



**NED UNIVERSITY OF ENGINEERING & TECHNOLOGY
PROCUREMENT CELL**

Phone# 99261261- 68, (Ext. 2220 & 2471) Fax # 99261255, E-mail: dp@neduet.edu.pk

"Say NO to Corruption"



Director Procurement

No. PC/ NED/M-6-196005/8583/ 282

Dated: 10.09.2026

NOTICE INVITING TENDER
EPADS

NEDUET invites sealed bids on C&F basis, following a "Single Stage One Envelope" procedure, from manufacturers, authorized dealers, distributors, and suppliers for the procurement as follows:

S#	Tender		Tender Schedule – Date and Time			
	Number	Work	Issue / Sale		Submission	Opening
			From	To		
1.	PC(M-6)/NED/ Equip/Energy Studies/8583/ 2026	Import of Laboratory Equipment on C&F basis for Mechanical Engineering.	15.09.2026	29.09.2026	30.09.2026 10:00 A.M	30.09.2026 10:30 A.M

Eligibility Criteria

- Bidder must have at least 3 years continuous, verifiable of experience in the relevant field.
- Bidder must provide copies of the online annual income tax returns submitted to the FBR for the last three consecutive fiscal years, proving a mandatory minimum average annual turnover of Rs 100 million over this period; failure to submit these FBR returns will result in rejection of the bid.
- Bidder must possess valid and active registrations with the GST and must maintain an "Active" taxpayer status
- Bidder must have successfully executed or currently have ongoing at least two independent purchase orders for the import of Laboratory equipment within the last three years, where each individual order carries a minimum value of Rs 50 million or above, and both must be accompanied by corresponding satisfactory completion certificates or official performance verifications from their respective clients.
- Bidder must submit an original affidavit on non-judicial stamp paper of at-least Rs 100/-, affirming that they have no litigation history, have never been blacklisted by any public or private organization, and have never indulged in corrupt, fraudulent, or collusive practices. The affidavit must also undertake that all provided information and documents are authentic, and its date of issuance must be subsequent to the publication date of this NIT.

All bidders are required to furnish a fixed amount of Rs 5.00 million of Bid Security in the mode of payment specified in Rule 37(2) of SPPRA in favor of Director Finance, NEDUET. Bidding documents can be obtained and shall be submitted through EPADs as per above schedule. Bidders are requested to give their Best and Final Price as "No Negotiations" is permitted. Bidding Documents containing detailed terms and conditions are also available at Websites <https://www.neduet.edu.pk> and <https://www.portalsindh.eprocure.gov.pk>.

Director Procurement
10/9/2026

ISSUED ON: _____

ISSUED TO: _____

**Bids Submission Through EPADS only
Manual bids shall not be considered.**

**Strengthening of Lab Facilities in 05 Leading
Engineering Universities (UET Peshawar, Taxila,
Lahore, Khuzdar & NED Karachi
[MEGA – 6]**



Bidding Document

**“Import of Laboratory Equipment for Center
for Energy Studies on C&F basis for
Department of Mechanical Engineering”**

Tender No. PC(m-6)/NED/Equip/Studies Energy Mechanical/8583/2026

Procurement Cell

Table of Contents

Serial No.	DESCRIPTION OF TITLE		Page No.
1.	Tender Notice		3
2.	Important Note		4
3.	Articles of Agreement		5
4.	Instructions to Bidders		7
5.	Bidding Data Sheet		15
6.	Conditions of Contract		18
7.	ANNEXURES		Page No.
(I)	Form of Tender	Annexure – A	29
(ii)	Tender Particulars	Annexure – B	31
(iii)	Form of Schedule	Annexure – C1	32
(iv)	Form of Schedule	Annexure – C2	33
(v)	Bid Bond	Annexure – D	35
(vi)	Supplier / Contractors P. D	Annexure – E	37
(vii)	S.D.D.F.S	Annexure – F	39
(viii)	Affidavit		40
(ix)	List of equipment/Specification		41
(x)	Contract Form		82
(xi)	Integrity Form		83

IMPORTANT NOTE

1. Tender bids must be submitted electronically through EPADS, any clause in this tender document asking for manual submission must be replaced and read as **“through EPADS”**
2. All bidders are informed that bid opening time is limited and most of the bidders place their Financial Proposals in inappropriate locations within their bids in EPADS. Considerable time is wasted locating the Financial Proposal within the limited time. Therefore, bidders are advised to submit the Financial Proposal using the format provided by the Procuring Agency in the bidding documents. If a bidder prepares a bid on their letterhead, it should be placed either at the beginning or at the end in their bid in EPADS.
3. Please attach a copy of Bid Security with the financial proposal through EPADS.
4. A fixed amount of Bid Security in the mode of payment as specified in the Rule 37(2) of SPPRA in favor of Director Finance. Besides, the following documents in original are required to be sent in a sealed envelope at the office of Deputy Director Procurement, Procurement Cell on or before the submission time of the bid:
 1. Bid Security
 2. Affidavit for Non-Blacklisting of Firm (ref: Page No. 37 of bidding document).
 3. BOQ / Financial Proposal (ref: Page No. 41 to 78 of bidding document)
5. In accordance with the established protocols, if a bid is not reflected in the bid opening list in EPADS, it shall be deemed and treated as a "bid not submitted." Therefore, all participants are advised to verify the inclusion of their submissions in the bid opening list to avoid any misinterpretations regarding their bid status.

ARTICLES OF AGREEMENT

This Agreement made this _____ day of _____ 2026, by and between the Registrar, NED University of Engineering & Technology located at Karachi, Sindh, including his successors in office and Assignees / Agents, acting through the NED University of Engineering & Technology, hereinafter called the "University", of the one part.

And

_____ of

located at

_____,
hereinafter called the "Supplier / Contractor" which expression shall include their successors, legal representatives of the second part.

Whereas the University requires equipment for the

for Procurement Cell, NEDUET and whereas the Supplier / Contractor has agreed to supply, install, put into operation and demonstrate the working of the said Equipment valued at Rs _____ (_____) in figures and words in the period of _____ months, subject to the terms and conditions set forth, hereinafter, which have been accepted by the Supplier / Contractor.

(Amount in figures and words)

Now this Agreement witnesses as follows:

1. In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents which, for the purpose of identification, have been signed by _____ on behalf of the Supplier / Contractor, and by _____
(Name and designation of the authorized person)
_____ on behalf of the University, all of (name and designation of the authorized person) which shall be deemed to form and be read and construed as a part of this Agreement
viz.:
 - a) Articles of Agreement;
 - b) Instructions to Bidders;
 - c) Conditions of Contract;
 - d) Bill of Quantity with prices.
 - e) The specifications of the equipment; and
 - f) Supplier / Contractor's Offer including the relevant correspondence prior to signing of this Agreement with all Annexures duly filled in;

3. In consideration of the payment to be made to the Supplier / Contractor, the **Supplier / Contractor** hereby **covenants** with the University to supply, deliver, install, put into operation and demonstrate the working of the Equipment Supplies in conformity in all respects of the Contract & the order form No.
4. The **NED University** hereby **covenants to pay** the Supplier / Contractor in consideration of the supply, delivery, installation, putting into operation and demonstration of the working of the Equipment the contact price in the manner prescribed by the Contract and approved by the University.

In Witness Thereof the parties have hereunto set their respective hands and seals, the day, month and year first above written.

WITNESSES:

NED UNIVERSITY _____

Contractor/ Supplier _____

Witness No.1:

Witness No.1:

Signature: _____

Signature: _____

Name: _____

Name: _____

Designation: _____

Designation: _____

Witness No.2:

Witness No.2:

Signature: _____

Signature: _____

Name: _____

Name: _____

Designation: _____

Designation: _____

INSTRUCTIONS TO BIDDERS

The NED University of Engineering and Technology, intends **Import of Energy Studies Laboratory Equipment on C&F basis for Department of Mechanical Engineering**. This tender is issued for the supply, installation, putting into operation and demonstration of the working of the Equipment as per the Schedule of requirements given in this Tender Document.

PREPARATION OF TENDER.

1. Language of Tender

The **Tender** along-with any accompanying literature shall be prepared in **English** language only:

2. Submission of Tender

- a) The **Tender** shall be enclosed in a double cover. The outer cover shall bear the address of the Director Procurement, NED University of Engineering and Technology without any indication that it encloses a tender. The inner cover shall be marked with the title of the tender, number of invitations to the Tender and the date of opening of the Tender, and **must be sealed**.
- b) The **Form for Tender**, (Annexure-A) **Tender Particulars (Annexure-B)** and **Forms of Schedule to Tender** (Annexure "C1"&"C2") enclosed herewith, shall be submitted in duplicate. The authorized person signing the tender documents must state his full name and authorized position designation underneath his signature.
- c) The **erasing and/or alterations**, if any, in the Tender shall be authenticated by the authorized person by his full signature.
- d) The **Tender** shall be accompanied with the **original quotations** from the manufacturers, in case the Tender is submitted through their authorized agents or distributors, and shall be supported by credentials establishing the experience and standing of the manufacturers and / or their authorized agents or distributors.
- e) **Ambiguous and incorrect answers** and/or incorrect filling of Tender Documents will render the tender liable to rejection.
- f) **Quotations** through cable, telegraph, telex, fax, or e-mail shall not be considered.
- g) The tenders shall not rely on any **interpretation or correction** given by any person except the written **addenda and/or corrigenda** to documents issued by the Director Procurement NED University of Engineering and Technology.

3. Bid Security and Contract Performance Security

- a) Each bidder shall furnish a fixed amount of Bid Security in the form of Pay order / Bank Draft / Banker's cheque in Pak Rupees or an equivalent amount in a freely convertible currency. The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call / Pay Order or a Bank Guarantee issued by a Scheduled Bank (A Rated) in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank (A Rated) in Pakistan in favour of the **"Director Finance, NEDUET, Karachi"** valid for a period 28 days beyond the Bid Validity date. Any bid not accompanied by an acceptable Bid Security shall be rejected by the NEDUET as non - responsive. The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 28 days after the expiration of the period of Bid Validity. The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement. The Bid Security may be forfeited:
 - a) If the Bidder withdraws his Bid
 - b) If the Bidder does not accept the correction of his Bid price or
 - c) In the case of successful Bidder, if he fails within the specified time limit to furnish the required Performance Security; or (ii) sign the Contract Agreement.
- b) The **successful bidder** shall have to give a **Contract Performance Bond**, as per **Annexure "E"** to this Tender Document, to the extent of **5% of the total value** of the contract on the same conditions as the Bid Bond. The Performance Bond shall be retained by the Procuring Agency, till the completion of the guarantee period as per Clause 23 of the Conditions of Contract.

4. Quality of Equipment.

- a) The Equipment and other relevant materials (hereinafter called **"Equipment"**) quoted and supplied against this "Invitation to Tender" shall be strictly in accordance with the **Specifications** attached with this Tender Document. The Equipment shall be the product of an established manufacturer shall conform to internationally acceptable commercial standards, and shall be a model that has been successfully operated over a reasonable period of time in educational institutions R&D organizations, or relevant industry.
- b) In Bidders must also warrant the use of best material in the making of the, Equipment by the find that the Specifications for any items of the Equipment are lacking in details, they may give their own proposals with detailed specifications, preferably three alternate proposals, if possible, for such items in Annexure "F".
- c) The Equipment offered by the tenders must be of a quality suitable for the purposes and operations for which they are required, and must be capable of rendering the required performance and services at site in the local conditions of extreme tropical climate, air, dust, water, power and fuel at Karachi.

- d) The Hardware for operation of the Equipment will be made available by the University.
- e) The electric supply for operation of the Equipment will be made available at 220volt single phase, or 380volt three phase, and 50 cycles.
- f) The Equipment offered shall be complete with their standard accessories and must be accompanied by their normal instructions book/manual.
- g) Wherever possible or feasible, each item of Equipment offered must have its own protection devices, e.g., overload protection by circuit breakers or fuses, or voltage stabilizer for electric equipment.
- h) Unless stipulated otherwise in the specifications for any item, the Equipment conforming to ASA, SAE, SSI or DIN will be acceptable.
- i) The successful bidders may be asked to supply list of spares for 05 years satisfactory operation of any item of the Equipment prior to award of the contract.

5. Literature.

The bidders must furnish with their bid's catalogues giving full technical details of the Equipment to enable the NEDUET to check their offers technically against the prescribed specifications failing which the offers will be liable to rejection.

6. Principals Name, Certificate and Invoice.

- a) The bidders are required to mention in their quotations/offers the name and address of their principals along with a certificate authorizing them (bidders) to quote on their (Principals) behalf as under:

"This is to certify that M/s. _____ located at _____ have obtained quotations from us against tender inquiry No. _____ dated _____ from

NED University of Engineering and Technology, at Karachi, due for opening on _____ and have agreed to make available the Equipment on the quotations and terms and conditions of the tender".

The above condition does not apply to the manufacturers bidding directly.

- b) The bidders must also furnish along with their offers their principals original Proforma Invoice failing which their offers will be rejected.

7. Country of Origin.

The bidders must state in his Tender the country of origin of the Equipment offered.

8. Alternate/Optional Offer

If any bidder elects to submit alternative proposal(s) complete information on the alternative items and accessories including all data relating to technical specifications in Vol. I, II & III shall be given as per Annexure "F" together with prescribed Bid Security. It is explicitly clarified that in case, without bid security of optional/alternate offer including offer for accessories items, complete bid shall be rejected.

9. Prices.

- a) **CATEGORY-'A'** **Equipment Manufactured/Available in Pakistan without involving Import.**

The prices quoted must be total per unit in as shown in **Annexure "C- 1"** and shall include:

- i. All charges for packing, marking, handling, insurance, inspection, guarantees, freight/transportation, agent's commission; and all duties, taxes, levies, octrois etc.; and.
- ii. The cost of installation, putting into operation and demonstration of the working of the Equipment in the premises of the NED University.

- b) **CATEGORY-"B"**. **Equipment Imported from approved Countries.**

The prices must be quoted for each item of Equipment in **Annexure-"C2"** separately for each of the PARTS given below:

PART-1. Payment in Foreign currency.

The C&F prices quoted by the principals in the currency of the country of origin.

For the purpose of comparison, the prices quoted shall be converted to equivalent prices on the basis of the official bank rate prevalent on the date of opening of the Tender.

PART-2 Payment in Local Currency / Pak. Rupees.

- (i) The insurance charges. The insurance will be arranged by the Supplier (i) / Contractor through the University with National Insurance. The (i) University will assist the Supplier / Contractor in obtaining the insurance (i) at concessional rates, if any, as allowed by the Government. However, (i) Insurance expenses will be reimbursed as clause No. (N) of Bidding (i) Data.
- (ii) All the charges pertaining to handling and clearance of the Equipment at the port including all taxes, levies, octrois etc. but excluding the customs duties for the payment of which the NED University is exempted by the Government. However, if the customs duties are charged for any items of the Equipment for which the Government the exemption, the NED University will make the payment on production of original receipt / voucher.
- (iii) The transportation charges for transporting the Equipment from the port to the premises of the NED University including the charges for loading the Equipment at the port and unloading the same at the NED University.

- (c) In addition to what is stated in para - a & b) above, the prices given in Annexure C1 & C2 shall also include the following for the Equipment of both the Categories-A & B.
- (i) Supply, detailing, manufacture, factory testing, export preparation and all costs incidental to shipping/transport up to the stage of installation in the premises of the NED University.
 - (ii) Responsibility for any loss and/or damage at any stage from manufacture to installation in the premises of the NED University.
 - (iii) Provision for clean on boards bills of landing.
 - (iv) The cost of export taxes, fees and charges levied and outgoing incurred on exporting goods in the country of origin.
 - (v) The expenses on account of the certificate of origin, invoices or any other documents issued in the country or origin.

10. Validity of Prices/Tender

- a) The prices quoted shall be valid for a period of at least 90 days from the date of opening of the tender.
- b) Until the final Contract is executed, the successful bidder shall be bound by the terms and conditions of this Tender Document.

11. Acceptance of the Terms

- a) The submission of the tender against this tender inquiry by the tenderer means that the tenderer has read and accepted the terms and conditions relating to all the tender documents and annexures, and that he/she has thoroughly examined the specifications and particulars in the tender inquiry. Further the tender shall be deemed to be fully aware of the nature of the Equipment and the purpose for which they are required and shall be bound to accept the Contract if placed with him/her on the basis of the prices and of the delivery schedule as indicated in Clause 12 hereof within the validity of his/her Tender.
- b) If the Tender is awarded in favour of Proprietor / Principals who has no authorized agent or distributor in Pakistan, he/she shall have to appoint a distributor or nominee for the purpose of successful completion of the contract and to provide after-sales service.

12. Delivery Period.

- i. Shipment of Imported Items.
 - a) The shipment of the items of Equipment which are to be imported shall be started as early as possible, the shipment schedule shall be submitted to the Project Director NED University, and shall be negotiable and subject to approval by the NED University.
 - b) The tenderer must indicate in his/her offer the port from where the Equipment will be shipped.

ii. Delivery Period.

- a) The entire Equipment must be delivered, installed and put into operation in the NED University as early as possible after receiving the letter of award of the Contract.
- b) The Tenderer shall give in the offer his/her own schedule for the delivery and installation of various items of the Equipment which shall be negotiable and subject to approval of the NED University.

iii. Delay in the Delivery of the Equipment Supplies.

- a) For the Equipment delayed beyond the delivery period, as specified in the Contract, or as approved by the NED University as stated in Clause 12 ii b) above, there shall be levied liquidated damages as specified in Clause 22 of the Conditions of Contract given in this Tender Document.
- b) The liquidated damages may be waived fully or partially by the Indenting Department, with the approval of the Vice Chancellor of the University, if there are reasonable grounds for such a delay.

13. Negotiations

Under no circumstances will the negotiations take place with any tenderer with regard to Specifications and Prices quoted and read out at the public opening of the tenders and with regard to the substance of the offer. The bidders cannot revise their prices after the public opening of the tenders.

14. Rights of the NED / University

- (a) The NED University reserves the right to reject any or all bids as mentioned in SPPRA rules, or not waive minor irregularities or errors in any offer. If it appears to the NED University that such irregularities or errors must be corrected in the offer in which they occur, the same will be corrected prior to issue of the letter of intent which may be awarded thereupon.
- (b) The NED University is neither bound to accept the lowest or any other offer nor is it bound to assign reason for rejection of any offer.
- (c) The NED University reserves the right to award the contract to one bidder or divide it among several bidders.
- (d) The NED University reserves the right to increase or decrease the quantity of the Equipment at its discretion without assigning any reason whatsoever.
- (e) The NED University reserves the right to cancel the offer of the tenderer whose bid has been found / evaluated to be the lowest if it is revealed to the NED University that the tenderer does not have the capability or financial resources or facilities to carry out the Contract in accordance with the terms and conditions of this Tender Document.

15. Evaluation of Bids.

- a) All bids shall be evaluated in accordance with the evaluation criteria and other terms and conditions set forth in the bidding documents.
- b) For the purpose of comparison of bids quoted in different currencies, price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate prevailing seven working days before the date of opening of the bids specified in the bidding documents, as notified by State Bank of Pakistan.
- c) A bid once opened in accordance with the prescribed procedure shall be subject to only those rules, regulations and policies that are in force at the time issuance of notice of invitation of bids.
- d) In comparing bids the NED University will consider, besides the prices quoted, such other factors as compliance with specifications, relative quality of Equipment Supplies, past experience of the tenderer, after-sales services facilities available in Pakistan and the tenderer's capacity to perform.
- e) The evaluation criteria specifically mentioned in the specifications will also be considered for evaluation of the bids.
- f) For the purpose of evaluation, the prices to be compared shall be the total prices inclusive of all duties, taxes, freight charges etc. as stated in clause 9 titled "Prices" above.
 - I. For the items quoted in Annexure-C-1, the total prices as mentioned in Clause-9(b) shall be compared.
 - II. For comparison of the items quoted in Annexure C-1 with those quoted in Annexure C-2, the total prices as mentioned in Clause-9(a) including the charges/cost packing, making, handling, insurance, inspection guarantees, clearance, freight/transportation upto the University's premises duties, taxes, levies, octrois etc.

16. Errors in the Bids.

- (i) Any arithmetic errors found during evaluation of bids will be rectified on the following basis:
 - a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the NED University.
 - b) If there is a discrepancy between the words and figures, the amount in figures shall prevail.
 - c) If there is any discrepancy between the total tender price entered in the Articles of Agreement and the total shown in the Schedule of Prices, the amount stated in the Articles of Agreement shall be corrected by the NED University in accordance with the corrected schedule of Prices.

- (ii) If the tenderer does not accept the corrected amount of tender, his/her Tender will be rejected and the Bid Bond submitted with the tender shall be forfeited. **CC-14**

17. Foreign Exchange for Items of Equipment to be imported.

For the items of Equipment which are to be imported and for which the prices have been quoted on C&F basis in Annexure C-2, the University will arrange payment in the foreign currency, to the extent of the C&F amount, as stated in Clause 9(b), through its bank in Pakistan in accordance with the prevailing foreign exchange control rules/regulations of the Government of Pakistan.

18. Applicable Law

This tender shall be interpreted in accordance with the SPP Rules 2010 (amended up to date). However, in accordance with to relevant provisions of SPP Rules 2010 (Amended up to date), the Procuring Agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award.

BIDDING DATA SHEET

The following specific data for the subject procurement to be procured shall complement, supplement, or amend the provisions in the bidding documents Whenever there is a conflict, the provisions herein shall prevail over those in bidding documents.

Introduction		
(A)	Name of Procuring Agency:	NED University of Engineering & Technology,
(B)	Brief Description of Works:	"Import of Energy Studies Laboratory Equipment on C&F basis for Department of Mechanical Engineering"
(C)	Procuring Agency's address:	NED University of Engineering & Technology, Main University Road, Karachi.
Bid Security, Bid Cost and Performance Bond		
(D)	Bid Cost:	Bid cost should be based on C&F inclusive all taxes and duties etc.
(E)	Amount of Bid Security:	All bidders are required to furnish a fixed amount of Rs 5.00 million of Bid Security in the form of Deposit at Call or Pay Order or Demand Draft or a Bank Guarantee issued by a scheduled bank in Pakistan or from a foreign bank duly counter guaranteed by a scheduled bank in Pakistan in favor of Director Finance, NEDUET.
(F)	Period of Bid Validity (days):-	(90 days)
(G)	Performance Bond:	5% of Contract Price / Work Order Amount in the mode of payment specified in Rule 39(1) of SPPRA.
(H)	Deadline for Submission of Bids along with time:	As notified in NIT
(I)	Venue, Time, and Date of Bid Opening:	As notified in NIT
(J)	Time for Completion from written order of commence:	Maximum upto 120 days from the date of Letter of Intent.
(K)	Time of Maintenance	12 Months from the date of issuance of Inspection Certificate.
(M)	Payment in Foreign currency	An irrevocable letter of credit of the C&F price, in the currency quoted by the principals, will be opened in a bank in the country of origin only in favor of the Manufacturer within 30 days after signing the Contract.
Local Charges		
(N)	Local charges	Local expenditure i.e., Insurance and Clearing & Forwarding shall be reimbursed and paid in PKR on production of original bill / receipt. Bidders are required to mention estimated cost of local expenditure with their bids if bidder does not mention total estimated of local expenditure, then no any amount shall be reimbursed under these accounts.

Eligibility Criteria		
(O)	Eligibility Criteria	
	i)	Bidder must have at least 3 years continuous, verifiable of experience in the relevant field.
	ii)	Bidder must provide copies of the online annual income tax returns submitted to the FBR for the last three consecutive fiscal years, proving a mandatory minimum average annual turnover of Rs 100 million over this period; failure to submit these FBR returns will result in rejection of the bid.
	iii)	Bidder must possess valid and active registrations with the GST and must maintain an "Active" taxpayer status
	iv)	Bidder must have successfully executed or currently have ongoing at least two independent purchase orders for the import of Laboratory equipment within the last three years, where each individual order carries a minimum value of Rs 50 million or above, and both must be accompanied by corresponding satisfactory completion certificates or official performance verifications from their respective clients.
	v)	Bidder must submit an original affidavit on non-judicial stamp paper of at-least Rs 100/- affirming that they have no litigation history, have never been blacklisted by any public or private organization, and have never indulged in corrupt, fraudulent, or collusive practices. The affidavit must also undertake that all provided information and documents are authentic, and its date of issuance must be subsequent to the publication date of this NIT. The template is available at Page 39.
	vi).	Bidder must not have had any performance security forfeited, nor have had any contract schedule, or work order cancelled or terminated with this Procuring Agency (NEDUET). However, in the case of a Joint Venture, each partner/party must independently satisfy this requirement. Any forfeiture of performance security, or any cancellation or termination of a contract schedule or work order with this Procuring Agency against any single partner/party shall disqualify the entire Joint Venture from this tender.
Other Terms & Conditions:		
(a) Under following conditions bid shall be rejected;		
(i).	Conditional and telegraphic bids/tenders.	
(ii).	Bids not accompanied by bid security and relevant documents mentioned in (b) below).	
(iii).	Bids received after specified date and time.	
(iv).	Bid not signed, named & stamped by the authorized person of the firm / Companies along with authorized letter.	
(v).	Blacklisted firms/companies	
(vi).	If bid quoted without government taxes and duties etc.	
(vii).	Bid quoted other than C&F shall be rejected.	
(viii).	Bidders are advised that before Filling the bidding documents all pages of bidding documents should carefully be rechecked. If any page(s) / paper(s) of bidding documents are missing that can be downloaded from the official website of this University and SPPRA, Bid(s) with Incomplete bidding documents will straightaway be rejected. All Bidding documents must be signed, named & stamped by authorized person of the firm/ Companies along with authorized letter.	
(ix).	Bidders are required to provide their valid E-mail Ids and Contact numbers(s) for effective and timely communication.	
(x).	After issuance of Purchase Order, all correspondence and matters shall be dealt by Project Director (Mega M-6) of NED University.	
(xi).	All information, documentation, statutory registrations, or renewals required under this Bidding Document must be active, valid, and fully completed at the time of bid submission. Any documentation or registration that is "in-progress / in process"	

	pending approval with any authority, or accompanied by a commitment or promise of future delivery after the bid opening date shall not be accepted; that bid shall be deemed non-responsive, incomplete, and shall be rejected.	
(b) Responsive Bidder is required to submit following documents with their bid:		
(i)	List of similar assignments with cost (mention number of projects with their cost) Under-taken over the past 03 years.	
(ii)	Details of equipment, machineries and transport Owned by firms/contractor. (if applicable).	
(iii)	Financial Statement and income tax returns for the last 03 years.	
(iv)	bidder must provide a letter of authorization from the manufacturer explicitly permitting participation in this tender for supply.	

CC-17

Signature & Stamp of Bidder

CONDITIONS OF CONTRACT

1. Scope of the Contract

- a) The **Scope of the Contract** shall be the supply, delivery, installation, putting into operation and demonstration of the working of the Equipment in the premises of the NED University at Karachi, in accordance with the technical Specifications and Bill of Quantities enclosed in this Tender Document.
- b) The Supplier / Contractor shall within a period of one month of the execution of the agreement furnish to the University a **detailed program** for supply and delivery of various items of the Equipment for necessary approval by the NED University.

2. Definition of Terms

In writing these Conditions of Contract, Specifications and Bill of Quantities, the following words shall have the meanings hereby indicated, unless there is something in the subject matter or Contract inconsistent with such constructions:

- i. **The University** shall mean the NED University of Engineering and Technology, Karachi, Sindh.
- ii. **The Supplier / Contractor or Supplier / Contractor** shall mean the Tenderer (Bidder) whose Bid has been accepted by the University and shall include the Bidder's executors, administrators, successors and permitted assignees.
- iii. **The Equipment** shall mean and include all the Equipment Supplies, literature, materials and articles to be provided by the Supplier / Contractor under the Contract.
- iv. **The Contract** shall mean the agreement signed by the Supplier / Contractor for the supply, delivery, installation, putting into operation and demonstration for the working of the Equipment as stated under the Scope of the Contract above.
- v. **The Contract Price** shall mean the sum mentioned in or calculated in accordance with the provisions of the Contract, which is to be paid to the Supplier / Contractor for satisfactory execution of the Contract in accordance with these Conditions of Contract.
- vi. **The Specifications** shall mean the specifications annexed to or issued, herewith, and shall include the schedule and drawings attached hereto as well as the samples and patterns if any.
- vii. **Month** shall mean the Calendar month.

viii. **Writing** shall include any manuscript, type-written, printed or other statement reproduced in any visible form and whether under seal or under hand. CC-19

3. Contract Documents.

CC-20

- a) The term **Contract Document** shall mean the following documents which shall be deemed to form an integral part of the Contract:
- i. Articles of Agreement;
 - ii. Instructions to Bidders;
 - iii. Conditions of Contract;
 - iv. Bill of Quantities with prices.
 - v. The Specifications of the Equipment; and
 - vi. Supplier / Contractor's Proposal / Offer including the relevant correspondences prior to signing of the agreement with all Annexures duly filled in;
- b) In the event of any **conflict** between the above-mentioned documents, the present Articles of Agreement and Conditions of Contract shall prevail. For enhancement of quality and efficiency terms & conditions of contract can be reviewed with the mutual consent between successful bidder(s) and Procuring Agency.

4. Signing of the Contract Agreement

Within 15 days of the issue of the letter of intent, the successful bidder (bidders) will be required to **sign an agreement** with the NED University for the supply of such quantity, in whole or in part, of the tendered Equipment as will be communicated to him / her (them) in the letter of intent.

5. Packing, Marking and Handling

- a) All the Equipment Supplies, whether imported or locally manufactured / available, shall be delivered to the NED University at Karachi in **safe and secure condition** at the risk and cost of the Supplier / Contractor.
- b) The packing, marking and handling shall be so arranged by the Supplier / Contractor as to **prevent any loss of or damage** to the Equipment.
- c) In case any of the items of the Equipment are to be imported by the Supplier / Contractor, the **import** shall be **arranged by the Supplier / Contractor** himself / herself with such packing and marking and through such means as deemed fit by him / her for safe and secure delivery at NEDUET. The packing of the equipment shall be the usual export packing to ensure safe journey by air, sea, rail and road, as the case may be, of the Equipment to destination. Each packing shall be clearly marked in English with the following:

- i. Port of Destination: KARACHI.
- ii. Name of the Ship: _____
- iii. Name of the Consignee: FOCAL PERSON (Mega M-6)
NED UNIVERSITY OF
ENGINEERING &
TECHNOLOGY KARACHI,
SINDH,
PAKISTAN
- i. Name of the Supplier / Contractor: _____
- ii. SUPPLIER / CONTRACTOR'S NAME & ADDRESS: _____

- iii. Case Number & Contents: _____
- iv. Net Weight & Dimensions: (length, Breadth & Height): _____
- v. Gross Weight: (Kg.) _____
- vi. Number & Date of Contract: _____
- vii. Marking: **NEDUET**

6. Transportation and Shipment

a. For Equipment to be Imported

- i. All those items of Equipment which are to be imported by the Supplier / Contractor shall be **shipped** by whatever means the Supplier / Contractor deems fit **at his / her risk and cost**. The Supplier / Contractor must keep NED University informed of the shipping arrangements, schedule of shipping, arrival at the port, clearance from the port, and transportation from the port to the NED University at Karachi.
- ii. **All costs** of loading of the Equipment from the wharves at port of shipment and also the cost of ship wharf age / berthing, demurrage charges, stevedoring, handling charges and other port and river dues in respect of shipment companies' vessels at the port of shipment and all other expenditure up to the stage of placing the Equipment at rest on board the ship and the freight charges shall be **borne by the Supplier / Contractor**.
- iii. Similarly, all costs of unloading the Equipment at the wharves, wharf age / berthing, demurrage, stevedoring, handling charges and other port dues at the port of arrival in Pakistan and transportation from the port up to the stage of placing the Equipment position in the premises of the University shall be borne by the **Supplier / Contractor**. However, these Local expenditures i.e., Insurance and Clearing & Forwarding shall be reimbursed and paid in PKR on production of Original bill / receipt.
- iv. All things being equal, **Pakistan flag ships** should be used, as far as possible, for shipment of the Equipment. If no such ship is available, such other ships may be used consistent with the execution of this Contract with economy and efficiency.
- v. The Equipment must be shipped **under deck**
- vi. The Supplier / Contractor shall send by air mail / courier service or personally deliver 4(four) sets of non-negotiable shipping documents direct to the Director Procurement, NED University of Engineering and Technology, Karachi, so as to reach him at least 8 (eight) days before arrival of the ship at the port in Pakistan.

b. For Equipment Manufactured / Available in Pakistan

- i. All those items of the Equipment which are to be manufactured in Pakistan, or are to be supplied from the locally available stocks (whether imported or manufactured in Pakistan), may be transported from the place of manufacture or availability to Karachi by **any mode of transportation** as deemed convenient and suitable by the Supplier / Contractor at his / her risk and cost.
- ii. **All costs** of handling, loading, transportation, unloading and placing the Equipment in position in the premises of the NED University shall be **borne by the Supplier / Contractor**.

7. Pre-shipment and After-fabrication Inspection

- a) The **pre-shipment inspection** and / or the inspection of the Equipment
- a) Principals/Proprietor at the premises, if desired by the NED University,
- a) shall be arranged by the Supplier / Contractor at his / her own cost. The
- a) responsibility for the quality, quantity, correctness and adherence to the
- a) Specifications etc. of the Equipment shall lie solely and squarely on the
- a) Supplier Contractor / Contractor.
- b) The NED University may, at its discretion, waive pre-shipment inspection and hence issue the waiver in writing so that the Equipment could be shipped under manufacturer's test certificate. This waiver shall be deemed as authorization to ship for the purpose of negotiating the letter of credit.
- c) The pre-shipment inspection and/or the waiver thereof shall in no any above the Supplier / Contractor of any of his obligations under this Contract

8. Insurance

The **Supplier / Contractor shall arrange** the insurance for the Equipment in whatever way he / she deems fit at his / her risk and cost. Once the shipment is arrived & consignment reached to NEDUET satisfactorily, insurance charges will be reimbursed to Bidder upon formal request together with other local expenditure after issuance of Inspection Certificate, as specified vide clause (M) of Bidding Data of Bidding Documents.

9. On-arrival Inspection

There shall be inspection of the Equipment by the representatives of the University after arrival in the premises of the NED University in presence of the Supplier / Contractor or his authorized representatives and the representatives of the insurance company. The **inspection report**, which, inter-alia, should indicate the condition in which each item of the Equipment has been received, shall be signed by the above representatives. The Supplier / Contractor shall coordinate with the Director Procurement and Indenting Department of NED University, and the insurance company for arranging the inspection at such date and time as is convenient to the above representatives.

Upon receipt of the Equipment Supplies in the premises of the University and after inspection, as stated in Clause 9 above, the NED University will issue a **taking- over certificate** in respect of those items of Equipment which are received in acceptable condition. The taking-over of the damaged items will be with-held until the same are repaired / replaced and are re-inspected and found in acceptable condition.

11. Installation and Demonstration of Equipment

Supplies. a). Installation

- (i) After inspection and taking over of the Equipment as stated in Clauses **9** and **10** above, if required the **Supplier / Contractor shall install** those items of Equipment which are to be permanently positioned in place in the premises of the NED University. For this purpose, the Supplier / Contractor shall co- ordinate with the Indenting Department, NED University, for making arrangements for the Hardware needed for the installation.
- (ii) The cost of hardware **for such installation** shall be borne by the Supplier / Contractor/ Contractor as per contract. The Supplier / Contractor shall provide, along with his offer, the details of the hardware needed for each item of the Equipment separately. The technical and other personnel needed for installation of the Equipment shall be provided by the Supplier / Contractor at his cost. The entire cost of installation, configuration, application except that of the needed hardware, shall be borne by the Supplier / Contractor.

b) Demonstration

- (i) After installation of the Equipment, as stated in Clause **11 a)** above, the complete **working of each item** of Equipment for the purpose of performing the intended Laboratory experiments, testing of specimens and recording of the test results etc., shall be demonstrated fully to the designated staff of the University by the Supplier / Contractor or his technical personnel.
- (ii) The entire **cost**, including the T.A. / D.A. of the personnel involved in the demonstration, shall be **borne by the Supplier / Contractor**.

12. Completion Certificate

After completion of the installation and demonstration, as stated in Clause **11** above, a certificate is to be obtained by the Supplier / Contractor from the concerned **Department** stating that the Equipment (item-wise) have been satisfactorily installed and demonstrated by the Supplier / Contractor.

13. Terms of Payment

The Supplier / Contractor shall be paid for Equipment in the following manner:

- a) **CATEGORY A:** **Equipment Manufactured/Available in Pakistan without involving import.**
 - i. For all those items of Equipment for which the completion certificate has been issued by the University, as stated in Clause **12** above, the University will pay to the Supplier / Contractor total price of the items quoted by the Supplier / Contractor.
 - ii. The payment for those items of Equipment for which the completion certificate has not been issued by the University, as stated in Clause **12** above, will be with- held and released only after the damaged items are replaced / repaired, re- inspected and found in satisfactory condition with consequent issuance of the completion certificate. The payment will be made in the same manner as stated in Clause **13 a) i** above
- b) **CATEGORY-B:** **Equipment Imported from Approved Countries.**

The payment for this category of Equipment will be made in two parts as under:-

PART-I. Payment in Foreign currency

- i. An irrevocable **letter of credit** of the C&F price, in the currency quoted by the principals, will be opened in a bank in the country of origin only in favor of the Manufacturer within 30 days after signing the Contract.
- ii. The letter of credit amount will be paid against presentation of the shipping documents to the bank through the above letter of credit. The required shipping documents include:
 - Clean on-board bill of lading;
 - Supplier / Contractor's detailed invoice showing description of the Equipment specifications, quantity, unit price and total price;
 - Detailed packing list;
 - Certificate of origin of the Equipment and
 - Certificate of pre-shipment/after-fabrication or authorization to ship Equipment as per Clause-7.

PART-2. Payment in Foreign Currency

The Rupee component of the price of the Equipment as stated in Clause **9b) of "Instructions to Bidders"** will be paid to the Supplier / Contractor in the following manner:

- i. For all those items of Equipment for which the taking over certificate has been issued by the University, as stated in Clause **10** above, the University will pay as per contract of the total price of the items quoted by the Supplier / Contractor/ Contractor.
- ii. The payment for those items of Equipment for which the completion certificate has not been issued by the University, as stated in Clause

10 above, will be withheld and released only after the damaged items are replaced/repared, re-inspected and found in satisfactory condition with consequent issuance of the completion certificate. The payment will be made in the same manner as stated in Clause **13 a)i** above CC-25

14. Warranty / Guaranty

- a) The Supplier / Contractor shall **warranty** that the Equipment shall be fit for the purposes and operation mentioned in the relevant clauses of the “Instructions to the Bidders” and “Conditions of Contract”, notwithstanding the fact that the entire Equipment or any item or part of the Equipment bear or are found to bear a patent or trade mark.
- b) The Supplier / Contractor shall guarantee supply of good quality Equipment in accordance with the Specifications and as stated in Clauses 4 and 5 of the “Instructions to the Bidders”. Further, the Equipment shall be brand new and absolutely free from all defects in material, quality and workmanship. In case of defects, the defective Equipment or the defective parts / components of the Equipment thereof, shall be replaced by the Supplier / Contractor free of cost to the University within reasonable time.

15. Breach of Contract

In case of breach of warranty /guarantee or Contract, the **damages** suffered by the NED University shall be **recovered from the Supplier / Contractor** out of any payment due to the Supplier / Contractor and / or in accordance with the terms and conditions of the Contract Performance Bond given at Annexure “E” enclosed with this Tender Document, without notice to the Supplier / Contractor.

16. Supplier / Contractor’s Default Liability

- a) NED University may upon written notice of default to the Supplier / Contractor **terminate the Contract** in the circumstances detailed hereunder:
 - i. If in the judgment of the University, the Supplier / Contractor fails to make delivery of the Equipment within the time specified in the Contract Agreement or within the period for which extension has been granted by the University; and
 - ii. If, in the judgment of the University, the Supplier / Contractor fails to comply with any of the other provisions of the Contract.
- b) In the event the NED University terminates the Contract, in whole or in part, as provided in Clause **16 a)** above, the NED University reserves the right to **purchase**, on such terms and conditions as it may deem appropriate, Equipment similar to the one terminated, and the Supplier / Contractor will be liable to the NED University for any additional costs for such **similar Equipment** and / or for liquidated damages for delay, as defined in Clause **22** of the Conditions of Contract until such reasonable time as may be required for the final supply of the Equipment.

- c) If the Contract is terminated, as provided in Clause **16 a)** above, NED University, in addition to any other rights provided in this Clause, may require the Supplier / Contractor to **transfer title** and deliver to the University under any of the following cases in the manner and as directed by the University:
 - i) Any **completed Equipment**; and
 - ii) Such **partially completed Equipment**, drawings, information and contract right (hereinafter called manufacturing material) as the Supplier / Contractor has specifically produced or acquired for the performance of such parts of the Contract as has been terminated.
- d) The NED University will **pay to the Supplier / Contractor** the Contract Price for the completed Equipment delivered to and accepted by the NED University and also for the manufacturing materials delivered and accepted.
- e) In the event the NED University does not terminate the Contract, as provided in Clause **16 a)** above, the Supplier / Contractor shall continue with the performance of his / her Contract, in which case the Supplier / Contractor shall be liable to the NED University for **Liquidated Damages for delay** as set out in Clause 22 until the Equipment are accepted.

17. Bankruptcy

If the Supplier / Contractor shall become bankrupt or have a receiving order made against him / her or compound with his / her creditors, or being a corporation commence to be wound up, not being a voluntary winding up for the purpose of amalgamation or reconstruction, or carry on its business under a receiver for the benefit of its creditors or any of them, NED University shall be at liberty to:

- a) **terminate the Contract** forthwith by a notice in writing to the Supplier / Contractor or to the liquidator or receiver or to any person in whom the Contract may become vested, and to act in the manner provided in Clause 16 above as though the last mentioned notice has been the notice referred in such Clause and the Equipment have been taken out of the Supplier / Contractor's hand; and / or
- b) give such liquidator, receiver, or other person the **option of carrying out the Contract** subject to his / her providing a guarantee for the due and faithful performance of the Contract upto an amount to be determined by the University.

18. Termination of Contract

- a) If, for any cause as set forth in Clause **19** hereafter, the Supplier / Contractor finds it impracticable to continue operation or, if owing to force majeure or to any cause beyond its control, the University finds it impossible to continue operation, then **prompt notification** in writing shall be given by the party affected to the other.
- b) If the delay or difficulties so caused cannot be expected to cease or become avoidable, or if operation cannot be resumed within six months, then either party shall have the right to terminate the Contract by giving ten **(10) days written notice** to the other.
- c) In the event of termination of the Contract under this Clause, **payment** will be made to the Supplier / Contractor as follows:

- i) The Supplier / Contractor shall be paid for all the Equipment for which the completion certificate has been issued, as stated in Clause 12, and for all the reimbursable expenses due and unpaid.
- ii) The Supplier / Contractor shall also be paid reasonably for any work done during the said six months period as well as for settlement of any financial commitment made in connection with proper performance of the Contract and which are not reasonably defrayed by payments under i) above.
- iii) On termination of the contract for any cause, the Supplier / Contractor shall see to the orderly suspension and termination of operations with due consideration to the interests of the University with respect to completion, safeguarding or storing of the Equipment produced for the performance of the Contract and the salvage and resale thereof

19. Force Majeure.

The Supplier / Contractor shall not be liable for any additional cost or for liquidated damages for delay or any failure to perform the Contract arising out of force majeure or cause beyond his / her control including acts of God, or of the public enemy, or of the Government, fires, floods, epidemic quarantine restrictions, strikes, freight embargoes and default of sub Supplier / Contractors due to any such cause (unless the NED University shall determine that the Equipment to be furnished by the Supplier / Contractor might reasonably have been obtained from other sources in sufficient time to allow the Supplier / Contractor to meet the required time schedule), provided that the Supplier / Contractor shall within ten (10) days from the beginning of such delay notify the NED University in writing of the **causes of the delay**. The NED University shall ascertain the facts and the extent of the delay and **extend the time** for completing the supplies as in its judgment the findings justify.

20. Rejection

- a) In the event any portion of the Equipment supplied by the Supplier / Contractor is found before taking over to be **defective in material or workmanship**, or otherwise not in conformity with the requirements of the Contract, the NED University shall have the right to either reject or require, in writing, rectification of the Equipment. In the later case, the Supplier / Contractor shall with utmost diligence, and at his own expense, make good the defects so specified or replace the defective Equipment. If the Supplier / Contractor fails to rectify or replace the rejected Equipment, NED University may adopt any of the following options:
 - i) **replace or rectify**, at its option, such defective Equipment and charge to the Supplier / Contractor the excess cost occasioned to the NED University plus (15%) fifteen percent; or
 - ii) acquire the said Equipment **at a reduced price** considered equitable under the circumstances; or
 - iii) **terminate the Contract** as provided in Clause 18 of these Conditions of Contract.
- b) Nothing in this Clause shall affect any claim by the University under Clause 22 hereafter.

21. Extension of Time

If the completion of the Contract is delayed due to reason beyond the control

of the Supplier / Contractor, the Supplier / Contractor shall without delay request NED University, in writing, of his **claim** for an extension of time. NED University on receipt of such request may agree to **extend the completion date** as may be reasonable in the circumstances of the case but without prejudice to other terms and conditions of the Contract.

22. Delay in Delivery - Liquidated Damages

- a) Should the **progress** of the Contract at any time be **lagging behind** the program agreed between the NED University and the Supplier / Contractor, NED University will notify the Supplier / Contractor in writing and the Supplier / Contractor shall there upon take such steps as he / she may deem fit to **expedite the progress** of the Contract. Non-issuance of this notice by the University shall not in any way absolve the Supplier / Contractor of the liquidated damages as stated in Clause 22 b) below.
- b) If the Supplier / Contractor **fails to complete the Contract**, in full or part, within the time laid down in the Contract Agreement or any extension thereof, there shall be deducted from the Contract Price, as **liquidated damages**, a sum of one half of one percent (**0.5%**) of the **Contract price** of each unit of the delayed Equipment for each calendar week of delay subject to the maximum of ten percent (10%) of the Contract Price of the unit or units so delayed, and such deduction shall be in full satisfaction of the Supplier / Contractor's liability for the said failure.

23. Period of Guarantee

- a) The term **period of guarantee** shall mean the period of twelve (**12**) months from the date on which the Equipment have been put into operation and demonstrated to NEDUET staff.
- b) During the period of guarantee, the Supplier / Contractor shall **remedy**, at his / her expense, **all defects** in design, materials, and workmanship that may develop or are revealed under normal use of the said Equipment upon receiving written notice from the University; the notice shall indicate in what respect the Equipment are faulty.
- c) The provisions of this Clause include all the **expenses** that the Supplier / Contractor may have to incur for delivery and installation of such replacement parts, material, and equipment as are needed for satisfactory operation of the Equipment at the University premises.

24. Non-assignment

The Supplier / Contractor shall **not have the right to assign or transfer** without the prior approval of the University the benefit and obligations of the Contract or any part thereof.

25. Expenditure under Contract

The Supplier / Contractor shall not make any expenditure for the purpose of this Contract in any **country not authorized** by the Government of Pakistan

26. Certificate Not to Affect the Rights of NED University or the Supplier / Contractor

No certificate of the NED University on account nor any sum paid on account

by the University nor any extension of time for the delivery of the Equipment pursuant to Clause 19 shall affect or **prejudice the rights of the NED University** against the Supplier / Contractor nor relieve the Supplier / Contractor of his obligation for due performance of the Contract or be interpreted as approval of the Equipment supplied, and no certificate shall create liability of the NED University to pay for the alterations, amendments, variations etc. not ordered in writing by the NED University or discharge the Supplier / Contractor for the payment of damages or of any sum against the payment of which he / she is bound to indemnify NED University nor shall such certificate nor the acceptance by him / her of any sum paid affect or **prejudice the rights of the Supplier / Contractor** against the University. CC-29

27. Payments Due from the Supplier / Contractor

All costs, ascertained damages or expenses for which under the Contract the Supplier / Contractor is liable to NED University may be deducted by NED University from any money due or may become due to the Supplier / Contractor under the Contract or may be recovered by action of law or otherwise from the Supplier / Contractor.

28. Legal Proceedings

The Contract and the Tender Documents are governed by the **Laws of Pakistan** and no proceedings to or arising out of any of them shall be instituted in any courts other than those situated at Karachi, Sindh Pakistan.

29. Dispute

Should any question or dispute arise as to the material, design, construction or delay in the supply of the Equipment or the purpose or the performance for which they are required or are warranted, NED University shall nominate an independent **certifier / expert** having knowledge of network equipment etc., who will, after affording the parties to the dispute an opportunity to present their contention, and after having tests made as the certifier deems fit, certify whether there has been any breach of Contract or warranty and, if so, what sum shall be paid to NED University in diminution or extinction of price, and such certificates shall be final and binding and shall not be questioned and shall be acted upon in arbitral or other legal proceedings. The award of the costs of the certifier will be within his / her own discretion and shall be recoverable from the party against which the costs are awarded.

30. Arbitration

All disputes and matters of difference whatsoever (other than those relating to the certificate of expert certifier) between NED University and the Supplier / Contractor relating to and arising out of the Contract and Tender Documents shall be referred to arbitration under the arbitration act 1940 with amendments and re- amendments thereof, each party nominating its own arbitrator. The umpire will be nominated by the arbitrators within the first three arbitral hearings. The **award of the arbitrators or of the umpire shall be final and binding** upon the parties. The arbitral proceedings shall be held at Karachi, Sindh Pakistan.

FORM OF TENDER
(LETTER OF OFFER)

Tender Reference No. _____

Dated _____

Name of Contract: **Import of Laboratory Equipment for Center for Energy Studies on C&F basis for Department of Mechanical Engineering**

The Director Procurement
NED University of Engineering & Technology
Karachi, Sindh,
Pakistan.

Dear Sir,

1. Having examined the Tender Documents including Instructions to Bidders, Conditions of Contract, Specifications, Drawings, Schedule of Prices and Addenda Nos.
_____ for the execution of the above-named Contract, we, the undersigned, being a company doing business under the name and address _____ and being duly incorporated under the laws of Pakistan hereby offer to execute and complete such Contract and remedy any defects therein in conformity with the said Documents including Addenda thereto for the Total Tender Price of Rs. _____ (in figures and words) or such other sum as may be ascertained in accordance with the said Documents.
2. We understand that all the Schedules attached hereto form part of this Tender.
3. As security for due performance of the undertakings and obligations of this Tender, we submit herewith a Bid Security referred to in Clause 3 of the Instructions Bidders and as per Annexure "D", in the amount of Rs. _____ (in words and figures) drawn in favor of or made payable to Director Procurement, NED University of Engineering and Technology, Karachi and valid for a period of 28 days beyond the period of validity of this Tender.
4. We undertake, if our Tender is accepted, to complete the whole of the work comprised in the above-named Contract within the time stated in Clause 12 of the Instructions to Bidders.
5. We agree to abide by this Tender for the period of 90 days beyond the date of opening of the Tender, and it shall remain binding upon us and may be accepted at any time before the expiration of this period.
6. Unless and until a formal Contract Agreement is signed, this Tender, together with your acceptance thereof, shall constitute a binding contract between us.
7. We undertake, if our Tender is accepted, to execute the Contract Performance Bond referred to in Clause 3 of the Instructions to Bidders and as per Annexure "E" for the due performance of the Contract.

8. We understand that you are not bound to accept the lowest or any Tender you may receive.
9. We do hereby declare that this Tender is made without any collusion, comparison of figures or arrangement with any other person or persons making a Tender for the above- named Contract.
10. We confirm, if our Tender is accepted, that all partners of the joint venture shall be liable jointly and severely for the execution of the Contract and the composition or the constitution of the joint venture shall not be altered without the prior consent of the Project Director, NED University of Engineering and Technology, (Please delete this clause in case of Tender from a single firm).

Dated this _____ day of _____ 2026

Signature _____ in the capacity of _____ duly authorized to sign

Tender for and on behalf of _____
(Name of Tenderer in Block Capitals)

Address: _____

Witness:

Name: _____

Address: _____

Occupation: _____

TENDER PARTICULARS

THE BIDDERS MUST SUPPLY THE FOLLOWING SPECIFIC INFORMATION FOR EACH ITEM OR GROUP OF ITEMS OF THE EQUIPMENT:

1. Conformation of Equipment:

Whether the Equipment offered conform to the particulars specified in the Schedules; if not, details of deviations must be stated in Annexure “F”.

2. Manufacturing Details:

- (i) Brand of Equipment.
- (ii) Name and address of Manufacturer; and
- (i) Country of origin of Equipment.

3. Delivery Schedule:

- (i) Earliest date by which delivery can be affected;
- (ii) Complete schedule of delivery; and
- (iii) If the delivery period is different for different items, it must be indicated item wise.

4. Packing Specification:

Whether the specifications for packing given in the Tender Documents will be adhered to.

**FORM OF SCHEDULE TO TENDER FOR EQUIPMENT
MANUFACTURED/AVAILABLE IN PAKISTAN WITHOUT INVOLVING IMPORT**

Due by _____ hours on _____
(time) (date) (month) (year)

SCHEDULE TO TENDER NO. _____ DATED _____

The Tender will be opened at _____ hours on _____
(time) (date) (month) (year)

Delivery on or before _____
(date) (month) (year)

Rates and amount to be quoted as follows in Pak. Rupees:

S. No.	Code / Item No.	Description Of Equipment	Detailed Specifications of Equipment with Model No.	Quantity Of Equipment	Unit	Rate Per Unit	Total Price.
1	2	3	4	5	6	7	8

It is certifying that:

i) The Equipment offered above conform in all respects with the particulars/specifications given in the Tender Documents' and

ii) All the terms and conditions of the Tender Documents are acceptable to us.

(signature of the authorized person)

SEAL

(name of the authorized person)

(name of the Tenderer)

**FORM OF SCHEDULE TO TENDER FOR EQUIPMENT IMPORTED FROM
APPROVED COUNTRIES.**

Due by _____ hours on _____
(time) (date) (month) (year)

SCHEDULE TO TENDER NO. _____ DATED _____

The Tender will be opened at _____ hours on _____
(time) (date) (month) (year)

Delivery on or before _____
(date) (month) (year)

PART 1. The rates quoted in the Table below must be on C&F basis in Foreign Currency for items to be imported.

S. No.	Code / Item No.	Description Of Equipment	Detailed Specifications Of Equipment with Model No.	Quantity Of Equipment.	Unit	Rate Per Unit	Currency	Total C&F Price	Country of Origin
1	2	3	4	5	6	7	8	9	10

PART 2. The rates quoted in the Table below must be in Pak. Rupees for Insurance, Local Transportation, Customs Clearance, Storage & Clearing Charges etc.

S.No.	Code/ Item No.	Description of Equipment	Quantity Of Equipment	Unit	Rate Per Unit	Total Price.
1	2	3	5	6	7	8

(Continued on the next page)

TABLE FOR COMPARASION OF TOTAL COST

In the Table below, the columns 1 to 5 and 8 are to be filled in by the Tenderer before submitting the Tender, while the columns 6,7 and 9 are to be filled in jointly by the NED University of Engineering and Technology, or his representative, and the Tenderer, or his representative, after opening of the Tender.

S. No.	Code/ Item No.	Description of Equipment	Total C&F Price for Part 1	Currency	Exchange Rate	Total Price for Part 1 (Rs.)	Total Price for Part II (Rs.)	Total Cost (Rs.)
1	2	3	4	5	6	7	8	9

It is certified that:

- i) The Equipment offered above conform in all respects with the particulars/specifications given in the Tender Documents; and
- ii) All the terms and conditions of the Tender Documents are acceptable to us.

(name of the Tenderer)

SEAL

(signature of the authorized person)

(name of the authorized person)

BID BOND

(Bank Guarantee)

Guarantee No _____

Executed on _____

Expiry date _____

Letter by the Guarantor (Bank) to the Employer (NED University)

Name of Guarantor (Bank) with address: _____

Name of Principal (Tenderer) with address: _____

Penal sum of Security (Bond),(in figures and words): _____

Tender Reference No. _____ Date of Tender _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Tender and at the request of the said Principal (Tenderer), we the Guarantor above-named are held and firmly bound unto the Director Procurement, NED University of Engineering and Technology, Karachi, acting through the Procurement Manager, NED University of Engineering and Technology, {hereinafter called The “Employer” (“University”)} in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severely, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal (Tenderer) has submitted the accompanying Tender numbered and dated as above for supply, installation, putting into operation and demonstration of Equipment at the premises NED University of Engineering & Technology, Karachi, to the said Employer (University); and

WHEREAS, the Employer (University) has required as a condition for considering the said Tender that the Principal (Tenderer) furnish a Bid Bond in the above said sum to the Employer (University), conditioned as under:

- 1) that the Bid Bond shall remain valid for a period of 28 days beyond the period of validity of the Tender;
- 2) that in the event of;
 - a) the Principal (Tenderer) withdraws his Tender during the period of validity of the Tender;
 - b) the Principal (Tenderer) does not accept the correction of his Tender Price, pursuant to Clause 16 of “Instructions to Bidders”; or
 - c) failure of the successful Tenderer to:

- i) furnish the required Contract Performance Bond, in accordance with Clause 3 of "Instructions to Bidders"; **or**
- ii) sign the proposed Contract Agreement, in accordance with Clause 4 of the "Conditions of Contract";

then the entire sum be paid immediately to the said Employer (University) as liquidated damages and not as penalty for the successful Tenderer's failure to perform.

NOW THEREFORE, if the successful tenderer shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said Employer (University) in accordance with his Tender as accepted and furnish within twenty eight (28) days of his being required to do so, a Contract Performance Bond with good and sufficient surety, as may be required, upon the form prescribed by the said Employer (University) for the faithful performance and proper fulfillment of the said Contract or in the event of rejection of the said Tender by the Employer (University) within the time specified then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT, the Guarantor shall forthwith pay to the Employer (University) the said sum stated above upon first written demand of the Employer (University) without cavil or argument and without requiring the Employer (University) to prove or to show grounds or reasons for such demand notice of which shall be sent by the Employer (University) by registered post duly addressed to the Guarantor at its address given above.

PROVIDED ALSO THAT, the Employer (University) shall be the sole and final judge for deciding whether the Principal (Tenderer) has duly performed his / her obligations to sign the Contract Agreement and to furnish the required Contract Performance Bond within the time stated above, or has defaulted in fulfilling the said requirements and the Guarantor shall pay without objection the sum stated above upon first written demand from the Employer (University) forthwith and without reference to the Principal (Tenderer) or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed the instrument under its seal on the date indicated above, the name and seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative pursuant to the authority of its governing body.

Guarantor (Bank)

Witness:

1. _____
(Signature)

(Signature)

(Name, Title, Address and Seal)

(Name)

2. _____
(Signature)

(Title)

(Name, Title, Address and Seal)

(Corporate Guarantor Seal)

CONTRACT PERFORMANCE BOND
(Bank Guarantee)

Guarantee No. _____

Executed on _____

Expiry Date _____

Letter by the Guarantor (Bank) to the Employer (University)

Name of Guarantor (Bank) with Address: _____

Name of Principal (Supplier / Contractor) with address: _____

Penal Sum of Security (Bond), (in words and figures) _____

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the Tender Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal (Supplier / Contractor) we, the Guarantor above named, are held and firmly bound unto the Director Procurement, NED University of Engineering and Technology, acting through the Director Procurement, NED University of Engineering and Technology {hereinafter called the Employer (University)} in the penal sum of amount stated above for the payment of which sum well and truly to be made to the said Employer (University), we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal (Supplier / Contractor) has accepted the Employer's (University's) above said Letter of Acceptance for the supply, installation, putting into operation and demonstration of Active & Passive Network Equipment at the premises of NED University of Engineering and Technology, Karachi.

NOW THEREFORE, if the Principal (Supplier / Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer (University), with or without notice to the Guarantor, which notice is hereby waived and shall also well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the Contract and of any and all modifications of the said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till the expiry of the guaranty period as per Clause 23 of the Conditions of Contract.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the Employer (University) without delay upon the Employer's (University's) first written demand without cavil or arguments and without requiring the Employer (University) to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's (University's) written declaration that the Principal (Supplier / Contractor) has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to the Employer's (University's) designated Bank and Account Number.

PROVIDED ALSO THAT the Employer (University) shall be the sole and final judge for deciding whether the Principal (Supplier / Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling the said obligations, and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer (University) forthwith and without any reference to the Principal (Supplier / Contractor) or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body

Witness:	_____
	Guarantor (Bank)
1. _____	_____
(Signature)	(Signature)
_____	_____
Name, Title and Address (Seal)	(Name)
2. _____	_____
(Signature)	(Title)
_____	_____
Name, Title and Address (Seal)	Corporate Guarantor (Seal)

Statement Describing Deviation from Specifications.

S.No .	Code No.	Description of Equipment	Statement of Variation from Specifications	Reasons for Variations .
1	2	3	4	5

(signature of the authorized person)

_____ **SEAL**

(name of the authorized person)

On behalf of

(name and address of the Tenderer)

The date of purchase of the Stamp Paper of at-least Rs 100/-, the date of execution, and the Deponent's signature on this Affidavit MUST be a date after the publication date of the NIT. Any affidavit dated prior to the NIT publication will result in technical disqualification.

AFFIDAVIT

I, _____, S/O _____, Muslim, adult, holding CNIC No. _____, resident of _____, do hereby solemnly affirm, declare, and undertake on oath as under:

1. That I am the Deponent herein, fully conversant with the facts stated below, and am the duly authorized [Owner / Partner / Director] of M/S _____, having its principal place of business at _____, **Karachi** (hereinafter referred to as the "**Bidder**").
2. That the Bidder has never been debarred, sanctioned, or blacklisted by any Federal, Provincial, or Local Government authority, department, autonomous body, private sector entity, or international organization.
3. That the Bidder is not currently engaged in, nor subject to, any pending dispute, litigation, or arbitration before any court of law, tribunal, or forum with any individual, government agency, or corporate entity. Furthermore, neither the Bidder nor its management has ever indulged in any corrupt, fraudulent, collusive, coercive, or obstructive practices.
4. That the Bidder possesses the requisite technical competence, financial soundness, and operational capacity to fully execute the works under **Tender No.** _____.
5. That the Bidder has never forfeited any Bid Security or Performance Security to the NED University of Engineering & Technology (NEDUET), Karachi, nor has any Purchase Order, Work Order, or Contract Schedule issued to the Bidder been cancelled, rescinded, or terminated by NEDUET owing to default, non-performance, or contractual breach.
6. That the Bidder, including its proprietor, directors, partners, and key personnel, has never engaged in forgery, misrepresentation, or falsification of documents in connection with any procurement or transaction with NEDUET.

That whatever is stated hereinabove is true, accurate, and correct to the best of my knowledge, information, and belief, and nothing material has been concealed therefrom.

DEPONENT

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

“IMPORT OF LABORATORY EQUIPMENT FOR CENTER FOR ENERGY STUDIES ON C&F BASIS FOR DEPARTMENT OF MECHANICAL ENGINEERING”

SUMMARY OF BID COST

S#	Description	Total Cost (C&F) In foreign currency
1.	Smart Energy Laboratory	
2.	Characterization Laboratory	
3.	Renewable Laboratory	
4.	Hydrogen and Fuel Cell Laboratory	
5.	PV Laboratory	
	GRAND TOTAL AMOUNT OF 1 TO 5	

Signature of Bidder with Seal

SECTION IV. SCHEDULE OF REQUIREMENTS

DEPARTMENT OF MECHANICAL ENGINEERING
NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
SPECIFICATIONS AND BILL OF QUANTITIES [B.O.Q]

TENDER NO.: PC (M-6)/NED/Equip/Studies Energy Mechanical/8583/ 2026

1. SMART ENERGY LABORATORY

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
01	SM-03	Arduino Engineering Kit	Arduino Engineering Kit or equivalent educational mechatronics/controls kit for teaching control, sensing, and data acquisition. Technical Specifications: 1. Microcontroller Boards: Included as part of kit. 2. Mechanical Modules: Mechanical/electromechanical modules included. 3. Sensors: Sensors included as part of kit. 4. Actuators: Actuators included as part of kit. 5. Documentation: Complete documentation included. 6. Example Projects: Example projects/experiments included. 7. Software: Required software/licenses included. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.	10				
02	SM-04	Different Sensors:	MT6701: 14-bit high-precision magnetic encoder and magnetic-induction angle measurement sensor module (Pack of 10). XKC-Y25: Capacitive liquid-level sensor for non-contact water detection (1 No.). XKC-Y26-NPN: Non-contact water/liquid-level induction switch detector (1 No.). KY-040: 360° rotary encoder module/brick sensor development board with 15 × 16.5 mm push button, Arduino compatible (Pack of 5). Cloweit Incremental Rotary Encoder: 50 mm body, 8 mm shaft, photoelectric optical switch, AB two-phase, 1024 PPR, 5–24 VDC (1 No.).	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			Cloweit Incremental Rotary Encoder: 50 mm body, 8 mm shaft, photoelectric optical switch, AB two-phase, 3600 PPR, 5–24 VDC (1 No.). Cloweit Incremental Rotary Encoder: 50 mm body, 8 mm shaft, photoelectric optical switch, AB two-phase, 5000 PPR, 5–24 VDC (1 No.). Wire-Pull Encoder: Wire box with 1 m analog displacement/distance measurement and electronic ruler (1 No.). BF1K-3FB-A: High-precision foil-type strain gauge, half-bridge configuration, suitable for weighing sensors (Pack of 10). GP2Y0A02YK0F: Infrared ranging sensor, approximately 20–150 cm range (1 No.). GP2Y0E03: Infrared ranging sensor, approximately 4–50 cm range (1 No.). GP2Y0A710K0F: Infrared ranging sensor, approximately 100–550 cm range (1 No.). JSN-SR04T/AJ-SR04M: Waterproof ultrasonic distance-measuring transducer sensor module compatible with Arduino (1 No.). Loctite 496: Strain-gauge adhesive kit, 20 g (1 No.). Loctite 480: Strain-gauge adhesive kit, 20 g (1 No.). Water-Level Transmitter: IP68 waterproof liquid-level sensor, 0–1 m range, 4–20 mA output, with 5 m cable (1 No.). Water-Level Transmitter: IP68 waterproof liquid-level sensor, 0–5 m range, 4–20 mA output, with 5 m cable (1 No.). 3D Laser Level: Osram green-beam, self-leveling cross-line laser tool set with laser detector and magnetic bracket (1 No.). DYP-A02: Waterproof ultrasonic distance-measuring sensor for obstacle avoidance, anti-collision and drop detection, with UART/RS485 communication (1 No.). Inductive Proximity Sensor: NPN output, DC 6–36 V, approximately 4 mm sensing distance, M5 body (1 No.). Inductive Proximity Sensor: NPN output, DC 6–36 V, approximately 6 mm sensing distance, M10 body (1 No.). LD2410C: 24 GHz high-accuracy FMCW human-presence radar sensor module with body-motion and heartbeat/micro-motion detection (Pack of 10). Type-K Thermocouple: Armored probe, 1 mm diameter, 0–1100°C range, 50 mm insertion depth and 3 m cable (1 No.). Type-K Thermocouple: Armored probe, 1 mm diameter, 0–1100°C range, 100 mm insertion depth and 3 m cable (1 No.). Differential-Pressure Sensor: 0–50 kPa measurement range with 4–20 mA output (1 No.). HX710B: Digital barometric-pressure sensor module, 0–40 kPa range, suitable for Arduino-based water-level and liquid-flow measurement (1 No.). VL53L0X: Time-of-Flight laser distance sensor compatible with Arduino (1 No.). 37980-RTA-003 MAF: Mass-air-flow meter sensor compatible with Honda Civic/CR-V 2.2 L and 2.4 L, model years 2007–2009, or equivalent (1 No.). MPU-6050: Six-axis inertial measurement unit incorporating a three-axis accelerometer and three-axis gyroscope (1 No.). ADXL345: Three-axis digital accelerometer (1 No.). GD8-F03/GD8-T03: Diffuse-reflective photoelectric sensor/photomicrosensor with sensitivity adjustment (1 No.). SCD41: I²C true CO₂, temperature and relative-humidity sensor (1 No.).					

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
03	SM-05	IR / Thermal Camera	Professional thermal imaging camera suitable for thermal analysis and inspection applications. Technical Specifications: 1. Detector Resolution: 640 × 480 pixels or better. 2. Super Resolution: Up to approximately 1280 × 960 or equivalent enhancement. 3. Temperature Range: –20°C to 1000°C or better. 4. Thermal Sensitivity: ≤0.05°C or better. 5. Accuracy: ±2°C or ±2%. 6. Lens/Screen: Rotatable lens/screen preferred. 7. Display: Touchscreen/display included. 8. Connectivity: Wi-Fi/USB connectivity. 9. Software: Analysis/reporting software included. 10. Calibration: Calibration certificate included. 11. Storage: Carrying case included. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.	01				
04	SM-06	Motor Pack for Arduino	Arduino-compatible sensor and motor package for mechatronics and control experiments. Technical Specifications: 1. Motors: DC/servo/stepper motors with drivers included. 2. Sensors: Temperature/humidity/light/pressure/distance/current sensors included. 3. IMU: Inertial measurement unit (IMU) included. 4. Encoders: Encoders included. 5. Relays: Relays included. 6. Prototyping: Breadboards and wires included. 7. Power: Power modules included. 8. Storage: Storage cases included. 9. Compatibility: All modules compatible with Arduino IDE. 10. Documentation: Example codes supplied. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use.	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			- Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
05	SM-09	Arduino MKE IoT Bundle	Arduino MKR IoT bundle or latest equivalent kit for IoT experiments and education. Technical Specifications: 1. Board: Arduino MKR WiFi/LoT board or latest equivalent. 2. Sensors: Environmental sensors included. 3. Actuators: Actuators included. 4. Prototyping: Breadboard and wires included. 5. Learning Content: Cloud/LoT learning content included. 6. Cables: USB cable included. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant.	10				
Total Amount: -								

2. CHARACTERIZATION LABORATORY

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
01	CH-01	Surface Tension and Contact Angle Analysis	Automated contact angle goniometer/surface tension analyzer for wettability and interfacial tension studies of liquids and surfaces. Technical Specifications: 1. Dispensing System: Motorized droplet dispensing system. 2. Camera: High-resolution camera for droplet imaging. 3. Illumination: LED illumination system. 4. Software: Image analysis software for contact angle/tension computation. 5. Contact Angle Range: 0–180° with accuracy $\pm 0.1^\circ$ or better. 6. Surface/Interfacial Tension Range: Approximately 0.01–2000 mN/m or better, where applicable. 7. Stage Options: Tilting stage and/or temperature stage options. 8. Accessories: Syringe set included. 9. Calibration: Calibration standard included. 10. Computer: Computer/software interface included.	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
02	CH-02	Ductless Fume Hood	Ductless fume hood suitable for chemical/sample preparation work with certified filtration system. Technical Specifications: 1. Filtration: Certified carbon/HEPA filtration as required for application. 2. Airflow Monitoring: Airflow monitoring system with alarm. 3. Sash: Transparent sash for visibility and access. 4. Lighting: Internal lighting included. 5. Filter Options: Solvent/acid/base filter options available. 6. Filter Monitoring: Filter saturation indicator or service plan. 7. Work Surface: Chemical-resistant work surface. 8. Electrical Supply: 220–240 V, 50 Hz operation. 9. Compliance: Must comply with applicable international laboratory/fume hood safety standards. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable.	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
03	CH-03	Laboratory Ultrasonic Cleaner	Bench-top ultrasonic cleaner suitable for cleaning laboratory samples/tools. Technical Specifications: - Tank Capacity: At least 4.5 L or better. - Tank/Basket Material: Stainless-steel tank and basket. - Ultrasonic Frequency: Approximately 35–40 kHz or better. - Timer: Digital timer function. - Heating: Integrated heating function. - Drain: Drain valve, where applicable. - Lid: Lid included. - Safety: Overheat protection. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms.	01				
04	CH-04	Portable digital PH meter	Portable digital pH meter suitable for laboratory and field measurements. Technical Specifications: - pH Range: 0–14. ; 2. Accuracy: ± 0.01 pH or better. - Temperature Compensation: Automatic temperature compensation (ATC). - Electrode: Replaceable electrode. ; 5. Body: Waterproof/rugged body construction. - Calibration Buffers: pH 4, 7, and 10 calibration buffers included. - Storage: Carrying case included. ; 8. Temperature Probe: Temperature probe included. - Compliance: Must comply with applicable	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
05	CH-05	Analytical Balances	Digital analytical/top-loading balance suitable for general laboratory weighing applications. Technical Specifications: - Capacity: Up to 1000 g or better. - Readability: 0.001 g or better. - Calibration: Internal and/or external calibration capability. - Draft Shield: Draft shield included, where applicable. - Data Output: RS232/USB data output. - Pan: Stainless-steel weighing pan. - Overload Protection: Overload protection function. - Calibration Weight: Calibration weight and calibration certificate included. - Electrical Supply: 220–240 V, 50 Hz operation. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support:	02				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			- Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
06	CH-06	Programmable single channel pipette	Programmable/electronic single-channel pipette suitable for precise liquid handling in laboratory applications. Technical Specifications: - Volume Range: 1–500 µL through one or more pipettes or adjustable range. - Accuracy/Precision: Compliant with ISO 8655 or equivalent standard. - Power Supply: Rechargeable battery with charger. - Calibration: Calibration certificate included. - Tips: Compatible sterile tips included. - Tip Ejector: Integrated tip ejector mechanism. - Documentation: User manual included. - Compliance: Must comply with applicable international laboratory standards (ISO 8655 or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.	02				
07	CH-07	Spin Coating Machine	Spin coating machine for thin-film deposition suitable for materials/electronics research applications. Technical Specifications: - Sample/Substrate Size: Up to Ø150 mm and/or 5 in × 5 in or better. - Speed Range: Programmable speed up to at least 6000 rpm or better. - Acceleration Control: Adjustable acceleration control. - Recipes: Multi-step programmable recipes. - Chamber: Solvent-resistant chamber. - Chuck Options: Vacuum or vacuum-free chuck options. - Safety: Safety lid/interlock mechanism. - Exhaust/Drain: Exhaust and drain provision included. - Accessories: Compatible chucks/adapters included. - Compliance: Must comply with applicable	01				

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					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
08	CH-08	Dip Coater with drying oven	Programmable dip coater with drying oven for thin-film deposition suitable for materials research applications. Technical Specifications: - Speed Range: Dipping/withdrawal speed adjustable from 1–200 mm/min or wider. - Travel Distance: 0–200 mm or better. - Programmability: Programmable immersion/dwell/withdrawal/drying steps. - Drying Oven: Temperature up to 100–200°C or better. - Controller: Digital/touch controller. - Substrate Holder: Substrate holder set included. - Safety: Safety cover included. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the	01				

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			supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
09	CH-09	Precision Cutters	Automatic metallographic precision cutting machine for deformation-free sectioning of metallographic samples. Technical Specifications: 1. Spindle Speed: Variable spindle speed control. 2. Feed Control: Precision feed control system. 3. Coolant System: Integrated coolant system. 4. Sample Holding: Sample holding fixtures included. 5. Cutting Wheels: Diamond/abrasive cutting wheels included. 6. Safety: Safety enclosure with interlock. 7. Cutting Modes: Programmable cutting modes. 8. Accessories: Complete accessories for metallographic sample preparation. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: · On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) · Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.	01				
10	CH-10	Mounting presses (Automatic metallographic mounting presses)	Automatic hot metallographic mounting press for repeatable sample mounting in metallographic sample preparation. Technical Specifications: 1. Programmability: Programmable temperature, pressure, and time. 2. Mould Sizes: Suitable for common mount sizes. 3. Cooling: Water/air cooling as applicable. 4. Controller: Touch/digital control panel. 5. Safety: Safety interlocks included. 6. Consumables: Resin starter kit included. 7. Accessories: Mould assemblies and accessories included.	01				

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			8. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
11	CH-11	Incubates	Laboratory incubator/environmental chamber suitable for controlled temperature and humidity testing applications. Technical Specifications: - Temperature Range: 5–60°C or wider. - Humidity Control: 20–80% RH or better, if required. - Air Circulation: Forced air circulation. - Controller: Digital PID controller. - Programmability: Programmable operating cycles. - Chamber: Stainless-steel chamber with shelves. - Safety: Over-temperature protection. - Data Logging: Data logging capability. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the	01				

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			supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
12	CH-12	Particle Size and Shape Analyzer Equipment	Particle size and shape analyzer suitable for characterization of particulate materials across nano to micro range. Technical Specifications: 1. Measurement Range: Approximately 10 nm to 1000 μm or wider. 2. Measurement Technique: Laser diffraction/DLS/dynamic image analysis, as suitable. 3. Dispersion Modules: Wet and/or dry dispersion modules, as required. 4. Measurement Routines: Automatic measurement routines. 5. Shape Analysis: Particle shape parameters output. 6. Software: Dedicated analysis software included. 7. Calibration: Calibration/reference standards included. 8. Computer: Computer interface included. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: · On-site delivery, installation, and commissioning by the supplier. · Demonstration and hands-on training for laboratory staff/faculty. Complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.	01				
13	CH-13	4-point probe station	Four-point probe station for sheet resistivity and I-V characterization of thin films, semiconductors, and conductive coatings. Technical Specifications: 1. Probe Spacing: 1 mm or suitable standard spacing. 2. Measurement Range: 1 $\mu\Omega$ to 10 M Ω or wider. 3. Source Meter: Integrated source meter up to ± 100 V and ± 1 A or better. 4. Sample Stage: Dedicated sample stage included.	01				

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			5. Software: Measurement and data analysis software included. 6. Data Export: Data export functionality. 7. Calibration: Calibration standard included. 8. Safety: Safety enclosure, where applicable. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
14	CH-14	Metallographic Grinder and Polisher	Metallographic grinder-polisher for sample surface preparation prior to microscopic examination. Technical Specifications: 1. Platen Configuration: Single/twin platen system. 2. Speed Control: Variable speed control. 3. Water Supply: Integrated water supply/drain system. 4. Polishing Head: Semi-automatic polishing head or manual mode, as required. 5. Sample Holders: Sample holders included. 6. Consumables: Grinding papers, polishing cloths, diamond suspensions, and consumable starter kit included. 7. Safety: Safety cover included. 8. Training: Training on operation and sample preparation techniques included. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals,	01				

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			maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
15	CH-15	Thermal Conductivity Measurement Equipment	Thermal conductivity measurement system suitable for solids, insulation materials, and composites. Technical Specifications: 1. Measurement Method: TPS/guarded hot plate/laser flash or equivalent method. 2. Measurement Range: Appropriate range for low and medium thermal conductivity materials. 3. Temperature Control: Integrated temperature control system. 4. Sample Holders: Sample holders included. 5. Software: Measurement and analysis software included. 6. Calibration: Calibration reference materials included. 7. Certification: Uncertainty/calibration certificate provided. 8. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.	01				

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			· Availability of spare parts and consumables post-warranty.					
16	CH-16	3D Surface Profiler	Non-contact 3D optical surface profiler for micro/nano surface topography, roughness, and step-height measurement. Technical Specifications: 1. Vertical Resolution: In nm range or better. 2. Lateral Resolution: Suitable for materials/thin film samples. 3. Stage: Motorized stage with stitching capability. 4. Software: 2D/3D analysis software included. 5. Objectives: Suitable measurement objectives included. 6. Vibration Isolation: Vibration isolation table, if required. 7. Calibration: Calibration standard included. 8. Computer: Computer interface included. 9. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.	01				
17	CH-17	Stirrer plate	Laboratory magnetic hotplate stirrer suitable for mixing and heating of liquid samples. Technical Specifications: 1. Top Plate: Ceramic/chemical-resistant top plate. 2. Stirring Speed: Approximately 50–1500 rpm or better. 3. Heating: Up to 300–500°C, depending on requirement. 4. Controller: Digital temperature/speed control. 5. External Probe: Support for external temperature probe. 6. Safety: Over-temperature protection. 7. Accessories: Stir bars included. 8. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior	01				

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			specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms.					
18	CH-18	UV/Visible/NIR Spectrophotometer	UV/Visible/NIR spectrophotometer for absorbance, transmittance, and reflectance measurement of liquids, solids, and films. Technical Specifications: - Wavelength Range: At least 190–2500 nm or wider, as required. - Optics: Double-beam optics. - Resolution: High spectral resolution. - Sample Accessories: Integrating sphere/solid sample holder, where needed. - Software: Measurement and analysis software included. - Computer: Computer interface included. - Accessories: Cuvettes included. - Calibration: Calibration standards included. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier	01				

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			with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
19	CH-19	Consumable	1. Sample containers made of glass and chemical-resistant plastic in assorted capacities of 50 mL, 100 mL, 250 mL, 500 mL and 1 L (200 Nos.), 2. Laboratory-grade glass sample vials, 10–50 mL, with leak-proof caps (200 Nos.), 3. Syringe filters, 0.22 µm, with compatible membrane material (500 Nos.), 4. Syringe filters, 0.45 µm, with compatible membrane material (500 Nos.), 5. Filter papers in assorted grades and diameters, minimum 100 sheets per box (20 Boxes), 6. Powder-free disposable nitrile gloves, small size, 100 gloves per box (4 Boxes), 7. Powder-free disposable nitrile gloves, medium size, 100 gloves per box (8 Boxes), 8. Powder-free disposable nitrile gloves, large size, 100 gloves per box (10 Boxes), 9. Powder-free disposable nitrile gloves, extra-large size, 100 gloves per box (2 Boxes), 10. Reusable nitrile/neoprene chemical-resistant gloves, assorted sizes M–XL (10 Pairs), 11. Heat-resistant gloves suitable for a minimum temperature of 300°C (10 Pairs), 12. Cryogenic gloves in assorted sizes for cold-gas or cryogenic handling (4 Pairs), 13. Chemical-resistant laboratory coats, assorted sizes M–XXL (10 Nos.), 14. Reusable chemical-resistant full-front laboratory aprons (10 Nos.), 15. Impact-resistant safety glasses with clear lenses and side protection (30 Nos.), 16. Chemical-splash goggles with indirect ventilation, anti-fog preferred (15 Nos.), 17. Full-face transparent safety shields with adjustable headgear (8 Nos.), 18. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 39 (1 Pair), 19. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 40 (2 Pairs), 20. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 41 (3 Pairs), 21. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 42 (4 Pairs), 22. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 43 (3 Pairs), 23. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 44 (1 Pair), 24. Safety shoes with steel/composite toe, anti-slip and chemical-resistant sole, EU size 45 (1 Pair), 25. Reusable full-face gas masks/respirators with adjustable head harness (10 Nos.), 26. ABEK-P3 or equivalent gas-mask cartridges for organic vapours, acid gases, ammonia and particulates (24 Pairs), 27. P3 or equivalent replacement particulate filters compatible with supplied respirators (50 Pairs), 28. Individually packed disposable particulate respirators, N95 or better (200 Nos.), 29. Gas-safe sampling probes with compatible tubing, connectors and accessories (4 Complete Sets), 30. Portable multi-gas detectors for H₂, CO, O₂ and combustible gas/LEL, with charger, calibration cap and carrying case (4 Nos.), 31. Fixed hydrogen gas detector/alarm units with sensor, controller/interface and mounting accessories (6 Nos.), 32. Audible and visual alarm beacon units compatible with the fixed	01				

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			gas-detection system (6 Nos.), 33. Automatic pipettes in assorted laboratory volume ranges (2 Complete Sets), 34. Pipette tips, 10 μ L, compatible with supplied pipettes (3,000 Nos.), 35. Pipette tips, 200 μ L, compatible with supplied pipettes (3,000 Nos.), 36. Pipette tips, 1,000 μ L, compatible with supplied pipettes (3,000 Nos.), 37. Low-lint laboratory cleaning wipes for general laboratory use (50 Packs), 38. Non-abrasive lint-free wipes for optics and sensitive instrument surfaces (30 Packs), 39. Chemical-resistant absorbent spill pads for laboratory spills (200 Nos.), 40. Chemical spill-control kits containing absorbents, disposal bags and PPE (4 Kits), 41. Clearly labelled acid- and alkali-neutralizing agent sets (2 Sets), 42. Assorted compatible laboratory-grade instrument-cleaning solutions and solvents (20 Litres Total), 43. Metallographic grinding and polishing media in assorted grades (10 kg Total), 44. Diamond polishing suspensions in assorted required grades (2 Litres per Grade), 45. Grinding and polishing papers/discs in assorted grit sizes (100 Nos. per Grit Size), 46. ZIF-8, purity $\geq 95\%$, laboratory/research grade, with batch and surface-area information (500 g), 47. UiO-66, purity $\geq 95\%$, laboratory/research grade (500 g), 48. HKUST-1, purity $\geq 95\%$, laboratory/research grade (500 g), 49. MIL-101 or equivalent MOF, purity $\geq 95\%$, with exact composition stated (500 g), 50. Activated or functionalized MOF suitable for gas adsorption, with composition and BET surface-area data (500 g), 51. Multi-Walled Carbon Nanotubes, purity $\geq 95\%$, outer diameter approximately 10–30 nm (1,000 g), 52. Carboxyl-functionalized MWCNTs, purity $\geq 95\%$, –COOH functionalized (500 g), 53. Hydroxyl-functionalized MWCNTs, purity $\geq 95\%$, –OH functionalized (500 g), 54. Single-Walled Carbon Nanotubes, purity $\geq 90\%$, with diameter and length ranges stated (250 g), 55. Carbon nanofibers or equivalent conductive carbon material, purity $\geq 95\%$, with technical data sheet (500 g)					
20	CH-20	Solid and Liquid Fuel Calorimeter	Bomb calorimeter suitable for determining calorific value/heat of combustion of solid and liquid fuels. Technical Specifications: 1. Bomb: Oxygen bomb assembly. 2. Ignition System: Integrated ignition system. 3. Temperature Measurement: High-precision temperature measurement system. 4. Water Handling: Automatic/semi-automatic water handling, as applicable. 5. Calibration: Benzoic acid standard included. 6. Gas Supply: Oxygen regulator/fittings included. 7. Data Logging: Software/data logging capability. 8. Safety: Safety shield included. 9. Compliance: Must comply with applicable ASTM/ISO calorimetry test methods. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and	01				

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			research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
21	CH-21	Bench-top Lab Planetary Ball Mill	Bench-top planetary ball mill suitable for fine grinding and mixing of laboratory samples. Technical Specifications: - Grinding Stations: Four grinding stations or equivalent throughput. - Speed: Variable speed up to 600 rpm or better. - Jar Capacity: Approximately 500 mL each, or as required. - Programmability: Programmable running/pause/reverse cycles. - Control: Adjustable speed and time settings. - Safety: Safety lock mechanism. - Accessories: Grinding jars and balls of suitable materials included. - Enclosure: Low-noise enclosure. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance	01				

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			documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
22	CH-22	High Performance Oven	High-performance laboratory drying/heating oven suitable for sample drying and heat treatment applications. Technical Specifications: - Temperature Range: Up to 300°C or better. - Controller: PID digital control. - Air Circulation: Forced-air circulation. - Chamber: Stainless-steel chamber with shelves. - Programmability: Programmable ramps and timers. - Safety: Over-temperature protection. - Data Logging: Data logging/USB, where required. - Temperature Distribution: Uniform temperature distribution throughout chamber. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
23	CH-23	Carbon, Hydrogen, Nitrogen and Sulphur Analyzer	Elements: Carbon, Hydrogen, Nitrogen and Sulphur. Method: High-temperature combustion with thermal conductivity/IR detection or equivalent. Sample Types: Solid, powder, liquid, coal, fuel, biomass, polymer and other compatible materials. Sample Mass: Approximately 0.1–100 mg or wider. Measurement Range: Carbon: 0.01–100%, Hydrogen: 0.01–20%, Nitrogen: 0.01–50% ,Sulphur: 0.005–20% Repeatability: ≤0.5% RSD or better. , Furnace Temperature: Minimum 950°C, preferably up to 1,200°C. Autosampler: Minimum 30-sample capacity. ; Software: Instrument control, calibration, data analysis, reporting and export to Excel/CSV/PDF. Accessories: Computer, printer, gas regulators, tubing, sample capsules, calibration standards and starter consumables for at least 500 analyses. Safety: Gas-flow monitoring, over-temperature protection and automatic shutdown.; Power Supply: 220–240 V, 50 Hz. Compliance: IEC/CE or equivalent international safety standards. Note: Equipment with equal or superior specifications will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary	01				

Sr. No.	BoQ Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: • Minimum warranty of three years from date of successful commissioning as per tender terms. • Local technical support and after-sales service to be confirmed by bidder					
Total Amount: -								

3. RENEWABLE LABORATORY

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
01	RN-01	Wind Energy Training System	Wind Energy Training System for education and research, comprising laboratory-scale wind turbine trainer with adjustable wind source, generator, power conditioning units, sensors, and SCADA/computer-based data acquisition and control. Technical Specifications: 1. Wind Turbine Trainer: Rated up to 500 W or appropriate laboratory scale. 2. Wind Speed Source: Adjustable wind speed up to 15 m/s or better. 3. Blades: Variable pitch blades with pitch adjustment capability. 4. Yaw/Pitch Demonstration: System capable of demonstrating yaw and pitch control mechanisms. 5. Generator: Suitable generator (permanent magnet/induction type) compatible with turbine rating. 6. Load Bank: Adjustable load bank for power output testing. 7. Charge Controller: Charge controller compatible with system rating. 8. Inverter/Storage Interface: DC-AC inverter and/or storage interface for grid/off-grid demonstration. 9. Sensors: Sensors for wind speed, voltage, current, power, and RPM measurement. 10. Control Panel: SCADA/computer-based control panel with integrated data acquisition system. 11. Safety Features: Safety guards and protective enclosures for rotating components. 12. Documentation: Complete experiment/lab manual included. 13. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Minimum performance requirements: turbine output ≥500 W continuous, controllable wind speed range 0–15 m/s with ±0.2 m/s accuracy, wind-speed resolution ≤0.01 m/s, rotor-speed resolution ≤1 rpm, torque resolution ≤0.01 N·m, pitch/yaw resolution ≤1°, integrated SCADA/DAQ with data export, emergency stop and overspeed protection, compliant with IEC 61400-2 and IEC 61010-1.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. - Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum three years warranty from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
02	RN-02	Geothermal Energy Unit with three-Well System	Computer-controlled geothermal energy training unit with three-well system for demonstration of geothermal heat extraction and heat exchange principles. Technical Specifications: - System Configuration: two-well system for geothermal simulation. - Supply Tank: Approximately 250 L or better with level switch. - Heating Tank: Approximately 6.5 L with computer-controlled 8 kW heater or better. - Pump: Flow rate up to 150 L/min, head approximately 6 m or better. - Heat Exchanger: Plate heat exchanger with approximately 0.336 m² heat transfer surface or better. - Flow Sensors: Multiple flow sensors covering 1–60 L/min. - Sensors: Temperature and pressure sensors integrated in the system. - Control: DAQ/control software for data acquisition and system control. - Documentation: Experiment manual included. - Safety: Safety devices integrated as per system requirement. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
03	RN-03	Flate Plate Solar Energy Collector	Flat plate solar thermal energy collector trainer with solar simulator for solar thermal energy conversion studies and experiments. Technical Specifications: - Collector Area: Copper-pipe thermal collector area approximately 1.9 m² or better. - Glass Cover: Tempered glass cover on collector. - Insulation: Insulated collector assembly. - Accumulator Tank: Approximately 150 L or better with anti-corrosion protection. - Backup Heater: Electric backup heater approximately 2400 W with thermostat. - Rated Pressure/Temperature: Rated pressure approximately 8 bar, temperature up to 110°C. - Solar Simulator: Multiple solar spectrum lamps, approximately 300 W each. - Pump: Computer-controlled pump, flow rate 0–2 L/min or better. - Sensors: Sensors for flow, temperature, and irradiance measurement. - Data Acquisition: DAQ/software for data logging and analysis. - Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy).	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
06	RN-06	Computer with accessories	High-performance desktop/workstation computer Technical Specifications: CPU: Form Factor: Business Tower FormFactor; Processor: Intel Core i7 14th Gen (minimum 20 cores) or better enterprise-grade processor with hardware-based remote manageability; Chipset: Manufacturer's commercial/business-class chipset with vPro support; RAM 16 GBDDR5 (2x8 GB), expandable to at least 64 GB; Storage: 1 TB PCIeNVMe SSD (M.2); Graphics: Integrated graphics with minimum 4GB shared video memory support; Networking: Gigabit Ethernet LAN; Bluetooth: Integrated Bluetooth supported; Expansion Slots: Standard OEM configuration; Video Ports: Standard onboard video ports. At least three digital display outputs (HDMI and DisplayPort); Audio: Integrated HD Audio; Operating System: Windows 11professional, licensed installed and ready-to-use; Power Supply: OEM standard power supply, minimum 260W 80+ Bronze certified ;Security: TPM 2.0, chassis intrusion detection; Manageability: Intel vPro or equivalent remote management technology; Keyboard: OEM Professional/office grade QWERTY wired keyboard; Mouse: OEM Professional/office grade wired optical mouse; OEM USBwired keyboard and optical mouse must be from same manufacturer as desktop; Warranty: Minimum 3-Year (36 Months) OEM Onsite Warranty. System and peripherals must carry a trackable and verifiable serial number for online authenticity verification on OEM website. Product must be from a Tier-1 OEM / internationally recognized manufacturer and supported by an authorized local service partner. Reference model: Dell Pro Tower QCT1250 or better. Monitor: 24-inch or larger professional IPS LED monitor with Full HD (1920×1080) resolution or better; anti-glare display; minimum 250 cd/m ² brightness; DisplayPort and HDMI connectivity; height-adjustable stand; VESA mount compatible; Energy Star/TCO certified; minimum 3-year OEM warranty. Monitor shall be from the same manufacturer as the supplied desktop system. Reference model: Dell Pro 27 Plus P2725H or better. Supplier is bound to verify and show the online authenticity of thesupplied items on OEM website. All wires, connectors and connections are to be supplied alongwith all standard OEM-supplied cables required for operation. Note: Supplier must install and commission the system with all required wiring electrical power source to the point of use.	12				
07	RN-07	Engineering Equation Solver (EES) - Software	Latest Academic/Nethreerk License of Engineering Equation Solver (EES) for Windows. Technical Specifications: 1. Equation Solving: Capability to solve nonlinear algebraic and differential equations. 2. Property Database: Built-in thermodynamic and transport property database for common fluids/substances.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			3. Unit Handling: Automatic unit checking and unit conversion capability. 4. Optimization: Built-in optimization tools/functions. 5. Uncertainty Analysis: Uncertainty/error propagation analysis capability. 6. Parametric Tables: Parametric table generation for multi-case analysis. 7. Plotting Tools: Integrated plotting/graphing tools for result visualization. 8. License Type: Latest academic (Includes five years of Academic Update Service)					
08	RN-08	COMSOL Multiphysics	Latest COMSOL Multiphysics Academic License, or equivalent software, with required modules for coupled heat transfer, CFD/fluid flow, structural mechanics, and relevant multiphysics simulation applications for teaching and research. Technical Specifications: 1. Core Package: Latest COMSOL Multiphysics core simulation software (or equivalent). 2. Heat Transfer Module: Module for conduction, convection, and radiation heat transfer simulation. 3. CFD/Fluid Flow Module: Module for computational fluid dynamics and fluid flow simulation. 4. Structural Mechanics Module: Module for structural/stress analysis simulation. 5. Multiphysics Coupling: Capability to couple multiple physics domains (e.g., thermal-fluid-structural) in a single simulation. 6. Solver: Integrated solver for linear/nonlinear, steady-state/transient simulations. 7. Meshing: Automated and customizable meshing tools. 8. Post-Processing: Post-processing and visualization tools for results (plots, animations, reports). 9. Parametric Studies: Capability for parametric sweeps and optimization studies. 10. Application Builder: Application Builder module for creating custom simulation apps, where applicable. 11. License Type: Latest academic/nethreerk license (multi-user as per lab requirement). 12. Updates/Maintenance: License shall include installation support and updates/maintenance as per academic procurement terms. 13. Compliance: Software must be genuine/licensed and compliant with applicable software licensing standards. Note: Software with equal or superior features to those mentioned above will be considered compliant. Scope of Supply: · Complete software package with valid license keys/activation as per required number of seats/nethreerk license, including all specified modules. · Installation support on designated computer systems/lab nethreerk. · User manuals, documentation, and installation guide. · Access to updates/upgrades as per license terms. Installation, Training & Documentation: · On-site/remote installation and configuration by the supplier.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			· Demonstration and hands-on training for laboratory staff/faculty. Complete user/operation manuals (hard and soft copy).					
09	RN-09	Viscometer	Digital Rotational Viscometer suitable for routine viscosity testing of fuels, oils, and fluids in laboratory/research applications. Technical Specifications: 1. Measurement Range: At least 1–100,000 cP or wider. 2. Accuracy: $\pm 1\%$ or better. 3. Repeatability: $\pm 0.2\%$ or better. 4. Temperature Control: Up to 100°C or better. 5. Spindle/Geometry: Selectable spindle/geometry set for different viscosity ranges and sample types. 6. Display: Digital display for real-time reading of viscosity, temperature, speed, and torque. 7. Connectivity: Data logging/software connectivity for recording and export of test data. 8. Calibration Oils: Standard calibration/reference oils included. 9. Storage: Carrying/storage case included. 10. Accessories: All standard accessories for routine viscosity testing included. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy).	01				
10	RN-10	High Speed Camera	High-speed digital camera system suitable for flow visualization, dynamic motion analysis, and high-speed imaging applications in engineering research and teaching. Technical Specifications: 1. Frame Rate: Capable of capturing up to 12,000 fps or better (at reduced resolution), with full HD (1920×1080) capture at full sensor resolution. 2. Resolution: Full HD (1920×1080) or better at base frame rate. 3. Sensor Type: High-sensitivity CMOS sensor suitable for high-speed, low-light imaging applications. 4. Recording Time/Memory: Sufficient onboard memory/buffer for continuous high-speed recording; expandable storage support. 5. Shutter: Global shutter with adjustable exposure time for motion-blur-free capture.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			6. Trigger/Synchronization: External trigger input/output for synchronization with other instruments (e.g., lasers, DAQ systems, PIV setups). 7. Lens Mount: Standard interchangeable lens mount (C-mount/F-mount/Nikon/as applicable) with compatible lens included. 8. Connectivity: USB 3.0/Gigabit Ethernet or equivalent high-speed data interface for image transfer. 9. Software: Dedicated image/video acquisition and analysis software for playback, frame extraction, motion tracking, and data export. 10. Workstation Compatibility: Compatible with high-performance computer/workstation for data processing and storage (as required by software). 11. Accessories: Tripod/mounting stand, cables, and carrying/storage case included. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: · On-site delivery, installation, and commissioning by the supplier. · Demonstration and hands-on training for laboratory staff/faculty. Complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum three years warranty from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.					
11	RN-11	Particle Image Velocimetry	High-Speed 2D Particle Image Velocimetry (PIV) System suitable for flow visualization and velocity field measurement in fluid mechanics teaching and research applications. Technical Specifications: 1. High-Speed Camera: Capable of at least 16,000 fps at suitable resolution or better. 2. Laser/Light Source: Dual-pulse laser/light-sheet source suitable for 2D velocity field measurement. 3. Synchronizer/Timing Unit: Synchronizer/timing unit for camera-laser synchronization. 4. Seeding System: Seeding particles/seeding particle generator as applicable to flow medium. 5. Optics: Suitable optics/lenses for image acquisition and light-sheet formation. 6. Calibration Target: Calibration target(s) for spatial calibration of the measurement system. 7. Acquisition Software: Image acquisition software compatible with camera and laser system. 8. Processing Software: PIV processing software for velocity field computation and analysis. 9. Workstation: High-performance computer workstation compatible with acquisition/processing software requirements. 10. Safety Equipment: Laser safety enclosure, laser	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			safety goggles, and interlocks as per laser class requirements. 11. Acceptance Testing: Installation and on-site acceptance testing to demonstrate system performance. 12. Compliance: Must comply with applicable international laser safety and electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.					
12	RN-12	Flue Gas Analyzer	Portable/Industrial Flue Gas Analyzer suitable for combustion analysis and emissions monitoring in laboratory/field research applications. Technical Specifications: 1. Gas Measurement Parameters: Capable of measuring O₂, CO, CO₂, NO, NO₂, and SO₂. 2. Flue Temperature Range: Up to 600°C or better. 3. Sensor Type: Electrochemical/NDIR sensors as applicable to measured parameters. 4. Accuracy: ±0.2% or better for O₂/CO₂ where applicable. 5. Sampling System: Internal pump, condensate trap, and sampling probe/hose included. 6. Data Logging: Built-in data logging capability. 7. Connectivity: Bluetooth/USB connectivity for data transfer. 8. Power Supply: Rechargeable battery for portable operation. 9. Calibration: Calibration certificates included. 10. Storage: Carrying case included. 11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable).	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			· All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. - Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). - Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.					
13	RN-13	Ultrasonic Leak Detector	Handheld Ultrasonic Leak Detector suitable for detection of compressed air/gas/vacuum leaks in laboratory, industrial, and field survey applications. Technical Specifications: 1. Frequency Range: Approximately 20–100 kHz or better. 2. Sensitivity: Suitable for detection of small compressed air/gas/vacuum leaks. 3. Audio Output: Heterodyne audio output for leak identification. 4. Display: Digital display for signal strength/intensity indication. 5. Headphones: Headphones included for audio-based leak detection. 6. Probes: Parabolic/long-range probe and contact probe included, as applicable. 7. Software: Data logging/reporting software for survey documentation. 8. Power Supply: Rechargeable battery for portable operation. 9. Storage: Carrying case included. 10. Training: Training for leak detection survey methodology included. 11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. - Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Un it Price	Freigh t Cost	Tota l Cost [C&F]
			manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder					
14	RN-14	2 axis solar tracker	Two-axis solar tracker training/research unit compatible with various PV panels for fixed vs. tracking PV performance comparison studies. Technical Specifications: 1. Tracking Type: two-axis tracking. 2. Operating Modes: Programmable, manual, and automatic modes. 3. Sensing/Tracking Method: Irradiance/light sensors or astronomical tracking algorithm. 4. Actuators: Motorized actuators with limit switches. 5. Controller: Dedicated tracker controller. 6. Mounting Frame: PV mounting frame compatible with various panel sizes. 7. Wind Protection: Wind-safe stow function where applicable. 8. Sensors: Voltage, current, and position sensors included. 9. Data Acquisition: DAQ/software for data logging and performance comparison. 10. Documentation: Experiment manual for fixed vs. tracking PV performance comparison. 11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. cope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.	01				
Total Amount: -								

4. HYDROGEN AND FUEL CELL LABORATORY

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
02	HF-02	Fuel Cell Automotive Trainer	Fuel Cell Automotive Trainer comprising PEM fuel cell stack integrated with electric drive/dynamometer training platform for hydrogen fuel cell vehicle technology education and research. Technical Specifications: 1. Fuel Cell Stack: PEM fuel cell stack, power range 1–5 kW or suitable educational scale. 2. DC Bus Voltage: Approximately 48–400 V as applicable to system design. 3. Gas/Cooling Management: Hydrogen supply management, air management, and cooling management systems. 4. Motor Controller: Electric motor controller compatible with drive system. 5. Load/Dyno Module: Load bank/dynamometer module for drive performance testing. 6. Control System: CAN-based control system or equivalent for system monitoring and control. 7. Sensors: Sensors for voltage, current, temperature, flow, and pressure measurement. 8. Safety Features: Safety shutoff system, ventilation system, and safety interlocks for hydrogen handling. 9. Data Acquisition: Data acquisition system with software for real-time monitoring and logging. 10. Documentation: Experiment/lab manuals included. 11. Training: Hydrogen safety training included. 12. Compliance: Must comply with applicable international hydrogen safety and electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty of three years from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder.	01				
04	HF-04	Solar Hydrogen Extension	Solar Hydrogen Extension Kit for PV-to-Hydrogen experiments, comprising PEM electrolyzer, PEM fuel cell, storage systems, and associated instrumentation for solar hydrogen production and utilization studies, compatible with the proposed PV trainer system. Technical Specifications: 1. Electrolyzer: PEM electrolyzer suitable for hydrogen production from deionized water using	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			electrical input. 2. Fuel Cell: PEM fuel cell for hydrogen-to-electricity conversion demonstration. 3. Storage: Hydrogen and oxygen storage units with appropriate capacity for experiments. 4. Water Reservoir: Deionized water reservoir/supply system for electrolyzer operation. 5. PV Interface: Solar panel or PV simulator interface for renewable power input. 6. Power Supply/Loads: DC power supply and load bank for electrolyzer/fuel cell testing. 7. Sensors: Sensors for voltage, current, flow, and pressure measurement. 8. Safety Features: Safety relief valves and venting devices for hydrogen/oxygen handling. 9. Data Acquisition: DAQ system with software for efficiency calculation and performance analysis. 10. Documentation: Manuals and experiment modules included. 11. System Compatibility: Must be fully compatible/integrable with the proposed PV Training System (Item 3). 12. Compliance: Must comply with applicable international hydrogen safety and electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
05	HF-05	Fuel Cell Testing Station	PEM Fuel Cell Test Station for single cell/stack testing and characterization, suitable for fuel cell research and performance evaluation applications. Technical Specifications: - Power Testing Range: 0.5–5 kW or better. - Gas Flow Control: Hydrogen and air/oxygen mass-flow controllers. - Humidification: Humidifiers for reactant gas conditioning. - Pressure Control: Back-pressure regulators for system pressure management. - Thermal Management: Stack temperature control system. - Electronic Load: Programmable electronic load for performance testing under varying conditions.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			7. Monitoring Parameters: Voltage, current, temperature, pressure, and flow monitoring. 8. Safety Features: Safety interlocks, gas leak detection system, and ventilation interface. 9. Software Control: Software-controlled test protocols for automated testing sequences. 10. Data Logging: Polarization curve and efficiency data logging capability. 11. Calibration: Calibration certificates included. 12. Compliance: Must comply with applicable international hydrogen safety and electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder.					
07	HF-07	Hydrogen Cylinder and Others	Supply of high-pressure ten (10) gas cylinders, complete with regulators, safety fittings, and handling accessories for each cylinder type. Technical Specifications: - Gas Types Required: Hydrogen (high-purity) and calibration gas mixtures (e.g., CO, NO, SO₂ balance N₂) as required for the Flue Gas Analyzer and CHNS Elemental Analyzer. - Gas Purity: High-purity/analytical/instrument-grade purity as required per respective instrument specification (e.g., 99.999% for carrier/calibration gases, as applicable). - Cylinder Capacity/Pressure: Standard cylinder sizes and working pressure as per local safety code and respective equipment requirement (e.g., 47 L / 7 m³ or as required). - Regulators: Dual-stage pressure regulators with inlet/outlet pressure gauges, gas-specific and compatible with cylinder valve type (e.g., CGA/DIN/BS fittings as applicable per gas). - Flashback Arrestors: Certified flashback arrestors included for combustible/flammable gases (hydrogen, and other applicable gases). - Hoses/Fittings: Certified, gas-compatible hoses and fittings for each cylinder type, color-coded per applicable gas safety standard. - Leak Detection: Leak detection solution and/or portable leak sensor included for verification of all	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			connections. 8. Cylinder Handling: Cylinder trolley(s) and safety chains/restraints for secure handling and storage of all cylinders. 9. Safety Signage: Gas-specific hazard/safety signage for each cylinder type (flammable, oxidizer, inert, etc.). 10. Storage: Compatible cylinder stand/rack or storage cage suitable for segregated storage of flammable, oxidizing, and inert gases as per safety code. 11. Documentation: MSDS and cylinder test/inspection certificates for each gas type. 12. Training: Safe handling and storage training covering all supplied gas types, with special emphasis on hydrogen and oxidizing gases. 13. Compliance: Must comply with applicable local/international gas cylinder safety codes and segregation requirements (flammable/oxidizer/inert gas storage separation). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: · On-site delivery, installation, and commissioning by the supplier. · Demonstration and hands-on training for laboratory staff/faculty. Complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum warranty from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty. Certifications/Standards: · Manufacturer's ISO 9001 (or equivalent) certification. · CE/UL or equivalent product safety certification. · Original manufacturer's authorization letter/dealership certificate (if bidder is not OEM).					
Total Amount: -								

5. PV LABORATORY

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
01	PV-1	Climatic Chamber	Programmable Climatic/Humidity Chamber suitable for material testing, PV module testing, electronics reliability testing, and environmental ageing/accelerated life testing. Technical Specifications: 1. Temperature Range: Minimum ambient to 60°C; wider range (0°C to 90°C or better) preferred.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			2. Relative Humidity Range: Up to 90% RH or better. 3. Controller: Digital PID/touch-screen microprocessor-based controller with programmable temperature and humidity profiles (multi-step/ramp programs). 4. Air Circulation: Forced-air circulation system ensuring uniform temperature/humidity distribution throughout chamber. 5. Safety Features: Independent over-temperature protection device, door/interlock safety switch, over-current/earth leakage protection. 6. Data Logging/Connectivity: USB and/or Ethernet interface for data logging, remote monitoring, and profile programming. 7. Chamber Interior: Corrosion-resistant stainless steel interior; adjustable/removable shelving. 8. Software: Dedicated software for programming test profiles and recording/exporting test history/data. 9. Electrical Supply: 220–240V, 50Hz, single/three phase as per chamber capacity. 10. Chamber Capacity/Volume: As per laboratory requirement. 11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: • Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. • Compatible computer, software, DAQ system, and requisite software licenses (if applicable). • All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: • On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) • Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: • Minimum warranty of three years from date of successful commissioning as per tender terms. • Local technical support and after-sales service to be confirmed by bidder.					
02	PV-2	Salt Spray Test Chamber	Salt Spray Corrosion Test Chamber suitable for neutral salt spray (NSS) testing of materials, coatings, and components as per ASTM B117 / ISO 9227 or equivalent standard. Technical Specifications: 1. Test Standard Compliance: Suitable for neutral salt spray testing in accordance with ASTM B117 / ISO 9227 or equivalent. 2. Chamber Temperature: Controllable up to at least 60°C. 3. Salt Solution: 5% NaCl fog generation (concentration adjustable/controllable). 4. Test Cycle Timer: Programmable test cycle timer for continuous/intermittent spray operation. 5. Chamber Construction: Corrosion-resistant construction (e.g., FRP/PVC or equivalent non-corrosive	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			material). 6. Fog/Solution Control: Automatic fog generation and salt solution level control system. 7. Sample Racks: Adjustable sample racks/holders for test specimen placement at required angle. 8. Condensate Collection: Integrated condensate/spray collection system. 9. Safety Features: Safety interlocks, over-temperature protection, and other standard safety devices. 10. Controller/Display: Digital display/controller for monitoring and setting temperature, humidity, and cycle parameters. 11. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: - Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. - Compatible computer, software, DAQ system, and requisite software licenses (if applicable). - All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: - On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) - Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: - Minimum warranty of three years from date of successful commissioning as per tender terms. - Local technical support and after-sales service to be confirmed by bidder. - Availability of spare parts and consumables post-warranty.					
04	PV-04	Solar Photovoltaic Training Devices	Solar Photovoltaic Training System for education and research, comprising PV module(s), solar simulator, power conditioning units, storage, sensors, and data acquisition system with software for comprehensive PV performance study and demonstration. Technical Specifications: 1.PV Module(s): At least one PV module shall be provided in each of the following power ranges: 150–250 Wp, 300–450 Wp, 500–700 Wp, and 700Wp and above. 2. Solar Simulator: Adjustable solar simulator, 1000 W/m² or better irradiance output.3. Load Banks: DC and AC load banks for module/system loading and performance testing. 4. DC–AC Inverter enabled with charge controller: Suitable inverter for grid-tied/off-grid demonstration. 5. Battery/Storage Module: Battery storage system compatible with PV system for off-grid study. 6 Sensors: Sensors for voltage, current, temperature, and irradiance measurement. 7. Data Acquisition System: Real-time DAQ system with software for I–V and P–V curve tracing. 8. MPPT Demonstration: Capability to demonstrate maximum power point tracking (MPPT). 9.Study Modules: Grid-connected and off-grid study/demonstration modules. 10.Protection Devices: Overcurrent, overvoltage, reverse polarity, and other standard electrical protection devices.	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			11.Documentation: Training manuals and experiment/lab guide included. 12.Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching, and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: •On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) •Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum three years warranty from date of successful commissioning as per tender terms.· Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
05	PV-05	Weather Station for Solar system	Automatic Weather Station suitable for solar resource assessment and meteorological data monitoring, comprising irradiance, temperature, humidity, wind, and precipitation sensors with data logging and remote communication capability. Technical Specifications: 1. Solar Irradiance Sensor: Pyranometer/solar irradiance sensor, range 0–2000 W/m² or better. 2. Ambient Temperature Sensor: Range –5°C to 85°C or wider. 3. Relative Humidity Sensor: Range 0–100% RH. 4. Wind Speed Sensor: Anemometer, up to 60 m/s or better, with wind direction sensor. 5. Rain Gauge/Barometer: Rain gauge and/or barometric pressure sensor, where applicable. 6. Data Logger: Data logger with expandable input channels for additional sensors. 7. Power Supply: Solar/battery powered system suitable for field/outdoor operation. 8. Enclosure: Weatherproof field enclosure suitable for outdoor environmental conditions. 9. Mounting: Mounting mast/tripod with all necessary accessories. 10. Communication: Data communication through USB/Ethernet/Wi-Fi/4G as required. 11. Software/Data Export: Software and/or cloud-based platform for data logging, visualization, and export. 12. Calibration: Calibration certificates for all sensors. 13. Compliance: Must comply with applicable international laboratory/electrical safety standards (IEC/CE or equivalent). Sensor sensitivity/resolution shall be: solar irradiance ≤0.1 W/m² or calibrated pyranometer sensitivity 7–14 μV/(W/m²), ambient temperature ≤0.1°C, relative humidity ≤0.1% RH, wind speed ≤0.01 m/s, wind direction ≤1°, rainfall ≤0.1 mm per tip, and barometric pressure ≤0.01 hPa. Note: Equipment with equal or superior specifications to those mentioned above will be considered compliant. Scope of Supply: · Complete apparatus/system with all standard accessories necessary for commissioning, teaching,	01				

Sr. No.	BoQ. Item No.	Items	Description / Specification the of Items	Qty.	Price In			
					FC Unit	Unit Price	Freight Cost	Total Cost [C&F]
			and research use. · Compatible computer, software, DAQ system, and requisite software licenses (if applicable). · All necessary cables, connectors, probes, sensors, and safety devices. Consumables/start-up kit as applicable. Installation and operation manuals, maintenance documentation. Calibration/verification certificate(s), where applicable. Installation, Training & Documentation: · On-site delivery, installation, and commissioning by the supplier (including electric wiring from DB, connectors, breakers, computer system and other necessary accessories) · Demonstration and hands-on training for laboratory staff/faculty must be provided by the supplier with complete operation & maintenance manuals (hard and soft copy). Warranty & After-Sales Support: · Minimum three years warranty from date of successful commissioning as per tender terms. · Local technical support and after-sales service to be confirmed by bidder. · Availability of spare parts and consumables post-warranty.					
06	PV-06	Data Acquisition Module	Multi-Channel Data Acquisition (DAQ) Module for laboratory measurement and control, suitable for logging and monitoring of multiple analog/digital signals with compatible software for data recording and export. Technical Specifications: Analog Input Channels: Minimum 20 analog input channels, expandable to at least 60 channels, through universal or modular input units. Input Types: Support for thermocouples, RTDs, DC voltage, DC current, resistance, strain/load cells, frequency, pulse, and digital signals, directly or through compatible modules. Temperature Measurement: Support for at least K, J, and T-type thermocouples with cold-junction compensation and Pt100 RTD sensors. Voltage and Current Ranges: Voltage ranges covering at least ± 100 mV, ± 1 V, ± 10 V, and up to 100 V DC; current measurement including 4–20 mA through direct input, current module, sensor, or precision shunt. Resolution: Minimum 16-bit analog-to-digital resolution or better. Sampling Rate: Minimum 10 samples/second/channel with 20 active channels for general logging. High-speed channels/modules, where supplied, shall provide at least 1 kS/s/channel for dynamic measurements. Measurement Accuracy: DC voltage accuracy of $\pm 0.1\%$ of reading or better, thermocouple accuracy of approximately $\pm 1^\circ\text{C}$ or better, and Pt100 RTD accuracy of $\pm 0.5^\circ\text{C}$ or better. Digital I/O: Minimum 4 digital/logic inputs and 4 alarm or control outputs, built-in or through an expansion module. Isolation: Input isolation suitable for laboratory measurements, preferably 300 V DC channel-to-ground or equivalent, with additional isolation modules where required. Connectivity: USB and Ethernet/LAN connectivity. Wi-Fi or wireless communication may be provided as an additional feature. Data Storage: Standalone data recording with capacity for at least one million readings or 4 GB internal/removable storage. Software/API: Licensed software for channel configuration, real-time numerical and graphical display, data logging, alarms, analysis, and export to CSV/Excel-compatible formats. API, SDK, or drivers	04				

Contract Form

THIS AGREEMENT made the _____ day of _____ 2026_____ between NED University of Engineering & Technology, Karachi. (Hereinafter called "the Procuring agency") of the one part and [name of Bidder] of [city and country of Bidder] (hereinafter called "the Bidder") of the other part:

WHEREAS the Procuring agency invited bids for certain goods and ancillary services, viz., Import of Energy Studies Laboratory Equipment on C&F basis for Mechanical Engineering Department, NEDUET, Karachi. has accepted a bid by the Bidder for the supply of those goods and services in the sum of [contract price in words and figures] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) The Bid Form and the Price Schedule submitted by the Bidder;
 - (b) The Procuring agency's Notification of Award.
 - (c) The General Conditions of Contract
 - (d) The Special Conditions of Contract
 - (e) The Schedule of Requirements and
 - (f) The Technical Specifications.
3. In consideration of the payments to be made by the Procuring agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring agency hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written

Signature of the Supplier
(Seal)

Signature of the Employee(for Procuring Agency)
(Seal)

Signed, Sealed and delivered in the presence of:

Witness:

Witness:

(Name, Title and Address)

(Name, Title and Address)

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS/CONTRACTORS/CONSULTANTS.

Contract Number: _____

Dated: _____

Contract Value: _____

Contract Title: _____

[Name of Supplier/Contractor/Consultant] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoS) through any corrupt business practice.

Without limiting the generality of the foregoing, _____
[Name of Supplier/Contractor/Consultant] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from Procuring Agency (PA), except that which has been expressly declared pursuant hereto.

[Name of Supplier/Contractor/Consultant] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[Name of Supplier/Contractor/Consultant] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.

Notwithstanding any rights and remedies exercised by PA in this regard, _____
[Name of Supplier/Contractor/Consultant] agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by _____
[Name of Supplier/Contractor/Consultant] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit, in whatsoever form, from PA.

[Procuring Agency]

[Supplier /Contractor/Consultant]



NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY

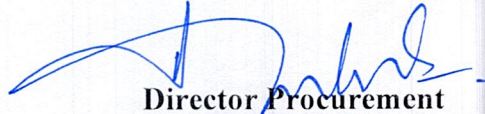
DP/ NED/196005/8583/ 1202Date: 11/09/ 2026

NOTIFICATION

With reference to this University Office Order No. DR(Estab)/(1193)Vol-II/6331, the Procurement Committee under Rule 7 of the Sindh Public Procurement Rules (as amended) comprising of the following Members has been constituted for Import of Laboratory Equipment on C&F basis for Department of Mechanical Engineering, vide case file # PC(M-6)/NED/Equip/Energy Studies/ 8583/ 2026, as follows:

- | | |
|--|------------------|
| 1. Prof. Dr. Mubashir Ali Siddiqui
Chairman,
Dept. of Mechanical Engg.
NEDUET, Karachi | Convener |
| 2. Mr. Muhammad Mabroor Khan
Administrative Officer
Center for Excellence in Marine Biology
University of Karachi | Member |
| 3. Mr. Fawad Ul Hasan Kamran
Deputy Director Procurement
NEDUET, Karachi | Member/Secretary |

The TOR / functions / responsibilities of the aforesaid Procurement Committee will be in accordance with Rule-8 of SPP Rules. The tender will be opened on 30-09-2026 at 10:30 AM in the office of Deputy Director Procurement.


Director Procurement
11/09/2026

Email:

- i. cmed@neduet.edu.pk
- ii. mabroork@hotmail.com
- iii. ddp@neduet.edu.pk

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

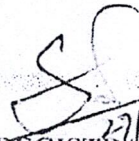
No. DR (Estab)/(1003)/5730

Dated: 27/05/2016

OFFICE ORDER

In supersession of this office order No. DR (Estab)/(1003)/11418 dated 02-11-2015, the University Administration has constituted the Complaint Redressal Standing Committee comprising of the following officers to address complaints regarding all procurement issues in the University in pursuance of Clause 31(1) of the SPPRA rules:

- | | | |
|----|---|----------|
| 1. | Prof. Dr. Saad Ahmed Qazi
Dean (ECE) | Convener |
| 2. | Independent Professional from the relevant field | Member |
| 3. | Nominee of Accountant General Sindh | Member |


Ag-REGISTRAR 27/5/2016

To:

The Convener & all members

Copy for information to:

1. Dean (ECE)
2. Director Planning & Projects
3. Director Finance
4. Director, Procurement Cell
5. Ag. Resident Auditor

Epaper Date: 2026-09-11



FOUNDED BY QUAID-I-AZAM MOHAMMAD ALI JINNAH



		NED UNIVERSITY OF ENGINEERING & TECHNOLOGY			
Director Procurement		PROCUREMENT CELL University Road, Karachi-75270			
Tel: 99261261-68, (Ext. 2471-2220) Fax # 99261255, Email: dp@neduet.edu.pk Web:to: http://www.neduet.edu.pk					
No. PC/ NED/M-6-196005/8583/282			Dated: 10.09.2026		
SAY NO TO CORRUPTION					
NOTICE INVITING TENDER [EPADS]					
NEDUET invites Sealed Bids on (C&F) basis, following a "Single Stage One Envelope" procedure, from manufacturers, authorized dealers, and distributors, and suppliers for the procurement as follows:					
Import of Laboratory Equipment on C&F basis for Mechanical Engineering.					
PC(M-6)/NED/ Equip/Energy Studies/8583/ 2026					
Issuance of Documents from	Last Date of Issuance of Tender Documents	Tenders Submission Deadline	Tenders Opening Date / Time		
15.09.2026	29.09.2026	30.09.2026 10:00 AM	30.09.2026 10:30 AM		
ELIGIBILITY CRITERIA:					
i. Bidder must have at least 3 years continuous, verifiable of experience in the relevant field.					
ii. Bidder must provide copies of the online annual income tax returns submitted to the FBR for the last three consecutive fiscal years, proving a mandatory minimum average annual turnover of Rs 100 million over this period; failure to submit these FBR returns will result in rejection of the bid.					
iii. Bidder must possess valid and active registrations with the GST and must maintain an "Active" taxpayer status.					
iv. Bidder must have successfully executed or currently have ongoing at least two independent purchase orders for the import of Laboratory equipment within the last three years, where each individual order carries a minimum value of Rs 50 million or above, and both must be accompanied by corresponding satisfactory completion certificates or official performance verifications from their respective clients.					
v. Bidder must submit an original affidavit on non-judicial stamp paper of at-least Rs 100/-, affirming that they have no litigation history, have never been blacklisted by any public or private organization, and have never indulged in corrupt, fraudulent, or collusive practices. The affidavit must also undertake that all provided information and documents are authentic, and its date of issuance must be subsequent to the publication date of this NIT.					
All bidders are required to furnish a fixed amount of Rs 5.00 million of Bid Security in the mode of payment specified in Rule 37(2) of SPPRA in favor of Director Finance, NEDUET. Bidding documents can be obtained and shall be submitted through EPADs as per above schedule. Bidders are requested to give their Best and Final Price as "No Negotiations" is permitted. Bidding Documents containing detailed terms and conditions are also available at Websites https://www.neduet.edu.pk and https://www.portalsindh.eprocure.gov.pk					
Director Procurement					

NED UNIVERSITY
OF ENGINEERING & TECHNOLOGY
Director
Procurement
PROCUREMENT CELL
University Road, Karachi-75270

Tel: 99261261-68, (Ext. 2471-2220) Fax # 99261255,
Email: dp@neduet.edu.pk Website: http://www.neduet.edu.pk
No. PC/ NED/M-6-196005/8583/282 Dated: 10.09.2026

SAY NO TO CORRUPTION

ٽينڊر گھرائڻ لاءِ نوٽيس (EPADS)

(NEDUET) مينوفڪچررز، مڃاڙ ڊيلرز، ڊسٽري بيوزرز ۽ سپلائرز کان C&F جي بنياد تي سنڌي اسٽيج هڪ لڦائي جي طريقيڪار جي تحت هيٺ ڏنل خريداري لاءِ مهربند آڇون طلب ڪري ٿو:

Import of Laboratory Equipment on C&F basis for Mechanical Engineering.			
PC(M-6)/NED/ Equip/Energy Studies/8583/ 2026			
Issuance of Documents from	Last Date of Issuance of Tender Documents	Tenders Submission Deadline	Tenders Opening Date / Time
15.09.2026	29.09.2026	30.09.2026 10:00 AM	30.09.2026 10:30 AM

اهليت جا معيار

- آڇ ڏيندڙ کي لاڳاپيل شعبي ۾ گهٽ ۾ گهٽ 3 سالن جو مسلسل ۽ تصديق جي قابل تجربو هجڻ گهرجي.
- آڇ ڏيندڙن کي گذريل ٽن مسلسل مالي سالن جي دوران ايف بي آر وٽ جمع ڪرايل ان لائن سالياني انڪر ٽيڪس ريترن جون ڪاپيون فراهم ڪرڻ گهرجن. جيڪي ان عرصي دوران گهٽ ۾ گهٽ 100 ملين روپين جي لازمي سراسري سالياني ترن اوور ثابت ڪنديون هجن. انهن ايف بي آر ريترن جون ڪاپيون جمع نه ڪرائڻ جي نتيجي ۾ آڇ رد ڪئي ويندي.
- آڇ ڏيندڙ وٽ هڪ صحيح ۽ فعال GST رجسٽريشن هجڻ گهرجي ۽ ان جي فعال ٽيڪس ادا ڪندڙ حيثيت برقرار رکڻ گهرجي.
- آڇ ڏيندڙ کي گذريل ٽن سالن دوران ليبارٽري سامان جي درآمد لاءِ گهٽ ۾ گهٽ ٻه الڳ پريجز آرڊرز ڪاميابي سان مڪمل ڪرڻ گهرجن يا هن وقت جاري هجن هر هڪ جي گهٽ ۾ گهٽ قيمت 50 ملين روپيا يا ان کان وڌيڪ هجي. ۽ ٻنهي سان گڏ اطمینان بخش تڪميل سرٽيفڪيٽ يا لاڳاپيل ڪلائنٽس پاران جاري ڪيل سرڪاري ڪارڪردگي جي تصديق شامل هجڻ گهرجي.
- آڇ ڏيندڙ کي گهٽ ۾ گهٽ 100 روپين (نان جوڊيشل اسٽيمپ پيپر) تي هڪ اصل حلف نامو جمع ڪرائڻو پوندو جنهن ۾ اهو بيان ڪيو ويندو ته هن کي ڪنهن به قانوني ڪارروائي جو ڪوبه تاريخ ناهي. ڪنهن به سرڪاري يا نجی تنظيم پاران ڪڏهن به بليڪ لسٽ نه ڪيو ويو آهي. ڪڏهن به ڪرپشن، فراڊ ۽ سازش جي ڪنهن به عمل ۾ ملوث نه رهيو آهي ۽ اهو پڻ بيان ڪيو ويندو ته مهيا ڪيل سڀ معلومات ۽ دستاويز مستند ۽ صحيح آهن. ڄاڻايل اسٽيمپ پيپر جاري ڪرڻ تاريخ هن NIT جي اشاعت جي تاريخ کان پوءِ جي هجڻ گهرجي.
- سڀني آڇ ڏيندڙن کي SPPRA جي قاعدي (2) 37 ۾ بيان ڪيل ادائينگي جي طريقي مطابق ڊائريڪٽرفنانس، NEDUET جي حق ۾ 5.00 ملين روپين جي مقرر رقم پڊ سيڪيورٽي طور جمع ڪرائڻ جي ضرورت آهي. واک دستاويز مٿي ڏنل شيڊول مطابق EPADS جي ذريعي وصول ڪيا ويندا ۽ جمع ڪرايا ويندا. آڇ ڏيندڙن کي درخواست ڪئي وئي آهي ته اهي پنهنجي بهترين ۽ آخري قيمت جمع ڪرائڻ چاڪاڻ نه ڪنهن به ڳالهه پورلھ جي اجازت نه آهي. سڀني تفصيلي شرط ۽ ضابطن تي مشتمل واک دستاويز ويب سائيٽس

<https://www.neduet.edu.pk>

۽ <https://www.portalsindh.eprocure.gov.pk> تي موجود آهي.

ڊائريڪٽر پرايوڪيورمينٽ