

**Institute of Infrastructure, Technology, Research And Management***(An Autonomous University Established by Government of Gujarat)*

IITRAM Campus, Near Khokhra Circle,

Maninagar (East), Ahmedabad – 380026, Gujarat.

Contact No.: 079-67775430

E-mail: rndoffice@iitram.ac.inWebsite: www.iitram.ac.in

E-Tender Notice No.: 2026/04

Date: 07/07/2026

NOTICE INVITING TENDER**-: CRUCIAL DATES & INFORMATION: -**

E-Tender Notice No.	2026/04
Name of Tender	Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)
Tender Issue Date	07/07/2026
Tender Fee	Rs.5,900/- (Including 18% GST) (Non-Refundable)
Bid Security (EMD)	Rs.2,25,000/- (Rupees: Two Lakhs Twenty-Five Thousand Only) (Refundable subject to T&Cs of this tender documents)
Last date and time for online bid/offer submission	27/07/2026 till 18:00 Hrs.
Last date and time for bid/offer physical documents submission	29/07/2026 till 17:00 Hrs.
Date & Time for opening of technical bid/offer	31/07/2026 at 11:30 Hrs.
Date & Time for opening of financial bid/offer	To be informed later through email (Will be informed only technically qualified bidders)
Bid Validity Period	90 days from the date of technical bid opening
Performance Security	@5% of the total cost of contract
Tender Inviting Authority	The I/c. Registrar Institute of Infrastructure, Technology, Research And Management Near Khokhra Circle, Maninagar (East), Ahmedabad – 380026, Gujarat, India. Contact No.: 079-67775430

NOTICE INVITING TENDER

Name of Tender : Inviting bids through e-Tender format for ‘Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)’ -reg.

About IITRAM

The Institute of Infrastructure, Technology, Research And Management (IITRAM) has been established by the Government of Gujarat as an Autonomous University and has been mandated to bring about significant change in Engineering Education with respect to Technical and Managerial knowledge in the area of Infrastructure.

The Institute offers Bachelor and Master of Technology programs in Civil Engineering, Mechanical Engineering, and Electrical Engineering. The Institute also offers Ph.D. studies in various fields in Basic Sciences, Engineering, Humanities and Social Sciences.

The Institute is located at Khokhara Circle (Nearby), Maninagar (East), Ahmedabad, Gujarat, India – 380026.

SECTION – ‘A’

INSTRUCTIONS TO BIDDERS

1. The Institute of Infrastructure, Technology, Research And Management (IITRAM), Ahmedabad invites bids for **“Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)”** under “Two bid system in e-Tender format”. Interested parties/bidders who wish to participate in this e-Tender may obtain/download the tender documents from IITRAM’s website i.e. www.iitram.ac.in or from (n)Procure portal i.e., <https://educationtender.nprocure.com/>. After submission of online bid / offer at (n)Procure portal, the bidder(s) have to submit their technical bid/offer documents through RPAD, Speed Post or in Person till the last date and time prescribed for submission in this tender documents. Tender sent by other means will not be accepted in any case. Hardcopy of Technical Bid Documents, Tender Fee, EMD (Bid Security) and other essential documents should be submitted on or before **29/07/2026 till 17:00 Hrs** in the office of the IITRAM Room No. G2, Near Khokhara Circle, Maninagar (East), Ahmedabad-380026, Gujarat. Financial bid is to be submitted in electronic form only at (n)Procure portal i.e., <https://educationtender.nprocure.com/>.
2. Manual bids/offers shall not be accepted.
3. The Eligibility Criteria to the tenderers of the tender are mentioned in **SECTION- ‘B’** of the tender documents.
4. The General T&Cs and Other Instructions for this tender are mentioned in **SECTION- ‘C’** of the tender documents.
5. The detailed ‘Schedule of Quantity & Items Description’ of the tendered item(s) are mentioned in **SECTION- ‘D’** of the tender documents.

6. The detailed format of 'Financial Bid' for the tendered item(s) for this tender is mentioned in **SECTION- 'E'**. *The table of Financial Bid is stated for reference purposes only and please do not disclose any price there at the time of submission of these tender documents. The Financial Bid should be submitted online only at (n)Procure Portal.*
7. Other relevant Annexure(s) for this tender is mentioned in **SECTION- 'F'**.
8. Intending tenderers are advised to visit Institute's website i.e. www.iitram.ac.in and (n)Procure Portal, i.e., <https://educationtender.nprocure.com/> regularly till closing date of submission of tender for any corrigendum(s)/addendum(s)/amendment(s)/notice(s).
9. Anyone or more of the following action/commission/omission are likely to cause summarily rejection of the bid/offer:
 - 9.1 Any conditional bid(s).
 - 9.2 Any bid without Tender Fee.
 - 9.3 Any bid in which rates have not been quoted in accordance with the specified formats/details as specified in the bid/offer documents.
 - 9.4 Any effort by a bidder to influence the Institute in bid evaluation, bid comparison or contract award decision.
 - 9.5 Any bid(s) received with a period of validity shorter than 90 days.
10. Joint ventures with any other companies are not allowed.
11. Interested and eligible bidders/suppliers may obtain further information or clarification from the IITRAM Office. Phone: 079-67775430; e-mail: rndoffice@iitram.ac.in
12. In case the tender is cancelled, the tender fee will not be refunded to the bidder concerned.

SECTION – ‘B’

ELIGIBILITY CRITERIA

1. The bidder should have valid PAN Card. Copy of PAN Card to be submitted.
2. The bidder should have valid GST Registration. Copy of GST Registration to be submitted.
3. The bidder has to submit (photocopies) last three years Income Tax Returns (ITRs).
4. Audited financial statements of last three financial years (i.e. 2023-24, 2024-25 & 2025-26) demonstrating adequate turnover and financial capability.
5. The bidder has to submit (photocopies) the Firm Registration Certificate.
6. The bidder has to submit the Undertaking by Original Equipment Manufacturer (OEM) on OEM's letterhead (in original) as per **ANNEXURE-IV**.
7. Minimum 10 years of experience in manufacturing or supplying UTM systems. Appropriate proof has to be submitted.
8. Submission of successful installation of similar type of UTMs at recognized institutions (IITs, NITs, Central Universities), Laboratories, or Industries during the last 05 years. Performance certificates or satisfactory completion certificates from previous customers.
9. The bidder has to submit the Tender Acceptance Letter on their letterhead (in original) as per **ANNEXURE-II**.
10. Tender Fee of **Rs.5,900/- (Rupees Five Thousand Nine Hundred Only)** and Earnest Money Deposit (Bid Security) of **Rs.2,25,000/- (Rupees Two Lakhs Twenty-Five Thousand Only)**.
11. If any bidder/supplier fails to meet any of the above eligibility criteria, he/she will be disqualified.

SECTION – ‘C’

GENERAL TERMS AND CONDITIONS OF CONTRACT & TENDER PROCESS

1. The quoted price shall include taxes (if any), other levy payable, all freight, packing & forwarding, transportation, loading & unloading, custom duty, excise duty & other duties, other charges (if any) to supply the item(s)/goods at our site.
2. The rates quoted also shall include training, installation, commissioning, erection and demonstration of the tendered items/goods at our site.
3. The items for which quotation/bid have been submitted must be in accordance with the specifications given in SECTION-D.
4. The rates quoted by the firm shall be fixed for the duration of the CONTRACT and shall not be subject to adjustment on any account.
5. The offer shall be valid up to 90 (ninety) days from the date of opening of technical bid/offer.
6. The tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the scheduled tender are not fully filled in. Particular attention must be paid to delivery date and also to the particulars referred to in the condition of the contract.
7. Financial bids will be opened in online format for technically qualified bidders only.
8. The INSTITUTE OF INFRASTRUCTURE, TECHNOLOGY, RESEARCH AND MANAGEMENT (IITRAM), Ahmedabad, is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing Customs Duty exemptions in terms of Notfn. No. 51/96- Customs dt. 23.07.1996, amended by Notification No. 43/2017 dated. 30.06.2017, further amended by Notification No. 42/2022-Customs dated 13.07.2022, Notification No.07/2024-Customs dated 29.01.2024; amended further vide Notification No. 38/2024-Customs dated 23rd July 2024 as amended from time to time for research purposes only. This Registration is valid up to 31/03/2029.
9. Tenders not complying with the above T&Cs in this tender document are liable to be rejected at the sole discretion of IITRAM without any further reference / communication.
10. This tender is not transferable.
11. This Institute reserves its right to choose, accept or reject any or all requests/deviations/offers, in full or part and also reserves the right at any stage to reduce or increase the quantity and split the order.
12. The bidder has to submit duly signed & stamped photocopy of following documents:
 - 12.1 PAN Card of the firm
 - 12.2 GST Registration Certificate of the firm
 - 12.3 Last three years Income Tax Return (ITRs) of the firm
 - 12.4 Audited financial statements of last three financial years (i.e. 2023-24, 2024-25 & 2025-26) demonstrating adequate turnover and financial capability.
 - 12.5 Valid Firm Registration Certificate of the firm
 - 12.6 Undertaking by Original Equipment Manufacturer (OEM) on OEM's letterhead (in original) as per **ANNEXURE-IV**
 - 12.7 Tender Acceptance Letter on their letterhead (in original) as per **ANNEXURE-II**
 - 12.8 Warranty certificate from Original Equipment Manufacturer (OEM) on OEM's letter head (in original)

- 12.9 Minimum 10 years of experience in manufacturing or supplying UTM systems. Appropriate proof has to be submitted.
 - 12.10 Submission of successful installation of similar type of UTMs at recognized institutions (IITs, NITs, Central Universities), laboratories, or industries during the last 05 years. Performance certificates or satisfactory completion certificates from previous customers.
 - 12.11 Submission of a list of installations with customer contact details for verification.
 - 12.12 All relevant / required Annexure(s) / Documents mentioned at any place of this tender documents
13. **Inspection:** Pre-dispatch inspection at Bidders site or inspection after the delivery of goods, as the case may be.
 14. **Inspection Charges** @0.5% within Gujarat State and Inspection Charges @1% for outside Gujarat State of the total order value, if required, should be borne by the bidder.
 15. All or any Claim(s), dispute(s) or difference(s) arising out of or in with connection with this agreement shall be subject to the jurisdiction of the Courts at Ahmedabad only.
 16. If any civil work is required to be done for installation and commissioning of the ordered / supplied item(s)/goods, then the supplier shall arrange the essential drawing. For this, prior permission from IITRAM authority is required. The cost of such work is to be borne by the supplier.
 17. Any loss or damage caused to the article in transit/installation/testing is to be made up by the firm free of cost within period of 30 days.
 18. Standard toolkit required for the item(s)/goods to be supplied.
 19. If the firm is blacklisted by Central Government or State Government or any other Government body, then the submitted tender will be rejected. It is essential for bidder / supplier to submit **ANNEXURE-III** duly filled, signed, sealed & stamped manner in hardcopy, failing which the tender will be summarily rejected.
 20. The bidder should give a declaration as per **ANNEXURE-V** that none of his / her near relatives, as defined below, is working / employed in IITRAM. In case of proprietorship firm declaration will be given by the proprietor, for partnership firm declaration will be given by all the partners and in case of limited company by all the Directors of the company excluding Government of India / Financial institution nominees and independent non-Official part time Directors appointed by Govt. of India or the Governor of the state and full time Directors of PSUs both state and central. Due to any breach of these conditions by the bidder, it will result in the rejection of the bidder's tender and forfeiture of the bidder's EMD at any stage whenever it is noticed. IITRAM will not pay any damages as well as will debarred the concerned bidder for further participation.

The near relative for this purpose is defined as: -
 - (i) Member of Hindu Undivided family.
 - (ii) They are husband and wife.
 - (iii) The one is related to the other in the manner as father, mother, son(s) & son's wife (daughter in law), daughter(s), daughter's husband (son in law) & brother(s) & brother's wife, sister(s) & sister's husband (brother-in-law).
 21. If there happens to be a holiday on any date indicated in this tender notice, the transaction shall be performed on the next working day.
 22. In case the tender is cancelled, the tender fee will not be refunded to the bidder concerned.

23. The tender/bid (i.e. technical bid/offer) will be opened on **31/07/2026, 11:30 Hrs.** at IITRAM Ahmedabad Premises. No separate information shall be given to individual bidders.
- 23.1 In first instance, the technical bid will be opened.
- 23.2 The bidders or their authorized representative may remain present during the opening of the technical bid, if they desire so, at their own expense. The required technical specifications for the tendered items/goods are mentioned in SECTION-‘D’.
- 23.3 Only those financial bids will be opened whose technical offers/bids are found suitable by the expert panel/committee appointed for the concerned items/goods. The respective dates for opening of financial bid shall be informed to the technically qualified bidder(s) through e-mail only.
- 23.4 In incomparable situation, the committee may negotiate price with the technically and financially qualified bidder before awarding the offer.
- 23.5 The tender committee reserves its right to select or reject any or all of the item(s) mentioned above without assigning any reasons.
24. If the bidder fails to meet any of the above eligibility criteria/fails to submit the adequate testimonials in support of the above-mentioned requirement will be disqualified.
25. Any effort by a bidder to influence IITRAM’s tender evaluation, tender comparison or contract/order award decisions may result in the rejection of the bidder's tender and forfeiture of the bidder's EMD (Bid Security).
26. After opening of bids, information relating to the examination, clarification, evaluation and comparisons of bids and recommendations concerning the award of contract shall not be disclosed to bidders or other person not officially concerned with such process.
27. In the event of any dispute or difference(s) between the vendee (IITRAM Ahmedabad) and the bidder(s) arising out of non-supply of material or supplies not found according to the specifications or any other cause whatsoever relating to the supply or purchase order before or after the supply has been executed, shall be referred to the concerned authority of IITRAM Ahmedabad who may decide the matter himself or may appoint arbitrator(s) under the arbitration and conciliation Act 1996. The decision of the arbitrator shall be final and binding on both parties.
28. No firm shall withdraw their rates after the Tender is opened. If a firm does so, their tender related deposit/s shall be forfeited, and such firm/bidder shall be considered ineligible for work/contract in future.
- 29. Submission of Bid:**
- 29.1 The Tender documents can be downloaded from Institute’s website i.e., www.iitram.ac.in or (n)Procure portal i.e., <https://educationtender.nprocure.com/>. The bidder(s)/suppliers are required to submit the Tender Acceptance Letter (**ANNEXURE-II**) endorsed by seal and signature as acceptance of terms and conditions of this tender. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.
- 29.2 The fully filled in and complete in all respect tender must be submitted with Tender Fee and EMD (Bid Security) through Electronic Transfer / Demand Draft. Bank details are as follows:

For Electronic Transfer, Institute Bank Account details are as follows:

Account Name : Institute of Infrastructure, Technology, Research And Management

Account No. : 923010019592531
Bank Name : AXIS BANK LTD
IFSC Code : UTIB0002645
Branch Name : Hatkeshwar Ahm GJ, Ahmedabad – 380026.

Note: Kindly submit Electronic Transfer advice with UTR details along with bid document.

OR

Demand Draft (DD) in favor of the “INSTITUTE OF INFRASTRUCTURE, TECHNOLOGY, RESEARCH AND MANAGEMENT” payable at Ahmedabad. Please mention Tender number and name of the firm/bidder on back side of DD.

- 29.3 Bidders registered with Micro and Small Enterprises (MSEs) and having valid MSE Certificate will be considered for relaxation of EMD. In view of the above, if the bidder will claim for EMD exemptions, the bidder should meet all the criteria for Micro and Small Enterprises. The bidder must submit the supporting document i.e. MSME registration certificate issued by competent government bodies (i.e. issued by Government of Gujarat & Government of India only) to become eligible for the EMD exemptions. The registration certificate (MSE) of the bidder must cover the items tendered to get EMD exemptions.
- 29.4 The EMD (Bid Security) is refundable (without any interest) within 30 (thirty) working days after successful award of offer / contract:
- 29.4.1 EMD (Bid Security) of unsuccessful bidder(s) will be returned (without any interest) within 30 (thirty) working days from the date of award of offer/contract.
- 29.4.2 EMD (Bid Security) of successful bidder(s) will be returned (without any interest) within 30 (thirty) working days after submission of a Performance Security.
- 29.4.3 The EMD (Bid Security) shall be forfeited:
- If bidder(s) withdraws their bid during the period of bid validity specified in this tender notice; and/or
 - In case of a successful Bidder fails, (i) To sign the contract agreement and (ii) To furnish a performance security.
- 29.5 The bidder / supplier has to submit the Tender in two parts viz., (a) Technical bid/offer in envelop No. (1) and (b) Tender Fee & EMD in envelope No. (2); both these envelopes should be sealed and put together in a main (big) covering envelope, super scribed with – Please Don't Open, Bid for “Tender for Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)” with due date, Tender Number and complete address along with contact number and email id.
- 29.6 The bidder / supplier has to specify the make, model, and detailed technical specifications of the quoted/offered item and attach a separate compliance sheet if any deviation compares to the technical specifications mentioned in SECTION-D. Mere copying of the expected technical details into the product details will not be entertained and may even lead to disqualification of the bidder.
- 29.7 The bidder/supplier must produce the brochure, model and make of the product being offered by them.
- 29.8 It is essential for bidder to submit annexure(s), tender documents and other essential documents as mentioned in this tender notice with duly filled, signed, sealed & stamped manner in hardcopy, failing which that bidder's/firm's tender will be summarily rejected.

- 29.9 The “**Financial Bid**” to be filled as per **SECTION–‘E’** and **should be submitted online only at (n)Procure Portal** as ‘Financial Bid’. Rates quoted ‘ONLINE’ will only be considered.
- 30. Evaluation of Quotations:**
- 30.1 In first instance, the technical bid will be opened.
- 30.2 The tender evaluation committee of the Institute will evaluate and compare the received quotations/bids to determine the substantially responsive tender i.e. (i) tender is complete (ii) properly signed (iii) confirm the terms/conditions and specifications of the tendered items/goods. Further, the financial evaluation will be done only for the substantially responsive tenders based on the following parameter(s):
- Total price quoted (ONLINE) at (n)Procure portal
- 31. Award of Contract:**
- 31.1 The Institute will award the CONTRACT to the firm/bidder who has offered lowest (L1) price for the tendered items/goods.
- 31.2 Notwithstanding the above, IITRAM reserves the right to accept or reject any quotation and to cancel the bidding process and reject all quotations at any time prior to the award of contract without giving any reason.
- 31.3 The bidder whose bid is accepted will be notified of the award of contract by the IITRAM prior to expiration of the bid validity period. The terms of the accepted offer shall be incorporated in the Purchase Order.
- 31.4 INSTITUTE OF INFRASTRUCTURE, TECHNOLOGY, RESEARCH AND MANAGEMENT (IITRAM), Ahmedabad, is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing Customs Duty exemptions in terms of Notfn. No. 51/96- Customs dt. 23.07.1996, amended by Notification No. 43/2017 dated. 30.06.2017, further amended by Notification No. 42/2022-Customs dated 13.07.2022, Notification No.07/2024-Customs dated 29.01.2024; amended further vide Notification No. 38/2024-Customs dated 23rd July 2024 as amended from time to time for research purposes only. This Registration is valid up to 31/03/2029.
- 32. Performance Security & Agreement (Contract Form):**
- 32.1 **Performance Security:** The successful bidder shall be required to deposit Performance Security in form of (i) Account Payee Demand Draft (ii) Fixed Deposit Receipt from a Nationalized bank (iii) Bank Guarantee from a Nationalized bank, at the rate of **5%** of the total cost of contract, for the duration of warranty period plus additional two months, in favor of “**Institute of Infrastructure, Technology, Research And Management**” from the date of installation of ordered items/goods. No payment shall be released without performance security.
- 32.2 This Performance Security will be returned (without any interest) within 30 working days after satisfactorily completion of warranty period.
- 32.3 **Agreement (Contract Form):** The successful bidder shall have to enter into the Agreement (Contract Form) in the prescribed Performa provided by IITRAM. The said agreement should be submitted by the respective bidder on Rs.300 Stamp Paper within 30 (thirty) days after receipt of the contract/purchase order. Institute will keep the original agreement in its custody.

33. Delivery Period & Penalty Terms:

- 33.1 **Delivery Period:** The items/goods are to be delivered within a maximum time limit of 90 days from the issue date of Purchase Order. However, in case of imported items/goods can be delivered within a maximum time limit of 120 days from the issue date of Purchase Order.
- 33.2 After the receipt of ordered items/goods in acceptable condition at IITRAM, Ahmedabad successful bidder/supplier has to install items/goods within 30 (thirty) days.
- 33.3 **Penalty:** Penalty of 1% per week of order value will be charged after duration specified above individually. Further, 06 weeks or above delay from above mention days may lead to cancellation of order at the discretion of the university and forfeiting the Performance Security or EMD or Maximum penalty shall be applicable @10%.

34. Warranty Terms:

- 34.1 Minimum one (01) year complete onsite warranty against any defect from the date of complete installation, commissioning and erection of all items/goods at our site.
- 34.2 Warranty certificate should be provided from Original Equipment Manufacturer (OEM) on OEM's letter head.

35. Terms of Payment:

- 35.1 **Payment:** 100% payment shall be released within 30 (thirty) working days on satisfactory receipt, installation, testing and commissioning of the ordered/supplied items/goods at our site, submission of clear tax-invoice(s) and supporting documents.
- 35.2 Advance payment will not be made under any circumstances.
- 35.3 Recoveries as per the Institute's norms shall be made while making payment (if any) without prior intimation to the supplier.

36. Address for the submission of bid/offer documents:

The I/c. Registrar
Institute of Infrastructure, Technology, Research And Management (IITRAM)
Room No. G2,
Near Khokhara Circle, Maninagar (East),
Ahmedabad- 380026, Gujarat, India.
E-mail: rndoffice@iitram.ac.in

We look forward to receiving your bid/offer.

**Sd/-
I/c. Registrar**

SECTION – ‘D’

SCHEDULE OF QUANTITY & ITEM DESCRIPTION

Name of Item(s): **Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)**

Required Qty.: **01 Unit**

50 kN CAPACITY UNIVERSAL MATERIALS TEST SYSTEM SPECIFICATION

I. GENERAL

The testing instrument shall consist of a Dual Column 50kN capacity Load frame and load cells, a Load weighing system, and Software for machine control, data acquisition and data manipulation and relevant accessories. All these components must be fully integrated and supported by the vendor.

II. MATERIAL TESTING SYSTEM SPECIFICATIONS

This unit shall integrate the following major sub-systems into a complete operating system. The major sub-systems and their specifications are:

A. LOADING FRAME

1. The Double column-loading frame must be capable of tension, compression, flexure, peel, tear, friction testing. It should include a digital closed loop command and feedback motion control system with an AC brushless Servo Motor capable of testing continuously for 10 days.
2. Load frame stiffness adequate for accurate testing up to full rated capacity.
3. The vertical Test Space (distance between the top surface of the base platen to the bottom surface of the moving crosshead) shall be any value in the range of 1055-1190 mm or Higher for load cells, grips and fixtures.
4. Horizontal test space shall be at least 410 mm.
5. The maximum load capacity shall be at least 50 kN.
6. The speed range of crossheads should be 0.001 mm to 500 mm per minute and shall be settable continuously. The return speed should be at least 600 mm/min.
7. Crosshead speed range: 0.05 to 500 mm/min or better. Preferably Maximum crosshead speed: ≥ 250 mm/min.
8. The machine shall maintain the specified accuracy over the entire load range and operating speed range.
9. The steady state speed accuracy shall be $\pm 0.2\%$, of set speed measured over full speed range.
10. The frame must include an operator panel which can be used to run and stop tests at the frame as opposed to through the PC and software.
11. The position control resolution of the system should be less than 25 nano meters.
12. The system should be operated with Single Phase AC voltage, and power consumption must not exceed 1.2 kVA.
13. There must be a mechanism in the controller to reduce the damage to the load cell and the delicate specimens by stopping the crosshead if force is detected during setup or jog or return. A demo is required for this feature before technical qualification.

B. LOAD WEIGHING SYSTEM AND LOAD CELL:

1. The system should be supplied with a 50 kN capacity load cell.
2. Resolution of load with this load cells should be less than 2 grams.
3. Load cells should include self-identification (recognition) electronics in the connector directly attached to these transducers which automates the calibration of these devices. System should allow for manual calibration of third-party transducers also.
4. The load measurement accuracy range shall be from full scale down to $1/500^{\text{th}}$ of the full scale.
5. Linearity and Repeatability of loadcell shall be $\pm 0.25\%$ to 0.5% of reading from 0.2 to 100% of Force Capacity.
6. Hysteresis of loadcell shall be $\pm 0.1\%$ of the applied load.

7. The Load cell should be able to withstand up to 300% of the force capacity without mechanical failure and up to 150% of force capacity without calibration change.
8. Compensated temperature range should be 0 to 50 Deg C.
9. Temperature Effect on Sensitivity shall be maximum of $\pm 0.02\%$ of Force Capacity per $^{\circ}\text{C}$
10. The computer should communicate to the frame through an Ethernet interface to give a high data transmission rate from system to PC.

C. SOFTWARE (Control part)

1. The control software will be a true graphical user interface meeting all the Latest Microsoft Windows standards. Touch Interaction features should make the software to be able to work on touch enable monitors, without use of keyboard and mouse.
2. The software must have multi levels of user access based on his or her login name and password.
3. The testing software must be able to perform Tensile, Compression, Flexure (3-point bend), peel, tear, friction tests.
4. Digital displays on the computer monitor should show live load, displacement, and optional strain values engineering units that can be selected to be Metric, S.I., U.S. customary. Multiple live display windows shall be available for display simultaneously.
5. The control software shall include set-up of the following: test speed, limits on all channels, calibration and balance of transducers, specimen dimensions, and results tables at a minimum.
6. An unlimited number of test methods shall be available for storage and retrieval.
7. For Easy retrieval of help guidelines, the system shall include an integrated context sensitive help and reference system, always running on backend.
8. The software must be user friendly and allow the user to be prompted during testing and provide a mechanism for the user to select images or video clips to be included in the prompt area when running tests.
9. software should have MS-word, HTML, PDF reporting formats.
10. The ability to re-analyze past test data using different calculations must be provided.
11. The software shall allow the user to define the company logo as a part of the method.

D. DATA ACQUISITION

1. Run time screen must be capable of displaying both the real time graph and the calculated results of multiple specimens simultaneously.
2. The control software shall be capable of acquiring data at 1000 Hz simultaneously across load, displacement, and up to two optional strain channels.
3. A live raw data viewer should be there on the screen while test is in progress. And storage of the same should also be possible.
4. Two No's Graphs, each of which should be A real time X-Y plot of two selected variables should be displayed on screen.
5. Control Chart and average curve should be available in graph of the software.
6. Customized reporting features in software is a must.

E. SERVICEABILITY AND SYSTEM STATUS

1. Manufacturing Factory trained service engineers must be available for additional training or warranty service.
2. The supplier shall install the system and provide basic on-site training to customer's satisfaction.
3. Advanced on-site training classes shall be available at the customer's location.
4. Vendor should provide the Onsite Calibration of the system up to full load.

F. TENSILE GRIPS

1. The grip capacity should be 50kN and suitable jaw faces should be provided with it.
2. The grips should have self-tightening wedge designs to avoid slippage.
3. Clamping force should increase with applied force.
4. It should be able to withstand a temperature ranging from -70°C up to $+250^{\circ}\text{C}$.
5. The grips should suit Plastics, Metals, Composite, wires etc.
6. The grip should suit the flat and cylindrical samples.
7. It should hold at least 25 mm wide, 5 mm thick and 5 mm Dia. Samples.

G. FLEXURAL FIXTURE FOR 3-POINT BEND TEST

1. Flexure fixture with rated capacity of at least 5 KN or better to be offered.

2. It should be able to withstand a temperature range from -100 Deg C to +350 Deg C
3. Adjustable Span distance from 10 mm to 200 mm
4. It should support plastics, composites, ceramics, thin metals and other materials.
5. Adjustable stops for specimen widths up to 50 mm should be provided for precise alignment.

H. EXTENSOMETER (Contact Type)

1. 25 mm Gauge Length or better Extensometer with quick release clamps should be offered.
2. It should cover 100% elongation of sample.
3. Operating force should be less than 40 grams.
4. Application range- Metals, Plastic and Composite etc.
5. Self-identification feature for ease of calibration.
6. Suitable for closed-loop strain control for manometric and low rate cycling testing.

CONTACT TYPE EXTENSOMETER SPEC.		
Repeatability	%	Better than 0.1-0.5, Full Range Output
Hysteresis	%	Better than 0.3 Full Range Output
Balance	%	Better than ± 2.5 FRO
Excitation	V	1 V to 10 V RMS
	kHz	DC up to 5 kHz
Sensitivity	mV/V	Up to 2.5 ($\pm 20\%$) or better
Electrical Calibration Accuracy	%	± 0.5 Full Range Output or Calibrated per ISO 9513 (Class 0.5, 1, or 2) or ASTM E83 (Class A, B1, B2, C, D, or E)
Bridge Resistance; (Nominal)	ohms	350
Gauge Length Accuracy	%	± 0.5 at gauge length
Temperature Range	$^{\circ}\text{C}$	-100 to +200
Temperature Effect on Zero	%	± 0.01 Full Range Output
Typical Temperature Effect	$^{\circ}\text{C}$	-0.006% FRO/ Celsius (+20 to +100) -0.008% FRO/ Celsius
-On Sensitivity	$^{\circ}\text{C}$	(+100 to +50) -0.01% FRO/ Celsius (+150 to +200)
-On Immersibility	-	Non-conductive/ non-corrosive fluids. i.e. acetone, mineral and silicone oils, alcohol, etc.
Over Travel	-	Mechanical limit stops
Gauge Length Settings	-	Cone latch with automatic release

The minimum requirements for after-sales service, such as:

- Local service engineer availability within a specified response time.
- Availability of spare parts for at least 10 years.
- Comprehensive warranty and annual maintenance support.

Proof that the bidder has trained service engineers.
Demonstration of the equipment before award.

SECTION – ‘E’

FINANCIAL BID

(Format for Submission of Financial Details)

(Data Sheet to be submitted ONLY Online at (n)Procure Portal)

Sr. No.	Name of Item(s)	Unit	Qty.	Rate (Without GST)	Total Amount (Rs.)	Applicable GST Slab Rate (%)
A	B	C	D	E	F = (D*E)	G
1.	Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)	No.	01.00			
					This table of Financial Bid is stated for reference purpose only and please do not disclose any price here at the time of submission of this document.	
Total Amount (Rs.) (Without GST)						---

Declaration:

I/We hereby declare and affirm that I/We have read and understood the terms and conditions of the contract as stipulated in this tender notice.

Signature of Bidder with Seal

Date: _____

Place: _____

SECTION-‘F’

Other Relevant Annexure(s)

ANNEXURE-I

Name of Item(s): **Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)**

FORMAT FOR SUBMISSION OF BIDDER'S INFORMATION

1	Registered Name of the Bidder:	
2	Registered Office Address: Contact Number Fax Number E-Mail	
3	Correspondence Address: Contact Number Fax Number E-Mail	
4	Details of the authorized person: (Name, Designation, Address) Contact Number Fax Number E-Mail	
5	Bidder Registration Type - • Proprietary Firm • Partnership Firm (if yes, give partnership deed) • Company or LLP • Government/ Public Sector Undertaking • Member of a group of companies (if yes, give name, address & details of group companies) • Subsidiary of a large corporation (if yes, give the name & address of the parent organization) If the company is subsidiary, state what involvement will the parent company have in the project.	
6	Permanent Account Number (PAN):	
7	Goods & Service Tax (GST) Number:	
8	<u>Particulars of Bank Account</u> Name of the Bank: Name of the Branch: Branch Code: Address & Contact Details: IFSC Code: Type of Bank Account: Bank Account No.:	

Signature of Bidder with Seal

Date: _____

Place: _____

ANNEXURE-III

Name of Item(s): **Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)**

UNDERTAKING

I, _____ hereby declare that Firm / Company / Agency / Organization / Partnership firm / Proprietary firm titled as _____ has not been blacklisted or banned or debarred at any stage from inception till this date by any of the NITs / IITs / IIITs / Central Universities / IISERs / CSIR Labs Central and State Government body / PSUs / Autonomous Institute or any Other Government Organization. In case of any fraudulency, the Firm / Company / Agency / Organization / Partnership firm / Proprietary firm is fully aware that the tender / contract will be rejected / cancelled by IITRAM and EMD / Performance Security or any deposited amount shall be forfeited.

In addition to above, IITRAM will not be responsible to pay the bills for any completed / partially completed / supplied work.

Signature of Bidder with Seal

Date: _____

Place: _____

ANNEXURE-IV

UNDERTAKING BY ORIGINAL EQUIPMENT MANUFACTURER (OEM)

To,
The I/c. Registrar
Institute of Infrastructure, Technology, Research And Management
Near Khokhra Circle, Maninagar (East),
Ahmedabad – 380026, Gujarat.

Subject: Undertaking by Original Equipment Manufacturer (OEM)

Tender Reference No:

Name of Tender / Work: Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)

Sir,

We, M/s. _____ (Name of the OEM) having registered office at _____ (address of the OEM) by virtue of being original equipment manufacturer for _____ (Name of the product/s), hereby authorize M/s. _____ (Name of the bidder) having their office at _____ (address of bidder) to submit quote, supply, install and provide after sales support for our range of products quoted by them to meet the above mentioned tender requirements.

M/s. _____ (Name of the OEM) within the scope of requirement as per the tender mentioned above undertake to provide technical & other support towards fulfilling the requirements of installation, commissioning, benchmarking, acceptance criteria and product warranty services of the tendered item(s)/goods to be supplied and installed at IITRAM.

We will support M/s. _____ (Name of the bidder) on regular basis with all related issues, technology and product updates and extends comprehensive support during the entire warranty period.

The undersigned is authorized to issue such authorization on behalf of M/s. _____ (Name of the OEM).

For M/s. _____ (Name of the OEM)

Signature & Company Seal

Name :

Designation :

Email :

Mobile No. :

ANNEXURE-V

Name of Item(s): **Supply, Installation, Testing & Commissioning of Universal Testing Machine (UTM)**

DECLARATION REGARDING NEAR RELATIVES

I, _____, authorized signatory of M/s. _____ hereby declare that none of our near relative(s) as defined in the tender documents is / are working / employed in IITRAM. In case at any stage, it is found that the information given by us is false / incorrect; IITRAM shall have the absolute right to take any action as deemed fit without any prior intimation to us.

Near Relative for this purpose are defined as: -

- (i) Member of Hindu Undivided family.
- (ii) They are husband and wife.
- (iii) The one is related to the other in the manner as father, mother, son(s) & son's wife (daughter in law), daughter(s), daughter's husband (son in law) & brother(s) & brother's wife, sister(s) & sister's husband (brother-in-law)

Signature of Bidder with Seal

To be signed by: -

- (a) Signature of Proprietor in case of Proprietorship Firm

.....

- (b) Signature of all partners in case of Partnership Firm

i.

ii.

iii.

- (c) Signature of all Directors of Company in case of Ltd. or Pvt. Ltd. Company

i.

ii.

iii.