with A.E.P. Pan Size (mm/inch) : 128x128/5.0”x5.0” Units of Measure : gm,mg,ct,GN,mo,oz,dwt,t1T,t1H,t1S,mom,Bat,MS Tare Range : Full Capacity; Operation Temp. : 10ºC ~ 40ºC Sensitivity Drift : ± 1ppm / ºC in temperature +15º to 35ºC	3

	Application Modes : PCS, % Weighing, Animal / Dynamic Weighing Check Weighing, Automatic Density, Determination, Formulation, Automatic Statistic Calculator etc. Compliance: ISO GLP / GMP / USP Compliance Power Supply : A/C Adapter 230 V-115 V +/- 20% 50-60 Hz NET WT. / GROSS WT.:5kg/6kg STANDARD FEATURES • Easy to read Large backlite LCD display with A.E.P. (Advanced Eye Protection) • Standard RS 232 C interface. • Windows Direct Communication • ISO CAL Perfect Self Auto Calibration When the ambient temperature changes by a specific value or once a defined time interval has elapsed, it performs External Calibration & fully automatic Internal calibration with built in motorized calibration weight for CY - C Series • Sensor Type : Electromagnetic force compensation • IP Protection : IP54 • Dye cast aluminium design for long term stability and accurate results • Density measurement for solid and liquid [With optional eqp. & software] • Auto Zero tracking • Sprit leveling : Balance have adjustable feet for maintaining / providing uniform level. • Overload protection. • Two Tare Keys (Left & Right) • Programmable smart keys provided for shortcut access to applications like Power On/Off, Tare etc. • Balance are equipped with a lug for optional anti-theft device.	
41	Microscope Slides Material: Borosilicate Glass Size: 75mm x 25mm (3 inches x 1 inch) or 76mm x 26mm (3 inches x 1 inc Thickness: 1mm to 1.2mm (0.04 inches to 0.05 inches)	150
42	Cover slip Material: Soda-lime glass or Borosilicate glass Size: 18mm x 18mm, 22mm x 22mm, or 24mm x 24mm Thickness: 0.13mm to 0.17mm (0.005 inches to 0.007 inches)	2
43	Moisture Meter	1
44	4-(1,2,2-Triphenyl Vinyl)benzaldehyde 5 gram	2
45	Measuring Cylinder 250ml Glass	50
46	50 ml Rimmed Polypropylene, Polyethylene Test Tube	100
47	L-Histidine, 100g	1
48	Laminar Air Flow Horizontal CAH 1200. At least 3 years warranty. Cleanliness: ISO Class 5 as per ISO 14644-1 Direction of Flow: Horizontal Working Size (WxDxH)in mm: 1200x600x600 (W4' x D2' x H2') Overall Size (WxDxH)in mm: 1300x750x2100 approx. Particle Retention : 0.3 Micron & Above Noise Level: 65 decibel on "A" scale ± 5 Velocity : 90 Feet / Minute ± 20 Worktable : By IS 304 Grade Stainless Steel surface Front door : by 4 mm thick Polycarbonate – Manual Vertical Sliding Type U V lamp: Make – PHILIPS, 3 feet, 30 watts – 1 No Illumination: LED Tube Fitting Pressure (ΔP): 0–25mm range differenctioal pressure sensor with Digital Display Other accessories: 5 /15 Amp power point, Gas inlet, Castor Wheels & Power chord Power Supply: 230V, Single phase, 50 Hz HEPA Filter Media : Ultra clean glass fiber paper – imported Type : Mini-Pleat HEPA Filter, Separator less Retention: 0.3 Micron with a max. 12mm WG Efficiency: 99.997%, Grade: H14 rating PRE Filter: Media : Synthetic, non-woven polyester fibers Casing : Aluminium Powder Coated frame Retention : 5 Micron & above Efficiency : 95 % Material of Construction: The Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish provided with the support stand	2
49	Micro Pipettes Variable Volume Single Channel 0.5 to 10ul Air cushioned, Mechanical, 4 digit volume display, Conforms with ISO 8655, UV resistant. Specifications: > Mechanical, fully autoclavable, variable volume, air-cushion, two button operated handheld pipette for applications involving high reproducibility. > Pipette should have four-digit display with the display window facing user > Pipettes should have two button operation mechanism. One for volume setting and Operation other for tip ejection. > The smallest adjustable volume of each pipette model (≥ 10 µL) should be as low as 5 % of the pipette nominal volume > The pipette should offer easy and fast volume adjustment speeds to for quick volume settings to achieve time efficiency	8

	> The control button height should not exceed 2.9 cm to ensure added comfort for users during longer operations > The pipette should feature a volume lock offering secure and confident set volumes during pipetting > Should feature user adjustable liquid type setting for higher accuracy to handle difficult and high-density liquids. Must offer the flexibility to adjust back to factory setting without the need for calibration > Pipette should come with two adjustment options – Calibration adjustment & Temporary adjustment > Quick connection clip to remove the lower part easily > Pipette Piston should offer high resistance to heat, acids and alkalis, mildew, bleaches, aging, sunlight and abrasion > The pipette should be fully autoclavable without disassembly (121 °C, 1 bar, 20 min), UV resistant, and suitable for Hydrogen peroxide (H2O2) sterilization > Pipette should be color-resistant to long term UV irradiation	
50	Micro Pipettes Variable Volume Air cushioned, Mechanical, 4 digit volume display, Conforms with ISO 8655, UV resistant Single Channel 2 to 20ul Specifications: > Mechanical, fully autoclavable, variable volume, air-cushion, two button operated handheld pipette for applications involving high reproducibility. > Pipette should have four-digit display with the display window facing user > Pipettes should have two button operation mechanism. One for volume setting and Operation other for tip ejection. > The smallest adjustable volume of each pipette model (≥ 10 µL) should be as low as 5 % of the pipette nominal volume > The pipette should offer easy and fast volume adjustment speeds to for quick volume settings to achieve time efficiency > The control button height should not exceed 2.9 cm to ensure added comfort for users during longer operations > The pipette should feature a volume lock offering secure and confident set volumes during pipetting > Should feature user adjustable liquid type setting for higher accuracy to handle difficult and high-density liquids. Must offer the flexibility to adjust back to factory setting without the need for calibration > Pipette should come with two adjustment options – Calibration adjustment & Temporary adjustment > Quick connection clip to remove the lower part easily > Pipette Piston should offer high resistance to heat, acids and alkalis, mildew, bleaches, aging, sunlight and abrasion > The pipette should be fully autoclavable without disassembly (121 °C, 1 bar, 20 min), UV resistant, and suitable for Hydrogen peroxide (H2O2) sterilization > Pipette should be color-resistant to long term UV irradiation	8
51	Micro Pipettes Variable Volume Air cushioned, Mechanical, 4 digit volume display, Conforms with ISO 8655, UV resistant Single Channel 20 to 200ulSpecifications: > Mechanical, fully autoclavable, variable volume, air-cushion, two button operated handheld pipette for applications involving high reproducibility. > Pipette should have four-digit display with the display window facing user > Pipettes should have two button operation mechanism. One for volume setting and Operation other for tip ejection. > The smallest adjustable volume of each pipette model (≥ 10 µL) should be as low as 5 % of the pipette nominal volume > The pipette should offer easy and fast volume adjustment speeds to for quick volume settings to achieve time efficiency > The control button height should not exceed 2.9 cm to ensure added comfort for users during longer operations > The pipette should feature a volume lock offering secure and confident set volumes during pipetting > Should feature user adjustable liquid type setting for higher accuracy to handle difficult and high-density liquids. Must offer the flexibility to adjust back to factory setting without the need for calibration > Pipette should come with two adjustment options – Calibration adjustment & Temporary adjustment > Quick connection clip to remove the lower part easily > Pipette Piston should offer high resistance to heat, acids and alkalis, mildew, bleaches, aging, sunlight and abrasion > The pipette should be fully autoclavable without disassembly (121 °C, 1 bar, 20 min), UV resistant, and suitable for Hydrogen peroxide (H2O2) sterilization > Pipette should be color-resistant to long term UV irradiation	8
52	Micro Pipettes Variable Volume Air cushioned, Mechanical, 4 digit volume display, Conforms with ISO 8655, UV resistant Single Channel 200 to 2000ulSpecifications: > Mechanical, fully autoclavable, variable volume, air-cushion, two button operated handheld pipette for applications involving high reproducibility. > Pipette should have four-digit display with the display window facing user > Pipettes should have two button operation mechanism. One for volume setting and Operation other for tip ejection. > The smallest adjustable volume of each pipette model (≥ 10 µL) should be as low as 5 % of the pipette nominal volume > The pipette should offer easy and fast volume adjustment speeds to for quick volume settings to achieve time efficiency > The control button height should not exceed 2.9 cm to ensure added comfort for users during longer operations > The pipette should feature a volume lock offering secure and confident set volumes during pipetting	8

	> Should feature user adjustable liquid type setting for higher accuracy to handle difficult and high-density liquids. Must offer the flexibility to adjust back to factory setting without the need for calibration > Pipette should come with two adjustment options – Calibration adjustment & Temporary adjustment > Quick connection clip to remove the lower part easily > Pipette Piston should offer high resistance to heat, acids and alkalis, mildew, bleaches, aging, sunlight and abrasion > The pipette should be fully autoclavable without disassembly (121 °C, 1 bar, 20 min), UV resistant, and suitable for Hydrogen peroxide (H2O2) sterilization > Pipette should be color-resistant to long term UV irradiation	
53	Micropipette Tarsons Variable volume Single Channel 1 – 10 ul Non-autoclavable	13
54	Micropipette Tarsons Variable volume Single Channel 2 – 20 ul Non-autoclavable	9
55	Micropipette Tarsons Variable volume Single Channel 20 – 200 ul Non-autoclavable	9
56	Micropipette Tarsons Variable volume Single Channel 200 – 1000 ul Non-autoclavable	9
57	Pipette Material: Borosilicate Glass	20
58	Thermometer Pen-type Waterproof Digital Thermometer -40°C to 250°C Blue	40
59	BOD Incubator 1. Chamber capacity - 250 Ltr; inner dimension - 500x500x1000mm 2. Should work on power supply of : 230 V AC, 50 HZ, Single phase. 3. Should have environment friendly CFC free hermetically sealed compressor. 4. Exterior construction should be of MS with heat cured epoxy coating. 5. Interior construction should be of SS 304. 6. Unit should have adjustable shelves in steps of 25mm & made of SS304. 7. Units internal chamber should be round cornered to protect contamination and easy to clean. 8. Units inner door should be - frameless - of tempered safety glass. 9. Units outer door should be of SS304 with gasket & positive sealing. 10. Unit should have PUF insulation. 11. The unit should be mounted on 04 Nos. PU coated castors out of which atleast 2 should have locking mechanism 12. Should have inbuilt Validation port. 13. Should have forced air circulation inside the chamber, to maintain optimum uniformity & control accuracy. 14. Should be equipped with eye level door mounted controller for easy access & monitoring. 15. Should have integrated digital PID controller equipped with auto tuning facility, timer & floating overshoot alarm. 16. Should have chamber illumination with LED strip light. 17. Temperature range should be +5 to 60ºC. 18. Accuracy should be ±0.5°C. 19. Should have floating overshoot alarm. 20. Should have Independent user settable absolute temperature overshoot alarm & cut off. 21. Should be equipped with MCB for Electrical safety. 22. Should be ISO certified & should submit photocopy for the same.	2
60	1-pyrenemethylamine hydrochloride 5 gram	1
61	Measuring Cylinder 500ml Glass	50
62	TLC kit	1
63	Potassium thiocyanate 500g	4
64	Table Top Non-Refrigerated Centrifuge 1. Max centrifugation speed of up to 17500 rpm or more and RCF 30,000 × g or more 2. Max rotor capacity should be 48 x 1.5/2ml tube, 6 x 50ml tube and 2 x MTP plate 3. Should have adjustable ramp function for delicate sample 4. Acceleration and breaking time should be ≤15s 5. Noise level with rotor must be < 59 dB 6. Timer setting: 30 s to 99h, with continuous run 7. Timer countdown to start only when selected rpm is achieved 8. Must have full digital display of time, speed 9. Should have more than 4 program keys for convenient access to routine programs with total memory of > 48nos program 10. Rotor, lid must be autoclavable at 121ºC 11. Height should be ≤30 cm for easier access of the sample 12. Should provide installations list and detail of service facility available in Kolkata 13. Rotor and rotor lid should be metallic only (not plastic) 14. Should provide the documents with respect to the specification asked 15. Should provide CE certificate 16. Power consumption should be less than 480W 17. Centrifuge should be completed with:: Angle rotor for 30 × 1.5/2.0 mL tubes to spin at 20000 × g/14000 rpm or more. Should supply adapter for 0.2ml, 0.5ml PCR tube. Rotor and its lid should be metallic. Lid locking by screw type < half turn, lid	4

	should be 3rd party certified aerosol tight. 2 Years comprehensive warranty.	
65	Table-top Refrigerated Centrifuge 1. Max centrifugation speed of up to 30,000 × g 2. Max rotor capacity should be 48 x 1.5/2ml tube, 6 x 50ml tube and 2 x MTP plate 3. Should have adjustable ramp function for delicate sample 4. Acceleration and breaking time should be ≤15s 5. Noise level with rotor must be < 55 dB 6. Timer setting: 30 s to 99h, with continuous run 7. Timer countdown to start only when selected rpm is achieved 8. Must have full digital display of time, speed 9. 4 to 5 program keys for convenient access to routine programs with total memory of > 48nos program 10. Rotor, lid must be autoclavable at 121ºC 11. Height should be ≤30 cm for easier access of the sample 12. Must have built in condensation drain to drain out the accumulated water from the chamber 13. Must have facility of programmable pre-cooling by day and time 14. Should have inbuilt facility to keep compressor on (avoiding auto off and on) during refrigeration 15. Must have facility to automate the program to shut down the compressor after certain hours 16. Should provide installations list and detail of service facility available in Kolkata 17. Rotor and rotor lid should be metallic only (not plastic) 18. Should provide the documents with respect to the specification asked 19. Should provide CE certificate 20. Should have manufacturer service centre at nearer to Kolkata 21. Centrifuge should be completed with: i) Angle rotor for 30 × 1.5/2.0 mL tubes to spin at 20000 × g/14000 rpm or more. Should supply adapter for 0.2ml, 0.5ml PCR tube. Rotor and its lid should be metallic. Lid locking by screw type < half turn, lid should be 3rd party certified aerosol tight. ii) Angle rotor for 6 × 15 + 6 x 50 mL conical tube rotor to spin at 7,800 × g or more. Rotor and lid should be made up of anodized aluminum. Should have option to spin 5ml conical tube with this rotor. 2 Years comprehensive warranty.	4
66	Table-top minicentrifuge 6/12 x 1.5/2ml tubes Rotor 2 x PCR strip rotor Max 13500 RPM LCD display	5
67	Digital Conductivity Meter Source Frequency : 100 Hz or 1 KHz automatically selected Conductivity Range : 0 uS to 200 mS with 1.0 cell constant (5 decadic ranges) Temperature : 0° C to 100° C (Manual) Display : 3 digits LED Conductivity : 0.1 us Accuracy: Conductivity/TDS : ±1% of f.s. ±1 digit (Conductivity) Cond. Cell Compensation: 1 Cell Constant : 0.9 to 1.1 Power:230 V ±10% 50 Hz Dimensions : 235(W) X 185(D) X 85(H) mm Weight: 1.25 kg (Approx.) Accessories: 1 Cell Constant Cell,Clamp & Stand	10
68	Colorimeter Photoelectric Colorimeter Wavelength Range : 400 nm to 700 nm with 8 optical filters Filter's peak wavelength (typical): 420 nm, 440 nm, 490 nm, 520 nm, 540nm, 570 nm, 600 nm, 700 nm. Measuring Modes : %T & Abs Photometric Resolution : 1%T &0.01in Abs upto 1.99 Abs (0.D.) Display : 3-Digit LED Sample Volume : 1mlin 4mlTest tube Source : White LED Detector: Hermetically Sealed photodiode Power: 230V ±10%, 50 Hz Dimension (WxDxH)in mm: 160X200X100	2
69	Ganong Respirometer	8
70	Autoclave Teflon lined hydrothermal SHILPENT max operating temperature 220°C, Warranty: 12 Months, Working Pressure Range: ≤ 3MPA or 30Bar, Heating and Cooling Rate: ≤ 5 Degree C/min Material: Shell made of high quality stainless steel (SS) 316 Inner PTFE (Teflon Liner) Chamber	4
71	Vertical Autoclave Chamber dimensions Ø30 x 50 cm Capacity 35 liters Heater 1.80kW Supply Voltage: 230 V AC, 50 HZ, Single phase. • Construction: Chamber, lid & all wetted parts are of SS304. Fly nut locking system for lid. Stainless steel pressure gauge with dual range in kPA (0~413.6) and PSI psi along with a correlated temperature scale for steam autoclaves in degrees Celsius	2

	Float switch SS float Ball ¼"Ø stem for low water level sensing. Drain valve for chamber cleaning. Unique Purge valve cum vacuum breaker on lid. Manual exhaust valve for steam release on lid. Drain valve for cleaning is provided at bottom. All fittings are on the lid. Industrial grade energy efficient ring type heater. All internal joints are argon welded. • Controlling system: Digital PID temperature controller (Preset at 121ºC and 20 min) with PT100 sensor for precise monitoring & control. Temperature set point and hold time are preset at 121ºC and 20 minutes respectively. Resolution: 1ºC • Safety Features: Each and every chamber is hydrostatically tested at 1.5 times of its working pressure. Spring loaded safety valve set at 20psi for over pressure. Spring loaded safety valve set at 22psi for extra safety. Sensor open alarm. End of cycle alarm. Water level low alarm with automatic heater cutoff.	
72	Autoclave 1. The Vertical Autoclave should have Chamber Capacity of 110 to 115 ltr. 2. The chamber of Autoclave should be manufactured as per ASME standards. 3. Should work on the power supply of : 230 V AC, 50 HZ, Single phase. 4. The units internal chamber, cover lid and all wetted parts should be fabricated from stainless steel of 304 grade. 5. Autoclave's all joints should be smooth finished for crevice free internals. 6. The chamber should be hydrostatically tested at 1.5 times of its working pressure. 7. The outer body should be made up of MS sheet with heat cured epoxy coating on both sides. 8. The lid should be equipped with single lever lock mechanism and lever handle moulded from industrial plastic. 9. The lid should be provided with auto purge cum vacuum breaker valve and a manually operable valve for exhaust. 10. The unit should have a solenoid valve for auto purging of air & normal exhaust. 11. Autoclave should have stainless steel pressure gauge with dual range dial display in KPA and PSI along with a co-related temperature scale for steam in degrees Celsius. 12. The operations of the unit should be controlled by a microprocessor based controller. 13. Should be able to set the temperature up to 122oC in steps of 0.1oC each. 14. Should be able to set the Sterilization hold time in steps of 1 minutes each. 15. The timer range should be up to 95 mins. 16. Incase of abrupt power failure / switching off, the Last Cycle which was set should remain in the memory. 17. The display for the parameters should be Two line Alpha-Numeric digital display. 18. The unit should be equipped with Low Water Detection unit and should give Audio-Visual alarm in case of Low Water in the chamber and cut off the supply to the heater. 19. The unit should have safety valve to protect the equipment in case of overpressurisation. 20. The Lid should be equipped with pressure interlock device. Also the heater should not start if the Lid is open. 21. The unit should be provided with safety cut-out for high temperature. 22. The unit should give indication by audio-visual alarm on completion of set autoclave cycle. 23. The electrical safety should be ensured by inbuilt MCB. 24. The unit should be mounted on 04 Nos. PU coated castors out of which atleast 2 should have locking mechanism 25. The Vertical Autoclave should be CE certified. 26. Should be ISO 13485 certified & should submit photocopy for the same.	1
73	Hydrothermal Autoclave 100ML Capacity : 100 ML Warranty:12 Months Pressure Range: ≤3MPA or 30Bar Temperature Range: 260 DegreeC Heating and Cooling Rate:≤ 5°C/min	2
74	Ice flaker 20kg/24hr manufacture rate 10kg Ice storing capacity	3
75	UV torch	3
76	Formalin 500ml	5
77	Sonicator (Ultrasonic bath) Multiple power settings handle both normal or delicate cleaning Degas mode for improved cleaning efficiency and easy sample prep Timed operation from 1-99 minutes Adjustable heating to 176°F (80℃) for deeper cleaning Frequency Output (Hz)40000 Capacity (Liters)3	4
78	Digital PH meter pH Range : 0 to 14.00 pH Millivolt Range: 0 to ±1999 mV	14

	Slope Correction: 85% to 115% Resolution: 0.01 pH, 1 mV in mV mode Repeatability : ±0.01 pH ±1 digit for pH ±1 mV ±1 digit for mV Standardization Range: ±1 pH (Approx) Temp. Compensation: 0 to 100° C Dig. Display (Manual) Display : 31/2-Digit Red LED Seven Segment with automatic polarity & decimal point Power: 230V± 10% 50 Hz Dimension: 235 (W) X 185 (D) X 85 (H) mm Weight: 1.25 Kg (Approx) Accessories: Combined Electrode, Stand & Clamp	
79	UV Cabinet 365 and 254 nm Ultra Violet Fluorescence Inspection Cabinet	2
80	Cryostat Microtome The Cryostat should be a floor standing open top cryostat with a spacious stainless steel cooling chamber • Freestanding cryostat with encapsulated, splash-proof microtome. • Should have LCD Display for Cryochamber temperature, actual time, defrost time and section thickness setting. • It should have a well illuminated cabinet • Cryo chamber temperature regulation should be between 0 º C to -30 ºC • Specimen temperature control of freeze shelf up to -40 º C • Easy to clean, actively cooled specimen preparation zone with quick-freezing shelf for up to 15 specimens (temperature selection down to -42˚C) • It should be weekly programmable for compressor ON/OFF • Maintenance free microtome with section thickness setting range from 1-60 microns 1-10µm in 1µm increments, 10-20µm in 2µm increment, 20-60µm in 5 µm increment • It should provide trimming facility from 1 to 800 microns in steps • Specimen head motorized coarse feed movement with two speed at 300 µm/Sec & 600 µm/Sec • It should have a provision of specimen retraction on return stroke and user set 5-100µm can be deactivated. • Twin compressor cooling system for cryochamber and speciment head. Specimen temperature selectable from - 0˚ C to 40˚C in 1˚ steps. Cryochamber temperature selectable from 0˚C to 30˚C, adjustable in 1oC increments at ambient temperature of 20˚C. • Specimen Retraction should be 0-200 µm in steps of 5 µm, can be deactivated • Total vertical specimen stroke 60 mm and total horizontal specimen feed 25mm • Disposable blade holder system with lateral displacement and integrated anti roll guide • Antistatic anti roll guide • The system should have a closed drainage system • It should have automatic manual chamber defrost facility with one automatic defrost cycle/24 hours; short duration defrost cycle of not more than 12 minutes. • The system should have in-built UV disinfection • System should be quoted with disposable blade system for both low and high profile blades. • The equipment should be supplied with 2 packet of disposable blades, 2 bottle of freezing Medium and 2 set of brushes. • Energy efficient stand by mode. • Must Manufacturer Submit at least 15 Performance certificated of satisfied users. • The product must be CE Certified and USFDA Approved. • Manufacturer must be ISO 9001 and WHO GMP Certified.	1
81	Vortex Brushless AC Motor Mixing Head/vortex cup Rubber Base material Plastic Number of Sample tubes testable simultaneously Multi-Tube User Interface Analog Front Panel Largest Volume of the tube testable 200 milliliter Body Material: Plastic Maximum Load capacity: 1.1 kilogram Activation mode: Continuous run Speed mode: Variable Speed Minimum Speed (RPM) 100 Speed control Accuracy (+) (RPM) 50 Orbital Diameter 4 millimeter Input Voltage (V) with number of Phases 230 Product CE certified	4
82	Experiment setup for Numerical Aperture of Optical Fiber (Laser, Fiber, screen, optical bench) To Determine the Attenuation and Numerical Aperture of an Optical Fiber. Setup Contains Diode Laser with Power supply. Optical Fiber Cable. Optical Bench 1 Mtr in S.S & Accessories. 02 No Stand for mounting fiber cable. Screen with circular screen and Object 10X Detector with digital multimeter.	4
83	Young's Modulus Setup Young's modulus Experiment Our Objective Our aim is to determine the Young's modulus of elasticity of the material of a given wire using Searle's apparatus.	5
84	Rydberg Constant measurement setup (Hydrogen discharge lamp with supply, grating with 600 lines/mm, two spare Hydrogen discharge lamps.)	5

	Complete Setup Hydrogen discharge lamp with supply, grating with 600 lines/mm, two spare Hydrogen discharge lamps, spectrometer with least count of 30 seconds, vernier scales of German Silver or equivalent, Ramsden eye-piece 8x, cross-hairs, focal length 175 mm or more, micro-metre slit on collimator, Adjustable (three screws) brass prism table with tangent screw for fine circular motion, objective aperture 30 mm, centre spindle made of brass, separate spirit level for to be included.	
85	Tunnel Diode (The junction between the P-type and N-type materials is about 10 nanometers (nm) wide.) Objective : To Plot V-I Characteristic & Resistance Characteristic of Tunnel Diode in Forward Bias Technical Specifications : Inbuilt Fixed DC regulated power supply Output Voltage : +5VDC On Board Digital Panel Meter Digital panel meter for measuring V1 : Voltage across Resistance R 3 V2 : Voltage across Tunnel Diode Potentiometer & Diode Potentiometer : R1 (Current control) Tunnel Diode : IN 3717 High quality bekelite used as front panel & mounted on light weight shock proof plastic cabinet Symbol diagram printed on bakelite Front Panel & all important test Points are brought out on front panel Power requirement : 230 VAC 10%, 50Hz. Weight : 1.5Kg Approx. Standard Accessories : Power chord, Patch chords & Instruction manual.	3
86	Multiplexer; Demultiplexer (8-channel multiplexer/demultiplexer) Study of 16 to 1 line Multiplexer & 1 to 16 line Demultiplexer Multiplexer & Demultiplexer has been designed to study the different type of a Multiplexer & Demultiplexer. Types of Multiplexer 2:1 Multiplexer.)4:1 Multiplexer. 8:1 Multiplexer. (16:1 Multiplexer. Types of Demultiplexer 1:2 Demultiplexer. 1:4 Demultiplexer. 1:8 Demultiplexer. 1:16 Demultiplexer. The instrument comprises of the following built in parts : Fixed output DC Regulated Power Supply of 5Volts. Twenty One (21) SPDT switches are provided on the front panel to select Logic '0' & Logic '1' inputs. 16 Output Indicators (LED's) are provided on the front panel to observe the output status. IC's 74150 & 74154 are mounted on the front panel and important connections are brought out on sockets.	4
87	Pestle Mortar (200 mm in diameter)	10
88	Vaccum pump Maximum flow : 20L/min Pump head type : Two - stage pump Ultimate vacuum : 8 mbar Maximum operating pressure : 1 bar Vacuum adjustment : No Clean / Dry valve : Yes Interface specification : 10 mm ump head material : PTFE Composite diaphragm material : PTFE Valve material : FFPM Working system : continuously working Environmental relative humidity : ＜80%RH Medium and ambient temperature : 5 ℃ ～ 40 ℃ Speed : 1450RPM Interior dimension WxDxH(mm) : 165×315×210 Power consumption : 120W Electrical requirement : AC 220V 50HZ	1
89	Sphygmomanometer: Type: Manual Sphygmomanometer	2
90	Statoscope: Comprises a chest piece connected by a double tube to the headgear with earpieces that are placed into the users' ears.	5
91	Haemoglobinometer Parameter: Hemoglobin, HCT (Hematocrit) Principle: Optical reflectance Strip: H12 Hemoglobin Test Strip Speed: 10 seconds Memory: 250 test results	2
92	Body weight Machine: Display Type: Digital display for easy reading.	2

	- Measurement Units: Measures weight in kg, lb, and st. - Material: Glass or high-quality plastic. - Power Source: Battery-powered or rechargeable via USB. - Low Battery Indicator: Yes, alerts when battery is low	
93	Stadiometer:	2
94	Anthropometric Kit:	1
95	Thermometer: Temperature display unit: Degree Fahrenheit Primary Measurement Mode: Body Temperature Mode	2
96	Oximeter: Device Type: Fingertip Pulse Oximeter Measurement Parameters: SpO2 (Oxygen Saturation), PR (Pulse Rate) Power Source: Battery-powered (2 x AAA) SpO2 Measurement Range: 0- 100%	1
97	Viscosity meter: Viscosity: LIQUIDS Usage/Application: Laboratory Maximum Viscosity Range: 20- 2,000,000 m.pas Features: Stepping Motor means Accurate, reliable operation Direct readout of all measurement parameters Auto R Viscosity Rpm: 0.3, 0.6, 1.5, 3, 6, 12, 30, 60 Power: AC 220V/50Hz Size/Dimension: 400 x 350 x360 Voltage: 100V-240V Weight: 9KG Power Source: Wide range power supply:100V-240V Power Supply: AC 220V/50Hz	1
98	Beaker: Material: Borosilicate Glass Capacity: 50ml, Thermal shock resistant, non- porous, and resistant to chemical corrosion.	10
99	Beaker: Material: .borosilicate Glass Capacity: 100ml, Thermal shock resistant, non- porous, and resistant to chemical corrosion	1
100	Beaker: Material: .borosilicate Glass Capacity: 250ml, Thermal shock resistant, non- porous, and resistant to chemical corrosion.	10
101	Beaker: Material: Borosilicate Glass Capacity: 500ml, Thermal shock resistant, non- porous, and resistant to chemical corrosion.	10
102	Test tube : Material: Borosilicate Glass Capacity: 10ml Shape: Cylindrical with a rounded bottom.	50
103	Test tube : Material: Borosilicate Glass Capacity: 50ml Shape: Cylindrical with a rounded bottom	50
104	Test tube : Material: Borosilicate Glass Capacity: 100ml Shape: Cylindrical with a rounded bottom.	50
105	Test tube stand No. of Wells/Tube Capacity: 24 Packaging Size: 1 Packaging Type: Carton	10
106	Petri plate: . Material: Borosilicate Glass 2. Size: 60mm 3. Depth: 15mm, 20mm, or 25mm	50
107	Petri plate: . Material: Borosilicate Glass 2. Size: 90mm 3. Depth: 15mm, 20mm, or 25mm	50
108	Petri plate: . Material: Borosilicate Glass 2. Size: 100mm 3. Depth: 15mm, 20mm, or 25mm	50
109	Spatula : Material: Stainless Steel Length: 150mm to 300mm (6 inches to 12 inches) Width: 10mm to 50mm (0.4 inches to 2 inches) Thickness: 0.5mm to 2mm (0.02 inches to 0.08 inches)	10
110	Homogenizer Homogenizer with Stand clamp, tool kit, two plastic disposable probes, probe adapter, and power cord with plug Min Sample Size (mL): 0.05 Max Sample Size (mL): 100ml Max Speed (rpm): 30000 Min Speed (rpm): 5000 Wattage (Output): 125 Power (VAC): 220 Power (Hz): 50	1
111	Digital food thermometer:	2
112	Heart rate monitor	2
113	Environmental thermometer: LCD Display	2
114	Hygrometer Temperature: -50 to +70 deg celsius Humidity(%), RH: 10.0-99% RH Humidity Accuracy(%), RH: 1 Temperature sensor: Diode Type or Thermistor Type Humidity Sensor Thin film capacitance or Thermistor Display Digital	2
115	Digital Lux Meter Measuring Range	2
116	Grip Dynamometer Type: Digital Hand Dynamometer	12
117	Refractometer:	5

118	Total Station • One Data Convert,Two Batteries, One Charger, One Tommy Pin, One Screw-driver, One Rain Cover. • Two Sides display, Detachable Tribrach. • Pendrive Slot, Bluetooth • Having following features :- - Date & Time is recorded while modifying or creating a file. - Fast Measurement in fast mode less than equal to 0.8 sec. with fast saving time. - Manual focus mode. - Visible Laser Pointer. - Dual axis Compensator. - On Board pre-loaded graphical software including Area, Perimeter. - 40000 points on board memory. - Range under Good Conditions. - Single Prism : 3.5km can measure distance in reflectorless mode 600 meters to a 90% reflective object (in good condition) - Angle Least Count : 1"/5" Selectable. - Angle Accuracy : 2" (As per DIN 18723 / ISO 17123-3) - Incorporating latest technology of Absolute Encoders. - Distance Accuracy in Prism Mode : ±(2mm+2ppmxD)mm - Distance Accuracy in Reflectorless mode : utp 300 + (3mm+2ppmxD)mm - Distance Least Count : 1.0mm - Battery 30 hrs. Continuous use both Batteries. - Laser Plummet in alidade rotating through 3600 - One Electric bubles 30" sensitivity on display panel. - One Circular Bubble in Tribrach. - Alpha Numeric Keyboard (Two sides identical)	1
119	Handheld Digital GPS device Specifications: Dimensions: 2.1 x 4.0 x 1.3 (5.4 x 10.3 x 3.3 cm) Display size: 1.4 x 1.7 (3.6 x 4.3cm); 2.2 diag (5.6cm) Display resolution: 128 x 160 pixels Display type: Transflective, Monochrome Weight: (141.7 g) with batteries Battery: 2AA batteries(NiMH or Lithium) Battery life: 25 hours Water rating:IPX7	10
120	Stereo Scope With Protection Wooden Box Material– Alluminium Stereo Scopic Battery Powered	10
121	Aerial Photographs of Bihar Stereopair Provided by NRSA and BRSAC Bihar Remote Sensing Agency corp.	10
122	Galvanic Skin Response (GSR) Skin Current Sensor Kit The Galvanic Skin Response (GSR) Skin Current Sensor V2.0 is a sort of biosensing module that gauges the electrical conductance of the skin (GSR). High sensitivity: the use of highly sensitive sensors enables accurate measurement of skin electrical activity, and even small changes can be detected. Low noise: The kit's current sensor has a low noise characteristic that provides clear electrical signals and reduces interference. Easy to use: The kit's simple interface makes it easy to connect to rduino development boards, eliminating the need for complex circuit design. Open source code: The kit provides open source code, which is convenient for developers to modify and customise according to their needs.	5
123	Disodium Hydrogen Phosphate (Na2HPO4) 500gm Extrapure 99.8%	2
124	Measuring Cylinder 50ml Glass	50
125	Potassium Chloride 1 kg Extrapure	2
126	L-amino acid kit 1 gm vials of 22 amino acids Purity 99%	2
127	Beaker Glass 250ml	100
128	Measuring Cylinder 10ml Glass	50
129	15 ml Rimmed Polypropylene, Polyethylene Test Tube (Pack of 25)	100
130	Beaker Glass 500ml	100
131	Sprit Lamp: SS Surface Finishing: Polished Material :Stainless Steel Fuel	102
132	L-Methionine, 100g	1
133	Potassium hydroxide 500gm 99% Purity	2
134	Potassium Iodide 500gm 99% Purity	4
135	Iso-Propanol (Isopropyl Alcohol) 500ml AR Grade	2
136	Potassium Chromate 500gm 99% purity	4

137	Beaker Glass 1000ml	50
138	Burette 25ml With stop cock 0.1ml grading	20
139	L-Phenylalanine, 100g	1
140	Acetic Anhydride ((CHCO)O) 500ml	15
141	Rotary Evaporator Capacity: 2L flask • Have rotation speed 20-300rpm with convenient large dial controls for adjustments. • Have clockwise operation facility. • Have microprocessors-controlled heating bath, temperature range 5°C to 99°C. • Have digital display of heating bath (5.4 lit) with 1000W heating capacity. • Have Temperature Resolution 0.1 °C • Heating bath shall be chemical resistant, insulated double wall protect burn & scalding. • Have LCD digital colour graphic display with all parameters'(Rotation speed ,vapor temperature, Bath temperature). • Have graphite filled PTFE Vacuum seal. • Have vertical condenser for standard distillations with hand lift. • Have auto lift system. • Have non-sticking large bore quick release vapor tube. • Have digital display & integrated control of vacuum, RPM & Temperature with single control knob. • Have volume base auto distillation, automatic distillation & ramp programming. • Provision must be available for Easily set and view operating parameters on the two large digital displays; one for rotation speed and timer and another for bath temperature and timer. • System must include Evaporator control stand, 2 L flask, water bath, clip, vacuum gauge, and power cords with NEMA 6 plug for rotator and bath, • Vacuum pump: Double Stage Diaphragm Pump Final vacuum up to 1.5m3/h, control up to 2 mbar. • Recirculating chiller: Temperature range: -20°C to 100°C, flow rate 12lit/min with display, 2000 watts, voltage220-240V, Pump pressure 300mbar.	4
142	Polarimeter Micro processor Based User Friendly and menu driven software 128 x 64 Graphical LCD Two point calibration. USB Interface USB Port for interfacing the system with PC. One can see the stored logs on the system before printing Internal storage capacity of 1000 logs with date and Technical Specification Measuring Range: + 200° (Sugar Scale) & + 70° (optical rotation) Accuracy: +/2% (Full Scale) Resolution: 0.01° Display: Graphical LCD (128 x 64) Keys: 4-Keys for Menu Operation Calibration Mode: 2 Point (zero & span) Interface: USB RTC: In-built clock with date and time Data Storage: 1000 Logs with Date & Time capacity Power:Supply: 230VAC +10 %, 50Hz	1
143	Potassium dihydrogen phosphate (KH2PO4) 500gm Extrapure 99.5%	4
144	n-Butanol 2.5 L Purity 99% AR Grade	2
145	Funnel Glass 70 to 75 mm Diameter	50
146	EDTA.2H2O 500gm Analytical Reagent Grade	5
147	PDA Media RDM-RHM-01 1kg	5
148	Rhizobium Powder 500gm	1
149	Yeast extracts powder 1kg	5
150	Agar Powder Bacteriological 500 gm	10
151	Mannitol 500gm	3
152	Mueller Hinton Agar M173 500gm	10
153	Dextrose 500gm	5
154	Tween 20 250ml	8
155	Silver Nitrate extrapure, 100g 99.5% Molecular Formula : AgNO3 Molecular Weight : 169.87	3
156	Glacial Acetic Acid 99.5% purity LR Grade 500ml	30
157	Acetocarmine 250ml Glass Bottle 99% purity	3
158	Methanol 99.8% 1L	100

159	Chloroform Purity 99.4% 500ml Glass bottle LR Grade	10
160	Giemsa Stain 100ml Plastic bottle	4
161	Methanol 500ml Glass bottle LR Grade	10
162	Sprit 500ml Plastic/Glass bottle	10
163	Sodium Chloride 500gm AR Grade	8
164	D.P.X. 500ml Glass bottle LR grade	4
165	Xylene 500ml Glass bottle LR Grade	8
166	Hydrochloric Acid 500ml Glass bottle LR Grade	20
167	Hayem's fluid 100ml LR Grade	1
168	Sodium hydroxide 500gm Pellets 99% purity AR Grade	14
169	Sodium Acetate 500gm	4
170	Sodium thiosulphate 500gm	6
171	Sodium dodecyl sulphate 500gm Ultrapure	2
172	Test tube rack Polycarbonate For 15ml tubes Tube capacity: 24	50
173	Magnet stirring bars 40mm length	50
174	Magnetic stirring bars 76mm length	10
175	Microtube Racks For 1.5ml tubes Capacity of 80 tubes	50
176	Microtube box For 1.5/2ml tubes Capacity of 96 tubes	50
177	Microcentrifuge tubes 0.5ml Packet of 1000 tubes	10
178	Microcentrifuge tubes 1.5ml Packet of 500 tubes	100
179	Centrifuge tubes 15ml Polystyrene with screw cap Radiation sterilized Pack of 1000	50
180	Reagent bottles 100ml Screw cap Glass Autoclavable	100
181	Reagent bottles 250ml Screw cap Glass Autoclavable	100
182	Reagent bottles 500ml Screw cap Glass Autoclavable	100
183	Reagent bottles 1000ml Screw cap Glass Autoclavable	50
184	Petriplates/ Petridishes 90mm diameter Inert transparent Plastic Disposable	2000
185	Pipette Tips 10ul Pack of 1000 tips	50
186	Pipette Tips 200ul Pack of 1000 tips	50
187	Pipette Tips 1000ul Pack of 500 tips	50
188	Rubber Gloves White Freesize Disposable Pack of 100 pieces	25
189	Chromatography Paper 150GSM	20
190	Whatman Filter paper Grade1 125mm diameter 100 circular sheets	10
191	Parafilm 4inch width	7
192	Blotting Paper 150GSM 40cm x 50cm or more Pack of 100 sheets	4
193	pH paper strips pH range 1 to 14 With coloured reference paper	12
194	Beaker Glass 100ml	100
195	Iso- Amylalcohol 1ltr	2
196	o-Phenylenediamine. Mol.wt.108.14. 1,2-Diaminobenzene, 1,2- Phenylenediamine, OPD. Flaked 99%. 500gm	1
197	Perchloric Acid. 1ltr c(HClO) = 0.1 mol/l (0.1 N), in anhydrous acetic acid, reag. Ph. Eur., USP, ready-to- use volumetric solution for titration in non-aqueous media,	1
198	N-Heptane 2.5ltr	1
199	Chitosan powder 500g	1
200	Ice Bucket. 2ltr	10

201	Acetonitrile. 99.9%, gradient grade, suitable for HPLC. 2.5 Ltr	5
202	Tetrahydrofuran. 99.9%, suitable for HPLC, inhibitor-free. 2.5 ltr.	1
203	Sucrose. ACS reagent. 500g	1
204	Magnesium Sulphate hepta hydrate. ACS reagent, 98%. 25g	1
205	Folin and Ciolcateu's reagent. suitable for determination of total protein by Lowry method, 1.9-2.1 N. 100ml	4
206	Glycine sodium salt hydrate, 100g	1
207	L-Alanine, 100g	1
208	L-Valine, 100g	1
209	L-Leucine, 100g	1
210	L-Isoleucine, 100g	1
211	L-Proline, 100g	1
212	L-Arginine, 100g	1
213	L-Asparagine, 100g	1
214	L-Aspartic Acid, 100g	1
215	Fehling's Solution (Fehling's A and B)	4
216	Ferric Chloride (FeCl) 500g	7
217	Ferrous Sulfate (FeSO) 500g	7
218	Hydroxylamine Hydrochloride (NHOH•HCl) 100g	3
219	Iodine Crystals (I) 100g	1
220	Lead Acetate (Pb(CHCOO)) 500g	3
221	Zinc Chloride (ZnCl) 500g	6
222	p-Anisidine (CHNH) 100g	2
223	Phthalic Anhydride (CH(CO)O) 500g	4
224	Schiff's Reagent 500ml	4
225	Semicarbazide Hydrochloride (NHCONHNH•HCl) 100g	3
226	Sodium Metal (Na) 100g	10
227	Sodium Nitroprusside (Na[Fe(CN)NO]) 25g	5
228	Benzoic Acid 500g AR grade	10
229	Salicylic Acid 500g	4
230	Pyridine 500ml	2
231	Benzophenone 5g	3
232	Phenol 500g	3
233	Acetanilide 500g	5
234	Tollen's Reagent (AgNO + NH) 500ml	2
235	Methyl Orange 25g	5
236	Phenolphthalein 50g	10
237	Anhydrous Sodium Sulfate (NaSO) AR grade 500g	14
238	Anhydrous Calcium Chloride (CaCl) 100g	15
239	Hexamethylenetetramine	10
240	Benzene. AR 500ml	12
241	Methyl Acetate AR Grade 500ml	6
242	Ethyl Acetate AR Grade 500ml	10
243	Calcium Hydroxide (Ca(OH)) AR grade 500g	4
244	Sulfuric Acid (HSO) 0.1N 500ml	8
245	Potassium dichromate 500g	4
246	Sodium Carbonate 500g	4
247	Ammonium hydroxide 500g	4
248	Barium Chloride 500g	4
249	Potassium permanganate 500g	4
250	Sulphanilic Acid 100g	2
251	Manganese oxide 500g	2
252	Ammonium Oxalate 500g	4
253	Oxalic acid 50g	4
254	Nitric acid 2.5ltr	1
255	Ammonium molybdate 100g	4
256	Platinum wire with glass handle pack of 50	1
257	Borax bead 400g	5
258	Nessler's reagent 500ml	1
259	Ferrous Chloride 500g	4

260	Copper Sulphide 100g	1
261	Lead Sulphide 500g	2
262	Ferrous Sulphide 250g	4
263	Zinc Acetate 500g	4
264	Nickel chloride 25g	4
265	Lead Nitrate 250g	2
266	Copper sulphate 500g	4
267	Potassium Oxalate 500g	4
268	Eriochrome Black T 100g	4
269	Ascorbic Acid 25g	2
270	Zirconium oxychloride 100g	1
271	Potassium Nitrate. ACS reagent. 500g	6
272	L-Lysine, 100g	1
273	Gentian violet 100ml	1
274	Leishman Stain 100ml	1
275	Ninhydrin Solution 100ml	5
276	Deep Freezer Type: Chest Type Capacity: Capacity (litres): 640 to 670 Liters Door Type: Top Open Door Dimension (mm) WxDxH: 2200 x 715 x 815 Temperature Range: -18°C ~ -24°C Wheels: Yes; Refrigerant: R290; No. of Baskets: 2 Star Rating: Yes; Very Low Energy Consumption	4
277	Deep Freezer Upright freezer Capacity = 300-330 ltr Dimension (mm) WxDxH: 1092 x 660 x 838 Temperature Range: -18°C ~ -24°C Wheels: Yes; Refrigerant: R290; No. of Baskets: 1 Star Rating: Yes; Very Low Energy Consumption	5
278	Deep freezer Chest type Gross Volume: 300-350 L Dimension (mm) (WxDxH): 610 x 597 x 1786 Temperature Range: -20°C Wheels: Yes; Lock: Yes; Refrigerant: R600a Rated Load, Wattage: 140 No. of Shelves/Drawer: 7; No. of Doors: 1	1
279	Homogenizer Display Type LED Speed Range 500-25000 RPM Generator Probes Type Flat bottom	2
280	Hot air oven 1. Forced convection oven should have Chamber capacity of 250 ltrs. 2. It should have Internal dimensions (WxDxH): 600x600x700mm aprox. 3. It should have exterior construction of mild steel with heat cured epoxy coating. 4. It should have internal chamber of stainless steel with CNC Press Punched back panel for internal efficient circulation. 5. It should have door construction having double tempered glass window within the main door. 6. It should have Incoloy sheathed spread out shaped heater for uniformity and efficient heating. 7. It should have Impeller type dynamically balanced aluminium blower for internal circulation. 8. It should have non contact type door switch for auto cut off when door opens. 9. It should be supplied with two Stainless steel Wire Mesh Shelves. 10. It should be fitted with stainless steel vertical channels (CNC Press Punched) for height adjustment of trays in steps of 25mm. 11. It should have seamless round cornered internal chamber ensures easy cleaning. 12. The bottom of internal chamber should be Solid and plain without any electrical fittings. 13. It should have digital PID temperature controller with flush but embossed button panel for easy setting, access and check up of operating status. 14. It should have Stainless steel sheathed PT100 sensor for precise monitoring & control. 15. The controller should have timer in format HH:MM / HHH:M mode with bypass 0 mode; auto tuning and alarms. 16. The controller should have Seven segment LED dual display. 17. It should have Temperature range: 50ºC to 200ºC 18. It should have control accuracy of ±0.5ºC at 120°C 19. It should have Over temperature safety protection. 20. Should be equipped with MCB for electrical safety. 21. It should be CE certified. 22. OEM should be ISO 13485 certified & should submit photocopy for the same. 23. Calibration reports with NABL traceability. 24. Should work on power supply : 230Vac, Single Phase, 50Hz.	4
281	Clevenger Apparatus BORO G Borosilicate 3.3. glass Essential Oil Determination	2
282	Microwave: Type: Convection Capacity:28L (Aprox) Power Consumption (Microwave): 1400 W	7

283	Sudan III reagent 100ml	2
284	Travelling Microscope (for Laboratory Work)	3
285	Compound Optical Microscope (40 x 1000x) with phase contrast	1
286	Monocular Student Microscope with LED Light Illumination & Battery Backup.	20
287	Vacuum Concentrator For preparative protocols of DNA, RNA, proteins, nucleotides, amino acids, hormones, enzymes etc. Technical description: • System should be a Centrifugal Vacuum Concentrator with integrated vacuum pump for biological applications • System should come with integrated vacuum pump to reduce the footprint and occupy work bench space • Vacuum pump should be highly resistant for organic solvents like Acetonitrile, DMSO, chloroform etc • System should have more than one operational mode for Aqueous, Alcohol and Highly Volatile solvents in both Concentrator and desiccator function • System should possess temperature selections (room temperature, 30 °C, 45 °C and 60 °C) to allow safe and efficient concentration of biological samples • System should also support Centrifugation and Desiccator function • System should have a motor less induction drive • System should have a run time of 1 min to 9:59 hrs in increments of 1 minute or infinite • Centrifuge should have a fixed rotational Speed of 1,400 rpm • System should have imbalance detection • System should support multiple labware formats (0.2, 0.5, 1.5, 2, 15/50 mL conical tubes, 96 well PCR plates, MTP and Deep well plates) with different rotors • System should have option to stack two rotors for increasing the capacity to 96 x 1.5/2.0 mL tubes • Rotors and adapters must be autoclavable at 121 °C, 20 min • System should be able to concentrate samples up to a maximum capacity of 300 mL • System should have a coated lid with superior chemical resistance • System should have the capacity of built-in pump: 1.7 m3/h • System should support maximum achievable Vacuum of < 20 hPa (< 20 mbar) • System should have an emission condenser inbuilt with volume approximately 280 mL to purify outlet air • Should be optionally supplied with a suitable cold trap • Noise level should be ≤50 dB(A) • System should have a small footprint of 33 x 58 x 29 (W X D X H in cm) • System should be European CE certified • System should be supplied with 48 X 1.5/2ml microcentrifuge tube rotor • Option for 6 X 15/50ml Conical tubes rotor and 2 X MTP/PCR/Deepwell plates upto 27mm high should be available for future upgrade.	1
288	Histopaque/ Ficoll 500ml	1
289	Bryophytes	1
290	ABTS extrapure AR (2,2-Azino-bis (3-ethylbenzothiazoline-6-sulfonic acid) 500gm Diammonium Salt), 98.5%	1
291	2,4-Dinitrophenylhydrazine (2,4- DNP) 25g	5
292	Ammonium Ceric Sulphate ((NH)Ce(SO)) 100g	2
293	FTIR Instrument FTIR should be High-end advanced PC based system for operation on 220V / 50Hz. FTIR Technical specification: • Full mid-IR wave number range from 7,800cm-1 to 350 cm-1 or better • Michelson's interferometer with 30° incident angle, completely sealed and desiccated optics • frictionless Flexible moving mirror mechanism for smooth moving mirror motion and high quality IR spectra • spectral resolution of 0.9 cm-1 or better . • Signal to Noise Ratio should be 30,000: 1 or higher (4 cm-1 resolution, 1 min scan, around 2,100 cm-1, peak-to-peak). Signal to noise ratio must be achieved without any mask or apodisation. • Germanium coated KBr beam splitter with moisture resistant coatings on surfaces • KRS-5 Window material • Diamond ATR must be supplied with the system. • Must have high intensity long life Ceramic IR source. • Should have DLATGS detector with temperature control • Data sampling should be done by stable He-Ne laser • Following components must be covered under a warranty of 10 years - Light Source, Interferometer, Laser, Detector and Electronic Substrate • Must have built-in validation software conforming to ASTM and European Pharmacopoeia. • System must be supplied with 64-bit Windows 10 based FTIR software for complete instrument control full data processing including Arithmetic calculations; Dynamic spectral subtraction; Peak detection; Baseline correction; Normalization; Derivatives etc. • Must have advanced data processing capabilities include Full Quantitation; Spectrum search; Private library search; Multi-linear regression; Deconvulation; Kubelka-Munk conversion; Kramer-Kronig Analysis; ATR-correction; JCAMP conversion; ASCII conversion; Contaminant / Foreign Material Analysis Program and Pharma Report Program etc. • Should have built-in atmospheric correction function for automatic elimination of water vapor and CO2 peaks • Should have Automatic accessory recognition (ATR recognition) function with optional Quick-Start	1

	accessories • Should have Built-in self diagnostic function for checking, logging and status monitoring of interferometer conditions and key components in the interferometer & sequential display of result • Must have USB interface for PC connectivity • Instrument must withstand humidity of 20-90% with no condensation • Installation & training must be provided • Following must be provided with the main instrument: a) Branded i3 PC with Windows 10 must be supplied along with Main system b) KBr Plain window Demountable Cell with holder. c) Magnetic Film holder d) KBr Pellet Making kit with all accessories.	
294	Incubator 1. Incubator should have Chamber capacity of aprox 150 ltrs. 2. It should have Internal dimensions(WxDxH): 500x500x600 mm aprox. 3. It should have exterior construction of mild steel with heat cured epoxy coating. 4. It should have internal chamber of stainless steel 304. 5. Unit should have adjustable shelves in steps of 25mm & made of SS304. 6. Units internal chamber should be round cornered to protect contamination and easy to clean. 7. Units inner door should be - frameless - of tempered safety glass. 8. Units outer door should be of MS with gasket & positive sealing. 9. Should have circulating fan inside the chamber, to maintain optimum uniformity & control accuracy. 10. It should have eye level door mounted controller for easy access & monitoring. 11. Unit should be equipped with digital PID temperature controller with timer, alarms & auto tuning. 12. The controller should have Seven segment LED dual display. 13. Unit should have temperature range from ambient +5°C to 70°C. 14. It should have control acuuracy of ±0.2°C. 15. It should have Over temperature safety protection. 16. Should be equipped with MCB for electrical safety. 17. It should be CE certified. 18. OEM should be ISO 13485 certified & should submit photocopy for the same. 19. Calibration reports with NABL traceability. 20. Should work on power supply : 230Vac, Single Phase, 50Hz.	2
295	BOD Incubator • It should have chamber capacity of 250 ltr. • Chamber internal dimensions (WXDXH): 500x500x1000 • It should have Exterior construction of Stainless steel 304 (1 ~ 1.2mm thick). • It should have Interior construction of SS 304. • It should have Chamber illumination with LED strip light. • It should be supplied with Stainless steel Wire Mesh Shelves 2 nos. • It should have fitted with stainless steel vertical channels (CNC Press Punched) for height adjustment of trays in steps of 25mm. • It should have seamless round cornered internal chamber ensures easy cleaning. • It should have Eye level door mounted controller with flush but embossed button panel for easy setting, access and check up of operating status. • It should have Efficient internal circulating fan(s) with self lubricating sleeve bearings for long life and silent operation. • The bottom of internal chamber should be Solid and plain without any electrical fitttings. • It should have Digital PID temperature controller with stainless steel sheathed PT100 sensor for precise monitoring & control. • The controller should have timer with bypass mode; auto tuning and alarms. • The controller should have Seven segment LED display. • It should have Temperature range: +5ºC to 60ºC • It should have control accuracy ±0.5ºC. • It should have independent Over temperature safety protection and should be user settable. • It should have Over current protection. • It should have High tempered safety glass of 5mm for internal door. • It should have PUF insulation. • It should have Heavy duty PU casters for ease of movement. • It should have Environment friendly CFC free hermetically sealed compressor. • Supply Voltage: 230 V AC, 50 HZ, Single phase. • Calibration reports with NABL traceability. • OEM should be ISO 13485 certified & should submit photocopy for the same. • Should have provision for 21CFR part 11 software. • Should have RS 485 port for communication.	2
296	BOD Incubator • It should have chamber capacity of 150 ltr. • Chamber internal dimensions (WXDXH): 500x500x600 • It should have Exterior construction of Stainless steel 304 (1 ~ 1.2mm thick). • It should have Interior construction of SS 304 • It should have Chamber illumination with LED strip light. • It should be supplied with Stainless steel Wire Mesh Shelves 2 nos. • It should have fitted with stainless steel vertical channels (CNC Press Punched) for height adjustment of trays in steps of 25mm. • It should have seamless round cornered internal chamber ensures easy cleaning. • It should have Eye level door mounted controller with flush but embossed button panel for easy setting, access and check up of operating status.	1

	• It should have Efficient internal circulating fan(s) with self lubricating sleeve bearings for long life and silent operation. • The bottom of internal chamber should be Solid and plain without any electrical fitttings. • It should have Digital PID temperature controller with stainless steel sheathed PT100 sensor for precise monitoring & control. • The controller should have timer with bypass mode; auto tuning and alarms. • The controller should have Seven segment LED display. • It should have Temperature range: +5ºC to 60ºC • It should have control accuracy ±0.5ºC. • It should have independent Over temperature safety protection and should be user settable. • It should have Over current protection. • It should have High tempered safety glass of 5mm for internal door. • It should have PUF insulation. • It should have Heavy duty PU casters for ease of movement. • It should have Environment friendly CFC free hermetically sealed compressor. • Supply Voltage: 230 V AC, 50 HZ, Single phase. • Calibration reports with NABL traceability. • OEM should be ISO 13485 certified & should submit photocopy for the same. • Should have provision for 21CFR part 11 software. • Should have RS 485 port for communication.	
297	Sudan Black B 100ml	1
298	Alcian Blue Stain 250ml	2
299	Coomassie Blue stain 500ml	1
300	Aniline (CHNH) 500ml	4
301	Benzoyl Chloride (CHCOCl) 500ml	4
302	Bromocresol Green 25g	1
303	Methyl green 100ml	2
304	Pteridophytes	1
305	Laboratory Shaker Mini Rotary Shaker Speed : 50 to 400 RPM Platform 12" x 12" with 250 ml flask clamp	1
306	Probe Sonicator -Ultrasonic Processor Capacity: 0.5 – 1200ml Probe Size: 12 mm Detachable type made of Titanium Alloy Ultrasonic Power: 1000 W Frequency (KHz): 20 – 25 KHz Timer: Cyclic ON / OFF Power Supply: AC 230, 50 Hz/60 Hz CE & ISO 9001: 2015 Certified Micro Based, processer, Digital (TFT) Display	1
307	7 in 1 Water and Soil Testing Kit Water and Soil Testing Kit Brand: Indian Make Features Microprocessor Water and Soil Analysis Kit (7 parameters) for measurement • pH • Conductivity • TDS • Salinity • Turbidity • Dissolved Oxygen • Temperature with rechargeable battery. Complete with accessories	5
308	"Hall Effect Apparatus The experiment should consist of: • Hall Probe (Ge Crystal-n type and p type) with resistivity 18-19 ohm cm in n-type and 12-14 ohm cm in p-type, Hall voltage 35-60mV/10mA/KG, Contact : Solid Silver, sample size 4x5x0.5mm: One each • Hall Probe Stand Multipurpose (metal stand with powder coated aluminium holder. • Hall Effect Set-up, with Provision for Hall Voltage Offset Adjustment on panel. With built in 0-200mV digital Millivoltmeter and 0-20mA Constant Current generator. Complete unit housed in metal cabinet of 260x200x110mm with effective electromagnetic shielding. Cabinet should be powder coated with plastic moulding on edges. • Electromagnet with 50mm pole dia, Low Carbon steel yoke, with net size of 460x200x50mm. Two coils with 900 turns each. Magnetic field strength variable upto 7.5 KG at 10 mm air gap between its pole pieces. Coil resistance 3.4 ohm per coil. • Constant Current Power Supply (transistor based) for above electromagnet (0-4A current) continuously variable. Complete unit housed in metal cabinet of 390x280x160mm with effective electromagnetic shielding. Cabinet should be powder coated with plastic moulding on edges. • Digital Gaussmeter with GaAs Transverse Probe. Range: 0-2KG, 0-20KG and 7 segment LED display with accuracy 0.5%. Complete unit housed in metal cabinet of 260x200x110mm with effective electromagnetic shielding. Cabinet should be powder coated with plastic moulding on edges. • Proper cables for interconnections between different units included with the setup. The setup should be complete in all respect."	5
309	Zeeman Effect (Complete Zeeman Effect Apparatus) The experimental set-up to study the Zeeman Effect, consists of the following:	3

	1. High Resolution Fabry Perot Etalon with l/10 flatness 2. Mercury Discharge Tube, MT-01 (Low Pressure Mercury Discharge Tube) 3. Power Supply for MT-01, ZPS-02 (High Voltage Power Supply for Discharge Tube) with built-in power supply for CCD Camera and LED light for viewing the scale in dark room. 4. Narrow Band Interference Filter, IF-01 Central Wave Length: 546nm Tmax: 74% HBW: 8nm 5. Polarizer with lens, PL-01 6. Precision Optical bench of 1 mt. length of Aluminium extrusion with wide MS Base for stability. Includes all related wiring for CCD Camera, LED lamp etc. 7. CCD Camera: CAM-700 (High Resolution CCD Camera) 8. Telescope with Focussing Lens with antireflection coating for better resolution: FL-01 9. Monitor 17": TV-17 10. Electromagnet with 50mm pole dia and 25mm tapperring, Low Carbon steel yoke, with net size of 450x170x180mm. Two coils with 900 turns each. Magnetic field strength variable upto 8.5 KG at 10 mm air gap between its pole pieces. Coil resistance 3.4 ohm per coil. 11. Constant Current Power Supply (transistor based) for above electromagnet (0-4A current) continuously variable. Complete unit housed in metal cabinet of 390x280x160mm with effective electromagnetic shielding. Cabinet should be powder coated with plastic moulding on edges.pc-10 12. Digital Gaussmeter with GaAs Transverse Probe. Range: 0-2KG, 0-20KG and 7 segment LED display with accuracy 0.5%. Complete unit housed in metal cabinet of 260x200x110mm with effective electromagnetic shielding. Cabinet should be powder coated with plastic moulding on edges. The fringes are displayed directly on TV monitor for easy usage and to enable the teacher demonstrate the experiment to large group of students	
310	Diode Laser setup with screen (to find the wavelength of laser source)	3
311	MOSFET (maximum voltages, currents, power dissipation, and temperatures)	10
312	Astable multivibrator (555 ICs)	4
313	Encoder and Decoder (Instrument comprises of DC regulated power supply 5VDC/150mA, 4 SPDT switches provided for selecting logic 1 and logic 0,1HZ monoshot clock pulse, 4 output indicators, circuit diagram for IC 7490, IC7447 and 7- segment)	3
314	Thermostat	4
315	Tube Furnace Grade : Standard Working Temp (°C) : 1100 with Alumina Tube Alumina Tube, Hot Zone Size (mm) : ID: 50, L: 250 Uniform Hot Zone Length : 80 Control Zone ; Single Construction in Steel with : Anti Corrosion Coating : Fan Cooling Work Tube : Replaceable Work Tube Type : Alumina 95% (60x50x1000) Insulation : Non Carcinogenic Fiber insulation Heater Type : Free radiating Heater : A-1 SS Flange for Gas Purging + Mild Vacuum : Double viton o-ring SS flanges with KF 25 port for gas connection, 1/4" port for gas purging with ball valves and an analogue vacuum gauge Ceramic Fiber Radiation Shield Radiation Shield for use during gas purging Avg. Rate of Heating : 5-7 °C/Min Thermocouple Type : K TC Protection Sheath : Inconel Sheath Control Panel : 30 Step Programmable PID Temperature Controller Solid State Relay Fuses and MCB Spares : Sample placement rod 2 Alumina Boat (30ml) Safety Features : TC Break Over Current 2: Calibration Certificate of Control Thermocouple from NABL Accredited Furnace 4: Working temperature is measured temperature on the inside of work tube and at the middle of hot zone 5: Uniform hot zone is length at the center of working tube where temperature variation (ΔT) is 10 K from temperature at center of hot zone. This length is measured with radiation shield placed at end of hot zone 6: The control thermcouple is located out of work tube at center of hot zone 7: Rate of heating with quartz and metal tubes can be as high as 25 C/Min. With ceramic tube the recommended heating rate is 8 C/Min upto 800 C and 5 C/Min for temperature above 800 C 8: Mild vacuum is vacuum upto 1 mbar, Medium Vacuum is upto x 10-2 mbar and High Vacuum is upto x 10-5 mbar	1
316	Digital Blood pressure machine: Type: BP Monitor Included Components: Main Unit, batteries, Cuff, User Manual, Storage Case	2

	Power Source: Battery Powered Display Type: Digital Intelliwrap cuff Suitable for use on arms	
317	Glucometer: Easy to use and Accurate:	2
318	Baby weighing scale: Large scale; Accurately measures weight	2
319	Feulgen stain A 250ml	2
320	Feulgen stain B 250ml	2
321	Picric Acid 100gm	2
322	Basic Fuchsin 100gm	2
323	Aceto Orcein Stain 100ml	2
324	Algae	1
325	Benzaldehyde (CHCHO) 500ml	3
326	Bromine Water (Br in HO) 500ml	13
327	Ceric Ammonium Nitrate ((NH)Ce(NO)) 100g	2
328	Diphenylamine (CHN) 100g	4
329	Ehrlich's Reagent (p- Dimethylaminobenzaldehyde) 100g	2
330	Tris Base 100gm	5
331	Gallic Acid pure, 98% (3,4,5-Trihydroxy Benzoic Acid) 100gm Molecular Formula : C7H6O5.H2O Molecular Weight : 188.14	2
332	Quercetin Dihydrate extrapure, 98%, 25gm CAS : 6151-25-3, 849061-97-8 Molecular Formula : C15H10O7.2H2O Molecular Weight : 338.27	2
333	Mercuric chloride 250 gm 99.5% Purity	4
334	RPMI 1640 Media 500ml. With stable glutamine and sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture	10
335	Eosin Y 25gm 99% Purity	4
336	Phosphate Buffered Saline Tablet. 50tabs. 1 tablet for 200ml	1
337	Penicillin-Streptomycin 100ml	10
338	L-Glutamine solution 100ml	10
339	Trypsin-EDTA Solution 1 ×sterile; sterile-filtered, BioReagent, suitable for cell culture, 0.5 g porcine trypsin and 0.2 g EDTA, 4Na per liter of Hanks Balanced Salt Solution with phenol red. 100ml	6
340	Human Serum. from human male AB plasma, USA origin, sterile- filtered. 20ml	1
341	DMEM High Glucose, With sodium Bicarbonate, sodium pyruvate, without -glutamine, liquid, sterile-filtered, suitable for cell culture. 500ml	4
342	DMEM Low Glucose With sodium bicarbonate and sodium pyruvate, without -glutamine, liquid, sterile-filtered, suitable for cell culture	4
343	Muffle Furnace: Specification of benchtop muffle furnaces Construction Exterior housing must be made of powder coated MS steel Ceramic fiber insulation designed to permit faster heatup, reducing energy consumption with embedded heat element Long life Type K thermocouple There is a safety door switch which will interrupt power to heating element when door is opened. It protects heating elements and minimizes heat exposure to operator. Thermocouple break protection cuts power to heating elements, preventing failure runaway condition Heater capacity of 3800W CE certificate & ISO certificate is provided Physical Dimension Exterior dimension is 43 x 49 x 45 cm Interior dimension is 20 x 16 x 24 cm Chamber size is 7.6 L Temperature Performance Working temperature from 1100 to 1150 C. Max temperature 1200 C Temperature uniformity should be at least ± 5 °C at 1000 °C and stability of ± 1 °C at 1000 °C The fast-heating system should heat up from room temperature 0 to 1200°C in 90 min. Temperature Controller separate standalone temperature controller. Single set point, single segment , one ramp to setpoint Digital LED display of actual temperature Should have over temperature protection The unit is covered with 3 Year warranty. The unit shall operate at 208-240V / 50 Hz	1
344	Fabric Tensile Strength Tester	1

345	Air and Water Permeability Tester: Usage/Application: Textile Industry	1
346	Liquid Absorbency Time and Capacity Test Kit: Usage/Application: Chemical Laboratory	1
347	Digital Sound Decibel Meter Sound Reader with Certificate Measuring Range of 30-130dB - Accuracy Within +/-1.5dBA, Large Backlit LCD Display Noise Detection	2
348	Flexi curve	2
349	Child Behavior Checklist: A standardized assessment tool for evaluating behavioral and emotional problems in children and adolescents.	1
350	Rheometer-Viscometer: Torque Range: 0.1-100 Nm (or 0.1-1000 mNm).	1
351	Dumpy Level-auto level Telescope Image : Erect Magnification: 24x Objective Aperture : 30 mm Resolving Power : 3.5” Field of view : 1°20’ Minimum Focus Distance : 0.3 m Stadia ratio : 100 Stadia constant : 0 Accuracy Standard Deviation of : 1km double run leveling : 2 mm Automatic Compensator : Working range : ±15’ Type : Magnetic Circular Vial Sensitivity : 8’ / 2mm Horizontal Circle Minimum division : 1° / 1gon Reading system : Total area 400G/360° Size and Weight :Dimensions 130mm x 140mm x L 200mm Weight 1.25 kg Dust and Water resistance IP55	4
352	USB Polygraph Real Home Lie Detector	1
353	EMG Biofeedback Instruments Usage/Application: Clinical Purpose	1
354	Academic Achievement Battery (AAB) Comprehensive Form Melissa A. Messer, MHS Format: Individually administered ADMIN TIME: 15 to 30 minutes for the Screening Form and 90 minutes for the Comprehensive Form Ages: 4 to 85 years	1
355	Emotional Literacy: Assessment and Intervention Southampton Psychology Service Editor Adrian Faupel Language : English ISBN-10 : 0708716261	1
356	Tachistoscope Apparatus Electronic with Variable Time controls	5
357	Sinha’s Comprehensive Anxiety Test Author: AKP Sinha and LNK Sinha The Sinha's Comprehensive Anxiety Test (SCAT)	10
358	Aflatoxin ELISA Kit	1
359	Bhatia Battery Performance Tests of Intelligence Author : CM Bhatia	10
360	Ultrapure Water Purification system Technical Specification of ASTM Type-I and Type- II Water Purification System Part 1: High Quality Pre Filter Before Main Units to counter the feed water contamination Manufactured by same equipment manufacturer submit catalogues mentioning below details. 1. High quality Prefilter with Low pressure switch cuts off system which can able to take care high TDS up to 5000 ppm and high SDI up to 50 having 5 Micron and 1 Micron with DC diaphragm pump to boost water pressure from 0 to minimum 2.5 bar at approximately 120 L/Hr with noise levels of Less than 50 Db. Apart from prefilters two separate model should be there for Type-I and TYPE II systems. Part 2: Main Unit Lab Grade Water purification System (Type II) Feed water acceptance capability Specifications for main unit- a. Conductivity: up to 2000 µS/cm. b. Fouling Index (SDI): upto 12. c. Free Chlorine: upto 3 ppm. d. Temperature- 5-35°C. Product Water and main unit should meet or exceed Type II water quality 1. Resistivity 5-15 Mega Ohms with Flow Rate - 3 Ltrs/Hr and TOC < 30 ppb 2. Automatic Electro Deionization Module – With Carbon Beads at cathode which doesn’t required extra pre softening cartridges. 3. System should have facility to control remotely with the help of software interface. All parameter like pressure , current , water rejection %, water product quality should be monitored in desktop or laptop. Attach screenshot of computer screen to validate it. 4. No of Conductivity Cell in Type -II to ensure the Input& Output water quality- 3 Nos.	1

	5. Inside Type-II system Inbuilt Pretreatment Cartridge- 0.5 Micron filter, anti-scaling compounds and RFID tag must be there not as a optional. 6. Pre-treatment pack contains silver-impregnated activated carbon which prevents the proliferation of Bacteria present in tap water; anti scaling compounds must to eliminate hardness and protect the RO membrane against oxidation, scaling and plugging. 7. RFID Tag- for Traceability of pretreatment cartridge and every Liter throughput water volume should be seen on computer when connected thought LAN. Date of installation also be seen on computer. Attach screen shot to verify this feature. 8. RO reject water recovery- up-to 50 %, before and after RO conductivity cell to know the % rejection of RO. 9. In Type II system: - LCD Display must show all below parameter to understand the main system's performance by the user itself. a. Tap water feed conductivity. b. RO feed water conductivity. c. RO water temperature. d. RO pump pressure. e. RO % rejection value. f. RO permeate water conductivity. g. Tank level 10. 3 Way solenoid Valve- RO permeate is diverted to drain until the quality meets expectations. No. of Recovery loop – 1 Nos in type II system to save wastage of reject water. Specifications for Storage Reservoir • Cylindrical tank Capacity minimum 50 Liter. Part 3: Ultra-Pure Water (Type I) should meet or exceed: Product Water Quality Ultrapure (Type 1) water: Typical Water Delivery Flow Rate (L/min) ….2 Ultrapure Water Resistivity (MΩ.cm at 25°C) - 18.2 Microorganisms (cfu/mL) –end filter< 0.01 Particulates < 0.22 µm (/mL) – with end filter< 1 Pyrogen Levels (EU/mL) –< 0.001 RNase Level (pg/mL) –< 1 DNase Level (pg/mL) – < 5 TOC (ppb) ..... ≤ 5 (TOC indicator should be there) Proteases (µg/mL) < 0.15 Recirculation loop- 1 number . 1. The water system has a built-in UV lamp with emission at 185 nm and 254 nm wavelength. The lamp will operate for 2 years without replacement in order to reduce operating costs and the maintenance procedures. 2. Two numbers of Polishing Cartridge of mixed bed resins should be there in Type-I system. 3. The system will have a choice of minimum 6 point-of-use final filters on the water dispenser to support different applications. Submit details of all minimum six. 4. The water Point-of-Delivery can be installed on a wall-mounted support for full flexibility of installation. The wall mounted configuration where the HMI and the Point of Delivery are fixed on the wall to a distance up to 3 meters. POD dispensing experience should be the same whatever the installation of the water purification system. 5. At the Point-of-Delivery, basic information on water quality or any alert / alarm information should be shared. 6. 7" large touchscreen with bright color LCD display compatible with gloves and wet or dry hands. 7. Only one single inline photo-oxidation UV lamp allows both to reduce organics in ultrapure water and to measure TOC level. 8. Inline TOC indicator is being measure at the point of use and displayed on the touchscreen after each dispense. 9. The water purification system is able to report the resistivity and conductivity in both temperature compensated and non-temperature compensated formats. The resistivity meters are able to be verified and calibrated on-site. 10. The system can be connected to the local network via an Ethernet port and has a USB key port. 11. Water dispensing reports record all dispensing parameters (water quality and volume, date and time). Dispensing reports can be stored without time limit. 12. The volumetric water dispensing to deliver a specific water volume, from 100mL to 25L automatically (with 100 mL incremental). A quick volumetric dispensing is also accessible from a pre-set menu of customizable water volumes. 13. Lab Close mode to saves energy and reduces wear of system components. The system automatically resumes hourly recirculation 24 hours prior to resuming lab activity, ensuring the system is ready for use. 14. Check and dispense LEDs should be embedded on the support of the Point-of-Delivery, the key information is at the point of dispensing, Certifications for Water System from manufacturer :- a. CE certificates for Type I & Type II system with model name need to be submitted along with tender. b. cUL, FCC certificates Type I & Type II certificates need to be submitted along with tender. c. ISO® 9001-2015 & ISO® 14001-2015 certificates need to be submitted along with tender. d. ISO® 50001-2018. e. ISO 3696.	
361	Ultra-low temperature (-86°C) freezer Technical Specification:- • Intended use: Cold storage of standard laboratory materials	2

	• Style: Upright • Storage volume: 730 to 750 L • Number of compartments: 3 • Number of inner doors: 3 • Racks per shelf: ≥ 6 • Rack Capacity: ≥ 18 • Holds: 2 in. Boxes- ≥ 570 • Vial Capacity: ≥ 57,000 x 2 mL • Temperature range: -50 °C to -86 °C / Microprocessor based temperature control • Maximum Peak Variation at -80 °C: +4.3 °C /-0.9 °C • Construction (Interior): Stainless steel grade 304 2B • Construction (Exterior): Powder-coated steel • Insulation: Vacuum insulation panels and polyurethane foam • Inner doors: Insulated and sealed • Inner shelves: Stainless steel, heavy duty (at least 150 kg load each) • Casters & level legs • Refrigeration system: 2 stage cascade cooling system • Compressors: Commercially available, heavy-duty compressors • Defrost method: Manual • Refrigerant: High stage- R290 / Low stage- R170 • Alarms: Adjustable high/low temperature, power fail, battery low, filter clean, fault • Password protection for freezer settings • Pull down time (freezer empty, from ambient to -80 °C): ≤ 4 h 10 m • Warm up Time (-80 °C to 0°C), freezer 2/3 full: 42 hrs. • Noise level (at -80 °C): ≤ 48 dB • Door open (for 15 s) recovery (freezer set to -80 °C): ≤ 20 min • Provision for remote notification and online monitoring • Electrical rating (1 phase): 230 V/50 Hz • Agency listing: WEEE / ROHS / REACH / UL / All components must be tested to CE specifications • Stabilizer: 5 kva, Servo controlled	
362	Lyophilizer Technical Specification • Control panel display in English • Vacuum can be displayed in Pascals • Condenser with uniform and good ice capture function • Acrylic drying Chamber is safe and easy to view sample status • Small and compact structure , with easy and convenient operation • Vacuum pump with high pumping speed , to reach good final vacuum • Big opening condenser with external coiling tubes, has pre-freezing function if in machine trays • Color LCD touch screen displays running time, display sample temperature, condenser temperature , vacuum level, and save data automatically • Display sample temperature curve, condenser temperature curve and vacuum curve • Condenser, trays, drying shelf and pre-freezing shelf are made of stainless steel 304, anti-corrosion • Stainless steel air inlet valve (drain valve) is safe, anti-corrosion , no leak • With USB port to output freeze drying data, open and view data in Excel format Machine should be with -60 deg.C condenser performance for trouble free capturing of moisture vapour during drying Freezedryer Nett drying area: 0.18 M2 Drying performance/: upto 2.5 litres aqueous material per batch Ice condenser capacity: 3 times of working volume 6kg/24 hours Ultimate vacuum: Less than 10 Pascals Inner trays: 240mm each x 4 numbers Spacing between trays: 70mm Vial loading possibilitieis: 12mm: 1220 pcs, 16mm: 680 pieces, 22mm: 348 pieces in a batch Seamless condenser size: 270 mm dia x 400 mm deep Drying chamber size: 300x460mm Vacuum pump flow rate: 4 litres/second, 14.4 m3/hour Defosting: off cycle defrosting Drying manifold: 10mm thick acrylic with 8 individually control valves to connect Freezedrying flasks Flask: 8 number of flasks should be provided Condeser cooling: Air cooling Dimension of the macine: 630x580x(970+460)mm Power: 1400 Watts, single phase 200V/50Hz type Refrigerant: CFC Free Weight: Around 200kg	2
363	Culture Flask T25 25cm2 Radiation sterile Canted neck high-density polyethylene cap polystyrene rectangular bottom flask vent cap	500
364	Culture Flask T75 75cm2 Radiation sterile Canted neck high-density polyethylene cap polystyrene rectangular bottom flask vent cap	200
365	Serological pipette 2ml Polystyrene Transparent	200

366	Serological pipette 5ml Polystyrene Transparent	200
367	Serological pipette 10ml Polystyrene Transparent	200
368	Serological pipette 20ml Polystyrene Transparent	200

Form I: Particulars of the Bidders

Name and full address of the organization	
Details of Registered Office Address Telephone No(s) Fax No(s) E-mail address (*Official*): Organization website: Year of Incorporation:	
Turn Over of the Organization (in crore) **2022-23:** **2023-24:** **2024-25:**	
Income Tax Registration number (PAN)	
Goods and Services Tax (GSTN):	
Type of organization (Company/Society/Trust/LLP/Firm)	
Name and addresses and designation of the persons who willrepresent the Bidder while dealing with the University (Attach letter of authority)	
Has the organization blacklisted by any state or central government entity or any of its undertakings	
(Authorized Signatory) Name:_____ Designation & Authority: _____ Place:_____ Date: _____ Stamp: _____	

Form II: Compliance Sheet for Pre-Qualification Criteria

Sr. No.	Criteria	Specific Requirement	Proof of Document Attached in Annexure by Company (Please attach annexure for each criterion)
1	Registration Certificate	Bidder should be a Company/ firm registered under the Indian Companies Act (or) a firm registered under the Limited Liability Partnership Act, 2008 (or) a proprietorship firm (or) a firm registered under the Partnership Act, 1932 for the last 3 years.	
2	Sales Turnover in Lab Equipment Sales & Maintenance services	The bidder must have an average annual turnover of ₹1,50,00,000 (One crore fifty lakhs) in the last three financial years.	
3	Certificates	Apart from company / firm registration, Participant must have registered under the following: • Valid GST Registration and GST Registration in Bihar Certificate. • Income Tax Return of the last three financial year	
4	Letter of authorization from OEM	The bidder should be an OEM or their authorized dealer/representative. In case of authorized dealer/representative, a letter of authorization/dealership clearly stating that dealer is authorized to bid for this particular tender on behalf of the original equipment manufacturer (OEM) and offer OEM products and services.	
5	Technical Capability	The bidder must have prior experience in supplying laboratory equipment to government colleges/ universities/ Government agency/ Educational Department/ Educational or Research Institutions. As proof of experience, the bidder must submit documents showing supply orders worth at least ₹2 crores in any single work order. Ongoing projects will also be considered.	
6	ISO Certificate	The Bidder must have valid ISO 9001:2008/2015 Certificate	

7	Local Service Centers	The bidder should have technical manpower and preferably have local service center to provide service for support for supply of the Equipment this contract.	
8	Participant should not be an entity which has been black-listed by central/state Government	A notarized affidavit on Rs. 1000/- stamp paper that the bidder has not been blacklisted by any Central / State Government (Central/State Government and Public Sector) or under a declaration of ineligibility for corrupt or fraudulent practices as on bid submission date.	

Form III: Self Scoring by the Firm with document

Sr. No.	Basic Requirement	Specific Requirement	Self-Marking by bidder	Proof of Document Attached in Annexure by Company (Please attach annexure for each criterion)
1	Age of firm/company	• 3 Year to 5 Financial Years: 15 marks • More than 5 Financial years: 20 marks		
2	Average annual Turnover of the firm/company in the last three financial years.	• From 1.5 crore and up to 5 crores: 15 marks • More than 5 crores: 20 marks		
3	Experience of working with at least Government agency/ Educational Department/ University/ College. Ongoing projects will be considered.	Bidders must have successfully undertaken the work/Ongoing projects will be considered. • 5 but up to 8 such assignments :15 marks • 9 but up to 10 such assignments :20 marks • More than 10: 25 marks		
4	Supply orders to the government colleges/ universities/ Government agency/ Educational Department/ Educational or Research Institutions, funded by State Government/ Central Government of India above Rs. 2 Crore in each work order.	Bidders must have successfully undertaken the work/Ongoing projects will be considered. • 1 but up to 3 such assignments :5 marks • More than 3 such assignments: 10 marks		
5	Service Centre	• Service Centre in Bihar: 5 Marks		

6	An undertaking (self-certificate) that the agency has Manpower having domain knowledge in Lab Equipment.	• Below 10 Employees: 10 Marks • 11 to 50 Employees: 15 Marks • More than 50: 20 Marks		

Form IV - PROPOSAL COVERING LETTER
[On the Letter head of the Bidder]

Date:

Dear Sir/Madam,

Having examined the Bid Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply in conformity with the said Bid documents in accordance with the schedule of prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods within the delivery period as specified in the Bid document. We will also submit the Performance Guarantee for an amount equal to 5% of the contract value.

We agreed to abide by all Terms and conditions of this Bid for a period of 180 days after the date fixed for Financial Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding contract between us.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988". If we are found in Bid pooling which is against law and involves fraudulent or and corrupt practices, my / our firm may be blacklisted.

Further we also certify that our organization is not blacklisted by any Govt. Department as on date.

Dated_____

(Signature)

SEAL

Form V: Non submission of EMD Declaration

(This form should be submitted by those bidders who are claiming waiving off of EMD)

To
Registrar
Lalit Narayan Mithila University
Darbhanga

Dear Madam,

Subject: Request for Proposal (RFP) for Agency for Laboratory Chemical, Glassware, Plasticware and Equipment Supply, Installation, Commissioning and Services for its maintenance to LNMU.

We_____(bidder name), hereby undertake that we are liable to be suspended from participation in any future tenders of LNMU for 3 years from the date of submission of Bid in case of any of the following:

1. If the bid submitted by us is withdrawn/modified during the period of bid validity.
2. If any statement or any form enclosed by us as part of this Bid turns out to be false / incorrect at any time during the period of prior to signing of Contract.
3. In case of we are becoming successful bidder and if:
    - We fail to execute the Contract within the stipulated time.
    - We fail to furnish Performance Bank Guarantee within the timelines stipulated in this RFP document.

Yours faithfully,

Date:

For _____

Signature_____

Name _____

Authorized Signatories
(Name & Designation, seal of the firm)

Form VI - EMD BANK GUARANTEE FORMAT

(To be stamped in accordance with Stamp Act)
Ref: Bank Guarantee No.: Date:

WHEREAS M/s._____ (Name & Address of the Firm) having their registered office at _____ (Address of the firms Registered office) (Hereinafter called the 'bidder') wish to participate in the tender No. _____ for Lalit Narayan Mithila University, Darbhanga and WHEREAS a Bank Guarantee for (Hereinafter called the "Beneficiary") a sum of Rs. 12,00,000 (Rupees Twelve Lacs only) valid till _____ (Mention here date of validity of this Guarantee which from the date of the submission of Tender's offer) which is required to be submitted by the bidder along with the tender.

We, _____ (Name of the Bank and address of the Branch giving the Bank Guarantee) having our registered office at _____ (address of Bank's Registered office) hereby give this Bank Guarantee No. _____ dated _____ and hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the University or any officer authorized by it in this behalf any amount not exceeding Rs. 12,00,000 (Rupees Twelve Lacs only) to the said University on behalf of the bidder. We _____ (Name of the Bank) also agree that:

1 Withdrawal of the tender or part thereof by the bidder within its validity, or

2 Non submission of Performance Security Deposit by the bidder, or

3 Withdraws his participation from the bid during the period of validity of bid document, and

4 Fails or refuses to participate in the subsequent Tender process after having been shortlisted.

Would constitute a default on the part of the bidder and that this Bank Guarantee is liable to be invoked and encashed within its validity by the Beneficiary in case of any occurrence of a default on the part of the bidder and that the encashed amount is liable to be forfeited by the Beneficiary. This agreement shall be valid and binding on this Bank upto and inclusive of _____ (mention here the date of validity of Guarantee) and shall not be terminable by notice or by Guarantor change in the constitution of the Bank or the firm of bidder or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the bidder and the University. "Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this Guarantee shall not be assignable, transferable by the beneficiary (i.e. LNMU). Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the Bank. Any invocation of the Guarantee can be made only by the beneficiary directly. NOTWITHSTANDING anything contained hereinbefore, our liability under this guarantee is restricted to Rs. 12,00,000 (Rupees Twelve Lacs only). Our Guarantee shall remain in force till _____ (Date of validity of the Guarantee). Unless demands or claims under this Bank Guarantee are made to us in writing

on or before _____(Date of validity of the Guarantee), all rights of Beneficiary under this Bank Guarantee shall be forfeited and we shall be released and discharged from all liabilities there under:

Place:

Date:-

Please mention here Complete Postal Address of the Bank with Branch Code, Telephone and Fax Nos. SIGNATURE OF THE BANK'S AUTHORISED SIGNATORY WITH OFFICIAL ROUND SEAL NAME OF DESIGNATED BANKS:

Note1 : The Bank Guarantee (B.G)Shall be from the Nationalize Banks or any other Banks, as Notified by the Finance Department, from time to time.

Note2: The B.G shall be signed by two bank officer Jointly if the amount of B.G is more than Rs 50,000/- and B.G must have proper B.G number as per R.B.I guidelines.

Seal:

Date:

Form VII - Undertaking of Authenticity for Lab Chemicals, Plasticwares, Glasswares and Equipments

To **Date:**
The Registrar
Lalit Narayan Mithila University
Darbhanga

Sub: Request for Proposal (RFP) for Supply of Chemicals, Glasswares, Plasticwares and Supply, Installation and Commissioning of Lab and ancillary equipments, vide our quotation number _____dated ___

Dear Sir,

With reference to the Lab Chemicals, Glasswares, Plasticwares and Equipment being supplied / quoted to you vide our invoice no. / quotation no. / order no. cited above.

We hereby undertake that all the components/parts/assembly/software used in the Lab Equipment shall be original new components / parts / assembly / software only, from respective OEMs of the products and that no refurbished / duplicate / secondhand components / Parts / Assembly / Software is being used or shall be used.

We also undertake that in respect of licensed system if asked for by you in the purchase order, the same shall be supplied along with the authorized license certificate and also that it shall be sourced from the authorized source.

Should you require, we hereby undertake to produce the certificate from our OEM supplier in support of above undertaking at the time of delivery / installation. It will be our responsibility to produce such letters from our OEM Supplier's at the time of delivery or within a reasonable time.

In case of default and we are unable to comply with above at the time of delivery of the items or during installation for Lab Equipment already billed, we agree to take back the items or the Lab Equipment without demur, if already supplied and return the money if any paid to us by you in this regard.

We also take full responsibility of both Parts & Service SLA as per the content even if there is any defect by our authorized Service Centre / Reseller / SI etc.

Authorized Signatory Name:
Designation:

Form VIII: - FORMAT ABOUT NON-BLACK-LISTING

DECLARATION ABOUT NON-BLACK-LISTING
(On Notarized Stamp Paper of Rs 1000/-)

I, M/s..... , (the names and addresses of the registered office) hereby certify and confirm that we or any of our promoter(s) / director(s) are not blacklisted/barred/convicted by any court of law for any criminal or civil offences/declared ineligible by any University/College or any other entity of GoB or any entity of state government or central government, or any local self-government body or public undertaking in India for participating in future bids for unsatisfactory performance, corrupt, fraudulent or any other unethicalbusiness practices or for any other reasons, as on date of submission (upload) of online bidding document.

And that we are hereby, declaring all ongoing litigations where our promoter(s)/director(s) are involved in with any government agency/state/central department/PSU, and as mentioned below:

1.
2.
3.

We further confirm that we are aware that, our application for the captioned Project would be liable for rejection in case any material misrepresentation is made or discovered at any stage of the Bidding Process or thereafter during the contract period and the amounts paid till date shall stand forfeited without further intimation.

Dated this..... Day of. ..... , 2025

Name of the Bidder/agency……
Signature of the Authorized Person:……..
Name of the Authorized Person:……
Designation of the Authorized Person:……..

Yours faithfully,
(Name & signature with stamp of the bidder)

Signature Verified by Notary

Form IX - PROFORMA FOR BANK GUARANTEE FOR PERFORMANCE SECURITY

(To be stamped in accordance with Stamp Act)
Ref: Bank Guarantee No.: Date:

WHEREAS ..... (Name of Bidder) hereinafter called "the Bidder", has been identified and selected to supply chemicals, plasticwares, glasswares and supply, install and commissioning of lab and ancillary equipments, and has undertaken, in pursuance of work order number _____, dated_____ (hereinafter referred to as "the Contract") to supply chemicals, plasticwares, glasswares and supply, install and commissioning of lab and ancillary equipments in L.N. Mithila University, Darbhanga.

AND WHEREAS it has been stipulated in the said Contract that the bidder shall furnish a Bank Guarantee ("the Guarantee") from a Scheduled Bank for the project/performance of the supply, install and commissioning of lab and ancillary equipments as per the contract. WHEREAS we ("the Bank", which expression shall be deemed to include it successors and permitted assigns) have agreed to give the SHS, Bihar the Guarantee:

THEREFORE, the Bank hereby agrees and affirms as follows:

1. The Bank hereby irrevocably and unconditionally guarantees the payment of ……., to the University under the terms of their contract dated on account of full or partial non- performance / non- implementation and/ or delayed and/ or defective performance / implementation. Provided, however, that the maximum liability of the Bank towards the University, under this Guarantee shall not, under any circumstances, exceed in aggregate.
2. In pursuance of this Guarantee, the Bank shall, immediately upon the receipt of a written notice from the University stating full or partial non-implementation and/ or delayed and or defective implementation, which shall not be called in question, in that behalf and without delay/demuror set off, pay to the University any and all sums demanded by the University under the said demand notice, subject to the maximum limits specified in **Clause 1** above. A notice from University, to the Bank shall be sent by Registered Post (Acknowledgement Due) /Email at the following address: Attention Mr. (*Mention the official address of the bidder*) and email ID _____.
3. This Guarantee shall come into effect immediately upon execution and shall remain in force for a period of **12 months** from the date of its execution.
4. The liability of the Bank under the terms of this Guarantee shall not, in any manner whatsoever, be modified, discharged, or otherwise affected by:
    a. any change or amendment to the terms and conditions of the Contract or the execution of any further contracts/Agreements.
    b. any breach or non-compliance by the bidder with any of the terms and conditions of any contracts/credit arrangement, present or future, between bidder and the Bank.
5. The Bank also agrees that the University at its option shall be entitled to enforce

this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against agency and not withstanding any security or other guarantee that the University may have in relation to the bidder's liabilities.

6. The Bank shall not be released of its obligations under these presents by reason of any act of omission or commission on the part of LNMU or any other indulgence shown by the University or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.
7. This guarantee shall be governed by the laws of India and only the courts of Darbhanga, shall have exclusive jurisdiction in the adjudication of any dispute which may arise here under.

Dated this the …….. Day of ……2025

Witness

(Signature) (Signature)

(Name) (Name)

Bank Rubber Stamp(Official Address)

Designation with Bank

Form I: Financial Proposal

As per the Financial Forms provided with Bid document.

1 The bidder/agency shall be required to quote for all the items mentioned in Annexure - A

2 Format of financial quote is shown in the table below:

Sl No	Items	Cost of all Items (A)	Cost of Annual Maintenance Services of the equipments for 2 additional years for required items only (B)	Total Price quote in figures (A+B)	Total Price in words
1	All the Items as mentioned in Annexure – A - Technical Specification of equipment with required quantity				

Note: -

(a) No other allowances like TA/ DA etc. will be paid by LNMU.
(b) It shall include all costs associated with the assignment including all freight, loading and unloading charges, transportation, labor charges, insurance etc. including training by the selected agencies on required items as may be requested by the university. The Tendering Authority will not bear any cost other than the lump-sum total cost quoted in the financial proposal.
(c) The financial bid will have to be submitted as per standard on-line format (E-proc2) only.
(d) The decision of the University will be final & will be binding on all firms.
(e) During Evaluation of Financial proposals, the quoted Total Cost of all the items **including GST,** as per the Govt. rule, shall be considered.
(f) Final negotiation on rates given in the financial bid will be made after finalization of Tender.
(g) The work order will be awarded based on the L1 basis explored by the University.

Yours faithfully,

30.11.25

Registrar
L.N. Mithila University
Darbhanga

Note: The Financial Proposal is to be submitted strictly as per forms given in the RFP