



J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA.

Mathura Road, Sector-6, Faridabad (HARYANA)

(Established by the State Legislature Act No 21 of 2009)

Ph -0129-2310132, 2310131 (Purchase & Store)

www.jcboseust.ac.in, dr.purchase@jcboseust.ac.in

TENDER NOTICE

Ref.: JCBUST/P.S/2023-24/05

Dated:11.08.2023

TENDER INVITED FOR PURCHASE OF EQUIPMENT FOR B.Sc. PHYSICS LAB (THERMAL PHYSICS LABORATORY) OF THE UNIVERSITY

Tenders are hereby invited from the manufacturers/suppliers/distributors for purchase of **Equipment for B.Sc. Physics Lab (Thermal Physics Laboratory)** of the University as per the specifications provided. Tender documents can be obtained from the Haryana Portal website <https://etenders.hry.nic.in>

1. Schedule:-

1.	Tender Reference	JCBUST/P.S/2023-24/05
2.	Tender Detail	Equipment for B.Sc. Physics Lab (Thermal Physics Laboratory)
3.	Tender Document fee	-
4.	E Service Fee (Rs.)	1000.00+GST
5.	Bid Security (EMD in Rs)	2% of tender amount if value exceed Rs. 40000/-
6.	Approximate Cost in Rs.	4.20 lacs
7.	Last date and time for submitting Bid Submission documents	04.09.2023 up to 02:00 PM
8.	Date and time of opening of Technical Bids	05.09.2023 at 11:00 AM
9.	Pre-Bid meeting	18.08.2023 at 11.00 AM
10.	Bid system	Technical Bid & Financial Bid through e-Portal
11.	Technical Bid Documents	To be evaluated as per pre-qualification criteria
12.	Performance Security (To be deposited by selected bidder)	5% of contract value in shape of DD/Bank guarantee/FD
13.	Warranty	01 years
14.	No. of Covers (1/2)	02 (RFQ &BOQ)
15.	Bid Validity days	4 months
16.	Financial Bid	BOQ
17.	Technical Evaluation	Item wise
18.	Financial bids opening schedule	After the opening/ evaluation of Technical bids, to be announced later
19.	GST	Mention basic rates and GST separately in BOQ
20.	Delivery period	45 days
21.	Allotment tender	Lot wise

2. Detail of Items: -

Sr. No	Description of Items	Qty	Amount
01	<p>Set up for Mechanical equivalent of Heat (J) by Callender and Barne's constant flow method</p> <p>Components: Mains apparatus, Constant level tank, Rubber tubing, Thermometer 2cs Battery Eliminator, Rheostat, Plug key One way, Beaker, Digital stop watch and connecting leads</p>	02	
02	<p>Set up for the coefficient of Thermal conductivity of Cu by Searle's Method</p> <p>Components: Copper Rod 1inch dia enclosed in wooden box, Constant level tank, Rubber tubing, Thermometer 4pcs , Digital stop watch, Hot plate, Steam boiler Beaker</p>	02	
03	<p>Set up for the coefficient of Thermal conductivity of Cu by Angstrom method</p> <p>Components: Angstrom's AC Power Supply of 50Volts/10 Amperes that has inbuilt Function generator circuit which provides the square wave signal to the power supply with a time period of 50 milliseconds and time period of square wave is indicated by two LEDs(Red LED for ON time and Green LED for OFF time . AC Voltmeter (0-50V) and an Ammeter (0-10A) is provided on the front panel of the Power Supply. A Copper rod of 50cm in length and 2.5cm in diameter fitted inside a wooden box to protect from energy loss. Heater that is fitted on one end of the copper rod has: (i) Heater Coil resistance = 10 Ω(Approx.) (ii) Maximum Load Current =4.2 Amperes (iii) Maximum Load Voltage =40 Volts (iv) Heating Filament =160 Watts Thermometers 360 °C (Set of Four) Connecting leads</p>	02	
04	<p>Set up for the coefficient of thermal conductivity of bad conductors by Lee's and charlton's disc method</p> <p>Components: Main Apparatus, Rubber tubing, Thermometer 2pcs , 3 discs, Hot plate, Steam boiler 2pcs, Screw gauge, Vernier caliper</p>	02	
05	<p>Set up for the temperature coefficient of Resistance by Platinum Resistance Thermometer (PRT)</p> <p>Components: Carey Foster bridge, resistance boxes, a thick copper strip, a rheostat, a cell/battery, galvanometer, platinum resistance thermometer, thermometer, one way key, connecting wires, and jockey.</p>	02	

06	<p>Set up for the variation of thermo EMF of a thermocouple with difference of temperature of its two junctions</p> <p>Components: A copper constantan thermocouple, clamp stand, heating arrangement, copper and glass beaker, thermometer (range 20°C-100°C), potentiometer 10 wires, galvanometer, Resistance Box, one way key, jokey, Battery Eliminator, connecting wire</p>	02	
07	<p>Setup to calibrate a Thermocouple to measure temperature in a specified range using Null method Direct measurement using OP Amp difference amplifier and to determine neutral temperature</p>	02	
08	<p>Set up for Stefan's constant using Black body radiation</p> <p>Components: Hot plate, Hemi-sphere chamber arrangement with silver disk, Stop watch, Galvanometer, Resistance box 1- 500 ohm, Two Steamer, Four thermometers (110 °C -2 nos. , 360 °C -2 nos.), Thermocouple tube, Rubber pipe, Wire, Thermocouple, Instructional lab manual</p>	02	
09	<p>Set up for measurement of Plank's constant using Black body radiation</p> <p>Components: Power supply (15V /3A) for light source, Digital Voltmeter/ multimeter (3-1/2 digits) Optical Bench (1.5 meter scale length) Light Source Tungsten Bulb (12V/36Watt) with holder Convex lens (Focal length 10cm, Diameter 50 mm) with holder Grating 15000 LPI with holder Objective lens (dia 28.4mm, Focal length 178mm) Photocell as a light sensor with angular arrangement Instructional lab manual</p>	02	

A DETAILED COMPLIANCE STATEMENT WITH RESPECT TO ABOVE MENTIONED SPECIFICATION SHOULD BE ENCLOSED ALONG WITH THE OFFER.

3. TERMS & CONDITIONS

- 3.1 Due date:** The tender has to be submitted online on or before the due date. The offers received after the due date and time will not be considered.
- 3.2 Preparation of Bids:** The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. Financial Bids to be submitted in BOQ format and **hard copy of Technical bid** only should be forwarded in sealed envelope and adequately superscribed to Dy. Registrar (P), JC Bose University of Science and Technology, YMCA, Sector-6, Faridabad-121006. The University shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained

- 3.3 EMD (if applicable):** The bidder is required to deposit the tender fee, processing fee (Non-Refundable) and EMD amount (Refundable) online on NIC Website and the acknowledgment of payment should be sent along with tender documents.
NOTE (Mandatory): All Bidders should send acknowledgement slip for tender fee, processing fee & EMD amount along with tender documents on website.
- 3.4** NSIC/MSME registered bidders must submit copy of valid NSIC/MSME Registration Certificate for exemption of EMD & Tender fee. **(The exemption can be availed by original manufacturers only).**
- 3.5** The University reserves the right to accept/reject any/all bids without assigning any reason and also to increase or decrease quantity without any notice.
- 3.6** In case, any other information/clarification is required, the undersigned may be contacted at Telephone No. 0129-2310164 on any working day (Monday to Friday) during office hours (9 a.m. to 5.00 p.m.) or through Email dr.purchase@jcbouseust.ac.in.
- 3.7 Refund of EMD:** The EMD will be returned to unsuccessful tenderers only after the Tenders are finalized. In case of successful Tenderer, it will be retained till the successful and complete installation of the equipment.
- 3.8 Opening and evaluation of the tender:** The technical bid will be opened online first and it will be examined by a technical committee (as per specification and requirement). At the time of technical evaluation of bid, the evaluation committee of JCBUST, YMCA, Faridabad may see the live demonstration of each parameter of specification of quoted equipment. This demonstration will be arranged by the supplier. The financial offer/bid will be opened only for the offer/bid which technically meets all requirements as per the specification, and will be opened subsequently for further evaluation.
- 3.9 Country of Origin:** Tenderer should mention the Country of origin of the equipment/items in compliance sheet.
- 3.10** All pages of the technical bid should must be sequentially numbered, signed by the Tenderer and must contain the list of contents with page numbers, in the absence of which the tender will be treated as invalid.
- 3.11** Tenderers are required to submit CA Certificate or balance sheet proof for last 3 years.
- 3.12 Eligibility Criteria:**
- 3.12.1** Tenderer should be the manufacturer/authorized dealer. Letter of Authorization from original equipment manufacturer (OEM) specific to the tender should be enclosed.
- 3.12.2** An undertaking from the OEM is required stating that they would facilitate the tenderer on a regular basis with technology/product updates and extend support for the warranty as well. (Ref. Annexure-II)
- 3.12.3** OEM should be Nationally/Internationally reputed Company.
- 3.12.4** Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between tenderer specification and supporting documents etc. may lead to rejection of the bid.
- 3.12.5** In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

- 3.12.6** If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- 3.12.7** Manufacturer/Supplier should have experience for supplying/installing **at least 3 similar setups** in various department of IITs, NITs, Universities & Government Engineering Colleges or any other Govt. Organization. Proof of such supplies (**Purchase order**) along with the names of the users, their contact number (As per Annexure-III) & **Completion/performance** certificates should be submitted.
- 3.12.8** Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent authority, Specified in (Annexure –V).
- 3.12.9** Tenderer should quote rates of all items, partially quoting is subjected to rejection of technical bid.

3.13 Performance Security

The supplier shall require to submit the **5% performance** security in the form of DD/FD/irrevocable performance bank guarantee (Ref. Format- Annexure-IV) issued by any commercial bank for an amount which is stated in the Purchase Order after complete installation of Equipment/item and should be kept valid for a period of 60 days beyond the date of completion of warranty period (If Applicable).

3.14 Force Majeure

- 3.14.1** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 3.14.2** For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

3.15 Risk Purchase Clause

In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.

3.16 Delivery and Documents:

- 3.16.1** The goods shall be supplied by the Supplier within the time limit specified in the supply order. The delivery period can be extended by the Dy. Registrar (P & S) with the approval of CPC, only in exceptional cases on written request of the Supplier giving reasons/explaining circumstances due to which delivery period could not be adhered to. **In case, the material is not supplied within the delivery period, the supplier shall be liable to pay the University the compensation amount equivalent to 1% (one percent) of the cost of material each day or such other amount as the CPC/Dy. Registrar (P & S) may decide till the supply remains incomplete, provided that the total amount of compensation shall not exceed 10% (ten percent) of the total amount of the cost of material supplied.** Appeal against these orders shall, however, lie with the Vice-Chancellor, J.C. Bose University of Science & Technology, YMCA, Faridabad whose decision shall be final.

3.16.2 The University is situated within the Municipal Limits. As such, Octroi, if any, shall be payable. In case, the material is supplied through a Transport Company by road, the Transport company's charges, labour charges and octroi charges shall be borne by the supplier. It may be mentioned specifically as to whether the material will be sent by rail or by road through a Transport Company.

3.17 Certificate of Origin (if possible, by the beneficiary);

3.17.1 Two copies of the packing list identifying contents of each package.

3.18 Liquidated Damages (L.D):

3.18.1 In case of any damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. JCBUST, YMCA, Faridabad will not be liable to any type of losses in any form.

3.18.2 Insurance (If applicable): For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning.

3.19 Prices:

3.19.1 The price should be quoted in net per unit and must include all charges for, but not limited to, inspection and packaging. Prices set forth shall be inclusive of applicable GST.

3.20 Resolution of Disputes: The dispute resolution mechanism would be as follows:

3.20.1 In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Vice Chancellor of the University who shall appoint an arbitrator; The Language of Arbitration is proceedings in English and the place of Arbitration in Faridabad willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

3.21 Applicable Law:

The place of jurisdiction would be Faridabad (Haryana). Any other jurisdiction mentioned in the quotations or invoices of the manufacturers/distributors/dealers/suppliers etc. shall be invalid and shall have no legal sanctity.

3.22 Right to Use Defective Goods

If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

3.23 Transfer and Subletting

The supplier shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.

3.24 Supplier Integrity

The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

3.25 Installation & Demonstration

3.25.1 The supplier is required to do the installation and demonstration of the equipment within two weeks of the arrival of materials at the JCBUST, YMCA, Faridabad, site of installation, otherwise the penalty clause will be the same as per the supply of materials.

3.26 Warranty

3.26.1 Warranty period shall be (as stated at “Schedule “of this tender) from date of installation of Goods and acceptance at JCBUST, YMCA, Faridabad. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.

3.26.2 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall arrange to repair or replace the defective goods or parts within 3 days free of cost in JCBUST, YMCA, and Faridabad. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 03 days. If the supplier having been notified fails to remedy the defects within 03 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier’s risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

3.26.3 The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.

3.27 Governing Language

The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

3.28 Applicable Law

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.

3.29 Taxes

Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

- 3.29.1** The supplier should have a valid GST Number and should enclose latest valid income Tax clearance certificate
- 3.29.2** It may be certified that Supplier has not debarred/ blacklisted (Annexure-II) for any reason/period by DGS&D, DS&D (Haryana) or any other Central/State Govt. Dept./University/PSU etc. If so, particulars of the same may be furnished. Concealment of facts shall not only lead to cancellation of the supply order, but may also warrant legal action.

3.30 Payment: Against Delivery with Complete Installation of Equipment/Software/supply of material as per Work/Supply Order.

3.31 Manuals and Drawings:

- 3.31.1** Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
- 3.31.2** The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
- 3.31.3** Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.

3.32 Site Preparation:

- 3.32.1** The supplier shall inform to the University about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the University should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.
- 3.32.2** The supplier may visit the University and see the site where the equipment is to be installed and may offer his advice and render assistance to the university in the preparation of the site and other pre-installation requirements.

3.33 Spare Parts

- 3.33.1** The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract and/ in the event of termination of production of the spare parts; Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.
- 3.33.2** Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares. Other spare parts and components shall be supplied as promptly as possible but, in any case, within six months of placement of order.

3.34 Defective Equipment

If any of the equipment supplied by the Supplier is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers' cost and risk and the

incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 7 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, JCBUST, YMCA, Faridabad may consider "Banning" the supplier.

3.35 Termination for Default

3.35.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- i. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or
- ii. If the Supplier fails to perform any other obligation(s) under the Contract. or
- iii. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

3.35.2 For the purpose of this Clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderer (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;

3.35.3 In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

3.36 Downtime

3.36.1 During the warranty period, not more than 1% downtime will be permissible. For every day exceeding permissible downtime, penalty of 1/365 of the 1% FOB value will be imposed. Downtime will be counted from the date and time of the filing of complaint with in the business hours.

3.36.2 Supplier should clearly mention about their service set up in India (preferably in Northern part of India) for prompt service support along with contact details of service engineers specially trained on the offered system. Service should be provided within 48 hrs from the report of technical problem so that machine down time is minimized.

3.36.3 In case the Equipment / System remains non-operational for more than 7 days then warranty period will be extended for the equivalent period for which Equipment / System remained non- operational. Warranty extension in such case shall be done without prejudice to any other Term & condition of the contract.

3.36.4 Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the University premises, immediately after completing the installation of the equipment.

3.37 Compliance Certificate

This certificate must be provided indicating conformity to the technical specifications. (Annexure-I)

3.38 Genuine Pricing

Vendor is to ensure that quoted price is not more than the price offered to any other customer in India to whom this particular item has been sold, particularly to IIT/Institutes and other Government Organization. Copy of the latest price list for the quoted item, applicable in India, must be enclosed with the offer.

3.39 Comparison of Bids

- 3.39.1** Technical Evaluation will be done by the technical committee after opening the technical bids.
- 3.39.2** Financial evaluation will be done on the basis of prices to mentioned in BOQ for technically qualified bids after opening the financial bids.
- 3.39.3** L1 will be decided on the basis of price including GST as quoted in the BOQ.

3.40 Award of Contract

- 3.40.1** JCBUST, YMCA, Faridabad shall award the contract to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated financial bid. However, JCBUST, YMCA, Faridabad reserves the right and has sole discretion to reject the lowest evaluated bid.
- 3.40.2** If more than one bidder happens to quote the same lowest price, JCBUST, YMCA, Faridabad reserves the right to decide the criteria and further process for awarding the contract, decision of JCBUST, YMCA, Faridabad shall be final for awarding the contract.

3.41 Rights to Terminate the Process: The University may terminate the tender process at any time and without assigning any reason. The University makes no commitments, express or implied, that this process will result in a business transaction with anyone. The bidder's participation in this process may be called by JCBUST at any time for discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by the JCBUST to execute a contract or to continue negotiations. JCBUST may terminate negotiations at any time without assigning any reason.

3.42 Acknowledgement of Understanding of Terms: By submitting a tender document, each Bidder shall be deemed to acknowledge that all sections of this tender notice, including all forms, schedules, annexure, corrigendum and addendums (if any) hereto, has been carefully read and has been fully informed as to all existing conditions and limitations.

3.43 Signing of contract: The agreement needs to be signed by the successful Bidder with the University. There after the PO will issued in the favor of concerned firm.

3.44 The bidder should submit a check list of technical bid as per Annex VI attached.

3.45 Bidders can discuss their queries in Pre bid Meeting as mention in Tender notice.

3.46 No charges will be paid other than mentioned in BOQ.

Asstt. Registrar (P&S)

COMPLIANCE SHEET

Sr. No.	Description of Items	Qty	Compliance Sheet Yes/No	Country of origin
01	<p>Set up for Mechanical equivalent of Heat (J) by Callender and Barne's constant flow method</p> <p>Components: Mains apparatus, Constant level tank, Rubber tubing, Thermometer 2cs Battery Eliminator, Rheostat, Plug key One way, Beaker, Digital stop watch and connecting leads</p>	02		
02	<p>Set up for the coefficient of Thermal conductivity of Cu by Searle's Method</p> <p>Components: Copper Rod 1inch dia enclosed in wooden box, Constant level tank, Rubber tubing, Thermometer 4pcs , Digital stop watch, Hot plate, Steam boiler Beaker</p>	02		
03	<p>Set up for the coefficient of Thermal conductivity of Cu by Angstrom method</p> <p>Components: Angstrom's AC Power Supply of 50Volts/10 Amperes that has inbuilt Function generator circuit which provides the square wave signal to the power supply with a time period of 50 milliseconds and time period of square wave is indicated by two LEDs(Red LED for ON time and Green LED for OFF time . AC Voltmeter (0-50V) and an Ammeter (0-10A) is provided on the front panel of the Power Supply. A Copper rod of 50cm in length and 2.5cm in diameter fitted inside a wooden box to protect from energy loss. Heater that is fitted on one end of the copper rod has: (v) Heater Coil resistance = 10 Ω(Approx.) (vi) Maximum Load Current =4.2 Amperes (vii) Maximum Load Voltage =40 Volts (viii) Heating Filament =160 Watts Thermometers 360 $^{\circ}$C (Set of Four) Connecting leads</p>	02		
04	<p>Set up for the coefficient of thermal conductivity of bad conductors by Lee's and charlton's disc method</p> <p>Components: Main Apparatus, Rubber tubing, Thermometer 2pcs , 3 discs, Hot plate, Steam boiler 2pcs, Screw gauge, Verneir caliper</p>	02		
05	<p>Set up for the temperature coefficient of Resistance by Platinum Resistance Thermometer (PRT)</p>	02		

	Components: Carey Foster bridge, resistance boxes, a thick copper strip, a rheostat, a cell/battery, galvanometer, platinum resistance thermometer, thermometer, one way key, connecting wires, and jockey.			
06	Set up for the variation of thermo EMF of a thermocouple with difference of temperature of its two junctions Components: A copper constantan thermocouple, clamp stand, heating arrangement, copper and glass beaker, thermometer (range 20°C- 100°C), potentiometer 10 wires, galvanometer, Resistance Box, one way key, jokey, Battery Eliminator, connecting wire	02		
07	Setup to calibrate a Thermocouple to measure temperature in a specified range using Null method Direct measurement using OP Amp difference amplifier and to determine neutral temperature	02		
08	Set up for Stefan's constant using Black body radiation Components: Hot plate, Hemi-sphere chamber arrangement with silver disk, Stop watch, Galvanometer, Resistance box 1- 500 ohm, Two Steamer, Four thermometers (110 °C -2 nos. , 360 °C - 2 nos.), Thermocouple tube, Rubber pipe, Wire, Thermocouple, Instructional lab manual	02		
09	Set up for measurement of Plank's constant using Black body radiation Components: Power supply (15V /3A) for light source, Digital Voltmeter/ multimeter (3-1/2 digits) Optical Bench (1.5 meter scale length) Light Source Tungsten Bulb (12V/36Watt) with holder Convex lens (Focal length 10cm, Diameter 50 mm) with holder Grating 15000 LPI with holder Objective lens (dia 28.4mm, Focal length 178mm) Photocell as a light sensor with angular arrangement Instructional lab manual	02		

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

Signature of Tenderer Name:___

Designation:_____

Organization Name: _____

Contact No.: _____

ANNEXURE-II

**<< Organization Letter Head
>>DECLARATION SHEET**

We, _____ hereby certify that all the information and data furnished by our organization with regard to these tender specifications are true and complete to the best of our knowledge. I have gone through the specifications, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certify that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.

The prices quoted in the financial bids are subsidized due to academic discount given to **J.C.Bose University of Science & Technology, YMCA, Faridabad.**

NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent	
Phone	
Fax	
E-mail	
Contact Person Name	
Mobile Number	
TIN Number	
PAN Number	
(In case of on-line payment of Tender Fees) UTR No. (For Tender Fee)	
(In case of on-line payment of EMD) UTR No. (For EMD)	

(Signature of the Tenderer)

**Name:
Seal of the Company**

ANNEXURE-III

LIST OF GOVT. ORGANIZATION/DEPARTMENT.

List of Government Organizations for whom the Tenderer has undertaken such work during last three years (must be supported with work orders)		
Name of the organization	Name of Contact Person	Contact No.

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.		
Name of the organization	Name of Contact Person	Contact No.

Signature of Tenderer

Name: _____

Designation: _____

Organization Name: _____

Contact No.: _____

ANNEXURE- IV

FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be typed on non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT Faridabad OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT Faridabad OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT Faridabad. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.)

To,
**J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA
Mathura Road, Sector-6, Faridabad (HARYANA)-121006**

LETTER OF GUARANTEE

WHEREAS J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA, SECTOR-6, FARIDABAD (HARYANA)-121006 (Buyer) have invited Tenders vide Tender No.....dt.....for purchase of..... and whereas the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment /machinery etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favor of “J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA, SECTOR-6, FARIDABAD” in the form of Bank Guarantee for Rs and valid till _____ years from the date of issue of Performance Bank Guarantee may be submitted within 21 (Twenty-One) days from the date of acceptance as a Successful tenderer.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document/ purchase order / performance of the equipment / machinery, etc. this bank shall pay to J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA, SECTOR-6, FARIDABAD on demand and without protest or demur Rs (Rupees.....).

This bank further agrees that the decision of J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA, SECTOR-6, FARIDABAD (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We,(name of the bank & branch) hereby further agree that the guarantee herein contained shall not be affected by any change in the constitution of the Tenderer (Seller) and/ or J.C. BOSE UNIVERSITY OF SCIENCE & TECHNOLOGY, YMCA, SECTOR-6, FARIDABAD (BUYER).

Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed Rs(Indian Rupees only).
2. This Bank Guarantee shall be valid up to(date)
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if Institute serves upon us a written claim or demand on or before.....(date).

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at (Address of local branch).

Yours truly,

Signature and seal of the guarantor:

Name of Bank:

Address:

Date:

Instruction to Bank: Bank should note that on expiry of Guarantee Period, the Original Guarantee will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

COMPETENT AUTHORITY AND PROCEDURE FOR REGISTRATION

- A The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)*.
- B. The Registration Committee shall have the following members*:
- i. An officer, not below the rank of Joint Secretary, designated for this purpose by DPIIT, who shall be the Chairman;
 - ii. Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;
 - iii. Any other officer whose presence is deemed necessary by the Chairman of the Committee.
- DICT shall lay down the method of application, format etc. for such bidders as stated in Para 1 of this Order.
- D. On receipt of an application seeking registration from a bidder from a country covered by Para 1 of this Order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.
- E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.
- F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.
- G Registration shall not be granted unless the representatives of the Ministries of Home Affairs and External Affairs on the Committee concur*.
- H. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by Central Government and its agencies/ public enterprises etc. but also for procurement by State Governments and their agencies/ public enterprises etc. No fresh **registration at the State level** shall be required.

The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.

- J. For national security reasons, the Competent Authority shall not be required to give reasons for rejection / cancellation of registration of a bidder.
- K. In transitional cases falling under Para 3 of this Order, where it is felt that it will not be practicable to exclude bidders from a country which shares a land border with India, a reference seeking permission to consider such bidders shall be made by the procuring entity to the Competent Authority, giving full information and detailed reasons. The Competent Authority shall decide whether such bidders may be considered, and if so, shall follow the procedure laid down in the above Paras.
- L. Periodic reports on the acceptance/ refusal of registration during the preceding period may be required to be sent to the Cabinet Secretariat. Details will be issued separately in due course by DPIIT.

[*Note:

- i. In respect of application of this Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government and paragraph G above shall not apply. However, the requirement of **political and security clearance as per Para D shall remain and no registration shall be granted without such clearance.**
- ii. Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc, and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

CHECK LIST FOR SELECTION CRITERIA TECHNIAL BID

Sr No	Description	Confirmation by the bidder. Indicate page No of the bid document	Remarks if any
1	Covering Letter		
2	EMD /Tender Fees/ Processing acknowledge slip		
3	Proof of business running from last 3 years (Copy audited financial statement or ITR)		
4	Affidavit regarding non blacklisting		
5	Manufacturer's authorization letter		
6	OEM Self declaration letter		
7	Photo copy of at least 3 purchase orders from Govt./ Semi Govt. organizations		
8	Proof of GST		
9	Assurance of supplying spares in next 3 years on bidder's letter head (If Applicable)		
10	F.O.R. at JCBUST, Fbd		
11	Self-declaration for acceptance of all terms and conditions of the tender		
12	Registration Certificate as per annex V (If applicable)		