# NOTICE INVITING TENDER (NIT) FOR SUPPLY & INSTALLATION OF MEASUREMENT EQUIPMENTS FOR VARIOUS LABS

FOR

# ELECTRICAL AND ELECTRONICS ENGINEERING DEPARTMENT NIT MIZORAM, AIZAWL

Last Date for Submission of Tender : 30/12/2014 upto 2:00 PM Opening of the Tender : 30/12/2014 at 3:30 PM

CR-16



# राष्ट्रीय प्रौद्योगिकी संस्थान, मिजोरम NATIONAL INSTITUTE OF TECHNOLOGY, MIZORAM (An Institute of National Importance under Ministry of HRD, Govt. of India) CHALTLANG, AIZAWL, MIZORAM - 796012

Phone/Fax: 0389-2341699 / 0389-2341236 / 0389-2341774

Email: nit\_mizoram@nitmz.ac.in

Ref. No.NIT-MZ/D-99/2014/3928(A) Date: 0 1 DEC 2014

## NOTICE INVITING TENDER (NIT) FOR SUPPLY & INSTALLATION OF MEASUREMENT EQUIPMENTS FOR VARIOUS LABS OF ELECTRICAL & ELECTRONICS ENGINEERING DEPARTMENT OF NIT MIZORAM, AIZAWL

The Director, NIT Mizoram invites quotation for supply & Installation of Equipments as per details at **ANNEXURE-IV**, in **Two Bids** to reach the undersigned on or before 30/12/2014.

Sl No.	Reference No.	Items	Quantity	EMD (Rs.) in the form of DD drawn at State Bank of India only	Tender Document Fee (Rs.)in the form of DD drawn at SBI only.
01.	NIT-MZ/D-99/ 2014/ <u>39</u> 28W Dated <u>1/12</u> /14	Supply & Installation of Measurement Equipments for various labs on turnkey basis to be installed at NIT, Mizoram, Aizawl	One Package	@2%	1,000.00

Last date & Time for Submission:
 (2) Date/Time for Opening of Tech. Bids:

30/12/2014 upto 2:00 PM 30/12/2014 at 3:30 PM

After evaluation of technical bids, financial bids of the successful bidders will be opened on a later date which will be notified in the Institute website. Venue of Bid Opening at NIT, MIZORAM, AIZAWL

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#### BID INSTRUCTION

**01.** Quotations will have to be submitted in TWO Bids i.e. Technical Bid and Financial Bids and must be kept separately in two sealed envelopes specifically mentioning "Technical Bid" and "Financial Bid" on the cover of the envelopes. Further these two sealed Bids must be kept inside one big sealed envelope before submitting it.

The address of the firm submitting the quotation and the Officer to whom the quotation is addressed must appear distinctly on sealed covers. Further, on sealed cover, the following are to be written:

QUOTATION FOR SUPPLY & INSTALLATION OF MEASUREMENT EQUIPMENTS FOR VARIOUS LAB OF ELECTRICAL & ELECTRONICS ENGINEERING DEPARTMENT, NIT MIZORAM, AIZAWL, NIQ REF NO. NIT-M2/D-99/2019/29124 [A] EL. EL/12. [19]

- **02 Submission of Compliance Certificate**: Duly filled and signed Compliance Certificates (as per formats at **Annexure I( A & B)** are must with the Technical bid.
- **03. Bid not transferable**: The bid documents are not transferable and the seal and signature of the authorized official of the firm's must appear on all the papers and envelopes submitted.

#### **QUALIFICATION REQUIREMENTS**

- The Bidder should be an Original Equipment Manufacturer (OEM) Or a firm of reputation having sufficient expertise and experience in the subject tender with sound warranty / service support capability and authorization from Manufacturer/Distributor.
- The Bidder has to quote for all the items in the Measurement Lab of Electrical Engineering Department, Bidders who do not Quote for all the items are subject to be disqualified.
- The bidder should have Experience of executing at least 1(one) Single Work Order of similar items successfully within last 3(Three) Financial Years. The attested Copy of the Purchase Order Copy should be attached along with the Technical Bid.
- That, the Bidder will assume total responsibility in supply, installation and for the fault-free operation and maintenance during warranty period.
- Performance Statement for the last 3 years have to be attached along with the technical bid Mentioning the customer name & address, Order No. & Date and execution time.
- 6. Bidders who do not meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.



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#### NIT TERMS & CONDITIONS:

**01. Rates:** Rates quoted in the **Price Bid** should be **on DOOR DELIVERY NIT Mizoram basis**, as per details below:

Sl. No.	Particulars	Rate
Ι	Basic Price (per unit) including Packing, Forwarding, Freight, Insurance, Installation & demonstration charges inclusive	
II	Taxes (pl. give break up)	
III	Grand Total for the item on door delivery at NIT Mizoram	

Note: Vague terms like "packing, forwarding, transportation etc. extra" without mentioning the specific amount will not be accepted. Such offers shall be treated as incomplete and rejected. Bidders shall indicate their rates in clear / visible figures as well as in words and shall not alter / overwrite / make cutting in the quotation. In case of mismatch, the rates written in words will prevail.

02. Validity of Quotation: Quoted rates must be valid for 90 days from the date of quotation.

- 03. Warranty: The quoted equipment and components must be warranted for a minimum of 1(One) Year or period specified against the item.
- 04. Literature a must: All the quotations for all the Major Items must be supported by the printed technical leaflet/literature and the specifications mentioned in the quotation must be reflected/ supported by such printed technical leaflet/literature. The model and specifications quoted should invariably be highlighted in the leaflet/literature for easy reference.
- 05. After Sales Service: Vendors should clearly state the available nearest after sales service facilities in the region, without which their offers will be rejected.
- 06. **Dealership Certificate:** Dealers or Agents quoting on behalf of Manufacturer/Distributor must enclose valid dealership certificate.
- 07. Manufacturer's Certificate: Manufacturer's certificate to prove that the products are genuine.

#### 08. Earnest Money:

Refundable earnest money deposit (EMD) @2% of the Quoted Value through demand draft drawn in favour of "The Director, National Institute of Technology Mizoram", payable at Aizawl, will have to accompany the technical Bid. The EMD of unsuccessful bidders shall be returned after award of contract. EMD of the successful bidder will be released on submission of the Performance Bank Guarantee. Offers received without Earnest Money or valid Certificate shall be summarily rejected.

09. Performance Bank Guarantee (PBG): In case of items with order value of Rupees five lakhs (INR 5,00,000/-) and above, the successful bidder shall furnish an unconditional PBG (as per format at Annexure II) for 5% of the Purchase Order value from a scheduled Bank of India, after receiving the purchase order. Where the PBG is obtained by a foreign bank, it shall be got confirmed by a Schedule Indian bank and shall be governed by Indian Laws and be subject to the jurisdiction of courts at Aizawl. The PBG will be kept till the Warranty Period and The PBG shall guarantee that,



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- (a) The Vendor guarantees satisfactory operation of the Equipment & components against poor workmanship, bad quality of materials used, faulty designs and poor performance.
- (b) The Vendor shall, at his own cost, rectify the defects/replace the items supplied, for defects identified during the period of guarantee.
- (c) This guarantee shall be operative from the date of installation till 120 days after the warranty period.

#### 10. Delivery:

- a) Time Limit: Maximum within 12 Weeks from the date of issue of this purchase order.
- b) Safe Delivery: All aspects of safe delivery shall be the exclusive responsibility of the vendor. At the destination site, the package will be opened only in the presence of NIT user/representative and vendor's representative. The intact condition of the package and the seal/indicators for not being tempered with, shall form the basis for certifying the receipt in good condition.
- c) Insurance: The supplier is to establish 'All Risk Transit Insurance' coverage till door delivery at NIT Mizoram.
- d) Part Delivery: Acceptance of part delivery shall be a prerogative of the institute.
- e) Penalty for delay in delivery: The date of delivery should be strictly adhered to otherwise the Director, NIT Mizoram reserves the right not to accept delivery in part or full.
- 11. Genuine Pricing: Vendor is to ensure that quoted price for the particular item is not more than the price quoted to any other customer in India, particularly to IITs/NITs and other Government Organization.
- 12. Conditional tenders not acceptable: All the terms and conditions mentioned herein must be strictly adhered to by all the vendors. Conditional tenders shall not be accepted on any ground and shall be rejected straightway. Conditions mentioned in the tender bids submitted by vendors will not be binding on NIT Mizoram.
- 13. Road Permit: NIT, Mizoram will provide Road Permit to the Vendors of outside Mizoram.
- 14. VAT deduction at source: In case of supply within Mizoram, VAT deduction at source, as per Order/ notification of the Govt. of Mizoram will be applicable.
- 15. Late and delayed tender: Late and delayed tender will not be considered. In case any unscheduled holiday occurs on the prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.

#### 16. Payment:

100% payment within 30(thirty) days from date of delivery, Satisfactory installation, acceptance and Training

17. Payment for Imported Goods: By an irrevocable letter of Credit at CIF/CIP Kolkata value negotiable through any overseas branch of State Bank of India/any Schedule Bank of India.

Note: Please note LoC will not be opened unless and until Letter of Acknowledgement in original is received at NIT, Aizawl, Mizoram, directly from the principal (Even in case of firms having subsidiary office in India).

#### **18. ADDITIONAL TERM FOR IMPORTED GOODS**

Following term besides the fore mentioned terms will be applicable in case of foreign purchases:

Rates: Prices quoted must be for destination including freight and insurance charges inclusive of free delivery up to the door of department/centre NIT, Mizoram premises, as per details below:

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Sl. No.	Particulars	Rate
Ι	Basic Price (per unit) including Packing, Forwarding, Freight, Insurance, Installation & demonstration charges inclusive	
II	Custom Duty (Approximate)	
III	Grand Total for the item on door delivery at NIT Mizoram	

- 19. Maintenance & Service Contract: An agreement is to be made between the Institute & the Manufacturer/Distributor/Dealer for providing Maintenance & service after expiry of the Warranty Period (preferably from the Manufacturer) within 30 days from the day of complaint. Maintenance and service charges will be paid as per the terms of the agreement for the same.
- 20. Enquiry during the course of evaluation not allowed: No enquiry from the bidder(s) shall be entertained during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative may make enquiries/seek clarification from the bidders. In such a case, the bidder must extend full co-operation. The bidders may also be asked to arrange demonstration of the offered items, in a short period of notice.
- 21. The acceptance of the quotation will rest solely with the Director, NIT Mizoram, who in the interest of the Institute is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.

#### 22. Force Majeure:

If the performance of the obligation of either party is rendered commercially impossible by any of the events hereafter mentioned that party shall be under no obligation to perform the agreement under order after giving notice of 15 days from the date of such an event in writing to the other party, and the events referred to are as follows:

i. Any law, statute or ordinance, order action or regulations of the Government of India,

- ii. Any kind of natural disaster, and
- iii. Strikes, acts of the Public enemy, war, insurrections, riots, lockouts, sabotage.

#### 23. Applicable Law:

- (a) The contract shall be governed by the laws and procedures established by Govt. of India and subject to exclusive jurisdiction of Competent Court and Forum in Aizawl / India only.
- (b) Any dispute arising out of this purchase shall be referred to the Director NIT Mizoram, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Director of the Institute. The decision of such Arbitrator shall be final and binding on both the parties.

#### 24. Training:

The vendor will provide free training at NIT Mizoram after Successful installation of the Machines/equipments.

Encl.: ANNEXURE-I, ANNEXURE-II, ANNEXURE-III & ANNEXURE-IV

DEPUTY REGISTR NATIONALINSTITUTE OF TECHNO **OGY, MIZORAM** 

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Mizoram

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## Annexure -I

#### A. COMPLIANCE CERTIFICATE FOR NIT TERMS (To be enclosed in the Technical bid)

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Sl. No.	NIT Terms and Conditions	Yes/No
01	Rate quoted as per instruction	
02	AMC rate after warranty provided	
03	Validity of quoted rate for 90 days agreed	_
04	EMD submitted (appropriate certificate enclosed)	
05	PBG term agreed	
06	Payment term agreed	
07	Delivery terms agreed	
08	Warranty period agreed	
09	Literature: Printed Literature provided	
10	Dealership / distributorship certificate (in case of dealers/agents) provided	
11	Sales Service: address of after Sales Service centre in India (for imported goods)/ in the region provided	
12	Applicable law terms agreed	

Signature with Seal:.....

Vendor: M/s.....

## B. COMPLIANCE CERTIFICATE FOR SPECIFICATIONS (One for each item must to be enclosed in the Technical bid)

Item Sl. No.			
Specifications as per Annexure-IV		Quoted Item Specs.*	Complied (Yes/No)
Parameter	Specification		
			-

Signature with Seal:.....

Vendor: M/s.....

\* Vendor must quote the parameter specification of the quoted product in this column and not just copy the specification from the tender call document. Failure to do so will lead to rejection of the tender.

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DEBNATH (SUKANTA

(UPAMIA DAS) AP, FEE

#### Annexure -II

#### PERFORMANCE BANK GUARANTEE

To:

National Institute of Technology Mizoram

WHEREAS...... (Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract No..... hereinafter called "the order".

AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of...... (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the order and without cavil or argument, any sum or sums within the limit of ...... (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the ......day of ......20.....

Signature and Seal of Guarantors ..... ..... ..... Date.....20.... Address:..... ..... .....

All correspondence with reference to this guarantee shall be made at the following address:

National Institute of Technology Mizoram

SUMAN MAJUMPER) AD, YEEE

(KRISHNARTINDE) (SURANTA

DEBNATH) AD, FEE

## Annexure -III

# MANUFACTURERS'/ DISTRIBUTOR'S AUTHORIZATION FORM

No.	Dated
The Director	
National Institute of Technology	
Aizawl-796012, Mizoram	
Dear Sir:	
We,	who are established and reputable
Manufacturers/distributors of	having
factories/office at	
(address of factory/office) do her	reby certify that
	(Name of the Authorised Dealer) is our authorized dealer to
quote against your tender enquir	ry noLast
Date of Submission is:	

Yours faithfully,

(Name) (Name of Manufacturer/Distributor)

(A) (SUMAN MAJUMDER)

(JUMAN MAJUMDER AD, FEE

(KRISHWARTI DE) ADIEEE

60 (SUKANTA DEBHATH) AD, EFE

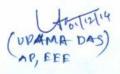


# Annexure -IV

# TECHNICAL SPECIFICATIONS FOR ELECTRICAL MEASURMENT LAB

Sl No	Description	Qty
1.	Commercial Galvanometer 30-0-30 divn	
2.	Sensitivity : 20 µA/Divn	01
2.	Measurement of Low Resistance by Kelvin Bridge It should consists of:	01
	Student Kelvin Double Bridge	
	Null Detector	
	DC Regulated Power supply	
	RESISTANCE COIL	
3.	Measurement of Low Resistance using Student Crompton Potentiometer.	01
	Student Crompton potentiometer Should Consists of :	
	Constant voltage source	
	Electronic standard cell	
	Super sensitive galvanometer	
	Resistance coil	
	Regulated power supply 5V/1.5A	
	Rheostat, 20 ohm 2A	
4.	Ammeter 0-1A Schering Bridge	01
4.	Feature :	01
	The board should consists of the following built- in Parts :	
	1. Schering Bridge Circuit with arms Values.	
	2. $\pm$ 12 VDC at 100 mA, IC regulated Power Supply internally connected.	
	3. 1 KHz Sinewave Oscillator having Output 0-15 Vpp.	
	<ol> <li>Audio amplifier and speaker for null detector.</li> </ol>	
	6. Potentiometer for balancing the bridge.	
	7. Band switch to select one from six different values of resistance.	
	8. Adequate no. of other Electronic Components.	
	9. Mains ON/OFF switch , Fuse & Jewel light.	
	<ul> <li>The unit is operative on 230V + 10% at 50Hz AC Mains</li> </ul>	
	<ul> <li>Adequate no. of patch cords stackable 4 mm spring loaded plug length ½</li> </ul>	
	metre	
	Good Quality , reliable terminal/sockets are provided at appropriate	
	places on panel for connections/observation of waveforms	
	<ul> <li>Strongly supported by detailed Operating Instructions, giving Details of Object theory, Design procedures, Report Suggestions and Book</li> </ul>	
	Reference	
5.	4 Digit True RMS 10000 count handheld DMM	15
-35.61	Features:	1794765
	1. 4 Digit with Adjustable backlighting - two intensity levels display.	
	2. 10,000 Count backlit Display.	
	3. True RMS AC measurement.	
	4. Basic DC Voltage accuracy 0.09 %.	
	5. Basic Functions like – ACV, DCV, ACI, DCI, Ω, Hz, Diode, Continuity, Capacitance,	
	Temperature (K Type Thermocouple), MIN-MAX recording.	
	6. AC Measurement upto 2 KHz range.	

(OUMAN MASUMDER) (KRISHNARTI DE) (JUKANTA DERMATH) (UDAMA DAS) AD, FEE AD, FEE AD, FEE



	7. Safety certified with EN / IEC 61010-1 category III, 1000 V over voltage protection. DETAIL SPECIFICATIONS:			
	<ul> <li>Voltage : 1000 mV - 1000 V.(AC/DC) Resolution : 0.1 mV.(AC/DC)</li> <li>Current : 1000 uA - 10 Amp.</li> </ul>			
	Resolution : 0.1 uA. (AC/DC)			
	<ul> <li>Resistance : 1000 Ω – 100 MΩ.</li> </ul>			
	Resolution : $0.1 \Omega$ .			
	Capacitance : 1000 nF – 10 mF.			
	Resolution : 0.1 nF.			
	<ul> <li>Frequency : 100 Hz – 1000 KHz.</li> </ul>			
	Resolution : 0.01 Hz.			
	<ul> <li>Temperature : - 40° C - 1000° C with Optional K Type Termocouple</li> </ul>			
	Power Supply : 1.5 V x 4.			
6.	DC power supply,30V/5A, 150 W	10		
	Features :			
	1. Excellent load & line regulation			
	2. Low output noise			
	3. Over voltage & over current protection			
	4. LCD Display with backlight display			
	<ol><li>Standby output for safety purposes</li></ol>			
	6. Save & recall function up to three memory states			
	<ol><li>Security fatures: keypad lock and physical lock mechanism.</li></ol>			
	Detail Technical Specification :			
	Output Ratings : 0 to 30 V, 0 - 5 A			
	Line & Load Regulation : CV < 0.01% + 2 mV			
	CC < 0.02% + 2 mA			
	Ripple & Noise : CV – 12mVp-p, < 1 mVrms			
	CC – 3 mArms			
	<ul> <li>Load Transient Response Time : &lt; 50 μs</li> <li>Description Account of Account of</li></ul>			
	Programming Accuracy : < 0.35% + 20 mV			
	<ul> <li>&lt; 0.35% + 20 mA</li> <li>Meter Resolution</li> <li>Voltage - 10 mV</li> </ul>			
	Meter Resolution     Voltage – 10 mV     Current – 10 mA			
7.	Maximum output float voltage : ± 240 Vdc     Oscilloscope 100 MHz, 4 Channel	03		
1.	FEATURES :-			
	i)Upgradable in nature in terms of bandwidth , addition of Digital Logic channels to work			
	on Mixed Signal mode			
	i) Built in Waveform Generator			
	ii) High Update rate			
	iii) Optional Segmented Memory mode to capture selectively and storing important			
	segments of Signals only			
	DETAILED TECHNICAL SPECIFICATIONS :-			
	1. No. of Channels : 4			
	2. Bandwidth :100 MHz (upgradable to 200MHz)			
	3. Maximum Input :400 V peak			
	4. Time base Range : 5 nsec. to 50 sec/div			
	5. TRIGGER SYSTEM : Edge , Pulse Width , Pattern , Duration , Video,			
	6. Max. SAMPLING RATE : 1 GSa/s on each channel.			
	7 Mere MEMODU DEDELL 400 Late Ct 1			
	<ol> <li>Max. MEMORY DEPTH : 100 Kpts. Standard</li> <li>8. Waveform update Rate : 50,000 waveforms / sec</li> </ol>			

(SOMAN MAJUMDER) (URASHNARTT DE) (SUKANTA DEBNATH) AP, EFE AP, FEE





	<ul> <li>9. Segmented Memory : To capture selected segments of the waveform.</li> <li>10. Automatic Parameter Measurement Upto 23 parameters</li> <li>11. Built in waveform generator: Optional for Sine , Square , Pulse , Ramp etc.</li> <li>12. Display System : 8.5 inch WVGA Colour</li> <li>13. Built in interface : USB 2.0 high speed device,</li> <li>14. Optional LAN ,GP-IB and XGA output.</li> </ul>	
	Optional Accessories For High Voltage And High Current Measurement Passive probe, 4KV high-voltage, 100:1, 250 MHz	01
	Current probe, 30A AC/DC, 100MHz	01
8.	Rheostat 0-50Ω, 3A	10

(SOMAN MAJUMDER) AP, EEE

(KRISHNARTI DE) AD, EEE

(SUKANTA DEDNATH) APIEE

