INVITATION FOR QUOTATION

TEQIP-III/2019/seip/Shopping/61 **13-Jan-2019**

To,

The CONCERNED

Sub: Invitation for Quotations for supply of Goods

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	**Brief Description**	**Quantity**	**Delivery Period(In days)**	**Place of Delivery**	**Installation Requirement (if any)**
1	Analog Attach MCU Labs (ARM)/Embedded Lab	1	50	NPSEI Pithoragarh	Yes
2	Analog front end	1	50	NPSEI Pithoragarh	Yes
3	Connectivity Attach Lab (Ultra Low Power Lab/Internet of Things Lab (IOT))	1	50	NPSEI Pithoragarh	Yes
4	IOT Sensor Modules	1	50	NPSEI Pithoragarh	Yes
5	Robotic ARM	1	50	NPSEI Pithoragarh	Yes

6	Senzband with Mind Sync and Memorie App	1	50	NPSEI Pithoragarh	Yes
7	Software	1	50	NPSEI Pithoragarh	Yes
8	TI-RSLK Kit	8	50	NPSEI Pithoragarh	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, initialing, 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 **50** 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:

10. **Delivery and Installation - 50% of total cost**

    Satisfactory Acceptance - 50% of total cost

All supplied items are under warranty of **36** months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by **12:00** hours on **04-Feb-2019 .**
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **Yes**
14. Testing/Installation Clause (if any) **Yes**
15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
16. Sealed quotation to be submitted/ delivered **THROUGH INDIAN SPEED POST ONLY** at the address mentioned below,

    NANHI PARI SEEMANT ENGINEERING INSTITUTE PITHORAGARH

    (Erstwhile Seemant Institute of Technology, Pithoragarh)

    GIC Campus, Link Road, Pithoragarh-262 502, Uttarakhand

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

(Authorized Signatory)

Name & Designation

Annexure I

1.ROBOTICS
2.ARTIFICIAL INTELLIGENCE
3.IOT (INTERNET OF THINGS)
4.ULTRA LOW POWER

Sr. No	Item Name	Specifications
1	Analog Attach MCU Labs (ARM)/Embedded Lab	**MODULE 1: 2NOS** • Two CC110L RF BoosterPack boards • Two MSP430G2553 devices (preloaded with a sample program) • Quick Start Guide • CD with software and documentation **MODULE 2: 2NOS** ARM Cortex M4 Core, 80MHz Speed 256 K Flash, 32 K RAM 2 , 12 Channel 12-bit ADC 16 PWM Channels USB Host/Device/OTG 2 CAN 43 GPIOs, 4 SPI, 4 I2C, 8 UART **MODULE 3: 2NOS** • InvenSense MPU-9150: 9-axis MEMS motion tracking o 3-axis gyro o 3-axis accelerometer o 3-axis compass • Bosch Sensortec BMP180 pressure sensor • Sensirion SHT21 humidity and ambient temperature sensor • Intersil ISL29023 ambient and infrared light sensor • TI's TMP006 non-contact infrared temperature sensor
2	Analog front end	Three TL082 Dual Op-amps Three MPY634 Analog Multipliers 200 Nos –Times IC’s
3	Connectivity Attach Lab (Ultra Low Power Lab/Internet of Things Lab (IOT))	**MODULE 1: 2NOS** 2.4 GHz, ISM band multichannel low power transceiver Module 2 LEDs, 1 Push Button Wireless Sensor Monitoring Applications Application UART allows serial communication to PC **MODULE 2-2 NOS** 1 x CC2650 Module BoosterPack

		10-pin JTAG debug cable 1 x Additional CC2650 Module Sample **MODULE 3-2NOS** Wi-Fi Network Processor in QFN package Industry's first devices to be Wi-Fi CERTIFIED™ at the chip level by the Wi-Fi Alliance™ 2 20-pin stackable connectors (BoosterPack headers) to connect to TI LaunchPads and other BoosterPacks On-board chip antenna with option for U.FL-based testing Power from on-board LDO using USB OR 3.3V from MCU LaunchPad 2 push buttons 4 LEDs Jumper with 0.1 Ohm resistor for current measurement 0.8 megabit serial flash 40 MHz crystal, 32 KHz crystal and oscillator U.FL and chip antenna USB 4 Layer PCB with 6 mm spacing and track width **MODULE 4- 1NOS** Supports various IDE: CCS, IAR Embedded Workbench for ARM Cortex-M4 Standalone development platform featuring sensors, LEDs and push-buttons On-board chip antenna with option for U.FL-based testing 2x20-pin stackable connectors (BoosterPack headers) to connect to TI LaunchPads and other BoosterPacks Back-channel universal asynchronous receiver/transmitter (UART) through USB to PC XDS110-based JTAG emulation with serial port for flash programming **MODULE 5 : 2 NOS** USB 2.0-enabled MSP430F5529 16-bit MCU Up to 25 MHz 128KB Flash and 8KB RAM 12 Bit SAR ADC Various USB device class examples and embedded software libraries available (CDC, HID, MSC) eZ-FET lite: Open source onboard debugger with application UART One USB connection for emulator and target via the use of an onboard USB hub USB as power source: 5V and 3.3V through a high efficiency DC/DC converter 40 pin LaunchPad standard leveraging the BoosterPack ecosystem

4	IOT Sensor Modules	Sl No. Modules Features 1 HR202 Soil Humidity Sensor 3.3V-5V DC Operation 15 mA Operating Current Humidity Range: 20 to 95% LM 393 Based Design 2 Water Level Sensor 3-5V DC Operation Operating Current <20 mA Sensor Type: Analog 3 Alcohol Sensor Selective digital/analog output Direct and easy interface High Sensitivity & Response Time 4 Temperature Sensor LM35 based sensor Digital/Analog output Good Sensitivity 5 Sound Sensor Electret microphone based DC 4-6V Single signal output Can be used for voice control and sound detection 6 Ultra-Sonic Sensor 5v wide voltage input range Current consumption <3 mA 2-200 cm of non-contact measurement range 7 LDR Sensor Sensitive type photo resistance sensor 3.3-5V DC DO digital switch and AO analog voltage output Fixed bolt hole, convenient installation 8 3-Axis Accelerometer Wide Application area Tilt & Motion, Motion Sensing, Free Fall Detection E Compass, Image Stability
5	Robotic ARM	**HARDWARE** • The kit consists of black anodized aluminum brackets, • Aluminum tubing and hubs, custom injection molded components, and precision laser-cut Lexan components. • IR sensor for the detection of object on the conveyor belt. • Camera USB Type, Full HD 1080p,H.264 avc compression,Carl zeiss optics must be supplied for the image processing Applications. • Must be supplied with Remote having 5 knobs to control the each servomotor respectively. • Mounted Object detection Conveyor Belt for Material Pick up and place. • On Board Bluetooth to control wirelessly. • USB cable for the interfacing to the PC.

		• Power adapter to power the board **THE MECHANICS** • The arm uses 1 x HS-475HB in the base. • 1 x HS-805BB in the shoulder. • 1 x HS-755HB in the elbow. • 1 x HS-645MG in the wrist. • Wrist rotates Servo Motor. • 1 x HS-422 in the gripper. **THE CONTROLLER SECTION** • AVR processors (Atmega328) based Controller, • Serial port-based version with powerful PC software with USB interface • Reprogrammable Section with PC software using USB • IR based object detection. And conveyor belt controlling mechanism. **SOFTWARE** • Interfaced through MATLAB. And MATLAB based experiments programs must be supplied. • For future LABVIEW compatibility must be there. • Android interface to the Arm through APP and App must be provided. **EXERCISES** • Camera based color detection on conveyor belt mechanism. • Real time controlling of the Robotic Arm through GUI Created in MATLAB. • Image processing application through compatibility using MATLAB software • MATLAB based Sorting of object on basis of their color using image processing in MATLAB • Android based control of robotic ARM learning kinematic and Inverse Kinematics • Open platform for Android Application through Bluetooth. • All reading of unit must be connected to system in excel file. Must Supplied with dust cover.
6	Senzband with Mind Sync and Memorie App	Senzband with Brain wave technology RSLK compatible sensors and Bluetooth Module PIR sensor HM-10 Bluetooth module ultrasonic sensor Servo motor moisture sensor buzzer

		Dedicated Edgate Apps for RSLK
7	Software	**SOFTWARE:** CrossWorks Single License for Microcontroller **SOFTWARE:** NeeuroDEV Software Development Kit Our SDK Integrates Senzeband ,a safe and non-invasive brainwave sensor,to let you monitor and make use of EEG Signals together with your application .
8	TI-RSLK Kit	– Teaches the foundations of an electronic system and includes: SimpleLink™ MSP432P401R MCU LaunchPad™ development kit Motor drive and power distribution board Robot chassis, motors, Line IR sensors 50+ other mechanical and electronic components

Additional Terms & Condition:

1. The manufacturer/authorized dealer should submit three purchase order along with satisfactory work completion certificate for similar types of items supplied to other Engineering colleges/organizations.
2. 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.
3. The manufacturer/authorized dealer has to provide at least three years warranty and free service/maintenance required at the college site.
4. Pre dispatch inspection may be carried out if necessary for certain goods at the manufacturer site.
5. At the time of technical evaluation of products, the vendor may be called for the demonstration if required.
6. FREE installations and FREE Demonstration at College.
7. The manufacturer/authorized dealer should provide catalog/leaflet in support of the quoted product.
8. Vendor should provide License copy of Cross Works Software (Electronically Delivered) and Certificate from Authorized Partners to Sell Cross Works software In India.
9. Vendors have to quote the full package and demonstrate all the experiments covered. Quotation will be evaluated for the whole package.

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: _____