National Institute of Technology, Nagaland, Chumukedima, Dimapur, Nagaland-797103

INVITATION LETTER

Package Code: TEQIP-III/nitn/15
Package Name: MICROPROCESSOR AND MICROCONTROLLER LABORATORY

Current Date: 18-July-2019
Method: Shopping Goods

Sub: INVITATION LETTER FOR MICROPROCESSOR AND MICROCONTROLLER LABORATORY

Sir/Madam,

1. You are invited to submit your most competitive Sealed Quotations for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	**Microprocessor and Microcontroller Laboratory:** (Detailed specifications given at Annexure I)	20	NIT Nagaland	YES

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. Quotation

3.1 The contract shall be for the full quantity as described above.

3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.

3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit price

3.4 Applicable taxes shall be quoted separately for all items.

3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

3.6 The Prices should be quoted in Indian Rupees only. Goods/Equipments should be brand new.

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **60** days after the last date of quotation submission.
6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which
   6.1 are properly signed; and
   6.2 Confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together
8. Award of contract: The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

   8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

   8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:

   Delivery and Installation - 90% of total cost
   Satisfactory Acceptance - 10% of total cost

10. Liquidated Damages will be applied:
    - Liquidated Damages Per Day Min % : 0
    - Liquidated Damages Max % : 0
11. All supplied items are under warranty of **Twelve** (**12)** months from the date of successful acceptance of items.
12. You are requested to provide your offer latest by 1**2:00** hours on **01-Aug-2019.**
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **Yes**
15. Testing/Installation Clause (if any) **Yes**
16. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly Indicating the model quoted for
17. The tender document shall be submitted/delivered in a sealed envelope bearing the following reference on the top left corner: **Package Code: TEQIP-III/nitn/64 Dated: 18-07-2019** latest by 1**2:00** hours on **01-Aug-2019** and addressed to: **The Registrar, National Institute of Technology, Nagaland, Chumukedima, Dimapur, Nagaland-797103.**

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

18. The bidder should furnish the certificate of GST registration, PAN, and IT Returns of last three years.

19. The Bidder should have experience of executing at least 5 (Five) Purchase Order of Equipment/Machines from any IITs /NITs/ Central Govt. Institutions or Educational & Research Institutions of National Repute.
20. Vendors should clearly state the available nearest after sales service facilities in the region, without which their offers will be rejected.
21. The bidder should be the manufacturer or authorised dealer and, in such case, the certificate of dealership from the manufacturer should be produced.
22. **Performance Bank Guarantee (PBG):** The supplier shall furnish an unconditional PBG for 5% of the Purchase Order value for a period of one year from a scheduled Bank of India, within 21 days from the date of delivery and installation of the work. 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 Dimapur. The PBG shall guarantee that,

    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.

23. The bidder should produce Audited statement of accounts for the last 3 years.
24. **Disputes and Jurisdiction**: Any legal dispute arising out of any breach of contract pertaining to this order shall be settled in the court of competent jurisdiction located within Dimapur in Nagaland.
25. **All the supporting documents should be attached with the quotation, without which the tender will be completed rejected.**
26. The Institute reserves the right to accept in part or in full any quotation(s) or reject any or more quotation(s) without assigning any reason or to cancel the tendering process and reject all quotation(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

We look forward to receiving your quotation and thank you for your interest in this project.

TEQIP-III COORDINATOR
18-07-2019

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

Annexure I

Sr. No	Item Name	Qty	Specifications
1.	**Micro Processor**	20	**Advanced 8085 Training and Development System with LCD display, USB interface and inbuilt assembler/disassembler shall have following specifications;** • High performance 8-bit 8085A CPU @ 3 MHz. • Onboard 40x2 / 16x2 / 20x4 LCD Interface options; should be supplied with 40 character X 2 lines LCD display. • 16 K powerful monitors FIRMWARE Including all standard commands, codes, functions and utility subroutines, Assembler and Dis-assembler. 4K has been used for system firmware. • 32 K user RAM 62256 with battery backup for sockets using 3.6V Ni-Cd Battery. • Three 28 pin sockets provided for memory expansion up to a maximum of 56 K. • Versatile Keyboard/Display controller using 8279 brought out on separate FRC connector. • 24 Parallel I/O lines from 8255 are brought out on separate FRC connector. • 22 Parallel I/O lines from 8155 are bough on separate FRC Connector. 2k-bit static RAM (256 bytes) and a timer also available. • On board 40x2 LCD display and PS2 connector for 104 Key Standard PC-compatible Keyboard. • Three 16 bit Timer / Counter channels are available on-board, using 8253. These channels are available on a 10 pin FRC connector. • Serial I/O through auto adjusting type RS-232 channel. • Program Uploading and downloading facility should be provided. • PC interface: Through RS-232 as well as on- board USB Interface. • Power supply options: Should be SMPS and 5V Adapter. • Programmable timer. • Powerful 8085 interrupt capabilities. • Built-in audio cassette interface • All address, data and control and hardware interrupt lines are brought out on a Pin FRC connector for system interfacing and expansion. • All Peripheral Interfacing and Study Cards should be support by this trainer kit. • Should be Supplied with Switch Mode Power Supply: +5v 1A, +12v 1A, -12v 0.5A OR 5V DC Adapter. • Should be Supplied in attractive enclosure with cable-connectors and documentation includes User Manual with all details.

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

2.	**Microprocessor**	20	**Advanced 8086 Microprocessor Training and development kit with LCD display, USB interface and inbuilt assembler/disassembler shall have following features;** • High Performance 16-bit 8086 CPU @ 8 MHz • Should be supplied with 40 character X 2 lines LCD display and provision to connect 16x2 / 20x4 LCD on the same kit. • Onboard optional socket for 8087-2 NDP (Co-Processor). • Onboard 8284 Clock Generator and 8288 Bus Controller. • Having two modes of operation: Local / Remote. • 64 KB Powerful Monitor Firmware in two 27256 EPROMs organized as 16-bit words including all standard commands, codes, functions and utility subroutines, Assembler and Dis-assembler Expandable to 128 KB. • 64 KB Static RAM in two 62256 RAMs organized as 16-bit words with battery back-up. • 3.6V Ni-Cd battery backup circuit for static RAMs. • Versatile Keyboard/Display controller using 8279. • On board 40x2 LCD display and PS2 connector for 104 Key Standard PC-compatible Keyboard. • On board 8254 Time/Counter chip. Out of 3 Channels of Timer/Counter Two Channels are totally available to the user through a 7-pin relimate connector. • 48 Parallel I/O lines from Two 8255 are brought out on separate FRC connector. • Printer Interface Provided through another 26 pin FRC Connector. • Serial I/O through 8251 USART, with on-board level shifters 1488 and 1489, brought out on a 9 bit D type Connector. • Software Selectable Baud Rates: 300 to 9600. • Onboard 8259 Interrupt Controller Provides 8 Prioritized interrupt Levels. • Should have on Board RS232 Serial and USB interface hardware. Assembly Language environment. • All 8086 bus Signals terminated on 50 and 20 Pin FRC Connector. • All Peripherals i.e. Study and PIO Cards are supported by this trainer kit. • Two Modes of Operation: Monitor Mode and Serial Mode. • Should be Supplied with Switch Mode Power Supply: +5v 3A, +12v 1A, -12v 0.5A. • Should be Supplied in attractive enclosure with cable-connectors and documentation includes User Manual with all details.
3.	**Microcontroller**	20	**Advanced 8051 Microcontroller Training and development kit with LCD display, USB interface and inbuilt assembler/disassembler shall have following features;** • High Performance 8031/51 MCU @ 12 MHz • On Board USB interface hardware and Onboard 40x2 LCD Interface.

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

			• 32K Onboard Program Memory • Powerful monitor software with Standard Commands like Move, Fill, Display / Modify Memory / Registers, Execute Program, Upload / Download etc. • Single line Assembler / Dis-assembler • 12KB Battery backed up User Program Memory. • 16KB Battery backed up User Data Memory • 3.6V Ni-Cd battery backup circuit for static RAMs. 48 Parallel I/O lines from Two 8255 are brought out on separate FRC connector. • On board 8253 Time/Counter chip. Out of 3 Channels of Timer/Counter Two Channels are totally available to the user through a 7 pin relimate Connector. • Serial I/O through 8250 USART, with on-board level shifters 1488 and 1489, brought out on a 9 bit D type Connector. • Software Selectable Baud Rates: 300 to 9600. • 8259 Interrupt Controller Provides 8 Prioritized interrupt Levels. • All 8031/51 bus Signals terminated on 50 Pin FRC Connector. • All Peripherals i.e. Study and PIO Cards are supported by this trainer kit. • On board 40x2 LCD display and PS2-Connector for 104 Key Standard PC-compatible Keyboard. • Two Modes of Operation: Monitor Mode and Serial Mode. Serial mode for using the kit with terminal • Should be Supplied with Switch Mode Power Supply: +5v 3A, +12v 1A, -12v 0.5A. • Should be Supplied in attractive enclosure with cable-connectors and documentation includes User Manual with all details.
4.	**INTERFACING CARDS**	20	8085, 8086 and 8051 µP and µC Trainer Kits

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To: _____

_____

Sl. No.	Description of goods \ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. ———————— (Amount in figures) (Rupees ————————amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ———————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____

TEQIP-III Project Coordinator
National Institute of Technology Nagaland
Dimapur -797103, Nagaland