INVITATION FOR QUOTATION

DIC/UIET/2016

Package: Sensors and other items for Energy Harvesting

Shopping **Date: 29/11/2016**

To,

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
1.	PIR sensor	10	30	UIET, Sector 25 Chandigarh
2.	Super capacitor	5	30	UIET, Sector 25 Chandigarh
3.	Battery	5	30	UIET, Sector 25 Chandigarh
4.	Energy harvester circuit	4	30	UIET, Sector 25 Chandigarh
5.	Piezoelectric	10	30	UIET, Sector 25 Chandigarh
6.	Energy harvester kit	1	30	UIET, Sector 25 Chandigarh
7.	Arduino boards	10	30	UIET , Sector 25 Chandigarh
8.	Relays	20	30	UIET, Sector 25 Chandigarh
9.	Zigbeetransrecievers	8	30	UIET, Sector 25 Chandigarh
10.	IOT energy management module	1	30	UIET, Sector 25 Chandigarh
11.	Host pc with UPS	01	30	UIET, Sector 25 Chandigarh

2. Quotation,

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

2.2 Corrections, if any, shall be made by crossing out, initialing, dating and re writing.

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

2.4 Applicable taxes shall be quoted separately for all items.

2.5 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.

2.6 The Prices should be quoted in Indian Rupees only.

3. Each bidder shall submit only one quotation.
4. Quotation shall remain valid for a period not less than **55** days after the last date of quotation submission.
5. Evaluation of Quotations,

   The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

   5.1 are properly signed ; and

   5.2 confirm to the terms and conditions, and specifications.
6. The Quotations would be evaluated for all items together.
7. 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.

   7.1 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.

   7.2 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.
8. Payment shall be made in Indian Rupees as follows:

   Delivery and Installation - 90% of total cost

   Satisfactory Acceptance - 10% of total cost

9. All supplied items are under warranty of **12** months from the date of successful acceptance of items.
10. You are requested to provide your offer latest by **17:00** hours on **13.12.2016.**
11. Detailed specifications of the items are at Annexure I.
12. Training Clause (if any) **yes**
13. Testing/Installation Clause (if any) **yes**
14. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
15. Sealed quotation to be submitted/ delivered at the address mentioned below,

    University Institute of Engineering and Technology, Sector-25, South Campus Panjab University Chandigarh
17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

Annexure-1

S.No.	Name of Equipments	Quantity	Specifications
1.	PIR sensor	10	• Operating voltage: DC5V to 20V • Static power consumption: 65 microamps • level output: high-3.3V, low-0V • Delay Time: adjustable (0.3 seconds to 18 seconds) • Embargo time: 0.2 seconds • Sensing range: less than 120 degrees angle, 7 meters • Operating temperature: -15 ~ +70 degrees • PCB Dimensions: 32 * 24mm, the screw hole distance 28mm, screw diameter 2mm, sensor lens size: (diameter): 23mm
2.	Super capacitor	5	10 F , 2.5 V
3.	Battery	5	• Battery Type: 18X650 battery pack • Nominal voltage: 7.4V • Nominal Capacity: 2200mah • Maximum size: 19*38*70mm(with PCM) • Weight: 86grams • Maximum charging current: 2200mA • Discharging current: 2200mA • Max. discharging current: 4400mA • Charging Temperature: 0°C to 45°C

			• Discharging Temperature: -20°C to 60°C
4.	Energy harvester circuit	4	
5.	Piezoelectric	10	Piezoelectric patches
6.	Energy harvester kit	1	On board EFM32GG990F1024 with ARM Cortex M3 Debugging with a SEGGER J-Link debugger Energy debugging with an integrated Advanced Energy Monitoring (AEM) with voltage monitoring 4 harvesters for different source types On board solar cell and thermo electric generator Connectors for optional external generators
7.	Arduino boards	10	The system must be supplied with processors likearduino. The system must have facility for processors on acombination of mother board and daughter board combination. E2PROM with 4K.memory or more RTC DS1307 with 32 KHz Crystal with battery back-up. Two 12V relays with isolated O/Ps on 3 pin connectors. One 12V stepper motors with drivers. 8 I/Ps from DIP switches. 8 O/Ps available on LEDs. 4 multiplexed 7-segment displays. 4-Single bit keys ,8 Channel ADC with Potentiometers Arduino328 Daughter Board · Microcontroller- ATmega328, Flash Memory- 32 KB · SRAM - 2 KB (ATmega328), EEPROM- 1 KB (ATmega328) · Clock Speed- 16 MHz, Operating Voltage- 5V · Digital I/O Pins- 2 box header (14 pins of which 6 provide PWM output · Analog Input Pins- on 1 box header (6 pins)
8.	Relays	20	5v, 10A 12V,10A
9.	Zigbeetransrecievers	8	·Long distance communication X-bee modem ·xternal /on board antenna ·X-bee modem with range upto 300 ' in open environment, ·USB connectivity to pc interface ·Facility to configure X-bee modem using X-CTU software ·5V Power input with burn protection regulated -3.3v output operated hardware ·Multiple Microcontroller interfacing using 10 pin connector Open i/o to interface external.
10.	IOT energy management module	1	**Functional Properties** • Inter operation among diverse sensor. • Demands a complex distributed architecture excommunicating over Internet • Uses numerous diverse components • Context detection & Analysis. • Device discovery and management. • Security and privacy.

			• Managing data volume. • Providing unique application plug-in interface **Technical Specification** Controller: BRCM2835 SoC,StandardSoC Speed 700Mhz,RAM 512mb,Storage Micro SD,Ethernet 10/100,HDMI output port,Composite video On 3.5mm jack,Number of USB2.0 ports 4,Expansion header 40,Number of available GPIO 26, 3.5mm audio jack ,camera interface ,LCD display interface ,Power 650mA, 3W Microcontroller ATmega2560 Operating Voltage 5v,Digital I/O Pins 54 (of which 6 provide PWM output) PWM Digital I/O Pins 15 Analog Input Pins16 Flash Memory 32 KB (ATmega328P) of which 0.5 KB used by bootloader SRAM 8kB EEPROM 4KB Board is supplied with agriculture moneterings speak website with ph sensor, silmoisutresensor,humidity, temperature in the field and its data logging on thingspeak website , smart home monetering and control has a faciltity of controlling any device from internet and controlling movement of curtains and intruder datalogging at various points of time and the satus of the door opening ,smart colony it has smart street light system ,and smart water flow caluclation system , internet controlled robot using blynk app appartfeom the above it has all the below failities Sensor Protocols: Analog, Digital, SPI, I2C Serial Communication:Ethernet,Wi-Fi Cloud:IBM Blue mix, Things speak, Device hub **Actuator:**Motor, Relay, Pneumatic,buzzer
11.	Host pc with UPS	01	Processor i7, windows 7, RAM 8GB, Hard disk 320 GB

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: _____