

Government of West Bengal

Office of the Principal

Cooch Behar Government Engineering College

Village: Harinchawra, P.O.: Ghughumari, Dist.: Cooch Behar, West Bengal – 736170, India

Website: www.cgec.org.in

Phone Number: 03582 233 044

Ref. No .: 114/CGEC /2024

Date: 06 03 2024

E-mail ID: principalofficecgec@gmail.com

NOTICE

Sealed quotations are invited from the reputed, eligible interested Companies/Suppliers/Service Provider Agencies for the purchase of "**Permanent Equipment**" for the **Research and Development Project** funded by Department of Science & Technology and Biotechnology (DSTBT), Government of West Bengal [Sanction Order No.: 2142(Sanc.)/STBT-11012(16)/18/2019-ST SEC, Date: 10.02.2024]. The details of the invitations are available in the College website **www.cgec.org.in** and it may be downloaded there from.

(Dr. Prabal Deb) Principal, Cooch Behar Government Engineering College (CGEC), Cooch Behar, West Bengal – 736170 Principal Cooch Behar Govt. Engg. College P.O. Ghughumari, Dist. Cooch Behar Copy 196-736170. West Bengal (India)

- 1. College website,
- 2. College notice boards,
- 3. Principal, CGEC,
- 4. Account Officer, CGEC
- 5. Dr. Aritra Acharyya (PI)
- 6. Guard File



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E-mail ID: principalofficecgec@gmail.com

Date: 06/03/2024

Website: www.egec.org.in Phone Number: 03582 233 044

Ref. No.: 114 CGEC 2024

NOTICE FOR INVITING QUOTATION FOR THE PURCHASE OF "PERMANENT EQUIPMENT" FOR THE RND PROJECT FUNDED BY DEPARTMENT OF SCIENCE & TECHNOLOGY AND BIOTECHNOLOGY (DSTBT), GOVERNMENT OF WEST BENGAL [SANCTION ORDER NO.: 2142(SANC.)/STBT-11012(16)/18/2019-ST SEC, DATE: 10.02.2024]

Sealed quotations are invited from the reputed, eligible interested Companies/Suppliers/Service Provider Agencies for the purchase of "**Permanent Equipment**" for the **Research and Development Project** funded by Department of Science & Technology and Biotechnology (DSTBT), Government of West Bengal [Sanction Order No.: 2142(Sanc.)/STBT-11012(16)/18/2019-ST SEC, Date: 10.02.2024]. The interested Companies/Suppliers/Service Provider Agencies may submit their quotation/bid documents in prescribed format. Details of the specifications and quantities of the items are as follows:

SI. No.	Item Name	ltem Number	Sub-Item Number Range	Sub-Item Specifications	Item Quantity (Nos.)	Estimated Item Price (INR)
1	Raspberry Pi 5 Mini-Computer System	1	(i) – (v)	Annexure – 1	1	24760
2	LoRA Module	2	(i) – (ii)	Annexure – I	1	8400
3	Trail Camera Accessories	3	(i) – (xiv)	Annexure – I	1	27290
4	Electronic Components	4	(i) – (vi)	Annexure – I	l	2800
5	IoT Development Boards and Accessories	5	(i) – (xi)	Annexure – I	!	16040
6	Hot Air De-Soldering Station	6	(i) – (ii)	Annexure – I	1	7160
	Total	Estimated	Price (INR)	*		86450

Notes: (1) Quantity may vary at the time of placing the order, (2) Details of all the sub-items with specifications and quantity are listed in Table 1 of the Annexure – 1.

Qualification Conditions:

- (1) Bidder should be registered Firm/Company/Establishment,
- (2) Bidder shall provide all relevant records required, i.e. Income Tax Return Certificate/PAN, Commercial Tax Clearance/VAT/GST Certificate and other taxes (whichever applied).

Delivery Place/Works Site:

Bidder will supply and deliver the items at the above-mentioned section of CGEC.

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Bid Price:

- (1) The Bid Price shall be in INR (Rs) and including all taxes and other levies such as the transportation expenses; no extra price is payable by the college. Bidder must quote the item wise.
- (2) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment of any account.

Validity of Quotation:

Quotation shall remain valid for a period not less than 30 days after the deadline date specified for submission.

The following Documents must be submitted with the Quotation/Bid:

- 1. Copy of Establishment Registration Certificate/Valid Trade License in relevant field
- 2. Copy of PAN and copy of latest return
- 3. Copy of GST Certificate
- 4. Copy of PTAX enrolment certificate and copy of latest paid challan of PTAX
- 5. Detailed office address of the AGENCY WITH Telephone Number, Fax Number and Mobile Number and name of the contact person.

Evaluation of Quotation:

- The purchaser will evaluate and compare quotations determined to be substantially responsive, i.e.
 - (a) Those are properly signed,
 - (b) Confirm to terms, conditions, specifications and qualifications conditions.
- Each Item will be evaluated separately.

Award of Contract:

- The purchaser will award the contract to the bidder whose quotations has been determined to be substantially responsive, who has offered the lowest evaluated quoted price.
- The bid document may also be downloaded from our college website: www.cgec.org.in
- All bid documents must be submitted to the office of the Principal on or before <u>27</u> March, 2024 at 4:00 pm in sealed envelope and clearly marked with Ref No. <u>114/CGEC/2024</u>, Dated: <u>06/03/2024</u>.
- All sealed quotations received till then will be opened on the same day before the bidders or their representative who wish to be present in the office on <u>27</u> March, 2024 at 4:30 pm.

(Dr. Prabal Deb) Principal, Cooch Behar Government Engineering College (CGEC), Cooch Behar, West Bengal – 736170

Principal Cooch Behar Govt. Engg. College P.O. Ghughumari, Dist. Cooch Behar Pin-736170. West Bengal (India)

Annexure - I

Specification and Quantity Sub-Items

Item Number	Item Generic Name	Sub-Item No.	Sub-Item Name	Sub-Item Specifications	Sub-Item Quantity			
1		i	Raspberry Pi 5, Model B, 8 GB RAM	 Model: Raspberry Pi 5 Model 8GB 64-bit quad-core Arm Cortex-A76 processor RAM: LPDDR4X-4267 8GB SDRAM 800MHz VideoCore VII GPU PCIe 2.0 x1 interface for fast peripherals 5V/5A DC power (PD enabled) Real-Time Clock (RTC), powered by an external battery On-board power button 	2			
	Raspberry Pi 5 Mini- Computer SystemiiOfficial Raspberry Pi 5 Active Cooler1. Original Raspberry 2. Temperature-Cont 3. Delivers up to 1.44 4. Comes With Alum 5. Compatible With t 1. Panasonic ML-202 2. Comes with a cont 3. Easy to install and 4. Double-sided adherivOfficial 27W USB- 	 Original Raspberry Pi Product. Temperature-Controlled Fan, Delivers up to 1.4CFM of Air Flow. Comes With Aluminium Heat Sink Compatible With the Official Raspberry Pi 5 Case. 	2					
		iii		 Panasonic ML-2020 Battery Comes with a connector for Pi 5 board Easy to install and Replace Double-sided adhesive pad to attach it to the inside of a case 	2			
		iv	C PD Power Supply for Raspberry Pi 5-	1. Input: 100-240VAC 2. Output: 5A @ 5.1V, 3A @ 9V, 2.25A @ 12V, 1.8A @ 15V 3. Connector: USB-C 4. Cable: 1.2m, 18awg 5. Color: White	2			
		v	256 GB MicroSD Card	1. Up to 150MB/s transfer speed 2. Class 10				
he		i	USB to LoRa SX1262 Data Transfer Module	quency Range (HF): 850~930MHz	4			
2	LoRA Module	ii	LPWA Outdoor Waterproof Antenna (433/470MHz)	 5dBi High gain with magnetic base, LoRa Antenna, 4G/3G/2G/LPWA Support, Frequency Range: 690~2700MHz Height: 11 Cm SWR ≤2.0 Connector: SMA male connector Output Impedance: 50Ω 	4			
3	Trail Camera Accessories	i	Ai Thinker ESP32 CAM Development Board	 Module Model:ESP32-CAM Custom IO Port:9 SPI Flash:Default 32Mbit RAM:520KB SRAM +4M PSRAM WIFI:802.11 b/g/n/e/i Bluetooth Version:4.2 Antenna Type:IPEX and PCB Input Supply Range (VDC):3.6 ~ 5 Current Dissipation (mA):180-310 	6			
	Accessories	ii	USB TO UART TTL 5V 3.3V FT232RL Download Cable To Serial Adapter Module For Arduino	 Standard interface layout, compatible with a variety of Arduinos such as the Pro Mini Original FTDI FT232 chip, stable performance USB power has current protection, using 500MA self-restore fuse RXD/TXD transceiver communication indicator With power, sending, receiving indicator, working status LED indicators 	2			

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		6. Mini USB Port Connection	
iii	ESP32 CAM Lens OV2640 Wide Angle 160 Degree Night Vision 850nm Camera Module 75mm Length	 Support 3.3V, 5V The OV2640 CameraChip is low voltage CMOS image sensor that provides the full functionality of a single-chip UXGA (1632x1232) camera and image processor is a small footprint package. The OV2640 provides full-frame, sub-sampled, scaled or windowed 8-bit/10-bit images in a wide range of formats, controlled through the Serial Camera Control Bus (SCCB) interface. It is having 24pin connector which connects to the ESP32 cam FFC connector with 0.5mm pitch. This product has an image array capable of operating at up to 15 frames per second (fps) in UXGA resolution with complete user control over image quality, formatting and output data transfer. All required image processing functions, including exposure control, gamma, white balance, color saturation, hue control, white pixel canceling, noise canceling and more are also programmable through the SCCB interface. It also includes a compression engine for increased processing power. It has proprietary sensor technology to improve image quality by reducing or eliminating common lighting/electrical sources of image contamination, such as fixed pattern noise, smearing, etc., to produce a clean, fully stable color image. 	6
iv	4GB MicroSD Card	1. Capacity: 4 GB 2. Class 10 3. Read Speed: 30 MB/s	6
V	6dBi 2.4GHz 5GHz Dual Band WiFi SMA Antenna +165mm U.fl-IPEX Cable	 Flexible cable Stable signal Best for indoor applications. Connector: IPX female to SMA-KY Frequency(Hz): 900/1800 Gain: <3 dB VSWR: <1.5 	6
vi	NEO-6M GPS Module with EPROM	 5Hz position update rate. The cold start time of 38 s and Hot start time of 1 s. Configurable from 4800 Baud to 115200 Baud rates. (default 9600). SuperSense ® Indoor GPS: -162 dBm tracking sensitivity. Support SBAS (WAAS, EGNOS, MSAS, GAGAN). Separated 18 x 18mm GPS antenna. 	3
vii	Navigation Antenna Magnetic Mount SMA Male GPS Antenna with 15cm 6 inch UFL 1PX 1PEX to SMA Female RG316 Coaxial Pigtail Cable	 ANTENNA SPECIFICATIONS: Antenna Gain: 28dBi, Voltage: 3-5V, Cable length: 3 Meters/9.8 Feet, Nominal Impedance: 50ohm, Frequency Range: 1575.42MHz. COMPATIBLE WITH: Vehicle Telematics, 4G LTE GPS Tracker Locator, Vehicle Real Time Tracking, GPS Navigation System Module, Mobile DVR Video Recorder, Bus, Truck, Car, Marine, Boat, Jeep, RV Van, Security Alarm System, Vehicle Amateur, Radio Mobile Radio etc. COMES WITH SMA MALE CONNECTOR: 28dBi Navigation antenna comes with sma male connector and provides you excellent signal improvement. FIXED FORM: Powered by the head unit and its own car charger. This antenna has a magnetic base which can adhere to any surface. PACKAGE LIST: 1 x GPS Antenna, 1 x 15cm 6 inch U.FL IPX IPEX to SMA Female RG316 Coaxial Pigtail Cable 	3
viii	5V, 1 Channel Relay Module	 Trigger Voltage: 5 VDC Trigger Current : 20 mA Maximum Switching Voltage: 250VAC@10A; 30VDC @10A Single Pole Double Throw (SPDT) Configuration Power supply indicator lamp 	3

		ix X	IR led Board Module 850nm Infrared 36 LED Board CCTV Camera Night Vision Generic KG001 HC-SR501 PIR Sensor Pyroelectric Infrared Module	 IR LED Module with Photo Resistor Automatically turn ON IR LED at night time and turns Off at day time Operating at 12V Small size and Lightweight module Inner diameter 17mm; Outer diameter 53mm. Product Type: HCSR501 body sensor module Operating Voltage Range: DC 4.5-20V Quiescent Current: <50uA Level Output: High 3.3 V or low 0V 	3
		xi	12V, 10A PWM Solar Charge Controller	 Eccel Output: High 5.5 V of low 0V Material: plastic; Color: blue; Max Solar Panel Voltage (V): 200Wp(12V), 400Wp(24V); Dimensions: 16 x 12 x 5.5 (cm) Ratings: 10 amp; Battery Voltage: 12V/24V PACKER: Luminous Power TECHNOLOGIES Pvt. Ltd., Plot No. 150, Sector-44, Gurugram Haryana-122003 Inbuilt Low volatge disconnect ; Automatic battery selection; USB port for DC load connection Package contains : Pack of 1, 10Amp Solar Charge Controller 	3
A Station of the		xii	DC-DC Step-Down Buck Converter Power Supply Module 24V 12V 9V to 5V 5A 25W Replace LM2596S	 This DC-DC Step-Down Buck Converter Power Supply Module provide all the active functions for a step-down (buck) switching regulator, capable of driving a load up to 5A with excellent line and load regulation Simple High-Efficiency Step-Down (Buck) Regulator Mostly used for On-Card Switching Regulators 	3
and the second sec		xiii	12 Volt/ 7 Ah Powersafe Battery (Sealed),Original Replacement To Ups Battery	 Ups Battery - Vrla - Dry Sealed Maintainance Free Battery Eco Friendly. Ready To Use - Factory Charged Good Service Life Technology : Manufactured In Techincal Collaboration With Shin Kobe Electric Machinery Co Japan, Maker Of World Renowed Hitachi Batteries, Exide Industries Ltd Is An Iso 9001 Organisation. Reliable performance Installation: Please check with seller during delivery for installation of your Inverter battery. If you are installing inverter/battery for the first time then you may need additional electrical wiring setup & electrical socket for which additional charges may apply; Exchange: Please check with seller during delivery if exchange is possible for your old batteries. Depending on the battery brand, weight and condition, it can get you up to INR 2500 as exchange amount 	3
		xiv	Polycrystalline Solar Panel	 Best in Class Efficiency : Innovative cell technology ensures optimum solarpower generation providing high value for money upto16.5%. Technology : Poly Crystalline, PID Resistance Technology Outstanding Durability : With its newly reinforced frame design, Loom Solar 20W can endure a front load up to 6,000Pa, and a rear load up to 5,400Pa. Application : Perfect for charging Power Bank/Mobile/Small Battery upto 20AH Dimension : (L*W*H)mm -450*350*22 	3
4	Electronic Components	i	Resistors	Values: 1, 10, 22, 33, 47, 56, 68, 82, 100, 120, 150, 180, 220, 270, 330, 390, 470, 560, 680, 750, 880, 1k5, 1k8, 2k2, 3k3, 4k7, 5k6, 6k8, 12k, 15k, 18k, 1k, 22k, 27k, 33k, 47k, 56k, 68k, 82k, 100k, 120k, 180k, 220k, 330k, 390k, 470k, 560k, 680k, 820k, 1m No. of pcs.: 20 each value Wattage: ¼ W Material: CFR	1

		ïi	Capacitors	Values: 1, 2.2, 4.7, 10, 22, 47, 100, 220, 470, 100 μF No. of Pcs.: 10 each value Voltage Rating: 63V Type: Electrolyte	I
	-	iii	IC Regulators	1Cs: 7805, 7812 No. of Pcs.: 10 cach	1
		iv	BJT Transistors	Type: <i>n-p-n</i> BJT Model: BC547	1
		V	P-N Junction Diode	Set of 50 pcs. Type: Silicon Rectifying Diodes Model: 1N4007 Set of 100 pcs	1
		vi	Flex Resistor Sensor	Length: 2.2 Inch	6
		i	ESP 32 Development Board	ESP 32	4
		iì	ESP 8266 Wifi Development Board	Node-MCU	4
		iii	Arduino UNO		2
		iv	Arduino UNO Cable	Cable for Arduino UNO/MEGA (USB A to B)-1M	4
		V	Arduino NANO		2
		vi	Arduino NANO Cable	Cable for Arduino Nano (USB 2.0 A to USB 2.0 Mini B) 30cm	2
5	IoT Development Boards and Accessories	vii	Arduino Mega 2560	Microcontroller: ATmega2560 Operating Voltage: 5V Input Voltage (recommended): 7-12V Input Voltage (limits): 6-20V Digital I/O Pins: 54 (of which 15 provide PWM output) Analog Input Pins: 16 DC Current per I/O Pin: 40 mA DC Current for 3.3V Pin: 50 mA Flash Memory: 256 KB of which 8 KB used by bootloader SRAM: 8 KB EEPROM: 4 KB Clock Speed: 16 MHz USB Host Chip: MAX3421E Length:101.98mm/4.01in Width:53.63mm/2.11in Height:15.29mm/0.60in 1. BCM2710A1 die Cortex-A53 CPU	2
		viii	Raspberry Pi Zero 2 W	 512MB LPDDR2 DRAM 802.11b/g/n wireless LAN Bluetooth 4.2 / Bluetooth Low Energy (BLE) MicroSD card slot Mini HDMI and USB 2.0 OTG ports Micro USB power 	4
		ix	32 GB MicroSD Card	 32 GB Class 10 Min. 140MB/s transfer speed 	4
		х	USB to MicroUSB Cable	 Compatible with smart phones, tablets, power banks Usb 2.0 Cable - a male to micro b 1.2M/ 4ft nicle plated fast charging USB, tangle free copper wire maximizes signal quality and increases durability High transfer speed up to 480mbps 3 years warranty 	-4

		xi	USB to Type C Cable	 3A Fast Charging - Delivers 3A fast charging and 480 Mbps data transfer speed. Quick Charge 2.0/ 3.0 - Supports Quick Charge (QC) 2.0/3.0 to deliver rapid charging speed. Wide Compatibility - It is compatible with all Type-C enabled devices including Android smartphones, tablets and PC peripherals. Unbreakable - Made of special braided outer with rugged interior bindings, it is an ultra-durable cable that won't be affected by daily rough usage. Ideal Length - It has an ideal length of 1.5 meters which is super convenient to use. 	4
6	Hot Air De- Soldering Station	i	750W Hot Air Rework Station with Soldering Iron	 This hot air rework station features a PID programmable temperature control system and real time temperature tracking of each component, as well as an automatic temperature correction with rapid speed compensation and minimum tolerance. It comes equipped with a hot air gun and soldering iron. The anti-static design prevents static or electricity leakage. Personalized Functions: A. Temperature Correction Function: The rework station will automatically correct the temperature due to environmental changes or replacement of the heating coil, soldering iron or other components. B. Sleep Mode: The soldering iron automatically goes to sleep if it is left in a still condition for 10 minutes, and the temperature will decrease to 200°C. This prevents the iron tip from oxidizing and other damage, as well as eliminates the need for a heat waiting period. Activation Method: a). Shake the iron handle several times. b). Press any button once. C). Power-off first and then power-on. C. Cold/Hot Air Switch: Switch from cold or hot air by pressing the button-the cold air function is especially designed to cool down heated elements processing. 	I
		ii	Tweezer Set	 Skid proof design- You can hold them firmly without slipping or rotating Great for beading and other fine crafts, medical, laboratory work, cosmetic hair removal and many aspects of watch and clock repair, it is good for watchmakers and jewelers. Also ideal for rhinestones, studs, gems, card making scrapbooks, sewing, stitching etc. Set of 5 multi-purpose tweezers, is self opening type (squeeze to close) tweezers. These tweezers are exactly as shown in image - straight, bent down, and bent sideways 	1
		iii	Sliding Razor Knife	 The manual locking system enhances safety by holding the blade in place. Crafting, scrapbooking and arts basic for cutting paper, cardboard and thin sheets of plastic. Metal blade runner ensures safe use. Plastic Body for Higher strength and Soft material for comfortable use. 	3

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CHECK LIST FOR BIDDERS/APPLICANTS

The bidder should ensure that all documents and papers submitted in this Bid are fully authenticated by the authorized signatory under his/her signature with office seal wherever applicable. The following documents should be submitted with Bid:

SI. No.	Documents to be Submitted	Documents Submitted (Y/N)
1	All pages of this bid document should be duly signed by the authorized signatory as a	
	token of acceptance of all terms and conditions by the bidder. Any other document	
	submitted by the bidder should also be signed by the authorized signatory.	
2	Self Attested copy of GST (GSTN)	
3	Self Attested copy of PAN/Number	
4	Self Attested copy of return for last month/quarter as the case may be submitted towards	
	Central and State Sales Tax.VAT if applicable	
5	Bid Form	

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

The bidder whose bid is accepted will be notified of the award of contract by the purchaser.

The terms of the accepted offer shall be incorporated in the supply order. The validity period may be extended by the purchaser by another 15 days in exceptional cases.

Other Terms and Conditions:

- (a) The college reserves the right to postpone/cancel the bid, the bidder will have to abide with the decision.
- (b) Payment shall be made after the supply and submission of bills which will be subject to satisfactory supply (certified by the committee constituted for the purchase). Personnel in Charge will certify the quality and quantity of the items supplied/work done as per the specifications and recommend accordingly the extent payment.
- (c) No preference will be given to any bidder or class of bidders, either for the price or for other terms and conditions.
- (d) Quotation may be submitted on the printed letter head of the bidder in the prescribed format attached at the end of this notice.
- (e) Successful bidder will have to enter into an agreement with the Campus for timely execution of the purchase order.
- (f) No payment will be made for any damage of the goods supplied.
- (g) Total responsibility of the Goods, Materials in the site will be with the party only, College is not responsible for any way of damages, pilferage or loss of Goods, Materials, etc.

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



Principal,

Principal Cooch Behar Govt, Engg, College P.O. Ghughuman, Dist. Cooch Behar (Dr. Prabal Deb) Fin-736170, West Bengal (India) Cooch Behar Government Engineering College (CGEC),

Cooch Behar, West Bengal - 736170

FORMAT OF BID

Supplier Ref. No.:	Dated:
Name of the Company/Supplier/Service Provider	Agency:

Quotation for Purchase of "Permanent Equipment" for the Research and Development Project funded by Department of Science & Technology and Biotechnology (DSTBT), Government of West Bengal [Sanction Order No.: 2142(Sanc.)/STBT-11012(16)/18/2019-ST SEC, Date: 10.02.2024]

Ref. No.:

Date:

Sl. No.	ltem Name	ltem Specifications/ Features with Brand	ltem Quantity	Item Unit Price	Offered Price without GST (INR)	SGST (INR)	CGST (INR)	Offered Price with GST (INR)
1	Raspberry Pi 5 Mini-							
	Computer System	1	i in					
2	LoRA Module							
3	Trail Camera Accessories							
4	Electronic Components							
5	IoT Development Boards and							
	Accessories							
6	Hot Air De-Soldering Station	a 🛍 💷 💷						
		Total Price w	ith GST (IN	२)				

Total

(Total Amount in Rupees ______ only)

We agree to supply the above-mentioned items/works in accordance with technical specifications for the total contract price of Rs. _____/- (In words Rupees _____) including taxes, transportation, etc.,

within eight weeks of issue of supply order.

- 2. We also confirm that the normal commercial warrantee/guarantee shall apply to the applied items.
- 3. We also agree and abode with the terms and conditions stipulated in the bid document.

(Signature of Bidder with Seal)	
Name:	
Designation:	
Address:	
Contact No.:	
Date:	