



Government of Odisha
Department of Higher Education
Lokaseva Bhawan, Sachivalaya Marg,
Bhubaneswar-751001

PTI-HE-SCH-POLICY-0003-2026/35467 /H.E., Bhubaneswar, Dated 01/07/2026

From

Smt. Ranjita Sahoo, OAS (S)
Joint Secretary to Government & SPD, RUSA/ PM-USHA

To

The Director
Information & Public Relation Department,
Bhubaneswar

Sub: Publication of tender for procurement, supply, installation & commissioning of laboratory equipment & its accessories for Berhampur University (RDE, Berhampur) under PM-USHA.

Madam/Sir,

I am directed to enclose herewith the copy of tender advertisement (Annexure A) for procurement, supply, installation & commissioning of laboratory equipment & its accessories for **Berhampur University (RDE, Berhampur)** under PM-USHA which may kindly be published in the **two leading national daily (English) newspaper all India edition and two odia daily newspapers on 02.07.2026**. The cost will be borne by Higher Education Department.

Yours faithfully,

Joint Secretary to Government
& SPD, RUSA/ PM-USHA

Memo No. 35468 /HE/date-----01-----072026

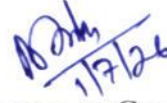
Copy forwarded to OSD to Commissioner-cum- Secretary to Govt., Higher Education Department for kind information of Commissioner-cum-Secretary.

Joint Secretary to Government
& SPD, RUSA/ PM-USHA

(PTO)

Memo No 35469 /HE/date 01 07/2026

Copy forwarded to Additional Secretary to Govt., I/C of IT Section, Higher Education Department with request to publish the RFP (enclosed as Annexure B) in the website of Higher Education Department on 02.07.2026.


17/26

Joint Secretary to Government
& SPD, RUSA/ PM-USHA



**GOVERNMENT OF ODISHA
HIGHER EDUCATION DEPARTMENT
Lokaseva Bhavan, Sachivalaya Marg, Bhubaneswar – 751001**

Phone: 0674-2954600 | Website: <https://dhe.odisha.gov.in> | Mail: rusa.odisha@gmail.com

REQUEST FOR PROPOSAL

Higher Education Department invites sealed tenders from eligible bidders for the following work:

The complete set of bidding documents and other details are available at <https://dhe.odisha.gov.in>.

EMD ₹5,00,000/-

Last date for submission of bids: 23.07.2026 up to 4:00 PM

Opening of technical bids: 24.07.2026 at 4:00 PM

Sr. No.	Name of the Work	Tender No.	Tender Fee
1	Procurement, Supply, Installation & Commissioning of Laboratory Equipment & its accessories for Berhampur University, Ganjam under Regional Directorate of Education, Berhampur approved under PM-USHA	PM-USHA: 02/2026	₹10,000/- + Applicable GST

Bids must be sent via Speed/Registered Post only to:

Joint Secretary to Govt. cum SPD (RUSA/ PM-USHA), Higher Education Dept., Lokaseva Bhavan, Bhubaneswar – 751001.

Sd/-

Joint Secretary-cum-SPD (PM-USHA)

**GOVERNMENT OF ODISHA
HIGHER EDUCATION DEPARTMENT
REQUEST FOR PROPOSAL (RFP)
FOR
PROCUREMENT, SUPPLY, INSTALLATION & COMMISSIONING OF LABORATORY
EQUIPMENT & ITS ACCESSORIES FOR BERHAMPUR UNIVERSITY (RDE,
BERHAMPUR) UNDER PM-USHA**

RFP No. : PMUSHA/OJHED/2026

Date : 02/07/2026

ISSUED BY

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

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NOTICE INVITING REQUEST FOR PROPOSAL (RFP)

RFP No. PM-USA-02/HE Date: 02/07/2026

The Higher Education Department, Government of Odisha invites sealed proposals from eligible Original Equipment Manufacturers (OEMs) / Authorized Dealers / Authorized Distributors / Authorized Suppliers for "Procurement, Supply, Installation & Commissioning of Laboratory Equipment & its accessories for Berhampur University, Ganjam (RDE, Berhampur) under of PM-USA".

The interested bidders may download the RFP document from the official website of Higher Education Department, Government of Odisha.

The proposals complete in all respect must reach the undersigned on or before the date and time prescribed in the RFP schedule.

The Higher Education Department reserves the right to accept or reject any or all proposals without assigning any reason thereof.

Sd/-

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001

Phone No : 0674-2954600

Email : rusa.odisha@gmail.com

DATA SHEET

Sl. No.	Particulars	Details
1	Name of the Work	Procurement, Supply, Installation & Commissioning of Laboratory Equipment & its accessories for Berhampur University, Ganjam under Regional Directorate of Education, Berhampur approved under PM-USA.
2	Tender Inviting Authority	Higher Education Department, Government of Odisha
3	Method of Selection	Item-wise Least Cost Selection (L1)
4	Availability of RFP Document	02/07/2026 to 23.07.2026 (up to 4:00 PM)
5	Last Date for Submission of Queries	08/07/2026
6	Date of Pre-Bid Meeting	10/07/2026 at 3:30 PM in the Conference Hall of HE Dept.
7	Last Date & Time for Submission of Bid	23/07/2026 (till 4:00 PM) (Registrar Post & Speed Post only)

Sl. No.	Particulars	Details
8	Date & Time of Opening of Technical Bid	24 /07/2026 at 4:00 PM
9	Presentation	will be intimated
10	Date & Time of Opening of Financial Bid	will be intimated
11	Bid Processing Fee	Rs. 10,000/- + GST (As applicable)
12	EMD Amount	Rs. 5,00,000/- (Rupees Five Lakh Only) (inclusive of all taxes)
13	Bid Validity	180 Days from the last date of submission of bids
14	Performance Security	5% of Contract Value
15	Delivery Period	Within 120 Days from Signing of contract Agreement
16	Warranty Period	36 Months Comprehensive Onsite Warranty
17	Address for Communication	Joint Secretary to Govt. & State Project Director, RUSA/PM-USHA, Higher Education Department, Govt. of Odisha Lokaseva Bhavan, Ground Floor, Sachivalaya Marg Pin-751001 Phone No : 0674-2954600 Email : rusa.odisha@gmail.com

1. INTRODUCTION

1.1 Background

The Higher Education Department, Government of Odisha is implementing various academic and infrastructure strengthening initiatives under PM-USHA (Pradhan Mantri Uchchatar Shiksha Abhiyan). Under PM-USHA, the Department intends to strengthen laboratory infrastructure and research ecosystem in selected State Public Universities of Odisha through procurement of modern laboratory equipment & its accessories.

The project aims at improving quality of higher education, practical learning, advanced research facilities, innovation ecosystem and employability-oriented academic environment in the Universities.

The Higher Education Department, Government of Odisha therefore invites sealed proposals from eligible Original Equipment Manufacturers (OEMs)/Authorized Dealers/Authorized Distributors/Authorized Suppliers for procurement, supply, installation and commissioning of laboratory equipment & its accessories for following **Berhampur University, Ganjam under Regional Directorate of Education, Berhampur** approved under PM-USHA.

The bidder shall quote rates item-wise and university wise against the equipment requirement indicated in the RFP document along with compliance to technical specifications prescribed therein.

The selected bidder shall be responsible for supply, installation, commissioning, testing, demonstration and warranty support of the equipment supplied under the project.

1.2 OVERVIEW & OBJECTIVES

The Government of India has launched PM-USHA (Pradhan Mantri Uchchatar Shiksha Abhiyan) for transformation of the higher education ecosystem in alignment with the objectives of National Education Policy (NEP), 2020 with emphasis on quality, equity, access, multidisciplinary education, research and innovation.

Under the PM-USHA, the Higher Education Department, Government of Odisha proposes procurement, supply, installation and commissioning of modern laboratory equipment & its accessories for Berhampur University, Ganjam to strengthen laboratory infrastructure, practical learning and research ecosystem.

The project aims at establishment of modern laboratories and advanced academic infrastructure to support undergraduate, postgraduate and research programmes across different disciplines. The initiative is intended to improve teaching-learning outcomes, promote innovation and interdisciplinary research, enhance employability and facilitate use of modern scientific and technological tools in higher education institutions.

The procurement shall be carried out through transparent competitive bidding process in accordance with applicable Government procedures and financial rules.

2. SCOPE OF WORK

The scope of work under this project shall broadly include procurement, supply, installation and commissioning of laboratory equipment & its accessories for different departments/laboratories of Berhampur University, Ganjam (RDE, Berhampur) under PM-USHA.

The detailed scope of work includes the following:

2.1 Scope of Higher Education Department / Universities

The scope of Higher Education Department / concerned Universities shall include:

- I. Providing suitable installation space and basic infrastructure facilities.
- II. Facilitating access to the installation sites.
- III. Inspection and verification of supplied equipment.
- IV. Monitoring of installation and commissioning activities.
- V. Issuance of installation and acceptance certificates after satisfactory functioning of equipment.
- VI. Processing of payment as per terms and conditions of the contract.

2.2 Scope of Successful Bidder

The successful bidder shall undertake the following activities:

- i. Supply of laboratory equipment strictly as per the technical specifications prescribed in the RFP.
- ii. Safe transportation, loading, unloading and delivery of equipment at designated Universities.
- iii. Installation and commissioning of all supplied equipment at site.

- iv. Supply of all standard accessories, attachments, consumables and fittings required for successful operation of the equipment.
- v. Conducting testing, demonstration and trial run of equipment.
- vi. Providing user manuals, operation manuals and service manuals wherever applicable.
- vii. Providing onsite operational training to faculty members, laboratory staff and other users.
- viii. Providing comprehensive onsite warranty support during warranty period.
- ix. Replacing defective parts/components free of cost during warranty period.
- x. Ensuring availability of technical support and after-sales service support during warranty period.
- xi. Submission of installation report, commissioning report and warranty certificates.
- xii. Any other incidental work necessary for successful completion of the project.

3. SPECIAL TERMS & CONDITIONS

- I. Either Original Equipment Manufacturer (OEM) or its authorized dealer/distributor/partner may participate in the bidding process.
- II. In case both OEM and its authorized dealer/distributor participate for the same item in the bid, both bids will be liable for rejection.
- III. In case of authorized dealer/distributor, bid specific Manufacturer's Authorization Form (MAF) from OEM shall be mandatory.
- IV. The OEM shall have functional office in India and shall have been operating in the Country for the last 5 Years.
- V. The bidder shall quote rates strictly in accordance with the specifications prescribed in the RFP document.
- VI. **The bidder shall submit item-wise compliance statement against the technical specifications. Also the bidder shall specifically mention specifications of their product and comparison with the required specification as mentioned in the RFP.**
- VII. The bidder shall furnish detailed technical brochures/catalogues along with the bid.
- VIII. Mere reproduction of technical specifications without proper compliance details shall not be acceptable.
- IX. The equipment supplied shall be new, unused and of latest model/version.
- X. Refurbished or second-hand equipment shall not be accepted under any circumstances.
- XI. The bidder shall ensure that the equipment supplied conform to relevant BIS/ISO or equivalent standards as prescribed by Govt. of India, wherever applicable.
- XII. Prices quoted shall be inclusive of all taxes, duties, transportation, insurance, loading, unloading, installation, commissioning and training charges & hedging.
- XIII. The Higher Education Department reserves the right to increase or decrease the quantity of equipment at the time of award of contract.
- XIV. Prices shall be quoted only in Indian Rupees (INR). Any quotation in foreign currency shall be liable for rejection.

- XV. Evaluation of financial bids and selection of L1 bidder shall be carried out on item wise basis.
- XVI. The successful bidder shall submit Performance Security Deposit equivalent to 5% of contract value in the prescribed format.
- XVII. The successful bidder shall complete supply, installation and commissioning within the stipulated timeline prescribed in the Purchase Order.
- XVIII. Delayed supply or installation shall attract penalty/liquidated damages as per terms of the contract.
- XIX. The bidder shall not assign or transfer the contract or any part thereof without prior written approval of the Department.
- XX. The Department reserves the right to inspect manufacturing facilities or conduct pre-dispatch inspection if required.
- XXI. The decision of Higher Education Department regarding technical evaluation and selection of bidder shall be final and binding.

4. WARRANTY CLAUSE

The successful bidder shall provide comprehensive onsite warranty for all supplied equipment for a minimum period of 36 (Thirty Six) months from the date of successful installation and commissioning unless otherwise specified in the technical specifications.

The warranty shall cover:

- Preventive maintenance.
- Corrective maintenance.
- Repair/replacement of defective components/spare parts.
- Software support and updates wherever applicable.
- Technical service support.

During the warranty period, the successful bidder shall ensure the following:

- a. Complaint response time shall not exceed 72 hours.
- b. Minor defects shall be rectified within 7 days.
- c. Major defects requiring replacement shall be rectified within 15 days.
- d. In case the equipment remains non-functional beyond reasonable period, standby arrangement/replacement shall be provided wherever feasible.
- e. No additional charges shall be payable for repair/replacement during warranty period.
- f. In the event of failure to comply with the stipulated response and rectification time lines mentioned above, penalty will be imposed at the rate of 0.5% of the equipment cost per week or part thereof of delay, subject to a maximum of 10% of the equipment cost. The penalty shall be recovered from the pending payments, performance security or any other dues payable to the bidder. Persistent failure in providing service support may also lead to blacklisting/debarment of the bidder as per applicable Govt. Rules.

The bidder shall clearly indicate details of service support infrastructure and availability of service engineers along with the bid.

Warranty certificates for all equipment shall be submitted at the time of installation and commissioning.

5. LIST OF EQUIPMENT UNIVERSITY WISE AT – (ANNEXURE II).

6. TERMS OF RFP

1. The bidders must submit the proposals in sealed envelopes superscripted as "RFP for Procurement, Supply, Installation and Commissioning of Laboratory Equipment & its accessories for Berhampur University, Ganjam under PM-USHA including the RFP no____ & name of the University". The outer envelope shall bear the submission address, RFP reference number, bidder's name and address and shall be clearly marked **"DO NOT OPEN BEFORE TECHNICAL BID OPENING"**.
2. Bidders must sign all pages of the RFP document by their authorized signatory and submit the same along with the Technical Bid.
3. The bidders shall quote rates item-wise for the equipment indicated in the University-wise requirement list and technical specifications. Partial quantity bidding against an individual item shall not be allowed unless specifically permitted by the Higher Education Department.
4. Only Original Equipment Manufacturers (OEMs)/Authorized Dealers/Authorized Distributors/Authorized Suppliers of OEM having similar experience are invited to bid. Joint Venture/Consortium bidding shall not be allowed.
5. In case of Authorized Distributors /Suppliers/Dealer of OEM, authorization letter from the Original Equipment Manufacturer (OEM) specific to this RFP shall be enclosed. An undertaking from the OEM stating that they shall provide regular technical support, warranty support and product updates shall also be submitted.
6. In the RFP, either the OEM itself or its Authorized Distributors /Supplier/Dealer may submit the proposal for a particular equipment/item, but both cannot submit simultaneously for the same item/product in the same RFP. If done so then the entire bid will be rejected. Also The bidder, whether an OEM, authorised dealer, distributor, or channel partner, shall quote only one make/brand against a particular item in the financial bid. Quoting multiple makes/brands for the same item shall render the bid liable for outright rejection/cancellation for that item and may lead to rejection of the entire bid at the discretion of the Tender Inviting Authority
7. If an Authorized Distributors /Supplier/Dealer submits bid on behalf of an OEM, the same Authorized Distributors /Supplier/Dealer shall not submit bid on behalf of another OEM for the same item.
8. The bidder, whether an OEM, authorised dealer, distributor, or channel partner, shall quote only one make/brand against a particular item in the financial bid. Quoting multiple makes/brands for the same item shall render the bid liable for outright rejection/cancellation for that item and may lead to rejection of the entire bid at the discretion of the Tender Inviting Authority.
9. The Financial Bid must contain equipment-wise and university wise price breakup in term of Rupees.
10. The Financial Bid shall be submitted strictly in the prescribed format provided in the RFP document.

11. The quoted price shall be inclusive of supply, transportation, insurance, loading, unloading, installation, commissioning, testing, training, warranty support, hedging and all applicable taxes and duties.
12. Participation of bidder in this tender shall be governed by the provision of Rule 144 (xi) of the General Financial Rules, 2017 & Department of Expenditure, Ministry of Finance Order no F.No. 6/18/2019 PPD Dated 23.07.2020 and subsequent amendments/clarification issued thereto.
13. Warranty shall be for a minimum period of 36 months from the date of successful installation and commissioning unless otherwise specified.
14. Performance Security in the form of Bank Guarantee equivalent to 5% of the Contract Value shall be submitted by the successful bidder on receipt of Letter of Award (LoA). The Bank Guarantee shall remain valid for the warranty period along with additional claim period of six months.
15. The Higher Education Department reserves the right to increase or decrease the quantity/scope of work before signing of agreement or after signing of agreement without change in the approved unit rates and as per provisions of OGFR/GFR and mutually agreed terms and conditions.
16. The Higher Education Department reserves the right to change/modify/amend any or all provisions of this RFP document. Such changes/amendments/corrigendum shall be uploaded in the official website of the Department only.
17. Bidders are advised to visit the Department website periodically for updates, corrigendum and notifications relating to the RFP.
18. The Higher Education Department reserves the right to cancel the RFP process or reject any or all proposals at any stage without assigning any reason thereof and without incurring any liability.
19. The Higher Education Department reserves the right to determine the eligibility of any bidder based on the information furnished in the proposal and/or any other information available with the Department.
20. Bidders shall maintain confidentiality of all information and documents provided by the Higher Education Department and shall not use such information for any purpose other than preparation and submission of the bid.
21. The Higher Education Department reserves the right to seek additional information, clarification or supporting documents from any bidder during evaluation of bids.
22. Submission of proposal by the bidder shall be deemed as unconditional acceptance of all terms and conditions of the RFP document.
23. The Proposal Covering Letter along with all prescribed annexures and declarations shall be duly signed by the authorized signatory of the bidder and submitted with the Technical Bid.
24. The bidder shall submit Power of Attorney/Authorization in favour of the signatory authorized to sign and submit the bid documents.
25. Any condition, deviation or qualification imposed by the bidder in the proposal may render the bid liable for rejection as non-responsive.
26. The bid and all correspondence relating to the bid shall be written in English language only.

27. All documents submitted by the bidder shall become property of the Higher Education Department and the Department shall have no obligation to return the same.
28. The Higher Education Department reserves the right to reproduce, copy, retain and use the bid documents and related materials for evaluation, clarification, negotiation, audit and contract management purposes.
29. The bidders shall bear all costs and expenses associated with preparation and submission of the proposal and the Higher Education Department shall not be liable for any such costs under any circumstances.

7. Instruction to Bidders

7.1 General Conditions

a. **Binding Information:** All information supplied by the bidders shall be treated as contractually binding upon the bidders, provided the assignment is successfully awarded by **HED, Odisha**, based on this RFP.

b. **No Commitment Before Contract:** No commitment, contractual or otherwise, shall exist unless and until a formal written contract is executed between **HED, Odisha**, and the selected bidder. Any notification of a preferred bidder status shall not give rise to any enforceable rights by the bidder. **HED, Odisha** reserves the right to cancel the process at any time before formal contract execution.

c. **RFP Supersedes Prior Communications:** This RFP supersedes and replaces any previous public documentation and communications regarding the procurement of lab equipment & its accessories. Bidders should not place reliance on any prior communications or documents.

7.2 Compliance / Completeness of Response

a. **Study RFP Document:** Bidders must carefully study all instructions, forms, terms, requirements, appendices, and other information in the RFP documents. The submission of the proposal shall be deemed as having been done after a careful study and full understanding of the RFP document.

b. **Non-Compliance May Lead to Rejection:** Failure to comply with the instructions may render the proposal non-compliant, leading to rejection. Bidders must:

- Comply with all requirements specified in this RFP.
- Submit the forms as instructed and respond to each section in the order specified.
- Include all supporting documentation as required in the RFP.
- Submit a complete proposal, **indexed** with page numbers clearly marked on each page. Cross-references should be indicated on the Index page.

7.3 Bidder Clarifications (Pre-Bid Discussion)

7.3.1 Queries to the RFP

a. **Submission of Queries:** **HED, Odisha** invites queries from bidders regarding any section or requirement mentioned in the RFP.

b. **Query Submission:** Bidders must ensure their queries reach **HED, Odisha** only via email (rusa.odisha@gmail.com) or through an authorized representative before the pre-bid meeting as notified. Any other mode of submission of queries will not be accepted.

Queries should be submitted in the following format:

- **Section/Page No.:** (Specify section/page of RFP requiring clarification)
- **Content of RFP:** (Brief description)
- **Clarification Requested:** (State specific clarification needed)
- **Remarks:** (Any additional comments or suggestions)

7.3.2 Responses to Queries and Issuance of Corrigendum

- Pre-Bid Discussion:** The queries submitted by bidders will be discussed and responded to during a virtual/physical/hybrid mode of meeting. The purpose is to provide bidders with information regarding the RFP and to address clarifications.
- Pre-Bid Meeting Schedule:** HED, Odisha reserves the right to reschedule or hold the Pre-Bid meeting at its discretion. The meeting will be held through virtual/physical/hybrid mode and details will be communicated.
- Clarifications After Pre-Bid Meeting:** Any requests for clarification received after the pre-bid meeting will not be entertained. HED, Odisha makes no representation regarding the completeness or accuracy of responses made in good faith.
- Corrigendum Issuance:** HED, Odisha may modify the RFP document at any time before the last date for submission through a corrigendum, which will be posted on its official website: (<https://dhe.odisha.gov.in>). Such modifications are binding on all bidders.

7.4 Key Requirements of the Bid

7.4.1 Rights to Terminate the Process

- Termination Rights:** HED, Odisha reserves the right to terminate the RFP process at any time without assigning any reason. Participation in this process does not guarantee a business transaction or a contract with HED, Odisha.
- No Offer:** This RFP does not constitute an offer by HED, Odisha. A bidder's participation may lead to engagement for the execution of the contract upon award.

7.4.2 Bid Processing Fee

Bidders must submit a **non-refundable Bid Processing Fee** of INR 10,000/- (**Rupees Ten Thousand Only**) along with their proposals. The fee must be submitted in the form of a **Demand Draft** issued by any scheduled bank in favor of "DDO US Higher Education Department, Odisha, payable at Govt. Secretariat Branch, UCO Bank, Bhubaneswar" and should be valid for 180 days from the due date of the Tender/RFP.

7.4.3 Earnest Money Deposit (EMD)

- EMD Submission:** The **Earnest Money Deposit (EMD)** must be submitted at **Rs. 5,00,000/- (Rupees Five Lakh Only)** (inclusive of all taxes). This amount should be in the form of a **Demand Draft** issued by any scheduled bank in favor of "DDO US Higher Education Department, Odisha, payable at Govt. Secretariat Branch, UCO Bank, Bhubaneswar" and should be valid for 180 days from the due date of the Tender/RFP. MSME manufacturer from Odisha are exempted from EMD payments as per MSME policy amended from time to time.
- Verification at Financial Bid Evaluation:** The EMD will be verified at the time of **Financial Bid Evaluation**. If the submitted EMD is non-compliant (in terms of amount or form), the financial bid will be rejected.

EMD of all unsuccessful Bidders would be refunded within 30 Days of the Bidder being notified as being unsuccessful. The EMD, for the amount mentioned above, of the successful Bidder would be returned within 60 Days, only after submission of Performance Bank Guarantee. EMD amount is interest free and will be refundable to the unsuccessful Bidder without any accrued interest on it. The Proposal submitted without Bid Processing Fee & EMD, mentioned above, will be summarily rejected.

The EMD may be forfeited:

- i. If a Bidder withdraws its Proposal during the period of validity.
- ii. In case of a successful Bidder, if the Bidder fails to sign the Contract in accordance with this RFP.

7.4.4 Submission of Responses

The Bids shall be submitted through REGISTERED POST/SPEED POST only under two cover system i.e. viz., Technical Bid/Proposal (Cover – I) and Financial Bid/Proposal (Cover – II) and both the covers shall be incorporated in a single cover.

- i. All the pages of the bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before submission.
- ii. The proposal submitted through any other mode shall not be considered and will be rejected.
- iii. No correspondence will be entertained in this matter.
- a. **Cover – I: Technical Bid** (in sealed envelope containing)
 - I. Covering Letter (**Annexure-I**)
 - II. Copy of RFP document including corrigendum/addendum if any (latest uploaded on website/shared through email) where every page should be signed by the authorized signatory with seal.
 - III. Technical Proposal
 - IV. Pre-Qualification/Eligibility Criteria, mandatory documents as mentioned in **Annexure-III**
 - V. Bid Processing Fee
 - VI. Earnest Money Deposit (EMD)
 - VII. Particulars of the Bidder (**Annexure IV**)
 - VIII. Affidavit for Not Being Blacklisted (**Annexure VI**)
 - IX. Format for Power of Attorney / Authorization Letter (**Annexure VII**)
 - X. All required Annexures as well as other relevant documents (if any)
- b. **Cover – II: Financial Bid** (in sealed envelope containing)
 - I. Cover Letter
 - II. Financial Proposal in the prescribed format at **Annexure V**

7.4.5 Authentication of Proposals

The Proposal should be authorized by the authorized signatory of the company. The Proposal shall be sent by Registered Post/Speed Post only. It is desirable but not mandatory that companies send their representatives during the opening of the bids.

7.5 Preparation and Submission of Proposal

7.5.1 Proposal Preparation Costs

The Bidder shall be responsible for all costs incurred in connection with participation of 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 to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the process. HED will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the process.

7.5.2 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, 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.

7.5.3 Late Proposals

- a. Original hard copy of the tender document and fees received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall be returned unopened.
- b. The Proposals submitted by telex/ telegram/ fax/ e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- c. HED, Odisha shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.
- d. HED, Odisha reserves the right to modify and amend any of the above-stipulated condition/ criterion depending upon project priorities vis-à-vis urgent commitments

7.6 Evaluation Process

- a. The HED reserves the right to reject any or all Proposals on the basis of any deviations.
- b. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP under the 'Evaluation and Selection' section.

7.6.1 Tender Opening

The Proposals submitted within due date and time mentioned in this RFP document will be opened by HED, in the presence of the Bidders or their authorized representatives who may be present at the time of opening. The representatives of the Bidders should submit a letter of authorization from the Bidder companies to participate in the opening of the Proposal.

7.6.2 Proposal Validity

The offer submitted by the Bidders shall be valid for a minimum period of 180 days from the date of submission of the proposals

7.6.3 Proposal evaluation and Selection will be carried out as per the specifications mentioned in the Section on 'Evaluation and Selection'.

7.7 Wherever a specific form is prescribed in this Request for Proposal (RFP) document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the required information. For all other cases, the Bidder shall design a form to hold the required information. The additional sheets attached should be properly annexed.

7.8 Local Conditions

- a. Each Bidder is expected to become fully acquainted with the local conditions and factors, which may affect the performance of the Contract and/ or the cost.
- b. The Bidder is expected to know all conditions and factors, which may have any effect on the execution of the Contract after issue of letter of Award. The HED, shall not entertain any request for clarification from the Bidder regarding such local conditions.
- c. It is the Bidder's responsibility that such factors have been properly investigated and considered before submitting the Proposal. No claim, whatsoever, including that for financial adjustment to the Contract awarded under the bidding document will be entertained by HED. Neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the HED on account of failure of the Bidder to know the local laws/ conditions. The Bidder is expected to visit and examine/study the location of the Universities and its surroundings and obtain all information that may be necessary for preparing the Proposal at its own interest and cost.

7.9 Contacting HED, Odisha or any of the bodies related to HED

Any effort by the Bidder to influence the Proposal evaluation, Proposal comparison or Contract award decisions may result in the rejection of the Proposal. Bidder shall not approach any HED officer after office hours and/ or outside office premises, from the time of the Proposal opening till the time the Contract is awarded.

7.10 Tentative schedule of events shall be as per the dates and time given in the Data Sheet.

7.11 Opening of Proposal

First, the Technical Evaluation Committee will open the Cover – I containing the technical bid/proposals.

Later the Cover – II containing the Financial Bid/Proposal of the technically qualified bidders will be opened by the Financial Evaluation Committee.

7.12 Pre-Delivery Inspection and Post-Delivery Inspection of all equipment

HED may conduct a pre-delivery inspection of all equipment/sample equipment through Physical mode by its own technical experts or 3rd party agency/consultants/advisors appointed by HED before the proposed equipment delivered by the selected bidder at the consignee institutes. All tests and inspections shall be made at the place of delivery. Officers authorized by HED shall be entitled at all reasonable time to inspect and supervise and test during installation and commissioning. Such inspection will not relieve the selected Bidder of their obligation in the contract. HED will conduct a post-delivery inspection of all equipment by its own technical experts or by an independent agency appointed by HED at any point of time at the consignee institutes. If the bidders fail to comply with any of the clause, then their Bid will be summarily rejected. HED reserves the rights to reject the bid any time without citing any reason thereof.

7.13 Deciding Award of Contract

- a. HED reserves the right to ask for a technical elaboration/clarification in the form of a technical presentation from the Bidder on the already submitted Technical Proposal at any

point of time before opening the Financial Proposal by providing at least 3 days of advance notice.

b. HED shall inform those Bidders whose Proposals did not meet the requirement or were considered non-responsive, informing that their Financial Proposals will be not opened after completing the selection process. HIGHER EDUCATION DEPARTMENT shall simultaneously notify those Bidders who technically qualify on the Technical Evaluation process, informing the date and time set for opening of Financial Proposals

c. The Bidder's name, the Proposal Price, the total amount of each Proposal and other such details, will be announced and recorded by the HED at the opening of Financial Bid/Proposal.

d. After acceptance of LoA (Letter of Award) of Contract, Performance Security has to be deposited as specified in this document for signing an Agreement with HED.

e. Special Condition for Awarding the Agreement:

i. HED/University will sign the Agreement with the successful Bidder for a period as mentioned in 'Duration of Contract' in the document.

ii. HED/University may extend the Agreement for a time period beyond what has been specified in 'Duration of Contract' in the document.

iii. HED/University will also have the right to provide extension/ increase in the scope of work as per the mutually agreed terms and conditions between both the parties.

7.14 Confidentiality:

a. As used herein, the term "Confidential Information" means any information, including information created by or for the other party, whether written or oral, which relates to internal controls, computer or data processing programs, algorithms, electronic data processing applications, routines, subroutines, techniques or systems, or information concerning the business or financial affairs and methods of operation or proposed methods of operation, accounts, transactions, proposed transactions or security procedures of either party or any of its affiliates, or any client of either party, except such information which is in the public domain at the time of its disclosure or thereafter enters the public domain other than as a result of a breach of duty on the part of the party receiving such information. It is the express intent of the parties that all the business process and methods used by the Bidder in rendering the Services hereunder are the Confidential Information of the Bidder.

b. The Bidders shall keep confidential, any information related to this RFP, with the same degree of care as it would treat its own confidential information. The Bidders shall note that the confidential information will be used only for the purposes of this RFP and shall not be disclosed to any third party for any reason whatsoever.

c. At all-time of the performance of the Services, the Bidder shall abide by all applicable security rules, policies, standards, guidelines and procedures. The Bidder should note that before any of its employees or assignees is given access to the Confidential Information, each such employee and assignees shall agree to be bound by the terms contained under this RFP and such rules, policies, standards, guidelines and procedures by its employees or agents.

d. The obligations of confidentiality under this section shall survive rejection of the Contract.

7.15 Publicity

Any publicity by the Bidder containing the name of HED should be done only with the explicit written permission from HED

7.16 Execution of the Agreement

After acknowledgement of the LoA (Letter of Award of contract) by the selected Bidder, a Performance Guarantee amounting to 5% of Total Bid Value has to be deposited with the concerned University in the form of Bank Guarantee of any nationalized/scheduled bank.

The performance guarantee shall be valid for a period of 42 months from the date of award of Contract as specified in the RFP document. The selected Bidder shall sign the Agreement within 21 (Twenty-One) days from the issuance of LoA (Letter of Award) of Contract. Agreement is mutually extendable post completion of the initial term.

7.17 Duration of Contract

The assignment of the work shall be valid initially for a period of 6 Months (180 Days).

7.18 Terms and Conditions: Applicable Post Award of Contract

7.19 Termination Clause:

I. Termination for Default

- a. HED, Odisha may, without prejudice to any other remedy for breach of contract, by a written notice of default of at least 30 days sent to the selected Bidder, terminate the Contract in whole or in part (provided a cure period of not less than 60 days is given to the selected Bidder to rectify the breach):
- b. If the selected Bidder fails to deliver any or all quantities of the equipment or services within the time period specified in the Contract, or any extension thereof granted by; or
- c. If the selected Bidder fails to perform any other obligation under the Contract within the specified period of delivery of service or any extension granted thereof; or
- d. If the selected Bidder, in the judgment of HED, Odisha, is found to be engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract.
- e. If the selected Bidder commits breach of any condition of the Contract If HED, Odisha terminates the Contract in whole or in part, the amount of Performance Guarantee shall be forfeited. Notwithstanding anything contrary elsewhere contained in the document, Bidder shall be entitled for all the payments accrued on account of services rendered till the date of such termination.

- II. Termination for Insolvency HED, Odisha, may at any time terminate the Contract by giving a written notice of at least 30 days to the selected Bidder, if the selected Bidder becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the selected Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to HED, Odisha.

III. Termination for Convenience

- a. HED, Odisha by a written notice of at least 30 days sent to the selected Bidder may terminate the Contract, in whole or in part, at any time for its convenience. The Notice of termination shall specify that termination is for HED, Odisha's convenience, the extent to which performance of the selected Bidder under the Contract is terminated, and the date upon which such termination becomes effective.
- b. In such cases, HED, Odisha will pay for all the pending invoice as well as the work done till that date by the Bidder.

c. Depending on merits of the case the selected Bidder may be appropriately compensated on mutually agreed terms for the loss incurred by the Contract if any, due to such termination.

d. Limitation of Liability: In no event shall either party be liable for consequential, incidental, indirect, or punitive loss, damage or expenses (including lost profits). Notwithstanding anything to contrary elsewhere mentioned in the contract, the selected Bidder shall not be liable to the other here under or in relation here to for more than the total Contract Value under this Agreement.

IV. Termination by HED, Odisha

a. The HED, Odisha may, by not less than 30 days written notice of termination to the Bidder, such notice to be given after the occurrence of any of the events, terminate this Agreement if:

i. The selected Bidder fails to remedy any breach hereof or any failure in the performance of its obligations hereunder, as specified in a notice of suspension, within thirty (30) days of receipt of such notice of suspension or within such further period as the may have subsequently granted in writing;

ii. The selected Bidder becomes insolvent or bankrupt or enters into any agreement with its creditors for relief of debt or take advantage of any law for the benefit of debtors or goes into liquidation or receivership whether compulsory or voluntary;

iii. The selected Bidder fails to comply with any final decision reached as a result of the Dispute Resolution mechanism/proceedings.

iv. The selected Bidder submits to the HED, Odisha a statement which has a material effect on the rights, obligations or interests of HED, Odisha and which the selected Bidder knows to be false.

b. Any document, information, data or statement submitted by the Bidder in its Proposals, based on which the selected Bidder was considered eligible or successful, is found to be false, incorrect or misleading; or as the result of Force Majeure, the selected Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

c. If the HED, Odisha would like to terminate the Contract for reasons not attributable to the selected Bidder's performance, they will need to clear all invoices for the Services up to the date of the notice. If the HED, Odisha would like to terminate the Contract for reasons attributable related to the selected Bidder's performance, the HED will give a rectification

V. Consequences of Termination

a. In the event of termination of the Contract due to any cause whatsoever, [whether consequent to the stipulated term of the Contract or otherwise], HED, Odisha shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Service(s) which the Vendor shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow the next successor Vendor to take over the obligations of the rest while Vendor in relation into the execution/continued execution of the scope of the Contract.

b. Nothing herein shall restrict the right of HED, Odisha to invoke guarantees, securities furnished, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to the under law or otherwise.

c. The termination here of shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of the Contract that are expressly or by implication intended to come into or continue in force on or after such termination.

VI. Delay Charges

Notwithstanding the right of HED, Odisha to cancel the order, Delay Charges for late delivery at 0.5% (Half 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 contract. Delay Charges should be recouped from pending payment or Performance Guarantee as per the payment schedule. No Damage will be charged in case of circumstances beyond control of the selected Bidder. Further the delay charges for commissioning will also be charged at the same rate mentioned herein.

The bidder shall follow the timeline as mentioned below:

SI no	Deliverable	Timeline from Date of Issue of Purchase Order/Work Order	Cumulative Timeline
1	(i) Submission and approval of detailed implementation plan. (ii) Pre-dispatch / Pre-delivery inspection of equipment by HED Odisha/University representatives/Third Party Agency (if required). (iii) Manufacture/Procurement readiness and submission of OEM certifications, test certificates and dispatch documents.	Within 30 days from signing of Contract Agreement (MoA)	Day 30
2	i. Delivery of all laboratory equipment, accessories, software, and allied items to all designated Universities/Departments. ii. Physical and visual verification by the respective Universities. iii. Submission of delivery challans and stock entry documents.	Within 04 months from signing of Contract Agreement (MoA)	Day 120
3	i. Installation, testing and commissioning of all equipment. ii. Integration with existing infrastructure wherever required. iii. Submission of warranty certificates and operation manuals.	Within 60 days from the date of delivery of equipment at respective Universities	Day 180

	iv. Hands-on operational training to faculty members, laboratory staff and technical personnel nominated by the Universities.		
	v. Final inspection and acceptance by HED Odisha/University authorities/Third Party Agency.		

b. Please note that the above Delay Charges for delay in delivery and delay in commissioning are independent of each other and shall be levied as the case maybe.

c. HED, Odisha reserve its right to recover these amounts from Performance Guarantee and the payments due to the bidder as per the payment schedule. Delay Charges will be calculated on per week basis.

d. The cumulative and aggregate limit of Delay Charges for delay in delivery and Delay Charges for delay in commissioning would be limited to maximum of 10% of the total Bid Value. The aggregate liability of the selected Bidder shall in no event exceed the total Bid Value under this Contract

7.20. Dispute Resolution Mechanism

a. The HED, Odisha and the selected Bidder shall make every effort to resolve amicably by direct negotiations, any disagreement or dispute, arising between them under supply order.

b. The contract shall be construed and interpreted in accordance with and governed by the laws of India and the sub-ordinate courts at Bhubaneswar shall have jurisdiction over all matters arising out of or relating to the contract agreement.

c. The HED, Odisha may terminate this contract, by giving a written notice of termination of minimum 30days, to the selected Bidder, if the selected Bidder fails to comply with any decision delivered by HED, Odisha

7.20.1 Notices

Notice or other communications given or required to be given under the Contract shall be in writing and shall be e-mailed followed by hand-delivery with acknowledgement thereof, or transmitted by prepaid registered post or courier. Any notice or other communication shall be deemed to have been validly given on date of delivery if hand delivered & if sent by registered post than on expiry of seven days from the date of posting. All notices, requests or consent provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered or mailed by prepaid certified/registered mail, return receipt requested, addressed as follows and shall be deemed received within two days after mailing or on the date of delivery if personally delivered.

Any Party may change the address to which notices are to be directed, by giving a notice to the other party in the manner specified above. A notice served on a Representative is taken to be notice to that Representative's Party.

7.20.2 Force Majeure

a. Force Majeure shall mean any event or circumstance beyond the reasonable control of either party, which materially affects performance of the contract and could not have

been prevented despite reasonable diligence. Such events may include natural calamities, floods, earthquakes, droughts, pandemics, war, government restrictions, embargo, riots, civil unrest, or similar unforeseen events.

- b. The affected party shall notify the other party in writing within 7 days of occurrence of such event. Neither party shall be liable for delay or failure in performance arising out of Force Majeure events. However, Force Majeure shall not include negligence, default, or failure to take reasonable precautions by the affected party.
- c. The obligations under the contract shall be resumed as soon as the Force Majeure condition ceases. If required, the timelines for performance of the contract may be extended by the procuring authority for the period affected by the Force Majeure event.

7.20.3 Failure to agree with Terms and Conditions of the RFP

Failure of the successful Bidder to agree with the Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event may invoke the PBG (Performance Bank Guarantee) of the successful Bidder.

7.21 Performance Guarantee

a. Within 21 days after the receipt of notification of award of the Contract (LoA) from HIGHER EDUCATION DEPARTMENT, the successful Bidder shall furnish Performance Guarantee to the concerned university, Odisha which shall be equal to 5% of Total Bid Value and shall be in the form of a Bank Guarantee Bond from any Nationalized Bank/ Scheduled bank in the Proforma given here-in after in this document valid for period of 42 months from the date of award of Contract as specified in the document.

b. The proceeds of the performance guarantees shall be payable to the concerned university, as compensation for any loss/ penalties resulting from the Selected Bidders failure to complete its obligations under the Contract.

c. The performance guarantee will be released by concerned university and returned to the Selected Bidder after 42 months from the date of award of Contract as specified in the document.

7.22 Statutory Requirements

During the tenure of this Contract, nothing shall be done by the Selected Bidder in contravention of any law, act and/ or rules/ regulations, there under or any amendment thereof governing interalia customs, stowaways, foreign exchange etc. and shall keep indemnified in this regard.

7.23 Contract administration

a. Either party may appoint any individual/Company as its authorized representative through a written notice to the other party. Each Representative shall have the authority to:

i. Exercise all of the powers and functions of his/ her Party under this Contract, other than the power to amend this Contract and ensure proper administration and performance of the terms hereof; and

ii. Bind his or her Party in relation to any matter arising out of or in connection with this Contract.

iii. The Selected Bidder shall be bound by all undertakings and representations made by the authorized representative of the Selected Bidder and any covenants stipulated hereunder, with respect to this Contract, for and on their behalf.

iv. For the purpose of execution or performance of the obligations under this Contract, the HED, Odisha's, representative would act as an interface with the nominated representative of the Selected Bidder. The Selected Bidder shall comply with any instructions that are given by the representative during the course of this Contract in relation to the performance of its obligations under the terms of the Contract.

7.24 Right of Monitoring, Inspection and Periodic Audit

The HED, Odisha reserves the right to inspect and monitor/ assess the progress/ performance at any time during the course of the Contract, after providing due notice to the Selected Bidder. HED, Odisha may demand, and upon such demand being made, the selected Bidder shall provide with any document, data, material or any other information required to assess the progress of the project. HED, Odisha shall also have the right to conduct, either itself or through any another consultant/ advisor as it may deem fit, an audit to monitor the performance by the Selected Bidder of its obligations/ functions in accordance with the standards committee to or required by HED, Odisha and the Selected Bidder undertakes to cooperate with and provide to HED, Odisha/ any other Consultant/ Advisor/ Company appointed by HED, Odisha, all documents and other details as may be required by them for this purpose. Any deviations or contravention identified as a result of such audit/ assessment would need to be rectified by the Selected Bidder failing which HED, Odisha may, without prejudice to any other rights that it may have, issue a notice of default.

7.25 Information Security

The selected Bidder would sign a Non-Disclosure Agreement with the HED, Odisha to ensure information security and confidentiality of processes, information and the various projects and activities taken up during the period of the agreement. The Selected Bidder shall not carry and/ or transmit any material, information, layouts, diagrams, storage media or any other goods/ material in physical or electronic form, which are proprietary to or owned by HED, Odisha, out of premises, without prior written permission from the HED, Odisha. The Selected Bidder shall, upon termination of this agreement for any reason, or upon demand by HED, Odisha, whichever is earliest, return any and all information provided to the Selected Bidder, including any copies or reproductions, both hard copy and electronic.

7.26 Indemnity

The Selected Bidders shall execute and furnish a Deed of Indemnity in favor of the HED,

Odisha, in a form and manner acceptable to the, indemnifying from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind how-so-ever suffered including patent, copyright, trademark and trade secret, arising or incurred inter-alia during and after the Contract period out of:

a. Negligence or wrongful act or omission by the Selected Bidder or its team or any

Company/ Third Party in connection with or incidental to the Contract Agreement (to be signed); or

b. Any breach of any of the terms the Selected Bidder's Proposal as agreed, the

c. Tender and the Contract by the Selected Bidder, its Team or any Company/ Third Party.

d. The indemnity shall be to the extent of Total Bid Value of the contract mutually agreed and signed by both the parties.

7.27 Bid Prices

Bid prices should be quoted in Indian National Rupees (INR). Bid Price should have breakup of proposed goods, works and services (excluding of Freight, GST and any other taxes & duties as applicable time to time). Bid price should be valid for minimum 270 days from the date of Financial Bid opening. Prices quoted must be firm and shall not be subject to any upward revision on any account whatsoever throughout the period of the engagement.

7.28 Payment Schedule

Payment will be made to the selected company as per the schedule mentioned in "Deliverable and Payment Schedule".

7.29 Continuance of the Contract:

Notwithstanding the fact that settlement of dispute(s) (if any) may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under the Scope of Work to ensure continuity of operations.

7.30 Conflict of interest

The Bidder shall disclose to HED, Odisha in writing, all actual and potential conflicts of interest that exists, arise or may arise in the course of performing the Service(s) as soon as practical after it becomes aware of that conflict.

7.31 Severance

In the event any provision of the Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

7.32 Governing Language

The Agreement shall be written in English language. All correspondence and other documents pertaining to the Contract that are exchanged by parties shall be written in English language only.

7.33 "No Claim" Certificate

The Selected Bidder shall not be entitled to make any claim, whatsoever against, under or by virtue of or arising out of, the Contract, nor shall entertain or consider any such claim, if made by the Selected Bidder after it has signed a "No claim" certificate in favor of HED, Odisha in such form as shall be required by it after the work is finally accepted.

7.34 Publicity

The Selected Bidder shall not make, or permit be made a public announcement or media release about any aspect of this Contract unless HED, Odisha first gives its written consent to the selected Bidder.

7.35 General

7.35.1 Relationship between the Parties

Nothing in the Contract constitutes any fiduciary relationship between the HED, Odisha, and Selected Bidder/Bidder's Team or any relationship of employer/employee, principal and agent, or partnership, between HED, Odisha and Selected Bidder. No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of the Contract. HED, Odisha will not be under any obligation to the Implementing Company's Team except as agreed under the terms of the Contract.

7.35.2 No Assignment

The Selected Bidder shall not transfer any interest, right, benefit or obligation under the Contract without the prior written consent of the HED, Odisha.

7.35.3 Survival

The provisions of the clauses of the Contract in relation to documents, data, processes, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless notifies the Selected Bidder of its release from those obligations.

7.35.4 Entire Contract

The terms and conditions laid down in the Request for Proposal (RFP) and all annexure thereto as also the Proposal and any attachments/ annexes thereto shall be read in consonance with and form an integral part of the Contract. The Contract supersedes any prior contract, understanding or representation of the Parties on the subject matter.

7.35.5 Governing Law

This Contract shall be governed in accordance with the laws of India.

7.35.6 Jurisdiction of Courts

The sub-ordinate courts at Bhubaneswar shall have jurisdiction over all matters arising out of or relating to the contract agreement.

7.35.7 Compliance with Laws

The Selected Bidder shall comply with the laws in force in India in the course of performing the Contract.

7.35.8 Notices

A "notice" means:

- i. A Notice; or
- ii. A consent, approval or other communication required to be in writing under the Contract.

All notices, requests or consent provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered, addressed as follows and shall be deemed received within two days after mailing or on the date of delivery if personally delivered:

To,

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

Any Party may change the address to which notices are to be directed, by giving a notice to the other party in the manner specified above. A notice served on a Representative is taken to be notice to that Representative's Party.

7.35.9 Waiver

Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights. A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision. The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

7.35.10 Modification

Any modification of the Contract shall be in writing and signed by an authorized representative of each Party.

7.35.11 Taxes

The Bidder shall pay service and other applicable taxes, if any, imposed on the

Goods/Works/Services under this Contract. Any variation to statutory duties/taxes shall be borne by HED.

7.35.12 Application

These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

7.36 Fraud and Corrupt Practices

7.36.1 Fraud and Corrupt Practices

a. The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, HED, Odisha shall reject a Proposal 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 practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, HED, Odisha shall, without prejudice to its any other rights or remedies, appropriate the Performance Security, as the case maybe, as mutually agreed genuine pre-estimated compensation and damages payable to HED, Odisha for, inter alia, time, cost and effort of HED, Odisha, in regard to the RFP, including consideration and evaluation of such Bidder's Proposal.

b. Without prejudice to the rights of HED, Odisha under Clause above and the rights and remedies which HED, Odisha may have under the LoA or the Agreement, if an Bidder, is found by HED, Odisha 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 LoA or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by HED, Odisha during a period of 2 (two) years.

Annexure-

III

8. Pre-Qualification/Eligibility Criteria and mandatory documents

8.1 Minimum Eligibility Criteria of the bidders

This Request for Proposal (RFP) is invited from companies meeting the following minimum eligibility criteria.

SL No.	Basic requirement	Specific Requirement	Documents Required.
1	Legal Entity	The Bidder must be a Registered Proprietorship Firm/Partnership Firm registered under Indian Partnership Act, 1932 or any other Partnership Act/Private Limited Company /Public Limited Company in India registered under the Indian Companies Act, 1956 or any other Act.	Copy of Certificate of Incorporation/Registration. In case of Authorized Distributor/Dealer/System Integrator, valid Manufacturer's Authorization Form (MAF) issued by the OEM specifically for this tender.
2	No Consortium	The Bidder should not bid under any Consortium. No Consortium bid shall be allowed for this RFP.	Self-declaration should be submitted
3	Continuation of Business	The Bidder company should have been in existence as a registered company in India for at least 05 years	Incorporation certificate of the firm, registration certificate
4	OEM	The bidder should be an Original Equipment Manufacturer (OEM) / Authorized Distributor / Authorized Dealer / Authorized System Integrator of OEM for supply, installation and commissioning of laboratory equipment.	A Self certified certificate on the letter head for OEM Bid specific authorization from OEM for authorized partner
5	ISO Certificate	The bidder/OEM should possess valid ISO 9001:2015 certification for Quality Management System (QMS). In addition, the OEM should preferably possess ISO 45001:2018 certifications.	Copies of valid certificates issued by accredited certification bodies shall be submitted along with the technical bid.
6	Financial Turnover	The bidder should have an average annual turnover of at least INR 75 Crores during the last three (3) financial years from supply/installation/commissioning of laboratory equipment, scientific instruments, technical education infrastructure, engineering laboratory equipment or similar assignments i.e 2024-25, 2023-24, 2022-23.	Audited Balance Sheets, Profit & Loss Statements and Certificate from Chartered Accountant indicating annual turnover for the last three financial years i.e 2024-25, 2023-24, 2022-23.

7	Financial Net Worth	The bidder should not have incurred losses in more than two financial years during the last five financial years.	Audited Financial Statements certified by Chartered Accountant.
8.	Tax registration	The bidder should be registered under Goods and Services Tax (GST), PAN and other statutory registrations as applicable under law	Copies of GST Registration Certificate, PAN Card and other applicable statutory registrations
9.	Mandatory Undertaking	Bidder should: - a) not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, and must not be the subject of legal proceedings for any of the foregoing reasons; b) not have, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise is qualified pursuant to debarment proceedings; c) not have a conflict of interest in the procurement in question as specified in the bidding document. d) comply with the code of integrity as specified in the bidding document	A Self certified certificate on a letter head.
10	Past experience	Must have prior experience of minimum 05 years in relevant field.	Work orders, MoAs, letter of

		The bidder/company must have successfully executed similar works involving supply, installation and commissioning of laboratory equipment/scientific instruments/workshop equipment for Universities, Engineering Colleges, Educational Institutions, Technical Institutions, Research Laboratories, Skill Development Institutes during the last five(5) years. The bidder must have executed such works in at least four (04) institutions/organizations, each having a minimum order value of INR 5 Crores. For the purpose of this clause, "similar work" shall mean supply, installation and commissioning of multiple laboratory/workshop/scientific equipment under a single work order or contract. Supply of single equipment/item alone shall not be considered as similar work experience. Copies of Work Orders, Completion Certificates and/or Client Certificates indicating scope of work and order value must be submitted in support of the above.	award of contract, Work completion certificate or contract agreement copy (any one) Successful Project completion and performance certificate from the client.
		The company must have experience of supply of Lab equipment at least in 02 Government Educational Institutes or Universities or IITs.	
12	Blacklist	No bidder should have been blacklisted by any State Government or Central Government agencies or corporations governed by them and the bidder should not have any criminal case in its/ agency name.	Self-declaration in a notarized document.

9. Deliverable and Payment Schedule

The selected bidder will have the following deliverables: -

Sl no	Deliverable	Time Line	Amount Payable
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1	Milestone 1: (i) Submission and approval of detailed implementation plan. (ii) Pre-dispatch / Pre-delivery inspection of equipment by HED Odisha/University representatives/Third Party Agency (if required). (iii) Manufacture/Procurement readiness and submission of OEM certifications, test certificates and dispatch documents.	Within 30 days from signing of Contract Agreement (MoA)	10% of the Bid Value against submission and approval of implementation plan, and successful pre-dispatch inspection.
2	Milestone 2: iv. Delivery of all laboratory equipment, accessories, software, and allied items to all designated Universities/Departments. (ii) Physical and visual verification by the respective Universities. v. (iii) Submission of delivery challans and stock entry documents.	Within 04 months from signing of Contract Agreement (MoA)	60% of the Bid Value along with 100% GST within 30 days of successful delivery, verification and stock entry at the respective Universities..
3	Milestone-3: vi. Installation, testing and commissioning of all equipment. vii. (ii) Integration with existing infrastructure wherever required. viii. (iii) Submission of warranty certificates and operation manuals. ix. (iv) Hands-on operational training to faculty members, laboratory staff and technical personnel nominated by the Universities. x. (v) Final inspection and acceptance by HED Odisha/University authorities/Third Party Agency.	Within 60 days from the date of delivery of equipment at respective Universities	30% of the Bid Value within 30 days after successful installation, commissioning, training, final inspection and submission of acceptance certificate by the concerned University authority.

Note: No Advance Payment will be given to the selected bidder.

Each stage-wise payment shall be released only after successful inspection, verification and certification by a Committee constituted at the respective University level comprising technical experts, subject experts and representatives of the concerned University.

The decision of the concerned University regarding acceptance of deliverables and release of payment shall be final and binding on the bidder.

10. Evaluation and Selection

The bidders who will be eligible by meeting all mandatory eligibility criteria, will be selected for Financial Bid opening. The evaluation criteria will be **Least Cost Selection (LCS)** where L1 Bidder will be selected as "Final Selected Bidder".

A bidder has to score minimum 75 marks in the Technical Bid Evaluation to qualify for the opening of financial bid.

10.1 Technical Evaluation

Each item will be evaluated separately. Initial Bid scrutiny will be made and incomplete details as given below will be treated as non-responsive if the proposals:

1.
 - a. Are not submitted in format as specified in the RFP document
 - b. Are found with suppression of details
 - c. With incomplete information, subjective, conditional offers and partial offers submitted
 - d. Are non-compliant to any of the clauses stipulated in the RFP
 - e. Have a lesser validity period

All responsive Bids will be considered for further processing as below:

Technical Evaluation Committee will prepare a list of responsive Bidders, who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by the Committee according to the evaluation process defined in this RFP document. The decision of the Competent authority will be final & binding in this regard.

1.
 - a. Administrative department level procurement committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are in order.
 - b. The scope of evaluation committee also covers taking any decision with regard to the Tender document, execution/ implementation of the project including management period.
 - c. Proposal document shall be evaluated as per the following steps:
 - i. Evaluation of document: A detailed evaluation of the bids shall be carried out by the Administrative department level procurement committee in order to determine whether the Bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the RFP document. The bidders must

submit the Make, Model, Features, and Technical Specifications along with the images of equipment for which they are submitting the bid.

- ii. Bidders may propose better technical specifications which may fit for the labs.
- iii. Bidders failing to comply with any of the above then the Bid will be summarily rejected.
- iv. Bidders who scores at least 75 marks in Technical Evaluation criteria set forth in this RFP document will be eligible for opening of their Financial Bid. If a bid does not meet these minimum score, it will be deemed technically non-compliant and will not proceed to the financial evaluation.

10.2 Technical Evaluation Criteria

Sl no	Evaluation Criteria Maximum	Maximum marks	Evaluation criteria
1	Experience in Similar Supply, Installation & Commissioning Projects	25 Marks	5 Marks for each eligible similar project above minimum eligibility criteria, subject to maximum 25 marks
2	Experience in Government Universities /State or Central Educational Institutions	15 marks	3 Marks for each eligible institution served, subject to maximum 15 marks
3	Average Annual Turnover during last 3 Financial Years	15 marks	₹40 Cr – ₹75Cr : 5 Marks Above ₹75 Cr – ₹100Cr : 10 Marks Above ₹100Cr : 15 Marks
4.	Certifications & Quality Standards	10 marks	ISO 9001:2015 certification for Quality Management System (QMS) 5 marks . In addition if the OEM possess ISO 45001:2018 certification -5 marks.
5	Technical Compliance with Specifications	15 marks	Full compliance with specifications,

			brochures, data sheets, technical literature and compatibility requirements
6	Warranty, After-Sales Support & Availability of Service Infrastructure	10 Marks	Service centre/support infrastructure in Odisha, warranty commitment, CAMC support, response time commitments
7	Presentation	10Marks	Evaluation by Committee based on technical understanding, product capability, implementation approach and support mechanism
TOTAL		100 Marks	

Note: -

Bidder has to score at least 75 marks to qualify for opening of Financial Bid .

10.3 Financial Evaluation

The Bidder shall be selected on the basis of **Least Cost Selection (LCS)**. Item wise Financial Proposals of only those bidders who qualify in the Technical Proposal evaluation, shall be opened and evaluated based on the commercial bid submitted by the bidders.

The bidder with Lowest Quoted Price (L1) for each item will be considered as Final Selected Bidder for that particular item.

11. Annexures to be enclosed in prescribed format

SI No	Annexure	Name & Details
1	Annexure-I	Proposal Covering Letter
2	Annexure-II	List of Equipment & Specification
3	Annexure-III	Pre-Qualification / Eligibility criteria and mandatory documents
4	Annexure-IV	Particular of bidders
5	Annexure-V	Financial Proposals
6	Annexure-VI	Affidavit for Not Being Blacklisted
7	Annexure-VII	Format for Power of Attorney / Authorization Letter

8	Annexure-VIII	Self-Declaration regarding "Restrictions on procurement from a Bidder of a country which shares a land border with India
9	Annexure-IX	Compliance Checklist

Annexure I– Proposal Covering Letter

Date: _____

To

Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

Sub: RFP for Supply, Installation, Testing, Commissioning and Comprehensive Maintenance of Laboratory Equipment and Accessories for Universities under Higher Education Department, Government of Odisha.

Sir/Madam,

We, _____ (Name of the Bidder), hereby submit our Proposal in response to the Notice Inviting RFP No. _____ dated _____ and confirm as under:

1. We have carefully examined the RFP document, including all annexures, corrigenda, clarifications and addenda issued by the Higher Education Department (HED), Government of Odisha. We hereby submit our Bid, which is unconditional and unqualified.
2. We acknowledge that HED shall rely on the information and documents submitted along with the Bid for selection of the successful bidder for the aforesaid project, and we certify that all information provided herein is true, correct and complete in all respects and that no material information has been suppressed or omitted.
3. This Proposal is being submitted for the purpose of participating in the bidding process for procurement, supply, installation, testing, commissioning and maintenance of laboratory equipment and accessories under the Higher Education Department, Government of Odisha.
4. We undertake to provide any additional information, clarification or supporting document as may be required by HED for evaluation of the Bid.
5. We acknowledge the right of HED to reject any or all Bids without assigning any reason and hereby waive, to the fullest extent permitted under applicable law, our right to challenge the same.
6. We certify that during the last three years:
 - a) We have not failed to perform any contract resulting in imposition of penalty by any Government Department, PSU, statutory authority, court of law or arbitral tribunal;
 - b) We have not been blacklisted, debarred or suspended by any Central Government Department, State Government Department, PSU, autonomous body or statutory authority;
 - c) No contract awarded to us has been terminated for breach or default on our part.

7. We further declare that:

- a) We have examined the RFP document thoroughly and have no reservations to any part of the bidding documents;
- b) We have not directly or indirectly engaged in any corrupt, fraudulent, collusive, coercive or restrictive practice in connection with this RFP;
- c) No person acting on our behalf has engaged or shall engage in any such prohibited practice;
- d) We do not have any Conflict of Interest in accordance with the provisions of the RFP document.

8. We understand that HED reserves the right to cancel, modify or withdraw the bidding process at any stage without incurring any liability towards the bidders.

9. We agree and undertake to abide by all terms, conditions and provisions of the RFP document.

10. We hereby submit the Bid Security Declaration/Bid Security, as applicable, in the format prescribed in the RFP document.

11. We understand and agree that the Bid shall remain valid for the period specified in the RFP document and shall be binding upon us during the said period.

12. We confirm that the quoted prices are in Indian Rupees (INR) only and include all applicable costs, including supply, transportation, insurance, installation, testing, commissioning, training, warranty obligations and applicable taxes and duties, unless otherwise specified in the RFP.

13. We certify that the equipment and accessories proposed by us conform to the technical specifications prescribed in the RFP and are sourced from authorized manufacturers/OEMs.

14. We undertake to provide warranty and comprehensive maintenance support as specified in the RFP and ensure availability of spare parts and technical support during the contract period.

15. We understand that selection of the successful bidder may be made on item-wise basis, as specified in the RFP document.

Signature of the bidder/ authorized representative: _____

Name: _____

Designation: _____

For and on behalf of: _____

Company Seal: _____

FINANCIAL BID

List of Equipment's of Berhampur University, Ganjam					
Editing System			IN INDIAN RUPEES		
Sl. No.	ITEM	QNTY	Basic price	GST	Total Price including GST
1	Ultra Centrifuge	1			
2	Liquid Nitrogen Plant	1			
3	Single photon camera/ detector	1			
4	Lyophilizer with rotary concentrator	1			
5	RT-PCR	1			
6	Phase Contrast Microscope	1			
7	Single Crystal X-ray diffractometer	1			
8	LC-HRMS	1			
9	SEM	1			
10	NMR Spectrometer	1			
11	Microwave Extraction (cum Digestion) System	1			
12	Microwave Synthesizer	1			
13	GC-MS	1			
14	Flow cytometer	1			
15	CTD (conductivity, temperature, and depth)	1			
16	Auto Analyzer	1			
17	Ambient Air Quality Monitoring Stations - Mobile Observatory	1			
18	FTIR	1			
19	Nucleofector	1			
20	Luminometer	1			
21	High-performance Computing System	1			
22	Spectrofluorometer	1			
23	Computer with audiovisual aids and sound system	29			

24	Computers for centralized computer Labs	150			
25	Online UPS-5 Nos, 15 KVA with 2 hrs backup	5			
26	Server PC with GPU	2			
27	Scanner for digitization of palm leaf manuscripts/old photos/graphics/objects with accessories	1			
28	Digital Display Board	29			
29	Ion Chromatograph	1			
30	Microwave Plasma-Atomic Emission Spectroscopy (MP-AES)	1			
Total Price					

** Price of the equipments / Instrument inclusive of (onsite warrant)' (3 years), transportation, installation, and commissioning of equipments separately.
The number of equipments may increase or decrease as per the actual requirement which will be notified in the work order(s).*

Date:

Signature of Bidder with Stamp

Berhampur University, Ganjam

Sl. No	Name of the Equipment	No. of Quantity	Technical Specifications
1.	Ultra Centrifuge	1	Specification for floor-standing Ultracentrifuge (Micro) ➤ Maximum Speed: 150,000 rpm ➤ Maximum RCF (xg): 1,050,000 xg ➤ Speed Control Accuracy: ± 50 rpm of set speed ➤ Maximum Capacity: 180 mL and should be compatible with 6 x 30 mL tube rotor ➤ Should be compatible with 4 x 7.0 mL swing bucket rotor ➤ The system should be a compact, floor-standing model that is movable in the laboratory ➤ Temperature set range from 0 °C to 40 °C with 1 °C increments and temperature Accuracy of $\pm 2^{\circ}\text{C}$ ➤ Timer: 1 min. to 99 hrs. and 59 min. with HOLD function, with Real Time Control function ➤ Drive System: Imbalance tolerant direct drive, eye balance to within 5 mm. ➤ Non-contact imbalance sensor to detect any imbalance in the system to activate the imbalance alarm and stops rotation immediately when detected ➤ The system should have features like eye-balancing of samples, delayed start/ stop, Colour LCD touch screen, RPM/ RCF mode, Run Scheduling and USB data communications ➤ The device should have a large display and supports a quick start up time of only 8 seconds to make operations fast and easy ➤ There should be an optional convenient software to manage real-time operating logs of up to 16 devices and support 21 CFR part 11 compliance ➤ The system should have an option for remote monitoring application through mobile app in Wifi/LAN network ➤ The system should have an option for Simulation software use in PC to simulate the centrifugal condition is appropriate before the centrifugation run. ➤ Thermo-module cooling system (HCF free) ➤ Vacuum System: Oil-rotary vacuum pump with moisture removal function and oil diffusion pump ➤ The machine should take less than 90 seconds to reach the maximum speed ➤ Programmability of registering up to 20 programs with up to 9-step run in the system. Folders could be managed easily with colour parings with the character. ➤ The system should be able to register up to 40 users ➤ Capability to record maximum of 10 operating logs in the system automatically that can be exported by the user through USB port ➤ The system should be able to accept Fixed Angle, Neo angle and Swinging Bucket Rotors.

			➤ The system should have option to browse available rotors, their specifications and accessories ➤ The system should support automatic rotor locking by self-locking rotors system, without any need for a tool or push the button to lock/unlock the rotors. ➤ Remote monitoring and centrifugation simulations using dedicated software ➤ Heat Output: 0.7 KW or below ➤ Power: 240 V, 50 – 60 Hz ➤ Noise level of 45 dB(A) or less ➤ Small footprint with dimension of 440 (W) x 520 (D) x 910 (H) ➤ Weight of the device should be less than 100 Kg ➤ The system should be supported with both 4 x Wheels and 4 x Legs for better stability during the usage ➤ Safety and Standards Certification: CE ➤ Product Safety: IEC61010-2-020, EN61326 ➤ Warranty of 2 years for the complete system and 5 years for the drive units Rotors: ➤ Fixed angle rotor of max. speed 55,000 - 58,000 rpm approx., R.C.F. 2,80,000 – 2,89,000 × g approx. of capacity 13.5 ml × 8 = 108 ml; k factor 50-55 or better with tubes provision for 13.5 ml seal tubes, 6/7 ml and 3.4/4 ml. 100 nos. of each tube Volumes with appropriate adapters should be included along with the quote. ➤ Fixed angle rotor of max. speed 50,000 rpm, max. R.C.F. 2,10,000 × g approx. of capacity 30 ml × 6 = 180 ml; k factor 61-95 or better with provision of seal tubes 30 mL, 25 mL or less and 20 mL or less. 100 nos. of each tube Volumes should be included along with the quote. ➤ Swing bucket rotor of max. speed 50,000 rpm, max. R.C.F. 2,53,000 × g approx. of capacity 7 ml × 4 = 28 ml; k factor approximately 77 or better with provision of 7 ml polypropylene tubes. 100 nos. of such tubes and 7 mL polycarbonate tubes 50 nos. should be included along with the quote. ➤ Along with the rotors all required consumables, seals, adapters, caps, heat sealer and sealing accessories must be quoted and provided.
2.	Liquid Nitrogen Plant	1	Supply and Installation of Automatic Liquid Nitrogen Generator of Production Capacity 60-90 litres per day with 5 Years Warranty. 60 -90 Liters per day system Supply of One fully Automatic Liquid Nitrogen Generator of Production Capacity 60-90 litres per day with purity 98%, complete with all equipment's and accessories including : • Oil-Free air compressor with replaceable suction dust filter • PSA nitrogen gas generator • Medical gas filter on nitrogen gas outlet to liquefaction plant • 1 x Cryo-cooler system • 1 x Single stage helium compressor unit – air cooled • Liquid nitrogen storage vessel – LN20-30 – 60 Litres • Liquid nitrogen transfer hose – 1.5 metres • Colour graphic touch screen controller • Nitrogen gas water cooling prior to liquefaction for increased efficiency • Documentation – installation / operating and maintenance manuals • Dewar Vacuum protection system • Free remote connection, monitor, control and update through internet Team Viewer software – ask for more details – only if connected to a local internet connection. INSTALLATION OF LIQUID NITROGEN SYSTEMS The SCIPLN220 Liquid Nitrogen generator is a complete automated system supplied as a packaged piece of equipment. Cabinet mounted on four wheels for ease of positioning, two wheels lockable for security. Two locked doors with keys on the front to prevent entry by unauthorised personnel. The SCIPLN220-AC is an air-cooled liquid nitrogen system which does not require cooling water, the hot air from the generator must be ducted from the room. The system can be situated in its preferred location and connected to the mains supply using the cable supplied. The chiller hoses should be connected to the ports shown on the side of the generator. As the system has already been fully commissioned and tested at our factory the START button on the screen can be pushed in order for the system to go into an initial start-up sequence:- 1. The nitrogen gas specification should

			be <2.0% oxygen content. 2. The helium compressor / cold-head reduces the internal vessel temperature in order to start producing liquid nitrogen (approximately 4 hours). 3. The dewar is expected to have 10% LN2 by volume within the first 24 hours with production slowly increasing until the dewar is 100%. Subsequent fills are faster due to internal cooling. 4. Once the internal storage dewar is full the generator switches into standby and re starts when the dewar level reaches a predetermined level LEVEL CONTROL The internal liquid nitrogen storage vessel has a liquid level indicator with high and low set-points. The low-level set-point can be adjusted by the customer for maximum efficiency depending on how much liquid is required, this means once the storage is full the system could remain in economy for longer and save power. MAINTENANCE Both the nitrogen inlet filter and Liquid system requires regular annual maintenance, these schedules are available from Stirling and should be carried out by a Stirling authorised or trained engineer only. WARRANTY The system will be with standard warranty of 12 months from installation or 18 months from dispatch whichever is earlier. Ambient temperature : Between +5°C and +52°C Ambient humidity : 20 – 95% Electrical Input : 230 V 1-phase 50Hz (3.2kw) SCIPLN210 dimensions : 1.4 m (L) x 0.65 m (W) x 1.75 m (H) SCIPLN210 weight : 350 kg (on wheels) The offered price should includes the following services (All services provided by SCIPL India) ➤ Pre-installation Site visit and Plan Layout, ➤ Consignment Checking at Site, ➤ Physical Installation, ➤ Trial run and Parameter testing, ➤ Training at site for operation and basic maintenance, ➤ Commissioning, ➤ Handing over and acceptance, ➤ Ducting for compressor and chiller Technical Service Charges (TSC) for Local Support Services for installation and commissioning of one SCIPLN220: 20-30 litres per day, Technical Service Charges (TSC) for support services to be provided locally.
3.	Single photon camera/detector	1	Photo-Detector (NIR-optimized single photon counting module) SPCM 800-44-FC Dead time: < 50 ns, Quantum efficiency at 800 nm:<60%, Max. photon count rate: < 30 MHz, Dark count: < 100 c/s, Input type: Fiber coupled, Supply voltage: 5.5 V, Maximum count rate/Peak light intensity: Maximum count rate can be sustained if case temperature is maintained within limit specified limits Maximum 10⁴ photons per pulse, Case temperature: pulse width < 1 ns -20°C/+70°C storage, +5°C /+70°C operating, Any cables, connectors or other accessories required to connect laser system with laser driver system and to PC (must be included). Warranty period 1 Years.
4.	Lyophilizer with rotary concentrator	1	Technical Specification for the purchase of Lyophilizer with Rotary Concentrator under PM-USA (MERU) scheme Technical specification for Lyophilizer with Rotary Concentrator ● The Lyophilizer Chamber Temp: -110° degree ● The cold trap volume should have a 4-5 Ltr Capacity ● Trap Chamber Size: Ø 160 x H 200 mm ● Automatic control and digital reading of TIME, TEMP, and VACUUM ● The keylock function should be available to lock the keypad ● Vacuum display and Time setting should be present. ● The DEFROST function should be available to remove frost or ice in the trap by using hot gas. ● The drain hole on the front should be available to remove the water from the chamber. ● A magnet embedded in the front cover of the condenser makes it very convenient for cleaning. ● Freeze-drying flask for manifold drying (12 Nos), manifold with 6 no. valves, acrylic

			chamber with a top for holding Petri dishes. ● Centrifuge speed 200 to 2000 rpm ● Centrifuge Temp: up to 65 °C ● IQ (Installation Qualification) and OQ (Operational Qualification) should be included ● CE Certified. Certified- (EN ISO 12100, EN 61010, EN 61326-1, EN 61000, EN IEC 63000) ● Base Plate -2no ● Oil Mist Trap -1no ● Rotary vane Vacuum pump-1no ● Vacuum concentrator system (2200 RPM) with vacuum pressure 5 mbar. ● 6 positions x 50ml (conical) Angle Rotor – 1no ● Vacuum hose to connect the Vacuum concentrated system to the base plate adaptor -2no ● Base plate adaptor to connect the base plate to the Vacuum concentrated system -2no ● Table with drawer -1no ● Oil for the vacuum pump 2L ● Warranty 3 Years and 2 Years AMC ● Suitable Online UPS with 1-hour power backup.
5.	RT-PCR	1	<i>System Overview</i> The Real-time PCR System should offer improved connectivity and performance for modern laboratories. It should feature enhanced thermal performance and an accurate optical system for consistent data acquisition. Applications - Gene expression analysis without requiring ROX - End-point analysis for sequence detection - Protein thermal shift assays - Assay optimization with thermal gradient Key Features - Wi-Fi connectivity for wireless operation and data retrieval - Stand-alone operation capability - Direct data transfer to USB device or computer connection - Internet connectivity for remote data access and notifications - Multiple block configurations available Thermal Cycler Specifications - Maximum ramp rate: 5°C/sec or better - Average ramp rate: 3.3°C/sec or better - Heating and cooling method: Peltier - Lid temperature range: 30-110°C or wider - Temperature range: 4-100°C or wider - Temperature accuracy: ±0.2°C of programmed target at 90°C or better - Temperature uniformity: ±0.3°C well-to-well after 10 sec of arrival at target or better Gradient Specifications

			- Operational range: 30-100°C or wider - Programmable span: 1-24°C or wider Optical Detection System - Excitation: Minimum 6 filtered LEDs - Detection: Minimum 6 filtered photodiodes - Excitation wavelength range: 450-684 nm or wider - Emission wavelength range: 515-730 nm or wider - Sensitivity: Should detect 1 copy of target sequence in human genomic DNA - Dynamic range: 10 orders of magnitude or better Software and System Requirements - Operating system: Compatible with the latest Windows OS - Embedded operating system: Windows 11 IoT or equivalent - Sample capacity: Minimum 96-well version - Sample size: 1-50 µL - Communication interface: USB 2.0 or better - Touch screen: Additional Components - 2 KVA Online UPS (single Phase) with 2 hr backup must be provided - Branded is PC with Windows 10/11 Professional with LaserJet printer Warranty and Service - Warranty: Three years from the date of installation. - Installation: Free of cost by dedicated service engineer - After-sales service: To be provided by the manufacturer or authorized dealer
6.	Phase Contrast Microscope	1	<u>Advance Phase contrast DIC Microscope with photography attachment:</u> <u>MICROSCOPE FRAME:</u> Infinity corrected Optical System Trinocular (three step light path divider) Research Upright Microscope with True Koehler Illumination of 14Watt high power LED with lifetime of 50000 hrs for Transmitted light illumination, Light Intensity LED indicator, Light pre-set switch, highly ergonomic Design for user comfort. Microscope should have the Fluorescence in future. Microscope should be upgradable to motorized function. <u>TRINOCULAR TUBE:</u> Field No. 22 or better, Three position prism Trinocular tube, 100% light for viewing, 20% - 80% viewing & photography, 100% light for photography. <u>EYEPIECE:</u> Wide Field, F.N. 22 or better, Focusable or Better. <u>NOSEPIECE:</u> Interchangeable reversed Sextuple Nosepiece. <u>STAGE:</u> Hard Coated Ceramic surface mechanical stage with right-hand low drive control (long type), with individual torque adjustment for X - Y. <u>SLIDE HOLDER:</u>

			Specimen holder for stage, left hand, for two specimens, thick type. <u>CONDENSER:</u> 8 position turret type condenser for Bright field, DIC and dark field and phase contrast application. top lens should comes with the condenser. <u>OBJECTIVE:</u> Plan Achromate 10X objective, NA 0.25 Plan Achromate 20X phase Objective,NA 0.40 Plan Achromate 40X phase Objective,NA 0.65 Plan Achromate 100X Objective ,NA 1.25 <u>PHOTOGRAPHY ATTACHMENT WITH SOFTWARE:</u> 25 mp resolution CMOS camera with fps of up to 100, dynamic range of 65.3 db, expouser time with 0.01 ms to 15 sec with image analysis software. Computer: I7processor,8 RAM,24 inch screen, 1TB ROM, windows 11 with keyboard and mouse. Warranty: A three-year comprehensive on-site warranty should be offered for the entire configuration (after successful commissioning of the equipment).
7.	Single Crystal X-ray diffractometer	1	A) Source ● High-performance dual-wavelength (Cu/Mo) micro focus rotating anode X-ray source with two target materials, two sets of focusing optics, and all the software and peripherals required to fully integrate the system. ● Maximum load 1200 W, brightness ~31 kW/mm². ● Two types of wavelengths selectable through the software and automatic change should be without any manual procedure. ● Target materials: Two desired target materials are Cu and Mo. ● Maximum load: 1200 W (Cu/Mo). ● Maximum voltage output: 40 kV (Cu), 50 kV (Mo). ● Maximum current output: 30 mA (Cu), 24 mA (Mo). ● Effective focus size: 70 μm (Cu), 100 μm (Mo). ● Stability: 0.01% or less (under power supply variation, under long-time use). B) X-ray shutter, Rotary shutter ● Turbo molecular pump, diaphragm primary pump. ● Automatic software-controlled wavelength switching of X-ray source, target material, and focusing optics. ● Electronically controlled brightness of the cabinet and sample lighting. ● Radiation protection cabinet. C) Detector ● Noise-free, and a hybrid photon counting detector for fast data collection. ● High signal-to-noise detector with wide dynamic range and fast readout. ● Pixel size:100 x 100 μm², count rate: >1 x 10⁶ cps/pixel, maximum frame rate:100 fps, Air-cooled. ● Energy range: 4 ~ 30 keV. ● Direct detection photon counting Aperture size with a minimum of 5000 mm² or more. ● Readout time: 3.7 ms (standard) / 0 ms (in zero dead-time mode). Power

		consumption:70 W. Purging gas: Nil D) Goniometer ● The instrument should include a fully automated high precision 4-circle kappa goniometer with all axes and detector distance controlled through the system computer. ● The detector movement should be motorized and the sample to the detector distance should be variable over a range to a maximum of 240 mm or higher. ● The goniometer shall be equipped with stepper motors with optical encoders for optimum scanning speed and positioning precision. ● Goniometer with a sphere of confusion less than ten microns, and a telescopic two-theta arm. E) Software ● The software must be fully automated from data collection through data reduction and processing. ● The software should be capable of parallel processing with data collection, integration of diffraction and solution of 3D structure. ● The software should provide fast and fully automatic structure solution and refinement during data collection of small molecules, as well as for protein crystals. ● It should contain options, for instance, a reciprocal space viewer, twin indexing, measurement of powder pattern, and modulated structure. F) Mounting Tools ● Mounting tools must include., Dual-thickness Micro Loops, Micro Meshes, diameters of 400 and mesh openings of 50 μm, 20 pcs, Reusable Goniometer Base, 100 pcs, Magnetic Cryo Vials-100 pcs. ● LV Cryo Oil Superior Cryo protectant LVCO-5 (250ML). ● One additional Goniometer Head and one additional test crystal should be provided. ● Necessary spares kit including Capillaries and Cryo loops. Capillaries made of special glass with a wall thickness of 0.01 mm and an outer diameter of 0.2 mm, 0.3 mm, 0.5mm - 100 pcs. of each type and other necessary capillaries. G) Temperature controller ● Cryo-stream cooler with automatic refilling system (90 - 400K), fully controlled by software. ● This system must include 60 and 200 L Dewar's and a dry air unit. ● Control Unit- SSD 256GB / HDD 1TB / RAM 16 GB / Advanced GPU. H) Workstations ● Minimum 2 systems are required. ● Specifications: 28" LED Monitor; Windows 10. ● Intel Xeon E3-1225v2 3.2 GHz 8MB 77W GT2 4C CPU. ● 16GB DDR3-1600 ECC (4X4GB) Unbuffered RAM, ● 256 GB SSD and (1TB X 2) 7200 RPM SATA 6 GB 1st Hard Drive ● Nvidia Quadro K600 1GB ● 16 X Super Multi DVDRW SATA 1st ODD ● USB Keyboard ● USB Optical Mouse
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			I) Microscope ● Polarising Optical Microscope for crystal mounting with camera (controlled by computer) with minimum following specifications: Upright type with universal infinity corrected optical system with LED Light Source, Y-shaped, providing wider work surface. Intensity control, the LED light pre-set switch must be frame-mounted. ● Coaxial coarse and fine focus controls with one fine focus extension knob. The Z-axis locking mechanism and tension 1/4 adjustment lever have to be incorporated. ● Conoscopic & Orthoscopic. Bertrand lens – Separately focusable with 3.4 mm field stop. ● Parfocal, Plan semi-apochromatic Polarising objectives 4X/0.10, W.D. 18mm, 10X/0.25, W.D. 6.0mm, 20X/0.40, W.D. 3.0, 40X/0.65, W.D. 0.45mm, 100X/1.25, W.D. 0.13mm (spring oil). ● Polarization accessories (rotation stage, transmitted-light illumination, polarizer, analyzer), Wide field eyepieces 10x (F.N.22) with cross lines. J) Power Back-up ● A Compatible online 15 KVA UPS with a minimum two-hour backup option should be included. K) Warranty ● 01-year OEM default warranty from the date of successful installation. Four years' additional comprehensive warranty to be quoted. ● The warranty should be comprehensive, which means that it covers the whole system, including all accessories and spare parts, etc. ● All accessories/spare parts replaced shall be from the OEM/supplier of the same model or a higher version. ● If, within a period of 5 years after commission, any accessory/spare part is proved to be defective, then such product shall be replaced by the manufacturer/supplier. Such replacement shall be the sole obligation of the manufacturer/supplier, including payment of charges for freight delivery, customs duty and transportation, if any, for Berhampur University. ● In case of system breakdown during the warranty period, a competent/suitable Service Engineer of the supplier should make as many visits as are required to rectify the problem and replace the faulty parts, without any liability of cost to Berhampur University. ● Service response time must be within 3-5 working days for small issues and within 10-14 working days for major breakdown/hardware changeover; otherwise, the warranty period shall automatically be extended by the time taken to rectify the defects. ● The two maintenance visits every year (within the warranty period) by authorised service engineers are required. L) Training Part ● The supplier must provide two sets of three days each comprehensive training on operation, application and maintenance of the instrument after installation and initial demonstration (a part of basic installation, familiarization & operational training at the time of installation) at Berhampur University. M) Other MISC Important Requirements ● Bidders must furnish documentary evidence (client's certificate) in support of satisfactory operation of the instrument. ● Berhampur University will provide CDEC, DSIR and concessional GST certificates. ● Specifications claimed must be supported by published OEM literature/documents from the company. ● Supplier must have proven capability and trained manpower to troubleshoot
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			equipment, both in terms of hardware and software. ● A suitable and essential tool kit is to be supplied with the 15 instruments for required maintenance. ● Accessories that are needed for the operation of the instrument, but not mentioned in the tender specifications list, must be quoted by the vendor ● Complete technical details of pre-installation requirements should be furnished along with the technical bid. Installation must be done at the user's site with no extra costs involved. Berhampur University will only provide the installation room and required electrical outlets. The vendor must supply all other infrastructure accessories, facilities and services required for the successful installation and operation of the instrument. The vendor may conduct a site survey prior to installation at no additional cost to Berhampur University. ● After the re-installation, the system should be rechecked with test runs, and appropriate calibration needs to be done. Damage during the shifting process, if any, will be the liability of the vendor. The vendor should arrange all the logistics for packing materials and pack the materials as originally installed at the main campus within 2-3 years without any additional cost.
8.	LC-HRMS	1	Supply and Installation Compact QTOF HRMS with Elute UHPLC system with 3 Years Warranty. with 5 Years Warranty. The TargetScreener compact UHPLC package consists of the following components: compact QqTOF: A bench-top electrospray Ionization Quadrupole Time-of-Flight Mass Spectrometer for HighResolution Exact Mass and True Isotopic Pattern measurements in both, MS and MS/MS mode. Includes Apollo II ion funnel ESI source, high performance hyperbolic quadrupole, high transmission collision cell for CID, temperature compensated TOF analyzer, electronics, syringe pump, Data system with >50 GSample/s digitizer and 24" LCD monitor, current Compass Software for UHPLC and MS control, data acquisition and a full TASQ package for reviewing and processing. Elute UHPLC: The Elute binary UHPLC system with ultralow dead volume is offering pressures up to 1300 bar/18950 psi with the following features: high pressure mixing and active seal washing, low volume mixer (35 µL), automatic Purge and Prime via internal pump, automatic solvent compressibility adjustment. The Elute comes standard with a built in degasser. The system can handle flow rates from 1-5000 µL/min. The column thermostat operates with cooling and heating. An optional 6 port column switching valve can be ordered separately at extra cost. The temperature controlled autosampler is equipped with a 108 positions vial rack. TargetScreener Applications Kit 1. High-quality accurate mass and retention time database for forensic toxicology and pesticides (> 3000 compounds), data acquisition & reporting methods, tutorial and demo data. 2. Urea Pesticide Standard Solution NE-USL 102 LGC Standards for installation (Dangerous goods to be ordered locally and shipped separately). 3. Column Kit TargetScreening 3.0 Incl. Installation, Familiarization upon installation and 1-year warranty. BioTools software allows the identification and detailed characterization of proteins and peptides using various types of mass spectra. This includes database search of single spectra and combined MS and MS/MS datasets, the import of search results and further detection of modifications and mutations. The RapiDeNovo module provides extensive de-novo sequencing capabilities. BioTools also supports various top-down sequencing spectra types for intact

			protein characterization and enables the annotation and database search of these data. NB: It should include all charge including custom, freight, insurance including 5 year free service for maintenance and manpower. All electrical installation at Berhampur University and should include free installation. Including Helium, UPS, Air Conditioner, Air Compressor . It should includes unlimited on-site repair visits, spare parts as well as wear and tear parts such as lasers, detectors etc. A detailed overview of the services covered can be found in the attached product description.
9.	SEM	1	<u>Required specifications</u> Resolution: 0.6 nm or better at 15 kV 1.0nm or better at 1 kV Magnification: ≤25X to 2,000,000X or more. Minimum magnification should be specified. Accelerating voltage: 0.01 to 30 kV continuously adjustable Vacuum System: Fully automated microprocessor controlled vacuum system comprising of Ion-Pump (for Field-emission SEM), Turbo-Molecular Pump (TMP) (along with water chiller if water-cooled TMP) backed by rotary pump, pneumatic valves (clarify if any in-built proper safety measures against failure of power supply, vacuum, water-flow, etc. are provided). This system should be compatible for gun and filament in order to protect both Gun/filament against air-exposure of specimen chamber during specimen loading/unloading. Probe current: At least 200 nA Electron gun: In lens type Thermal Schottky field emitter Electron Optics: FESEM should consist of a dual double condenser lens ● FESEM should have stable imaging can be done under various observation conditions and ease of operation of automatic functions ● Electrically controlled Aperture should be present which maintains small probe even during high beam current conditions ● The condenser lens should be coupled with additional lens to minimize system spherical aberration and optimize the convergence angle to ensure minimum focus change at all beam currents. This lens should be computer controlled and fully automatic to provide the smallest probe diameter at low beam currents and the optimum probe geometry for high resolution analytical performance at high beam currents. ● Beam Deceleration/Gentle Beam/ Tandem deceleration technology or equivalent for high resolution imaging at low kV ● Large depth of focus required ● Signal depth feature Detectors: Upper In-lens Electron Detector ● Secondary Electron detector ● Retractable Backscattered Electron Detector Chamber: Large chamber with at least 10 or more accessory ports for future upgradation ● Chamber design should allow changing of the specimens quickly. ● Chamber should be equipped with an IR-CCD camera or any suitable device to view the sample & stage inside the analysis chamber. Electron Optics: System should possess a state of art hybrid lens or equivalent technology. Specimen Stage: PC controlled fully 5 axis motorized eucentric stage movements equivalent to

- $X \geq 70$ mm or more
- $Y \geq 50$ mm
- $Z \geq 41$ mm
- Tilt = $\geq -5^\circ$ to $\geq 70^\circ$ or higher
- $R = 360^\circ$ endless
- Stage movement should be controllable through both computer and manually with joystick / trackball.
- Cartesian and compucentric stage is not permitted.

Multi-specimen Holder: For introducing many specimens (≥ 5)

Load-lock/Air Lock Chamber: Air lock / Load lock chamber must be quoted as a standard item for fast sample exchange and to minimize the contamination during the analysis and maintained a high vacuum inside column and chamber.

Water chiller: Imported chiller compatible with FESEM

Display and output (02 nos): 23" or higher TFT monitor(s) for FESEM image processing

- Linear and nonlinear grayscale processing.
- Colour selection and contrast enhancement routines.
- Histogram equalization.
- Image processing filters.
- Text annotations on images.
- Image output in bmp, tiff, gif, png and jpg formats.
- Image gallery with thumbnail format display.
- Live conditions of operating parameters, holder graphics

CPU (02 nos): Latest compatible branded computer (i5 processor or higher) with pre-loaded licensed software for FE-SEM operating parameters. 16GB RAM, 1 TB SSD

Operation panel and table: Operation panel is required to set focus, magnification and other parameters using joystick or trackball, table for FESEM should come from factory

Accessories:

- Specimen preparation kit - Necessary specimen kit for sample preparation
- sufficient number of stubs (≥ 50 Nos), etc. should be provided.
- At least 10 Nos. of carbon tapes should be provided.
- High Quality Chiller and Compressor
- 10 KV Online UPS with Battery Backups.

Calibration standards: Standard samples to check system calibration i.e., resolution, magnification etc. should be supplied along with the system.

Energy Dispersive Spectroscopy (EDS): LN2 free EDS 30mm² or higher, EDS resolution 129eV or better, point, line, area analysis, Real time net count map, probe tracking, Qbase, pixel resolution 4096 X 3072, deconvolution map, playback analysis, real time filter, visual peak id, phi rho z quantitative correction method, standardless quantitative peak identification, automatic qualitative analysis

Sputter Coater:

- Au sputter coater to be provided, preferably from same OEM make
- 2 Nos. of extra Au and one platinum targets should be provided.

Pre-installation requirements :

			Pre-installation requirements such as room size, tolerable limits field and vibration (mechanical), required power rating, utility requirements are to be stated clearly, and to be verified/surveyed by the supplier at the installation site. Warranty Training and Service Support: ● A five-year (05) comprehensive on-site warranty should be offered for the entire configuration (after successful commissioning of the equipment). ● Warranty period should also include FE - emitter Terms and conditions: - The firm has to guarantee support for both system and spares for a minimum period of 10 years. - Provision for on-line remote diagnosis of faults. - The firm must have at least 70 installations of Schottky Field Emission SEMs within India for desired experience of maintenance. - Compliance of all listed specifications/terms and conditions sheet should be indicated by the vendors in tabular form.
10.	NMR Spectrometer	1	Supply and Installation of Compact QTOF HRMS with Elute UHPLC system with 5 Years Warranty. Two Channel based advanced 400MHz NMR Spectrometer for Sample in Solution State. AV4400NS 1 PC NMR CONSOLE AVANCE NEO 400 MHZ Nanobay The AVANCE NEO 400MHz NANOBAY (NB) SYSTEM is a fully equipped NMR console for Double Resonance High Resolution NMR applications. The Nanobay system console electronics is housed within a compact stainless steel cabinet with full RF shielding (i.e. immunity against DVB-T, ATSC, ISDB-T and DTMB). It incorporates a state-of-the-art Ethernet ROUTER providing up to 10 TCP/IP based Ethernet ports for internal and external spectrometer devices such as sample changers, CryoPlatforms, magnet control and monitoring equipment and MAS accessories. A dedicated System Control Unit (SCU) containing an embedded processing CPU with 1TB hard disk drive allows versatile and flexible spectrometer control. It controls the overall timing of system for all RF channels, gradient channels, real time pulses, triggers, etc. It connects to a fast single channel offset-free gradient amplifier (GAB/2) unit for pulsed field gradient shimming and single axis Gradient enhanced SPECTROSCOPY (GRASP). The TRX1200 are highly integrated NMR RF transceiver (transmit and receive) units with built-in pulse program engine (sequencer, waveform memory). Each TRX1200 provides a fully broad banded transmit and a fully broad banded receive channel. Herewith all Nanobay systems are multi-receive ready by default. SCU and TRX1200 (both channels) characteristics: - 80MHz system clock - Synchronicity on all channels within 12.5ns timing resolution - Timing resolution of 12.5ns - Gradient control with a resolution of 12.5ns for Z-gradients - RF signal bandwidth from 5 to 1200MHz for transmit and receive - Simultaneous RF amplitude, phase & frequency switching within 12.5ns - High speed ADC, 240MSPS @16Bit, Digital Down Converter (DDC) - High speed DAC, 960MSPS, Digital Up Converter (DUC) - High Intermediate Frequency (IF) for transmit and receive of 1852MHz

- Sequencer waveform memory 1GB for pulse shaping

- Spectral width up to 7.5MHz

- Effective dynamic range >17Bit (5MHz) / >19 Bit (1MHz) / >23 Bit (6kHz)

The RF section consists of a double channel broad banded RF amplifier (BLA2BB), a combined proton and deuterium RF preamplifier (1H2H) and a broad banded X nuclei up to 19F RF preamplifier (XBB19F).

Channel/Nuclei setup:

- XBB19F channel: 15MHz to 170, 75As to 19F (built-in 2H Stop)

- 1H channel: 1H (Observe and Decouple)

- 2H channel: 2H (Lock and TopShim only)

RF amplifier (BLA2BB) characteristics:

- Min. 50W RF peak power @180-400MHz

- Min. 170W RF peak power @20-40MHz

- Min. 140W RF peak power @41-162MHz

- Pulse program controlled blanking and ultra-fast rise/fall times

- Built-in RF amplifier protection with forward / reflected RF power

Monitoring RF preamplifier (1H2H and XBB19F) characteristics:

- Linear, low noise, GaAs based preamplifier technology

- Sensitivity (Noise Figure, NF): ~1.2dB (XBB19F), ~1.7dB (1H), ~1.5dB (2H) (NF with all internal filters and active transmit-receive switch included). - Peak RF power: Max. 100W (1H2H) and 500W (XBB19F) peak power RF capability

- Fast, pulse program controlled mode switching (lock / decouple)

- 2H lock / 2H observe RF routing built-in (TopShim)

- RF power supervision (together with PICS)

- Factory calibrated for accurate tuning and matching (2G ATMA) The BRUKER Smart Magnet Control System (BSMS) section provides all other functionalities and features to enable standard NMR applications with standard bore (SB) NMR magnets using BRUKER BOSS-3 (and BOSS-1) 'plug style' shim systems und BRUKER shim upper parts (BST). It incorporates the deuterium lock channel (ELCB, L-TRX), the shim current sources (SCB20), the Z-gradient amplifier (GAB/2) and the VT/Sample Lift/Heater pneumatics electronics (SPB, VPSB).

BSMS and BSVT characteristics:

- Versatile magnet field stabilization options with digital NMR Lock control (ELCB)

- Ultra-stable, ultra-low noise B0 current source (ELCB)

- Ultra-stable shim current sources (SCB20, two units)

- 2G Digital NMR Lock RF (L-TRX, with 5W RF amplifier) for deuterated solvents

- Easy locking on complex lock solvents (e.g. Pyridine) even in automation

- Accurate sample temperature determination with NMR Thermometer

- Pulsed field gradients (GAB/2) up to 10A (50ms per second, built-in pre-emphasis)

- TopShim shimming including lineshape optimization (see JMR 182(1), 38- 48, 2006)

- Bruker Smart Variable Temperature (BSVT)

- digital temperature sensor resolution better than 5mK

- controls with up to 4 independent VT channels

- optional Bruker SmartCoolers (e.g. BCU-I)

		- optional Low Temperature accessories (LN2 exchanger / evaporator) - Temperature stability of electronics: e.g. 10 mK/K for HR RT probes - Supports various temperature sensor types (e.g. thermocouple T, PT100) - VT gas flow monitoring up to 3000 liter/h with mass flow regulation - Sample freeze protection for CryoProbes built-in (probe safety) # Compatibility: # - HR-MAS: MAS-3 only, requires separate trigger interface cable (AH0095) MSEVO400SB 1 PC MAGNET SYSTEM ASCEND EVO 400 MHz SB Superconducting magnet system in persistent mode with low loss cryostat technology for minimum helium and nitrogen consumption. Magnet system with built-in Electromagnetic Disturbance Suppression (EDS) using a proprietary technology for an efficient suppression of external disturbances (typically up to 99 %) like subways, railway lines and trams, corridor traffic, elevators, power lines or outside vehicular traffic. Features: - Standard Bore type (SB) with 54 mm bore size - Very high field stability with a guaranteed drift rate of <10 ppb/hr - Extreme small fringe field in vertical and horizontal direction - Cryogenically cooled high order shim system with 14 gradients - Excellent helium hold time - Helium flow system with one-way check valve for safe operation - Helium level measurement system - Alarm functions for low helium level (MICS) - Low nitrogen consumption with the upgrade possibility for BNL - Nitrogen flow system with one-way check valve for safe operation - Nitrogen level sensor with direct display function # Helium flow system to connect directly to a helium recovery system # Upgrade to different vibration damping accessories possible AH3011 1 PC MAGNET STAND ASCEND Type 'F' EMI Magnet stand to support Bruker superconducting magnet systems in an upright position. Elastomer damping system (EMI). Features: - Upgradeable to different passive and active vibration isolation posts - Compatible with devices for the installation of tilting protection # Floor velocity tolerance level according to VDI 2038 (2013) and Amick/Gordon SPIE 5933 for sensitive laboratory instruments VC-G (see also Bruker site planning manuals) AH0070 1 PC HELIUM TRANSFERLINE Helium transfer line for standard ceiling height.
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		Features: - For all Bruker Ascend and USPLUS magnet systems (4 K) - 10 mm diameter - Short arm with 708 mm - Long arm on the transport dewar 1508 mm - Bendable part in between 2060 mm 70 AH0074 1 NITROGEN REFILL KIT PFA TUBE Nitrogen refill kit with corrugated PFA tube for low pressure dewars up to 1.5 bar. Features: - For all Bruker magnet systems (4 K) - Corrugated plastic tube with 3 m length - Perfluoroalkoxy alkane or PFA belongs to the family of Fluoropolymers - Short silicon tubes for magnet turret connection for 13 and 18.5 mm AH3002 1 PC SHIM SYSTEM BOSS-3 SB PLUG Bruker Standard Bore (SB) Magnet System high performance Matrix Orthogonal Shim System (BOSS-3 SB). Designed for optimum homogeneity at low current and with low heat dissipation. Features: - 36 Matrix Shim Gradients - B0 coil - PT100 temperature sensor - Identification coding (ID) AH3007 1 PC SHIM UPPERPART BST SB Bruker Standard Bore (SB) Magnet System Sample Transfer (BST) for NMR sample insertion and ejection (SB Spinner supported). Features: - Built-in sample-up sensor - Built-in sample spinning/sample-down sensor - Prepared for shim system cooling PCWIN 1 PC NMR Workstation (WINDOWS) Configured NMR Workstation for AVANCE NEO NMR spectrometer series. Features : - Intel Xeon E5-1620v4 (up to 3.8 GHz), Quad Core - 16GB DDR4-2133 (2x8 GB) RAM - NVIDIA Quadro K620 2 GB GFX graphics card - 2TB 7200 RPM SATA HDD
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		- Integrated Intel I-218 Gbit LAN (SPECT) - Intel Ethernet I210-T1 PCIe NIC (NET) - 9.5 mm Slim SuperMulti DVDRW 1st ODD - USB US-Keybaord and USB mouse - Preinstalled Windows 10 (64 Bit) and TopSpin 4.x (w/o license) # (*) Configuration can change without prior notice AP2521 1 PC NMR WS MONITOR 24" LCD 24" TFT Monitor for NMR Workstations. SHTS000-04 1 PC TopSpin 4.x Basic license TopSpin4 NMR Software - Acquisition and Processing License. This software offers the full operating capability for spectrometer control, data acquisition (arbitrary dimensions) and processing (1D, 2D, 3D, 4D / nD) . capability for NMR data for WINDOWS, LINUX or MAC. Features: - NMR acquisition in arbitrary dmensions, with guided acquisition setup - NMRGuide for training of users in use of 1D and 2D, 132 experiments with NMR literature library - IconNMR automation interface - NMR data processing (1D, 2D, 3D, 4D and 5D) - Processing of Non Uniformly Sampled (NUS) data for 2D spectra (basic version) - Integration and deconvolution of NMR spectra - NMRSIM and DAISY for experiment simulation and 1D and 2D spectra prediction - Relaxation analysis (T1/T2), solid state lineshape analysis - TopSpin integrated structure editor # License key only (software available for download from our webserver) PA3823_BF/H_OZ 1 PC iProbe BBFO 5mm BBF/1H (air) X-nuclei optimized 5mm double resonance broad banded Bruker iProbe (BBFO SmartProbe) designed for direct X-nuclei observation with 1H decoupling and for 1H observation (indirect detection). The X-nuclei range corresponds to 19F and the broad band range 31P-109Ag (BBF) excluding 171Yb-9Be. This probe offers superior single or multiple solvent suppression. Multipurpose probe with highest sensitivities for X and 1H detection. Features: - Designed for BBF observation and decoupling - BB range: 19F, 31P-109Ag excluding 171Yb-9Be
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		- Designed for 1H decoupling and observation - 2H lock - Z-gradient with 5 G/A*cm - Fast Automated Tuning & Matching (2G ATM) - VT range: -150 °C to +150 °C - VT gas: Air # Automatic probe recognition (PICS) # Integrated VT Adapter (VTA) # No external RF filters required # Requires BOSS-3 Shim System (not included) AH0021 1 PC LN2 Evaporator for low VT (SS) Liquid Nitrogen Evaporator (LN2 Evaporator) accessory for very Low Temperature NMR applications. Allows to achieve very low temperatures down to about -120 °C depending on probehead. Features: - Evaporator - Flexible stainless steel transferline - 25 litre LN2 dewar # Includes VT adapter for BSVT based consoles LS_PRODIAGNOSE 1 PC LABSCAPE PRODIAGNOSE Allows the connection of NMR systems to Bruker's AutoDiagnose platform which currently offers the following features*: - Health Status Overview over all connected systems at a glance - System Configuration - Integrated cryogen level Overview - Integrated platform notifications - Email notification free trial - Easier root cause analysis for technical issues For AvNeo spectrometers, TopSpin 4.1.0. or higher is required. For cryogen notification features, TopSpin 4.1.4. or higher is required. For the connection of NMR systems to Bruker's AutoDiagnose platform, the customer has to ensure that the spectrometer workstation is connected to the Internet and all security settings are adapted to allow communication via a remote session. The connection to and use of Bruker's AutoDiagnose platform is subject to the ""AutoDiagnose Terms and Conditions of Use"" which must be accepted during the registration process. *Bruker's Autodiagnose is subject to continuous developments and the feature scope may vary over time NB: It should include all charge including custom, freight, insurance including 5 year free service for maintenance and manpower. All electrical installation at Berhampur University and should include free installation. Including Helium, UPS, Air Conditioner, Air Compressor
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11.	Microwave Extraction (cum Digestion) System	1	Microwave Extraction cum Digestion System Justification: The proposed microwave assisted digestion and extraction system is required for extraction and digestion of organic matter from environmental, soil, waste water, etc. for digestion and for extraction is mainly for pesticide residue analysis with the help of organic solvent organic solvents (dichloromethane, methanol, hexane, toluene etc.). The instrument should consist of but not limited to the followings: ● The system shall be capable of digestion and extraction of sediment, environmental, soil, waster water, sludge, plant sample etc. using different types of acid and solvents. ● Microwave Cavity should be stainless steel housing with proper multilayer Teflon coating for physical protection as well as chemical resistance. The volume of the cavity should be 60 litres or higher. ● The chassis should be coated with protected against corrosive media. ● The system should be explosion proof as a safeguard from any blasts. ● The door should be made up with stainless steel with multiple independent interlocks to prevent microwave leakage in case of improper closure or misalignment. ● There should be an automatic door locking system to ensure that the door is locked during the extraction ● The system must have built-in high-performance exhaust for cooling and fume removal and the exhaust should be separated from the electronics to prevent corrosion. ● The microwave power generation should be more than 1800 Watt with a uniform distribution of microwaves for uniform heating effect. ● The system must be equipped with all safety features needed to prevent over pressurization, temperature shoot up, leakage of microwave radiation, etc. during operation. ● Material of reaction vessel: Two types of vessels with rotors made of PTFE/TFM – 24 Nos. each. Vessel Volume: 100ml ● Separate Rotors (equipped with teflon bombs/vessels) for Extraction and Digestion ● Rotor Assembly: 100 ml x 24 rotors ● Pressure: Upto 60 bar ● Operating Temperature: Upto 260 degC ● Vessels and chambers should be physically and chemically resistant to all solvents, reagents and fumes used for extraction of samples. ● During handling, there must be the provision to cool the vessels inside the oven after microwave extraction. ● The system should have a built-in magnetic stirrer. Sufficient numbers of stirring bars (at least 24 numbers) to be provided. ● The systems should have extraction segmented rotors capable of performing the extraction of 15 or more samples at a time with self-regulating pressure valves. ● Should be capable of performing extraction of samples in the range of 100 mg to 20 gm. ● Extraction vessels should have a capacity of 100 ml or more. ● Operating temperature shall be 250 Degree Centigrade or more to ensure boiling of different kinds of organic solvents, and digestion of various samples. ● Sealing of reaction vessels should be easy and with or without use of any tools. ● The system should be provided with a filtration unit for filtration of more than 24 samples simultaneously with vacuum pump and pressure nanometre for faster filtration and control of the process. The filtration unit should be manufactured by the same manufacturer manufacturing the Extraction System
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			● The system should have options for both pre-loaded as well as customizable programs for its operations. ● The system should have a TFT / LCD / LED display for display routine operation. Also it should be provided with PC, Printer and 06 KVA UPS. ● The system must comprise of all required safety precautions for its operations. Safety manuals must be supplied along with the instrument. ● Vessel starter kit Set to be provided along with the instrument. ● All the tools required for complete operation of the system along with essential spares should be included. ● The entire system should work in power / electrical requirement in line with Indian Standard Conditions i.e., 220 – 230V, 50Hz. The power requirement against each component of the system should be clearly mentioned in the offer. ● The system and its accessories should be new, unused and of the latest model/version of manufacture. ● The system should be complete and supplied in one lot. ● Environmental conditions: Operating Temperature: 10°C – 35°C. ● The system should be compact and can be mounted on a laboratory work bench. ● Other accessories: One Fume Hood (Min. Internal Dimension: W x D x H: 3.5 x 2.5 x 6 ft) for handling of samples, preparing teflon vessels for digestion, extraction, etc. ● Warranty: Three Years (Minimum).
12.	Microwave Synthesizer	1	Microwave assisted focused monomode organic synthesis system able to handle the synthetic reactions Power Output: Minimum microwave power of minimum 600 W or higher Microwave Power field density: 6000 Watts/liter or more Maximum Pressure & Temperature: 30 bar and 300°C for all vessel types (10 mL as well as 30 mL) for scale up reactions without re-optimization of parameters. Temperature Measurement: IR measurement as standard facility with multi point calibration for accurate temperature measurement of reaction/s Stirring Speed: 0 rpm upto 1000 rpm or more to ensure uniform temperature in the reaction mixture volume. Controller: Large inbuilt Touchscreen display with capability for online graphical display of reaction parameters like pressure, power and temperature and review of previous reaction runs. Heating Performance benchmarks with glass vessels and without any heating aids : System should have ability to heat 20 mL Ethanol to 200 °C in 2 min System should have ability to heat 5 mL Toluene to 200 °C in less than 5 min Vessels : Should be supplied with Glass Vials of 10 ml and 30 ml capacity with sustainable material of construction and allow for multiple reaction runs to be conducted in the same vial. . Should be supplied with a vessel made of special material viz. SiC of at least 10ml capacity to allow for carrying out reactions involving metallic particles, in-situ fluorination and reactions using other aggressive reactants. Handling: Sealing of reaction vessels should be easy and without use of any tools. Direct printout to PDF files or export of data to excel via USB ports. Suitable air compressor for operation of the instrument and cooling of reaction vials after a reaction is over should also be quoted optionally. Autosampler sampler & other option: The system should be used with an autosampler with

			minimum 24 reaction vessels handling (10 mL and 30 mL) for unattended operation. Optional Fiber optic Ruby Thermometer with ability to measure internal reaction temperature simultaneously along with IR sensor and simultaneous display of both, IR and Ruby temperature on screen should be quoted separately. Compulsory accessory : Instrument should have integrated digital camera with on screen operation Set of consumables : Should quote for additional consumables for smooth running of the samples for 3 yr . Warranty: 3 Years
13.	GC-MS	1	GC MAIN FRAME: ● GC system should be Graphical user interface with touch screen display for Insightful Graphical User Interface (GUI) ● Gas Chromatograph with Electronic Flow control for Simultaneous Pressure, Temperature and Flow Programming ● Large Column Oven with temperature range from Ambient +10°C to 450°C ● Temperature Accuracy: ± 1 % ● Peak area repeatability: < 0.5 % RSD ● Retention Time Repeatability < 0.0008 min ● Auto Ignition ● Self-diagnostic function with GLP/GMP support ● Fast data transfer, acquisition speed 500Hz or better - able to "catch" very sharp peaks ● Fast oven cooling speed 450 °C to 50 °C within 04 minutes ● 32 oven ramps ● Should have retention time alignment/lock/adjustment feature ● Provision for simultaneous mounting of 02 injectors & 03 detectors ● Carrier Gas: Apart from Helium provision to use Hydrogen & Nitrogen as carrier Gas. ● Flow Control: Constant Flow, constant pressure, Constant liner velocity Appropriate gadgets & options for gaseous sample analysis Injectors - Split / Split less injector (Qty-2): ● Split / Split less injector for capillary Columns with Septum Purge functions. ● Must be suitable for all capillary columns, 50µm to 530µm id. ● Split ratio range: 0 to 9000, must be available to avoid column overload. ● Maximum operating temperature up to 450°C. ● Efficient carrier gas saver function built-in to reduce gas consumption during standby without affecting performance. ● Must have electronic septum purge flow control to eliminate carry-over. ● Pressure Range should be from 0-150 Psi or higher MASS SPECTROMETER WITH EI ● Ionization source Electron Ionization The quadrupoles should have a pre-rods filter or any other equivalent technique to minimize the influence of contamination and thus increase the sensitivity. ● Q2 Collision Cell should have efficient ion acceleration ensuring zero cross talk. ● It must be able to perform calibration manually as well as auto-tune

- Mass Range : 10 to 1050 amu with unit mass resolution over the entire mass range
- Dwell Time : 0.5 msec or better
- Scan Speed : 20,000 amu/sec, with 0.01 s step scanning
- Interface Temperature: 50 °C to 350 °C
- Ion source Temperature: Variable between 150~ 350 °C
- Filament : Dual (Automatic Switching during analysis)
- Maximum MRM/SRM Speed: > 800 MRMs/Sec
- Linear dynamic range : 10^6
- Air-cooled Turbo Molecular Pump of a minimum capacity of 250L/Sec and above.
- EI scan sensitivity: Signal-to-noise (S/N) > 1500 at m/z 272 for 1pg OFN in EI scan.
- EI MRM sensitivity: Signal-to-noise (S/N) > 17500 for the transition from m/z 272 to m/z 241 for 100fg OFN in EI MRM.

Flame Ionization Detector (FID)

- Minimum detectable level: ≤ 1.2 Pg C/s
- Temperature range: up to 450°C
- Dynamic range should be at least 10^7
- Data Acquisition Rate: 500 Hz.

TCD Detector

- Operating Temperature 350 °C
- Sensitivity 40000 mV.mL/mg decane or 9 μ V/ppm nonane
- Dynamic range: 10^5
- Data Acquisition Rate: 500 Hz.

Headspace Sampler:

- Headspace sampler with vial pressurization and loop fill pressurization technology with Electronic Flow and pressure control.
- 5 stage vial mixing
- No of processed samples 90 or more
- Automatic leak check & self-diagnostic functions
- Transfer line temperature- ambient+10 to 300°C
- Control software with 21 CFR part 11 compliance
- Area repeatability: < 1% RSD (n=5)
- Carry Over: < 0.15%

Auto Sampler:

- 60 vial liquid sample holding capacity 1.5/2 ml
- Sample injection volume: 0.5 to 200ul
- Cross contamination: $<10^{-4}$

Single Software for Control of GC-HSS as well as GCMS/MS:

- Software Should Provide Single Point Control of all GC Parameters, Injectors, detectors including MS

		● Software should have Security (log-in, User and group), Audit trail, System check, Software integrity and system Suitability test should be included as standard functions. ● Flexible report Format i.e. for Method, chromatogram, Mass Spectrum, Peak table, Quantitation result, calibration curve, Status Log, texts, graphics. ● It should provide Automated tuning & File management functions with Library Search facility. ● Complete Software control of vacuum system with Auto Start-up / Shut-down and vacuum protection against Power Failures. ● It should have a built-in weekly Scheduler for automating the system for one complete week in addition to daily automation. GLP/GMP Compliance. ● MS Navigator for maintenance procedures and troubleshooting guide. ● NIST Library latest version ● Essential Tool Kit, Utility Kit & Consumable Kit for Trouble Free maintenance for 3 Years. <u>Installation Accessories:</u> ● Branded PC core i7, 32 GB RAM, 1 TB SSD, CD Drive, Windows 11Pro & LaserJet B/W Printer ● Filled UHP Grade Cylinders (2 nos each) – collision gas N₂/Argon, H₂, Z_A, He 2no's each cylinder with double stage Stainless Steel Regulators, Purifiers and filled in gas cylinders. Additional Electron Ionization Filaments (2 No.) Liquid Auto sampler vials: 500 amber & transparent vials (02 ml capacity) with screw cap. Headspace Auto sampler vials: 500 vials (20 ml capacity) with cap and septa. Decrimper and crimper . Columns: Quote suitable columns for Gas analysis, VOC's & organic compounds – 04 No's each 5-SIL MS Column 30m*0.25mm, 0.25μ 624-SIL MS Column 30m*0.25mm, 0.25μ - Q-BOND - 30m*0.32mm*10um - Stainless steel column 3.0mx3.0mml.D. Activated Charcoal 60/80 Column Ferrules- injector end (Split-40 No. and PTV -20 No.), interface end (20 No. each) compatible with the above mentioned column. Analytical Standard: Mixed Standard for (i) Organochlorines, (ii) Organophosphates, (iii) Hydrocarbons, (iv) Fatty Acids Quote suitable columns for Gas analysis, VOC's & organic compounds – 04 No's each 10 KVA UPS (with power back up of minimum 02 hrs) <u>Accessories:</u> 02 ton AC (Split type & 05 Star rating), Granite top table & chair Free of cost installation, onsite training for 10 days with respect to metabolomics application Instrument operation and data analysis training at the customer site to be included (at least once per year for 3 years). Warranty: Minimum 03 yrs. of comprehensive warranty & 2 years AMC to be quoted after completion of warranty for GC-MS system It must be ensured that the spare parts of the system must be available for a period of 10 years after the warranty period Training & Installation: On-site application training with complete system installation and demonstration. Must have a service center in Odisha for prompt redressal within 48hrs.
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			Communication/ contact details to be furnished.
14.	Flow cytometer	1	1. The system must be equipped with 2 solid state lasers (488nm Blue & 633-642nm Red) having a minimum of 8 fluorescence parameter outputs or more. 2. The system should be CE IVD / US FDA IVD approved for all fluorescence parameters. 3. All the fluorescence detector channels, and side scatter channel must be designed with photo multiplier tube PMT for voltage optimization with stabilized CV & minimal electronic noise contribution for achieving best resolution even for dimly stained population. 4. Pulse Height, Area and Width information must be available for all parameters simultaneously to be able to discriminate doublets based on size, granularity & nucleic acid content. 5. Digital signal processing should allow threshold to be set on all available channels simultaneously in any combination of all available parameters during sample acquisition. 6. For high throughput, the analysis speed should be at least 35000 events per second or better with all the parameters available. 7. The system apart from offering low, medium & high flow rates, should also offer high sensitivity fluidics aspiration mode, which can result in higher fluorescence signal resolution for dim stained population. 8. The System should have sample carry over of <0.1% or better with cells for rare cell populations discovery and novel marker identification. 9. For Rare cell analysis the Abort Rate should not be more than 1% on all parameters and acquisition speed. 10. The system generated compensation should be valid for a minimum of 60days and updated with daily QC. 11. The system must be capable of standardization and collaboration between inter-Lab and intra-Lab through assay portability feature to maintain consistency in data quality. 12. The system MUST be future upgradable with CE-IVD/ US-FDA approved universal plate and tube loader platform which can accommodate minimum 30/40 tubes rack as well as up to 96 well plates directly for complete walk away automation. 13. System should be provided with a compatible latest workstation having the latest Windows 11 with at least 16GB RAM and 1TB storage capacity. 14. The system software should include pre-validated IVD approved pre defined templates for reporting of stem cell, CD4/CD8 & PID assays to ensure standardized results interpretation and minimize variability. Reports must display absolute cell counts, gating strategy visualization, reference ranges and interpretation guidance in accordance with IVD regulations. 15. The system must support Bi-directional LIS connectivity. 16. A compatible UPS with at least 1 hour backup must be quoted. 17. Vendor must include necessary consumables for Installation & demonstration of the quoted equipment models. 18. OEM must have direct presence in India with dedicated local Application and service support. 19. Vendor must take care of the installation of the quoted equipment with trained engineers and respond to a call within 48 hrs when the machine is down. 20. The instrument should be quoted with AMC for an additional 4 years after completion of the warranty period

15.	CTD (conductivity, temperature, and depth)	1	CTD (Conductivity, Temperature, Depth), DO, Chl Profiler – Specification The CTD profiler is a high-precision oceanographic instrument designed for measuring seawater conductivity, temperature, and depth, along with derived parameters such as salinity, density, and sound velocity. It is widely used for coastal, estuarine, and deep-sea applications. 1. Measurement Parameters <table><tr><th>Parameter</th><th>Range</th><th>Accuracy</th><th>Resolution</th></tr><tr><td>Conductivity</td><td>0 to 7 S/m</td><td>± 0.0003 S/m</td><td>0.00001 S/m</td></tr><tr><td>Temperature</td><td>-5°C to +35°C</td><td>± 0.001°C</td><td>0.0001°C</td></tr><tr><td>Depth</td><td>0 to 2000 m</td><td>± 0.1% full scale</td><td>0.001 m</td></tr><tr><td>Salinity*</td><td>Derived</td><td>± 0.002 PSU</td><td>0.001 PSU</td></tr><tr><td>Sound Velocity*</td><td>Derived</td><td>± 0.1 m/s</td><td>0.01 m/s</td></tr></table> N.B. The chlorophyll and DO sensors should be attached to the CTD. 2. Sampling and Data Storage ● Sampling Rate: Up to 24 Hz (user-configurable) , Up to 2000dbar ● Chlorophyll [cabled, 0.6m, 600dbar max] ● Dissolved oxygen [cabled, 0.3m, 2000dba] ● Data Storage Capacity: Up to 1 GB internal memory (~100 million samples) ● Data Output: Real-time via serial/USB/Ethernet or stored internally 3. Power and Battery ● Power Supply: 12–24 V DC ● Battery Life: Up to 60 hours continuous sampling 4. Communication Interface ● RS-232 / RS-485 / USB / Ethernet (model dependent) 5. Physical Characteristics ● Dimensions: Approx. 67 cm (L) × 10 cm (D) ● Weight in Air: ~10 kg ● Weight in Water: ~6 kg ● Material: Titanium or Delrin housing (corrosion-resistant) ● Depth Rating: Up to 2000 m 6. Additional Features Software support for real-time monitoring and post-processing	Parameter	Range	Accuracy	Resolution	Conductivity	0 to 7 S/m	± 0.0003 S/m	0.00001 S/m	Temperature	-5°C to +35°C	± 0.001°C	0.0001°C	Depth	0 to 2000 m	± 0.1% full scale	0.001 m	Salinity*	Derived	± 0.002 PSU	0.001 PSU	Sound Velocity*	Derived	± 0.1 m/s	0.01 m/s		
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16	Auto Analyzer	1	Fully Automated Bench-top Continuous Flow Nutrient Analyzer- QTY 01 No (Approx. Cost: 65 Lakhs INR) The fully automated “Continuous Flow Nutrient Analyzer” should be supplied with all necessary peripherals, including an auto-sampler, multi-channel system integrated on a single board (non-modular), and computer interface for data processing. The instrument must be capable of determining a suite of nutrients (Nitrate, Nitrite, Ammonia, Phosphate, and Silicate) at ppb concentrations in diverse sample types (e.g., seawater, estuarine water, lagoon water, etc) with high sensitivity and long-term stability. It should be supported by advanced operational software enabling unattended use, internet-based remote control, efficient data reduction routines, and real-time monitoring of all key instrumental parameters. <table><tr><td>Sl</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr><tr><td>Par</td><td>Anal</td><td>Meth</td><td>Appr</td><td>Re</td><td>Dete</td><td>Accur</td><td>Detectio</td><td>Detector</td><td>Hand</td><td>Acces</td><td>Acces</td><td>Installati</td></tr></table>	Sl	1	2	3	4	5	6	7	8	9	10	11	12	Par	Anal	Meth	Appr	Re	Dete	Accur	Detectio	Detector	Hand	Acces	Acces	Installati
Sl	1	2	3	4	5	6	7	8	9	10	11	12																	
Par	Anal	Meth	Appr	Re	Dete	Accur	Detectio	Detector	Hand	Acces	Acces	Installati																	

			am eter s	ytical Para mete rs	od	oach	ag ent s	ction Sensi tivity	acy and Precisi ons	n Range		ling capa city	series	series	on Training and warranty
			Speci fication	The system should be able to analyze Nitrate, Nitrite, Phosphate, Silicate and Ammonia disso lved in marine, brackish and estuarine water samples	Analyzer should be equipped with multi channel pumps with more than 30 positions for tubes	The analyzer should be capable of analyzing five parameters (Ammonia, Nitrate, Nitrite, Phosphate and Silicate) simultaneously on a single console	The single console should have in built drawers for reagent storage	The instrument should have wide analytical ranges with lowest detection limits (0.05 µM for phosphate, nitrite, nitrate, silicate, and 0.1 for ammonia)	Should be ≤ 2%	The instruments should show linearity within 0-40µM for Nitrate, 0-40µM for Nitrite, 0- 4µM for phosphate, 0- 200µM for Silicate, 0-20µM for Ammonia with good precision	Colorimeter detector, the system should have all necessary optical filters for accurate measurements Automatic matrix correction for salinity effect in seawater samples with varying salinity Software controlled automatic baseline and peak height settings and lamp switching on-off High resolution photometer, optimal signal-to- noise ratio for lower detection limit and wider dynamic range	The system should be equipped with auto-sampler (to accommodate more than 100 samples) having pre and post dilution capability	Manifolds should come with the pre-connected tubes, relevant accessories such as heating baths, cadmium column must be included	Full set Desktop PC (with colour printer) to command the instrument and run the instrument software The specifications for the PC should comply with software and should run smoothly with appropriate interface	Supplier should carry out the installation, calibration and impart training at Berhampur University, for analysis and troubleshooting Comprehensive warranty of the instrument and its peripherals including PC, software(s), printer for 5 years from the date of installation AMC cost post-warranty for a period of three years (on yearly basis) should be quoted separately
17.	Ambient Air Quality Monitoring Stations - Mobile Observatory	1	Continuous Ambient Air Quality Monitoring Stations (AQMS) - Mobile Observatory The complete setup includes analyzers and accessories as given 1. Continuous Ambient PM10 Particulate Matter Analyser Principle: Beta ray attenuation (automatic continuous operation), PM ₁₀ cyclone with flow control, Range: 0- ~1,000 µg/m ³ with auto-range, Environmental: +5 to +40 °C or better ; RH 0-95% non-condensing; Power ≤400 W, Data: 1-min or 5-min averages with rolling 1-h/24-h; on board storage ≥1 year Display: Inbuilt Digital Display to display the all the parameters (PM10) Certifications: USEPA & TÜV (QAL1) 2. Continuous Ambient PM2.5 Particulate Matter Analyser Principle: Beta ray attenuation (automatic continuous operation), PM2.5 cyclone with flow control, Range: 0- ~1,000 µg/m ³ with auto-range, Environmental: +5 to +40 °C or better ; RH 0-95% non-condensing; Power ≤400 W, Data: 1-min or 5-min averages												

		with rolling 1-h/24-h; onboard storage ≥ 1 year Display: Inbuilt Digital Display to display the all the parameters (PM2.5) Certifications: USEPA & TÜV (QAL1) 3. Continuous Ambient Sulphur Dioxide (SO2) Analyzer Principle: UV fluorescence, Range: 0–20,000 ppb or better with auto-range; DL ≤ 0.5 ppb (1-min), Precision: ≤ 1 ppb or 1% (1-min), Zero/Span: Auto zero; multi-point span capability; temperature-controlled optical bench, , Outputs: Analog 0–10 V / 4–20 mA; RS-232/485/Ethernet; Modbus/TCP preferred. Environmental: 0 to +30 °C or better Display: Inbuilt Digital Display to display the all the parameters (SO2) Certifications: USEPA & TÜV (QAL1) 4. Continuous Ambient Ammonia (NO-NO2-NOX- NH3) Online Analyzer Principle: Chemiluminescence for NO_x, NO, NO₂, and NH₃, Ranges: 0–20,000 ppb typical; DL ≤ 0.4 ppb (1-min), Converter Efficiency: $\geq 95\%$ for NO₂; selective NH₃ channel with documented conversion efficiency, Linearity/Precision: $\pm 1\%$ FS; $\leq 0.5\%$ FS (1-min), Auto-calibration/Zero; Multipoint Span; Low-NO_x mode for near-ambient applications Environmental: 0 to +30 °C or better Display: Inbuilt Digital Display to display the all the parameters (NO-NO2-NOX- NH3) Certifications: USEPA 5. Continuous Ambient Carbon Monoxide (CO) Analyzer Principle: Non-dispersive infrared absorption, Range: 0–100 ppm (expandable); DL ≤ 0.04 ppm (1-min), Linearity: $\pm 1\%$ FS; Precision: ≤ 0.1 ppm or 1% (1-min), Auto zero/span; pressure/temperature compensation. Environmental: 0 to +30 °C or better Display: Inbuilt Digital Display to display the all the parameters (CO) Certifications: USEPA & TÜV QAL1 6. Continuous Ambient Ozone (O3) Analyzer Principle: Non-Dispersive Ultraviolet (NDUV) absorption, Range: 0–20,000 ppb (expandable); DL ≤ 0.5 ppb (1-min), Linearity: $\pm 1\%$ FS; Precision: ≤ 0.5 ppb or 1% (1-min), Auto zero; sample dryer or humidity compensation, Environmental: 0 to +30 °C or better Display: Inbuilt Digital Display to display the all the parameters (O3) Certifications: USEPA & TÜV QAL1 7. Multi Gas Calibrator With Ozone Air Generator meets the CPCB standards Functions: Zero air generation, dynamic dilution, multi-point span for SO₂, NO/NO₂/NO_x, CO, O₃ Ozone: Internal UV ozone generator with photometric feedback; 0–5 ppm O₃, Mass Flow Controllers: NIST-traceable; accuracy $\leq \pm 1\%$ of setpoint, Inputs: Compatibility with certified span gases (cylinders not included in this line item), Outputs/Comms: Analog and digital for audit logs; leak check utility, Build: 19" rack-mountable; power ≤ 400 W 8. 19 Rack for Analyzers with necessary accessories Configuration: Three modular 19" racks sized for PM analyzers, gas analyzers, and calibrator, Features: Vented doors, cable management, adjustable rails, shock-mount feet, 230 VAC PDU 9. Gas Sampling System Inlets/Ports: ≥ 10 ports manifold with individual isolation valves, Sample Handling: Oil-free suction pump sized to maintain analyzer flows; heated line (if required for VOC), Drying: Membrane or refrigeration dryer for moisture removal where appropriate,
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			Hardware: Sampling head, PTFE/SS lines, flanges/glands, weather cap; particulate pre-filter, Materials: Electro-polished SS/PTFE for inertness; leak rate $\leq 1\%$ of flow; easy de-con 10. Work Station Computer with data logging & uploading software Hardware: Intel i5 (or better), 16 GB RAM (min), 1 TB storage, 19" monitor, keyboard/mouse, OS & Software: Licensed OS; Data Acquisition System capable of polling all analyzers, local storage, auto-restart, Data: Real-time visualization, alarms, auto validation rules, CSV export, daily backup, Networking: Ethernet with secure remote access; API/FTP push to display/central server, Warranty/Support: OEM warranty; remote diagnostics; user management & audit logs 11. 6KVA Online Uninterrupted Power Supply (UPS) Type: True online, double-conversion with static bypass, Backup: Battery bank sized for ≥ 120 minutes at typical CAAQMS load (document calculations), Output: 230 VAC, 50 Hz; THD $\leq 3\%$; efficiency $\geq 90\%$, Protections: Surge, short-circuit, overload; SNMP card for monitoring, Mounting: Rack/stand with proper ventilation; input/output isolators 12. CAAQMS Calibration Gas Cylinders Gases: SO_2, NO- NH_3 (for NO/NO_2/NO_x/NH_3), CO, , and zero air (if cylinder-based), Capacity: ~ 10 L cylinders; pressure ≥ 150 bar (as applicable), Accuracy/Traceability: certified mixtures with $\pm 2\%$ relative uncertainty (or better), Regulators: SS two-stage with suitable outlet fittings for calibrator; Documentation: Certificates of analysis; shelf-life ≥ 12 months for target levels 13. Weather Monitoring Station Parameters: Ultrasonic wind speed & direction, air temperature, RH, rainfall, solar radiation, Accuracy: Wind speed ± 0.3 m/s; direction $\pm 3^\circ$; Temp $\pm 0.3^\circ\text{C}$; RH $\pm 2\%$; Rain resolution ≤ 0.2 mm; Pyranometer ISO class compliant, Mast & Mounts: Suitable met mast, brackets, lightning protection, grounding kit, Data: 1-min averages, gusts; Modbus/TCP or SDI-12; integration to DAS, Environmental: IP65 or better; -10 to $+60^\circ\text{C}$; low maintenance (no moving parts for wind) 14. Mobile Van-Specification Vehicle model: TATA ULTA T7 /Any Equivalent (i.e. Equivalent vehicle will supply After approval from Institute only) Fabrication for Mobile Van: 1. Body: MS Sections, MS Angles, Formed Sections 2. Structure: GI Tubes , GI Formed Sections, 3. Paneling: Exterior: LHS / RHS / Roof Panels 1.2mm GI Sheet 4. Interior: LHS / RHS / Roof Panels 1.2 mm GI Sheet 5. Insulation: Glass Wool Insulation 40mm Thickness 6. Painting: P U Painting as per requirement. 7. Snickering: RTA Radium, 8. Layout: Analyzer racks, calibrator bay, gas cylinder cage, UPS/battery bay, operator desk, safe cable routing Note: Vendor to be submit the drawing approval for the mobile van fabrication after award of contract within 10 days and start the fabrication after the approval from institute.
18.	FTIR	1	Technical Specification (and Installation of FTIR Spectrometer)

		● FTIR spectrometer with pan India service and application support. ● Multipurpose cell module allowing easy connection of different cells without removing the entire module for calibration. ● Modular Configuration: Should be compatible with third party sample cell. The system should be compatible with various sample cell like Transmission, Horizontal and Vertical ATR and GAS sample cell. ● Wavenumber Range: 350-7500 cm⁻¹ or better. ● FTIR with both KBR and ATR mode of operation ● Design and Build: Hermetically sealed aluminum casing with gold-coated mirrors, user-replaceable KBr windows, and beam splitter. ● Class one air-sealed single-mode Vertical Cavity Surface Emitting Laser (VCSEL) or better. ● Permanently aligned cube corner interferometer for precision. No movable interferometer allowed ● User-replaceable light source made of SiC composite. (IR Source) ● Highly sensitive pyroelectric DLATGS/DTGS detector or better. ● The instrument should be with gas inlet option to purge the optical pathway for some special application. Performance: ● Wavenumber Precision: 0.0005 cm⁻¹ or better. ● Accuracy of wavenumber: 0.05 cm⁻¹ @900 cm⁻¹ to 3000 cm⁻¹. ● Spectral resolution: 2 cm⁻¹ to 16 cm⁻¹ or better. ● Signal-to-noise ratio: 55,000:1 or better (one minute). ● Measurement Speed: Less than 30 seconds. ● ECO mode should be available to avoid the cool down of the instrument during the idling. ● (9 inches or better) for easy operation and better spectra view. ● Additional PC for software operation. Software: IN BUILT ● User-friendly software for routine operations. Auto calibration facility with polystyrene check. ● Measurement and calibration data should be available, Data Export should be in csv, .pdf, and .spc format ● Instrument should have provision to make custom library and option for Commercial licensed library ● Single analysis preset creation for various analyses (identification, verification, integration, peak search,intensity analysis, baseline correction). ● Software control: Touchscreen, optional keyboard, mouse, and barcode reader compatibility ● Communication interphase should be with USB, CAN, Wifi and Ethernet port ● The System Suitability check should include polystyrene check, SNR Check, Baseline Check and wavenumber precision check Operation Mode: ● Self-Diagnostic and Self-Monitoring features.
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			● Status indicator LED for streamlined workflow during cell module change. ATR Accessory: Single reflection ATR cell with a diamond crystal, including a high-pressure confined space clamp and baseplate. hydraulic press for kbr pellets. UPS with 5KVA with minimum 1 hr backup. A standard table with drawer for the instrument. Cre i7 all in one desktop PC with a Laserjet printer Installation, Demonstration and application training should be included. Warranty: Comprehensive 3 years or more warranty covering all parts (excluding wear and tear parts). And additional 2 year AMC. Additionally minimum 5-10 years warranty for interferometer, IR source, light source components.
19.	Nucleofector	1	Nucleofection System It should support electroporation-based transfection which delivers plasmid DNA, siRNA, RNPs directly to nucleus. The Nucleofection System is suited to handle various functional units for the efficient transfection of mammalian cells (including hard-to-transfect cell lines), primary cells, stem cells, and neural cells. Overview: Modular system optimized for high-efficiency transfection of cell lines and primary cells (up to 90% efficiency for plasmids, 99% for oligonucleotides). Core unit controls modules; expandable for cuvettes or multiwell. Technical Specifications Library of cell type-specific programs (pre-set) and ability to run custom programs such as adjustable voltage, manual pulse parameters, and compatibility with cuvettes (typically 0.1-0.4 cm gap for 20-100 μL volumes) or multi-well plates (e.g., 96-well for medium throughput) Operational Power supply: 100 - 240 VAC, Frequency: 50 - 60 Hz Consumption: 0 VA (power off) / 20 VA (idle) / 140 VA (busy - during transfection), Fuse: T 2.5A, L250V Operating temperature: +15°C up to +40°C Supports Nucleofection of various cell numbers in 100 μL Nucleocuvettes or 20 μL 16-well strips. Adjustable voltage, pulse parameters, and compatibility with cuvettes (typically 0.1-0.4 cm gap for 20-100 μL volumes) or multiwell plates (e.g., 96-well for higher throughput). Multiwell Plate Specifications Supports 96-well Nucleocuvette plates; same voltage/pulse parameters as above. Features and Benefits: ● 8-inch capacitive touch screen with intuitive GUI for protocol selection, custom editing, and experiment saving/exporting. ● USB (2 ports) and Ethernet connectivity for software updates and data transfer. ● 21 CFR Part 11 compliant options for regulated environments. ● Electrically driven drawer for cuvette retainer to minimize handling. ● Positions for both strip and single cuvette formats for flexibility. ● Direct transfection of adherent cells without suspension, reducing stress. ● Supports transfection at later developmental stages. ● High viability post-transfection for sensitive cells.

			Electro Cuvette/Tube specification Supports transfection of 2×10^4 to 2×10^7 cells or more in 100 μL single cuvettes (0.1-0.4 cm gap) or 20 μL Nucleocuvette strips with more than 90% of plasmid transfection efficiency. Voltage: 10-3,000 V (adjustable in exponential or square-wave modes). Pulse length: 0.05-100 ms (in 0.05-1 ms increments); 1-10 pulses; intervals 0.1-10 s. Other requirements Power input and output plugs to be compatible with the Indian system. Software and Interface 8-inch capacitive touch screen on Core Unit; intuitive GUI for protocol selection, custom parameter editing, experiment saving/exporting. Includes >160 predefined programs; USB/network connectivity for updates/data transfer. 21 CFR Part 11 compliant option for regulated labs. Connectivity USB ports (2x) for data export; Ethernet for network updates Safety and Compliance: CE marked; fuse-protected; no SDS required as non-hazardous. IQ/OQ validation services available. Installation and Warranty - On-site installation and operator training included (Trial Nucleofection kit V for few experiments should be included to check the functionality check) - 36-month warranty from the date of installation
20.	Luminometer	1	General Overview Primary Application for Luciferase Assays: Optimized for flash and glow luminescence in reporter gene assays, including single and dual luciferase systems (e.g., firefly and Renilla luciferase for normalization). Supports ATP-based assays and kinetic monitoring; detects <0.5 zmol firefly luciferase for low-expression samples. Key Advantages for Luciferase Work: Ultra-sensitive photon counting with minimal background; automatic quickstart upon drawer closure; optional injectors for automated Dual-Luciferase workflows; reduces handling time and ambient light interference. Assay Compatibility: Dual-Luciferase® Reporter Gene Assay (Promega), ATP assays, cell viability/proliferation, cytotoxicity, and environmental toxicity assays; adaptable for bioluminescence and chemiluminescence. Performance Specifications ● Detection Principle: Single photon counting mode using a low-noise photomultiplier tube (PMT). ● Spectral Range: 300–600 nm (covers firefly luciferase emission at ~560 nm). ● Sensitivity: ○ Firefly Luciferase: <0.5 zmol per tube (enables detection of faint signals in reporter gene assays). ○ ATP: 1 amol per tube (proxy for luciferase-linked assays). ● Dynamic Range: 6 orders of magnitude (high linearity from low to high signals without adjustments). ● Cross-Talk (for Dual Measurements): Minimal due to sequential single-tube design;

		supports accurate ratio calculations. ● Repeatability: Excellent signal-to-noise ratio; low background via optimized optics and light shutter. ● Integration Time: Adjustable for endpoint, kinetic, or dual assays (up to multiple kinetics with 600 data points). ● Injection Precision/Accuracy: >98% for 20–500 μL volumes (using syringe pumps with PTFE tubing; cell-friendly for live assays). ● Background Noise: Very low, with automatic shutter for immediate readiness post-exposure. Measuring Chamber: Retractable drawer with interchangeable reflectors and adapters for maximal light collection; proximity of sample to detector enhances sensitivity. Tube Compatibility: ● Standard Lumivials: 12 $\times$ 47 mm, 12 $\times$ 55 mm, 12 $\times$ 75 mm. ● Eppendorf Centrifuge Tubes: 1.5 mL and 2 mL (adapters included for secure fit and injection; confirmed compatibility with 1.5 mL tubes for luciferase volumes). Injectors: Optional 0–2 syringe pumps (20–500 μL adjustable in 1 μL steps); chemically inert PTFE tubing; prime/wash protocols to minimize reagent waste (<10 μL per cycle). Interface: USB 2.0 for PC; Ethernet for network printing (Touch model). Power Supply: 100–240 V AC, 50/60 Hz, 24 V / 2.5 A DC (external autoranging adapter; compatible with Indian outlets and voltage variations). Detectors: Low-noise photomultiplier tube in single photon counting mode Detection technologies: Luminescence Measurement modes: Endpoint, Kinetics, Multiple Kinetics Spectral range luminescence: 300–600 nm Injectors: Up to 2 syringe injectors Range of Injector volume: 20–500 μL Software and Operation ● Included Software: Touch (built-in touchscreen) or PC version (Windows 11 and lower compatible) – intuitive for protocol setup, replicates (up to 99), standards, and dual assays. ● Measurement Modes: ○ Single/Dual Endpoint: For glow-type luciferase assays with injector control (e.g., measure firefly, inject Renilla buffer, measure second signal). ○ Kinetic: Real-time monitoring (single or multiple kinetics up to 600 points). ○ Quick Measurement: Automatic start on drawer closure. • Data Processing: Ratio calculations for dual-luciferase; standard curves; graphics display; export to CSV (Excel), PDF, HTML via USB or network. • User Interface (Touch Model): 7" capacitive touchscreen (480 $\times$ 800 pixels) with gesture control; GLP support (cut-off calculations, lot tracking); no training needed for basic luciferase protocols. • Additional Protocols: Wash & Prime; Cut-Off Assay; software license includes all modes. • Operating Temperature: 10–35°C (suitable for Indian lab conditions; avoid direct sunlight). • Storage Temperature: 0–40°C.
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			• Humidity: Up to 70% operating (non-condensing); up to 80% storage (@30°C). • Regulations/Certifications: CE marked; RoHS compliant; Research purpose only. • Safety Features: Enclosed drawer with light shutter prevents leaks; no radioactive elements. Accessories to be Included: ● External power adapter and cord. ● USB cable (PC model). ● Sample holders/reflectors (e.g., for 1.5 mL tubes). ● Software license and user manual. ● Dual injectors. ● Injection sample holder for microfuge vials. ● Lumivials (e.g., 12 × 55 mm). Warranty: On-site installation and operator training included for 3 years with standard service for Indian laboratory condition.			
21.	High-performance Computing System	1	Component	Quantity	Specification	Estimated Cost (INR)
			CPU(s)	2	AMD EPYC 9654 (96 cores each, total 192 cores) OR 2 × Intel Xeon Platinum 8592+	₹18,00,000
			Motherboard	1	Dual-socket EPYC/SP5 or Xeon-compatible board with 2TB+ DDR5 ECC support, 16+ PCIe Gen5 lanes	₹2,00,000
			RAM	1	1 TB DDR5 ECC Registered (16×64 GB DIMMs)	₹8,00,000
			GPU(s)	4	NVIDIA H100 80GB PCIe (or 2 × H100 SXM with NVLink)	₹55,00,000
			Storage (Primary)	2	4TB NVMe Gen4 SSDs (RAID 1 for OS)	₹1,00,000
			Storage (Data)	8	8TB NVMe Gen4 SSDs (RAID 10) for fast scratch/storage	₹4,00,000
			Cooling System	1	Custom Liquid Cooling (for CPUs and GPUs) with redundant pumps	₹3,00,000
			Chassis	1	4U Rackmount or Tower (Supermicro / Tyan / Custom)	₹1,50,000
			PSU	1	Redundant 3200W Titanium-rated Power Supplies (2×1600W)	₹1,50,000
			Networking	1	Dual 100Gbps InfiniBand or Ethernet (Mellanox ConnectX-7)	₹3,00,000
			OS & Software	1	Ubuntu Server / RHEL, CUDA, cuDNN, ROCm, TensorFlow, PyTorch, SLURM, etc.	₹50,000
			UPS System	1	10kVA Online UPS (with batteries for 30 min backup)	₹2,00,000
			Warranty &	1	3-Year Onsite Support & Parts Replacement	₹1,50,000

			≥3,000,000:1; HDMI, LAN, RS-232 OR: 4K UHD LED Display: 85" or larger; 3840×2160 resolution; HDR; ≥350 nits brightness; HDMI/USB-C inputs Motorized Projection Screen: 120" diagonal, 16:9 aspect ratio, matte white surface with remote control Ceiling/Wall Mount Kit: Adjustable heavy-duty mount for projector or LED display PTZ Camera: 4K/1080p; 20× optical zoom; HDMI + NDI/SDI/USB outputs; auto-tracking; PoE support Fixed Wide-Angle Camera: Full HD; 120° FoV; USB or HDMI output Camera Mount / Tripod Kit: Adjustable with tilt-lock mechanism Digital Wireless Microphone System: Dual-channel; handheld + lapel; rackmount receiver Gooseneck Podium Microphone: Condenser type; LED indicator; XLR output Digital Audio Mixer with DSP: ≥8 channels; EQ; AGC; feedback suppression; echo cancellation Powered Full-Range Speakers: ≥12"; ≥1000W RMS; onboard DSP Subwoofer: Active; ≥1000W RMS; freq ≤40 Hz Audio Cables and Accessories: Balanced XLR, DI boxes, connectors, cable trays Video Switcher / Encoder: 4–8 HDMI inputs; multiview output; direct USB recording; RTMP streaming HDMI Splitter & Extender Kit: 4K@60Hz; HDCP 2.3; CAT6 up to 50m Touch / IP-Based AV Control Panel: 7"+ touchscreen; programmable control; projector/screen/audio Managed PoE Network Switch: ≥8 PoE+ ports; VLAN; Dante/NDI ready AV Rack: 12U–15U; cooling fan; power strip; locking door Power & Surge Protection System: 6–8 socket rackmount PDU; spike suppressor Cable Management & Labelling: HDMI, CAT6A, power, audio cables; conduits; tagging Wireless Presentation Device: HDMI/USB-C compatible; 4K; direct casting Portable Whiteboard (optional): Magnetic; 4×3 ft; movable stand Documentation & Manuals: System layout, wiring diagram, quick-start guide Training & Commissioning: One full-day onsite training session Warranty and Service Requirements: • Minimum 5 years comprehensive onsite warranty for all components. • At least 2 preventive maintenance visits per year. • Service response time ≤ 48 hours. • OEM to assure spare part availability for 7 years. • Vendor to provide warranty certificates, test reports, and datasheets.
24.	Computers for centralized computer Labs	150	Desktop Computer: Intel Core i7 (13th Gen) / AMD Ryzen 7 (7000 series); 32 GB DDR5 RAM; 1 TB NVMe SSD + 2 TB HDD; Integrated UHD / AMD Radeon / Optional GPU; HDMI, DisplayPort, USB 3.2, Type-C, Ethernet; Windows 11 Pro Monitor (24"–27"): IPS LED Display; Full HD (1920×1080) or QHD; Anti-glare; Tilt-adjustable stand Keyboard & Mouse (Combo): USB ergonomic combo; Spill-resistant keyboard; Optical mouse Headphones (optional): Over-ear; noise-cancelling mic; USB connection

			Operating System: Windows 11 Pro (64-bit) licensed version Productivity Suite: MS Office Professional / LibreOffice Development Tools: Python (Anaconda), R, Visual Studio, Eclipse, Jupyter, Docker Desktop, MySQL, MongoDB Antivirus Solution: Enterprise Edition; centralized management; real-time protection Centralized User & File Management: Domain-based user accounts; shared storage via NAS / Server Warranty and Service Requirements: • Minimum 3 years comprehensive onsite warranty for all systems and peripherals. • 2 preventive maintenance visits per year. • Response time ≤48 hours for service calls. • OEM to ensure spare parts availability for 5 years. • Vendor to submit test reports, license documentation, and installation certificates.
25.	Online UPS-5 Nos, 15 KVA with 2 hrs backup	5	Online UPS System (15 KVA): True double-conversion online UPS; 3 Phase Input / 3 Phase Output; Capacity: 15 KVA / 12 KW; Input Voltage: 360–480V AC (3 Phase); Output Voltage: 400V ±1%; Frequency: 50Hz ±0.1Hz; Power Factor: ≥0.9; Efficiency: ≥92%; Total Harmonic Distortion (THD): ≤3%; Overload Capacity: 125% for 10 min; LCD Display Panel with status, load, battery, and fault indicators; Communication Port (RS-232 / USB / SNMP card ready). Battery Bank (for 2 Hours Backup): VRLA SMF batteries; Maintenance-free; Rated for 2 hours backup at full load; 12V / 150Ah or as per system design; Properly rack-mounted in MS powder-coated battery stands with interconnecting cables and protection. Battery Rack and Cabling: MS powder-coated, acid-resistant battery rack; Flexible copper DC cables of suitable gauge; Proper ferruling, lugs, and heat-shrink insulation. Input & Output Switchgear: Isolators / MCCB (63A–100A) with proper rating; MCBs for battery and bypass circuits; fully enclosed metal cabinet with indication lamps and cable management. Bypass Arrangement: Inbuilt static and manual maintenance bypass for uninterrupted power transfer. Display & Control: Digital LCD/LED display for input/output voltage, frequency, load %, battery voltage, and backup time; audible alarms for faults. Environmental Conditions: Operating Temperature: 0–45°C; Humidity: up to 90% (non-condensing); Noise Level: <55 dB at 1m distance. Standards & Compliance: CE / ISO 9001 / ISO 14001 certified manufacturer; BIS certified; IEC 62040 compliant. Accessories: Battery interlink cables, terminal covers, conduit pipes, and earthing wires; all-inclusive installation hardware. Installation & Commissioning: Complete supply, installation, interconnection, testing, and commissioning by authorized service personnel; functional demonstration at the site. WARRANTY AND SERVICE REQUIREMENTS: • Comprehensive onsite warranty: Minimum 3 years for UPS and 2 years for batteries. • Service Response Time: Within 48 hours of complaint. • Preventive Maintenance: Twice yearly during the warranty period. • Spares Availability: OEM assurance for at least 5 years post-warranty. • Documentation: OEM test certificates, load test reports, installation drawings, and warranty cards to be provided.
26.	Server PC with GPU	2	High-Performance Server Workstation: Intel Xeon W7 / AMD Ryzen Threadripper PRO 7000 series; 32 cores / 64 threads; Base clock ≥3.0 GHz; 128 MB cache; ECC RAM; workstation-grade

			motherboard Memory (ECC RAM): 128 GB DDR5 ECC Registered (expandable up to 512 GB) Primary Storage (SSD): 2 TB NVMe PCIe Gen4 SSD; read $\geq 7,000$ MB/s; write $\geq 5,000$ MB/s Secondary Storage (HDD): 4 TB Enterprise SATA 7200 RPM GPU Accelerator Card: NVIDIA RTX 4090 / RTX A6000 / A100; VRAM ≥ 40GB; CUDA cores $\geq 10,000$; Tensor cores; FP32 ≥ 80 TFLOPS Operating System: Ubuntu Server 24.04 LTS + Windows 11 Pro Dual Boot (Licensed) Chassis and Power Supply: 1000W–1600W 80+ Platinum PSU; liquid cooling for CPU/GPU; redundant fans Cooling Solution: Industrial-grade air/liquid cooling for CPU and GPU; thermal monitoring sensors Online UPS: 3 kVA online double-conversion; ≥ 30 minutes full-load backup Network Interface: Dual 10-Gigabit Ethernet ports + Wi-Fi 6E + Bluetooth 5.3 Switch (for Lab Network): 24-Port Gigabit Managed PoE Switch (Layer 2+); VLAN & SNMP support Cabling & Accessories: CAT6A UTP patch cords, cable trays, power cords Monitor (Dual): 27" 4K UHD IPS Display; HDR10; 99% sRGB; HDMI/DisplayPort input Wireless Keyboard & Mouse Set: Ergonomic combo, 2.4 GHz wireless, rechargeable External Storage (Backup Drive): 8 TB USB 3.2 External Drive External Optical Drive: USB 3.0 DVD Writer AI/ML Framework Stack TensorFlow, PyTorch, CUDA Toolkit, cuDNN, RAPIDS, OpenCV, scikit-learn, JupyterLab Virtualization Support: Docker, Kubernetes, VMware Workstation Pro Data Science Tools: Anaconda, RStudio, MATLAB, PostgreSQL, MongoDB Security Software: Endpoint Protection with ML-based Threat Detection AV Rack / Server Cabinet: 15U steel rack; cooling fans; power distribution unit; lockable door Power Distribution Unit (PDU): 8-socket industrial-grade PDU; surge protection Anti-Static Mat and Kit: ESD protection floor mat, wrist strap, grounding wire Documentation & Manuals: Installation layout, component test reports, warranty certificates Training & Commissioning: One full-day onsite installation and hands-on session Warranty and Service Requirements: • Minimum 5 years comprehensive onsite warranty for all components. • Service response time ≤ 48 hours. • Preventive maintenance: 2 visits per year. • OEM to assure spare part availability for 5 years post-supply. • Installation timeline: Supply, testing, and commissioning within 60 days of Purchase Order.
27.	Scanner for digitization of palm leaf manuscripts/ old photos/graphics/objects with	1	Archival Scanner - Professional large-format color scanning (Accommodates reflective media up to 12.2" x 17.2") - The large-format scanner for extraordinary archival, photo and graphics - 2400 x 4800 dpi resolution/4800 dpi

	accessories		- Hi-Speed USB 2.0 cable - Warranty 2 - 4 years - Windows/macOS Support - Print support - TWAIN Support - Flat bed size: 12" -18" - Flatbed Optical Resolution: 2400 dpi/4800 dpi - scan multiple images at one time and save files to a PC or Mac - LED technologies deliver bold, vibrant scans that are true to the originals - Photo Fix technology restores faded color photos in a snap and offers automatic dust removal; easily restore color and detail to old and faded photos with one touch - LaserSoft Imaging SilverFast Ai with calibration targets - Brand: Epson (Expression 13000XL Archival Scanner)
28.	Digital Display Board	29	Digital LED/LCD Display Panel: 55"-86" / larger; 4K UHD (3840×2160) resolution; HDR support; Anti-glare; IPS panel; 400-500 nits brightness (minimum); 16:9 aspect ratio Optional Outdoor LED Display: P4-P6 fine pitch, IP65-rated, brightness ≥5,000 nits, high contrast, 1920×1080 or better, modular panel for scalability Display Mounting Bracket / Stand: Heavy-duty adjustable wall mount / floor stand; tilt & rotation support; lockable Digital Signage Media Player: Quad-core CPU, 8 GB RAM, 128 GB SSD; HDMI 2.0 / DisplayPort output; 4K UHD output; support for MP4, MOV, JPEG, PNG; Ethernet & Wi-Fi connectivity; OS: Android 11 / Windows 11 / Linux Remote Management Software: Cloud-based or LAN-based CMS for scheduling, content updates, multi-screen management, alerts Integrated Speakers: 10W-20W stereo speakers built-in or external; compatible with display/media player Microphone Input (Optional): 3.5mm or XLR input for PA/announcement integration Ethernet / Wi-Fi Router: Gigabit LAN; dual-band Wi-Fi; VLAN support for signage network HDMI / DisplayPort Cables: High-speed HDMI 2.0/2.1 or DisplayPort 1.4; length per room layout Power & Surge Protection: Rackmount PDU or wall-mount surge protector; 10-15A; surge and spike protection Remote Control / Wall Control Panel: IR or RF remote; basic on/off, volume, source selection Content Management Software License Minimum 3-year license; supports scheduling, playlist creation, multi-display layouts Documentation & Manuals: Installation guide, wiring diagram, user manuals Training & Commissioning: One full-day onsite training session for staff Warranty: Minimum 5 years comprehensive onsite warranty for all components Preventive Maintenance: At least 2 visits per year during warranty period Service Response Time: ≤48 hours from service call Spare Part Availability: Guaranteed by OEM for 5 years post-supply Documentation: Warranty certificates, test reports, and OEM datasheets
29.	Ion Chromatogra	1	High-end HPIC (2D, Dual, Automated): Recommended system build (research-grade)

	ph	Base platform: HPIC, modular, metal-free flow path, continuous operation up to 5000 psi; analytical flow 0.001–10.000 mL/min (optional heads to ~22.4 mL/min); flow precision/accuracy <0.1%. Dual-channel system: Two chromatography channels (run two methods or two samples concurrently). Capillary or analytical formats supported; accepts two IC Cubes for true dual workflows. 2D-IC capability: Valve set and software control for heart-cut/stripping 2-dimensional IC (trace-level cleanup/enrichment). Reagent-Free Eluent Generation (RFIC-EG): EGC KOH and EGC MSA cartridges + EG degassers. Dual-EGC mode (KOH/KMSA) for advanced carbohydrate/HPAE-PAD gradients. Suppressors: Latest-gen ERS 500/500e (anion/cation, 2 & 4 mm), optimized for hydroxide/MSA gradients; very low noise with 4 µm columns. Detectors (typical high-end bundle): ● Conductivity detector (thermostatted cell) ● Electrochemical detector (ED) / PAD for carbohydrates (HPAE-PAD). Optional UV-Vis (VWD/DAD) and MS interface (IC-MS ready). Potential Anions: F, Cl, NO₃, SO₄, NH₄, Br, I, PO₄, P₂O₄ Potential Cations: Li, Ca, Mg, Na, K, Ba, Sr, Fe, Mn, Zn Detection Range: Pumps: High-pressure serial-piston design; Fast IC capability (short runs, <5 min, higher throughput). Temperature-controlled DC compartment: Houses columns, suppressors, valves, detectors; precise temperature stability. Autosampler: AS-AP (or equivalent) with large tray capacity and syringe wash; supports unattended sequences. Software: Appropriate for the HPIC (to be installed in the PC, and connected with the HPIC) Columns (examples): 4 µm-particle anion/cation columns (150 mm for speed; 250 mm for resolution), capillary and microbore variants available. Key performance specifications: Pressure range (analytical): 0–35 MPa (0–5000 psi). Flow range (analytical): 0.001–10.000 mL/min (0.001 mL/min steps). Fast IC: Increased pressure tolerance enabling short runs & higher sample throughput. Analytical Standard: Mixed standard (for cations and anion), Concentration: 1000 mg/L (as ion) Desktop with Printer: Processor: Core™ i7 13th Generation Intel® processor Software: Windows 11 Home Ram: DDR4 RAM; Memory: 1 TB or more (SSD) Graphics Card: UMA graphics 16 GB; Connectivity: Wireless LAN connection USB: (3.0) and 1 type C port; HDMI Port: Yes (in and out) Bluetooth: Yes; Display Dynamics: Full HD, Wireless Keyboard and Mouse Screen Size: 27 inch (minimum); Web Cam: Yes, HD (preferably) Printer: Wireless, Print, Copy, Scan, 40-Sheet ADF, Hi-Speed USB 2.0, Ethernet, Bluetooth LE, Up to 22 ppm, 250-sheet Input Tray. Additional Accessories: UPS: 05 KVA Platform: The instrument shall be installed on a vibration free leveled granite platform (to be supplied by the concerned vendor). Dimensions: minimum 120 cm (L) * 75 cm (W) * 10 cm (thickness)
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		Platform Support frame: Powder-coated mild steel frame with anti-vibration rubber pads or neoprene feet. Air-conditioning (AC) requirement: 02 ton (inverter split AC), 05 Star rating Operator Chair: Ergonomic, adjustable laboratory operator chair Warranty: Minimum 03 years.
30.	Microwave Plasma-Atomic Emission Spectroscopy (MP-AES)	Microwave Torch / Plasma Source: Generates nitrogen plasma (~5000–6000 K) using 2.45 GHz microwave energy. Sample Introduction System: Includes nebulizer, spray chamber, and peristaltic pump for aerosol delivery. Monochromator / Optical System: Czerny–Turner design with high-resolution grating for wavelength separation. Detector: Solid-state CCD detector for simultaneous multi-element detection. Nitrogen Supply: Nitrogen Generator or external N₂ cylinder (≥99.5% purity). Computer & Software: Expert software for operation and data acquisition. Elements Detectable: >60 elements including Li, Na, K, Mg, Ca, Fe, Mn, Zn, Cu, Al, Cr, Ni, Pb, Cd, As, Se Detection Limits (LOD): 1–10 µg/L for most elements; up to 50 µg/L for alkali metals. Dynamic Range: 0.01 mg/L to 1000 mg/L with appropriate dilution. Precision (RSD): ≤2% typically. Accuracy: ±5% of certified reference values. Additional Accessories: UPS: 05 KVA Stock Standards: 1000 mg/L single-element solutions traceable Mixed Calibration Standards: Multi-element environmental or metal standards. Matrix / Solvent: 2% HNO₃ ultrapure acid matrix. Platform: Polished granite platform (1.5 × 0.75 m), vibration-free. Air Conditioner (AC): Split-type 02-ton, maintain 22 ± 2 °C and <60% RH. Operator Chair: Ergonomic, antistatic, adjustable PU-seat laboratory operator chair. Power Supply: 230 V AC, 50 Hz, single-phase with 2 kVA UPS. Exhaust / Ventilation: Fume hood or exhaust duct near torch area. Warranty: Minimum 03 years.

Annexure IV – Particulars of the Bidder

(To be submitted on the official letterhead of the bidder, duly signed by the Authorized Signatory with seal)

Sl. No.	Particulars	Details to be Furnished
1	Name of the Bidder/Firm/Company	
2	Nature of Organization (Proprietorship/Partnership/Pvt. Ltd./Public Ltd./LLP/OEM/Authorized Dealer etc.)	
3	Registered Office Address	
4	Correspondence Address	
5	Name and Designation of Authorized Signatory	
6	Mobile Number of Authorized Signatory	
7	Email ID of Authorized Signatory	
8	Name and Contact Details of Primary Single Point of Contact (SPOC)	
9	Name and Contact Details of Secondary SPOC	
10	Registration/Incorporation Number	
11	Date of Incorporation/Registration	
12	PAN Number	
13	GST Registration Number	
14	EPF Registration Number (if applicable)	
15	ESI Registration Number (if applicable)	
16	MSME/Udyam Registration Number (if applicable)	
17	GeM Seller ID (if applicable)	
18	Name of OEM represented (where bidder is not OEM)	
19	Manufacturer Authorization Certificate enclosed (Yes/No)	
20	Number of years of experience in supply/installation of laboratory equipment	
21	Details of office/service support centre in India/Odisha	
22	Availability of qualified service engineers for after-sales support (Yes/No)	
23	Whether bidder has ever been blacklisted/debarred by any Government Department/PSU/Institution (Yes/No). If yes, furnish details.	
24	Whether any litigation/dispute is pending against the bidder relating to supply contracts with Government organizations (Yes/No). If yes, furnish details.	
25	Annual Turnover for last three financial years	
26	Name and address of Banker	
27	Bank Account Details (Account No., IFSC, Branch)	
28	Details of similar supply orders executed during last five years	

Note*:

1. All correspondence shall be to the aforesaid email ids only.
2. HED shall entertain communications received from the aforesaid email ids only.
3. HED shall not be liable if the Single point of Contact fails to convey relevant information to their organization /Authorities
4. HED shall not entertain requests from the company to re send Emails.

For and on behalf of:

Signature:

Name:

Designation:

(Authorized Representative and Signatory)

Date:

(Note: Please provide copy of Registration Certificate from the appropriate Registering Authority)

Annexure V - Financial Proposal Format

To be submitted in original along with the Proposals (Cover-II)

To,
Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

Subject: RFP for supply, installation and commissioning of laboratory equipment and its accessories for different laboratories.

Sir,

We, the undersigned, hereby submit our Financial Proposal for the supply, installation and commissioning of laboratory equipment and its accessories in accordance with the Request for Proposal (RFP) dated ____ and our Technical Proposal submitted thereunder

(Name of the University)

Sl. No.	Item	Quantity	Basic Price Per Unit (in Rs.)	GST (in Rs.)	Total Price Including GST (in Rs.)

Notes:

- Price must be quoted separately for each item and university wise. Same financial format shall be used for each item.
- The quoted price shall remain firm during the entire contract period and shall include freight, unloading, installation, commissioning, hedging, civil, electrical and all other incidental charges.
- The procuring authority may enter into AMC/CAMC (for 2 Year) after expiry of the warranty period at mutually agreed rates.
- Prices shall be quoted in Indian Rupees (INR) only.
- L1 bidder shall be determined item-wise, as applicable.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal.

Declaration

"We hereby declare that the information furnished above is true and correct to the best of our knowledge and belief. In case any information furnished is found to be false or misleading at any stage, the procuring authority shall have the right to reject the bid and take appropriate action as per applicable rules."

Signature of Authorized Signatory

Name:

Designation:

Name of Bidder:

Date:

Seal of the Firm/Company:

Annexure-VI - Affidavit for Not Being Blacklisted / Debarred

(To be submitted on Non-Judicial Stamp Paper of appropriate value duly notarized)

AFFIDAVIT

I/We, _____, having our registered office at _____, through the undersigned authorized representative, do hereby solemnly affirm and declare as follows:

1. That the bidder firm/company/agency namely _____ is participating in the Request for Proposal (RFP) floated by the Higher Education Department, Government of Odisha for procurement, supply, installation, commissioning and maintenance of laboratory equipment and accessories under PM-USHA.
2. That the bidder has not been blacklisted, debarred, suspended, declared ineligible, or placed under holiday listing by any Central Government Ministry/Department, State Government Department, PSU, Autonomous Body, Statutory Body, University, or any Government institution in India as on the date of submission of the bid.
3. That no criminal case, vigilance case, or proceedings relating to corruption, fraudulent practices, misrepresentation, or breach of contractual obligations is pending against the bidder organization which may affect its eligibility to participate in the bidding process.
4. That the information furnished in this affidavit is true and correct to the best of my/our knowledge and belief. In case any information is found to be false, incorrect, or misleading at any stage, the Higher Education Department, Government of Odisha shall be at liberty to reject the bid and take appropriate action as deemed fit, including forfeiture of bid security/performance security and blacklisting of the bidder.

Signature: _____
Name of Authorized Signatory: _____
Designation: _____
Name of the Bidder: _____
Date: _____
Place: _____

We solemnly affirm that we will strictly adhere to the laws against fraud, corruption and unethical practices, including but not limited to "Prevention of Corruption Act, 1988", during the Request for Proposal (RFP) process and execution of the Contract, in case we are awarded the work. We understand you are not bound to accept any Proposal you receive.

Authorised Person's Signature {In full and initials}:

Name and Title of Signatory:

Name and seal of the Bidder

Date:

Place:

Annexure-VII - Format for Power of Attorney / Authorization Letter

(To be submitted only where the signatory to the Bid is not directly authorized through the Company's Board Resolution / Governing Body Resolution / Partnership Deed. In such cases, the relevant authorization document shall also be enclosed.)

Date: _____

To

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

Subject: Authorization for signing and submission of bid in connection with the RFP for procurement, supply, installation, testing, commissioning and maintenance of laboratory equipment and accessories for Universities under Higher Education Department, Government of Odisha.

Sir/Madam,

We, _____ (Name of the Company/Firm/Organization), having our registered office at _____, hereby authorize Shri/Smt. _____, Designation _____, to act as our authorized representative for the purpose of participating in the above-mentioned RFP process.

The authorized representative is hereby empowered, on behalf of the organization, to:

1. Sign, submit and upload the bid/proposal and all related documents;
2. Attend pre-bid meetings, discussions, negotiations and other proceedings connected with the RFP;
3. Provide clarifications, information and undertakings as may be required by the Higher Education Department;
4. Execute agreements, contracts and related documents consequent upon award of the contract; and
5. Undertake all such acts as may be necessary in connection with the bidding process and execution of the project.

All acts carried out by the above-named authorized representative in connection with this RFP shall be binding upon the organization.

For a power of attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the power of attorney is being issued. However, the power of attorney provided by the Applicant from countries that have signed the Hague Legislation Convention, 1961, are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

This authorization shall remain valid for the entire duration of the bidding process and, in the event of award of contract, till completion of all contractual obligations under the project.

Yours faithfully,

For and on behalf of

(Name of the Company/Firm/Organization)

Authorized Signatory

Name: _____

Designation: _____

Seal of the Organization

Enclosure:

1. Board Resolution / Authorization Resolution / Power of Attorney, as applicable.

Annexure VIII - Self Declaration regarding Restrictions on Procurement from a Bidder of a Country which shares a Land Border with India

(To be submitted on the Bidder's Letter Head)

Tender Reference No.: _____

Date: _____

To

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

Subject: Self Declaration regarding compliance with Government of India restrictions on procurement from bidders of countries sharing land border with India.

Sir/Madam,

In reference to the bid submitted by M/s _____ against Tender Reference No. _____ for procurement, supply, installation, testing and commissioning of Laboratory Equipment and Accessories under the Higher Education Department, Government of Odisha, I/We hereby declare as follows:

1. I/We have read and understood the provisions of Rule 144(xi) of the General Financial Rules (GFRs), 2017, Ministry of Finance, Government of India, and all related orders/circulars issued by the Government of India regarding restrictions on procurement from a bidder of a country which shares a land border with India.
2. I/We certify that M/s _____ (Name of Bidder) is:

☐ Not from a country which shares a land border with India.

OR

☐ From a country which shares a land border with India and has been duly registered with the Competent Authority as prescribed by the Government of India.

Registration No.: _____

Valid upto: _____

3. I/We further certify that the bidder shall not sub-contract any work to a contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority in accordance with the applicable Government of India guidelines.

4. I/We also certify that any collaborator, consortium partner, OEM, technology partner, or service provider engaged in execution of the contract complies with the aforesaid provisions.
5. I/We hereby undertake that, in case any information furnished by us is found to be false, incorrect, or misleading at any stage, our bid/contract shall be liable for rejection/termination and appropriate action may be taken as per applicable rules and regulations.
6. I/We hereby declare that no criminal case, vigilance case, fraud investigation, blacklisting proceedings, or prosecution by any Government Department, PSU, Statutory Authority, or Court of Law is pending against the bidder organization as on the date of submission of this declaration.

I/We certify that all information furnished above is true and correct to the best of my/our knowledge and belief.

Date: _____

Place: _____

Authorized Signatory

Name: _____

Designation: _____

Annexure IX - Compliance Check List

RFP No: _____ Date: _____

Please check whether following have been enclosed.

Sl. No	Enclosure description	Enclosed (Y/N)	Annexure/Attachment / Page No./ Envelope No. of the enclosure
1.	Copy of Certificate of Incorporation of Company or Registration Firm		
2.	Copy Goods Service Tax Registration Certificate, Copy of PAN allotted		
3.	Tender Fee Demand Draft of Rs.10,000/-		
4.	EMD Bank Guarantee of Rs.10 lakhs		
5.	Copies of Annual audited accounts statements (P&L and Balance Sheets FY 2022-23,2023-24,2024-25 certified by a chartered Accountant		
6.	ISO Certificates		
7.	Particulars of the Bidder (Annexure-IV)		
8.	Past Project Experience		
9.	Self-Declaration that the bidder hasn't been black listed / performance issues by any Govt./PSU (Annexure-VI)		
10.	Power of Attorney (Annexure-VII)		
11	Self-Declaration regarding "Restrictions on procurement from a Bidder of a country which shares a land border with India" (Annexure-VIII)		

Signature of the Bidder

Place & Date

Company Seal

Annexure X - BID SECURITY DECLARATION

Tender No.: _____

Name of Procurement: _____

To

The Joint Secretary to Govt. & State Project Director,
RUSA/PM-USHA, Odisha,
Higher Education Department, Odisha
Lokaseva Bhavan, Ground Floor, Sachivalaya Marg
Pin-751001
Phone No : 0674-2954600
Email : rusa.odisha@gmail.com

I/We, the undersigned, declare that:

1. I/We understand that, according to the conditions of the bidding documents, bids must be supported by a Bid Security Declaration in place of Bid Security.

2. I/We accept that I/We may be disqualified or suspended from participating in tenders/procurements of the procuring entity in future if :-

- a) I/We withdraw or modify the bid during the period of validity of the bid; or
- b) I/We, having been notified of the acceptance of our bid during the validity period, fail or refuse to:
 - I. sign the contract; or
 - II. furnish the required Performance Security within the stipulated time.

3. I/We understand that this Bid Security Declaration shall remain valid for the entire bid validity period and beyond till execution of the contract obligations as required.

Authorized Signatory: _____

Name of Bidder: _____

Designation: _____

Date: _____

Place: _____

Seal of the Firm: _____