



Seemant Engineering Institute, Pithoragarh, NANHI PARI SEEMANT
ENGINEERING INSTITUTE PITHORAGARH (Erstwhile Seemant Institute of
Technology, Pithoragarh) GIC Campus, Link Road, Pithoragarh-262 502,
Uttarakhand

INVITATION LETTER

Package Code: TEQIP-III/2019/UK/seip/106

Current Date: 19-Jul-2019

Package Name: ECE Embedded Lab

Method: Shopping Goods

To,

The **CONCERNED**

.....
.....

Sub: INVITATION LETTER FOR ECE Embedded Lab

Dear Sir,

1. You are invited to submit your most competitive quotation 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	Embedded System, Basic Electronics	1	NPSEI Pithoragarh	Yes required

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.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **120**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:

Satisfactory Acceptance - 100% of total cost
10. Liquidated Damages will be applied as per the below:

Liquidated Damages Per Day Min % :N/A

Liquidated Damages Max % : N/A
11. All supplied items are under warranty of **36** months from the date of successful acceptance of items and AMC/Others is .
12. You are requested to provide your offer latest by **16:30** hours on **05-Aug-2019**.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **Yes required**
15. Testing/Installation Clause (if any) **Yes required**
16. Performance Security shall be applicable: **0%**

17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation to be submitted/ delivered at the address mentioned below **through INDIAN SPEED/ REGISTERED POST ONLY** and mention **TEQIP-III/2019/UK/seip/106** on the top of the envelope:

**The Director/ TEQIP-III Coordinator
NANHI PARI SEEMANT ENGINEERING INSTITUTE
(Erstwhile Seemant Institute of Technology)
GIC Campus, Link Road,
Pithoragarh-262 502, Uttarakhand**

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

(Authorized Signatory)

Name & Designation

Additional Terms & Condition:

1. All manufacturer/authorized dealer need to mention the make and model no for the item quoted and authorized dealer has to submit the recent valid authorization certificate from the original manufacturer.
2. The manufacturer/authorized dealer has to provide at least three years warranty and free service/maintenance required at the college site.
3. Training for a period of at least 3 days to be considered.
4. At the time of technical evaluation of products, the vendor may be called for the demonstration if required.
5. FREE installations and FREE Demonstration at College.
6. The manufacturer/authorized dealer should provide catalog/leaflet in support of the quoted product.
7. Vendors have to quote the full package and demonstrate all the experiments covered. Quotation will be evaluated for the whole package.
8. Statutory Documents like GST certificate, PAN Card, Manufacturing License etc to be provided.
9. Quotations will not be considered submitted through by hand in any case.

Annexure I

Sr. No	Item Name	Specifications
1	Embedded System, Basic Electronics	<p>A. <u>Embedded Development Platform</u></p> <ul style="list-style-type: none">• Embedded platform for FPGA and Controller/DSP controller application,• Daughter cards for FPGA and Controller for extended technology,• Mother board with flexible architecture,• Each Microcontrollers must have daughter board with all IO lines available to user on 10pin FRC connectors• All controllers/DSP Boards must have Programming through USB port. All boards must have operated on Universal AC/DC power supply 9V-24V.• Xilinx Spartan 3 FPGA family, Spartan3E FPGA Daughter Card, ARM7TDMI-S 32 Bit LPC2148 microcontroller, DSP TMS320F2812 fixed point 32 bit DSP controller, Altera Cyclone II FPGA, AVR ATMEGA128, PIC32, CPLD as Cool Runner CPLD Daughter Card <p>Basic Mother Board with peripherals;</p> <ul style="list-style-type: none">• 8 input Switches with 8 LED for experiment of Logical IO's• RTC DS1307 with Battery & I2C 24C08 EEPROM• On Board Stepper Driver, DC motor Driver & Servo Motor Driver with all 3 motors. Speed, Direction Control Experimentation.• 4x4 Keypad, 4digit 7 segment display,• 16x2 Y/G LCD,• I2C based ADC-DAC interface• Temperature Measurement using LM35• Buzzer Relay Interface On-board• IR Receiver Module & Remote• On board IR transmitter Receiver, Ultrasonic Sensor & RGB LED.• 170 tie points porotype board must be available on same board with 10 nos. of connecting wires. <p>Set of FPGA and Controller/DSP controller Boards/Daughter Boards Card as below;</p> <ul style="list-style-type: none">• ARM7TDMI-S 32 Bit LPC2148 microcontroller,• DSP TMS320F2812 fixed point 32 bit DSP controller,• CPLD Cool Runner CPLD Daughter Card• Spartan3E FPGA,• Altera Cyclone II/IV FPGA,• AVR ATMEGA128,• PIC32,

- 128x64GLCD interfacing Board- 1
- 3.2inch TFT Display for ARM7 LPC 2148
- Power supply – 1no.
- FRC Cables – 5 nos.
- Serial Cable- 1no.
- USB Cable – 1 no.
- Ethernet Cable – 1no.
- Operational Manual with Schematic Diagrams.
- Must be supply soft copy with of Respective Controllers IDE software for all above Microcontrollers & FPGA's CPLD & DSP.
- Must be supply with sample Codes in C/VHDL for all available on board peripherals.

B. Embedded Platform with Advance FPGA:

Different vendors FPGA - Basic foundation board should consist of different peripherals & interfacing accessories.

- Xilinx FPGA - Spartan 3E - XC3S500E: The XILINX Spartan-3E FPGA device with Operating Frequency: 50MHz Operating Voltage: 1.15V~3.3V Package: QFP208, I/Os: 116, LEs: 500K, RAM: 360kb, DCMs: 4 Debugging/Programming: supports JTAG with USB JTAG must be provided.
- Spartan 6 FPGA - XC6SLX9-2TQG144C: The XILINX Spartan-6 FPGA device with: Operating Frequency: 50MHz; Operating Voltage: 1.15V~3.3V; Package: QFP144, I/Os: 102; Logic Cells: 9152, RAM: 132kb; Debugging/Programming: supports JTAG with USB JTAG must be provided.
- Altera Cyclone IV EP4CE6E22C8N - P4CE6E22C8N: the ALTERA Cyclone IV FPGA device which features: Operating Frequency: 50MHz; Operating Voltage: 1.15V~3.465V; Package: QFP144; I/Os: 80; LEs: 6K; RAM: 270kb; PLLs: 2; Debugging/Programming: Supports JTAG with USB JTAG must be provided

Basic foundation board must consist of;

- 8 Bit ADC 0804
- 8 Bit DAC using 0808
- 16 Digital Inputs through switches & 16 LED's for Output for any logical experimentation
- 16x2 LCD display
- 4 Digit 7 segment display
- 4x4 Keypad
- DC Motor control drivers with motors
- Stepper Motor control drivers with motors
- Relay Buzzer & LED sequence
- 2 serial ports

- VGA Port.

Interfaces must be provided such as;

- 128x64 Graphics LCD (GLCD)x1,
- AT45DBXX Data Flash Board x 1,
- FM24CLXX FRAM Board x 1,
- PCF8563 RTC x1,
- PCF8591 AD DA Board x 1,
- Temperature sensor DS18B20 x 1,
- USB to UART converter with USB Micro interface,
- ENC28J60 Ethernet Board x 1,
- CY7C68013A USB Board for fast USB High speed USB module with embedded 8051 core, USB mini-AB connector
- Above mentioned FPGA's must be provided and should be interchangeable with foundation board.
- All required Cables, connectors, Power adaptor.

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. _____