

## INVITATION FOR QUOTATION

TEQIP-III/2019/iotg/Shopping/34

11-Feb-2019

To,

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### 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	Component Lab	1	30	THE DIRECTOR INSTITUTE OF TECHNOLOGY GOPESHWAR KOYHIYAL SAIN CHAMOLI 246424 UTTARAKHAND	NO

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 **45** 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 - 0% of total cost**

**Satisfactory Acceptance - 100% of total cost**

10. All supplied items are under warranty of **12** months from the date of successful acceptance of items.
11. You are requested to provide your offer latest by **15:00** hours on **27-Feb-2019** .
12. Detailed specifications of the items are at Annexure I.
13. Training Clause (if any) **NO**
14. Testing/Installation Clause (if any) **NO**
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 at the address mentioned below,  
The Director, Institute of Technology, Gopeshwar, Kothiyalsain, Chamoli-246424, Uttarakhand
17. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

**Annexure I**

Sr. No	Item Name	Specifications		
1	Component Lab	Item Name	Specification	Qty.

	Arduino Uno Rev 3	Microcontroller ATmega328P Operating Voltage 5V Input Voltage (recommended) 7-12V Input Voltage (limit) 6-20V Digital I/O Pins 14 (of which 6 provide PWM output) PWM Digital I/O Pins 6 Analog Input Pins 6 DC Current per I/O Pin 20 mA DC Current for 3.3V Pin 50 mA Flash Memory 32 KB (ATmega328P) of which 0.5 KB used by bootloader SRAM 2 KB (ATmega328P) EEPROM 1 KB (ATmega328P) Clock Speed 16 MHz LED_BUILTIN 13 Length 68.6 mm Width 53.4 mm Weight 25 g	05
	Arduino Mega 2560 Rev 3	Microcontroller ATmega2560 Operating Voltage 5V Input Voltage (recommended) 7-12V Input Voltage (limit) 6-20V Digital I/O Pins 54 (of which 15 provide PWM output) Analog Input Pins 16 DC Current per I/O Pin 20 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 LED_BUILTIN 13 Length 101.52 mm Width 53.3 mm Weight 37 g	05

		Raspberry Pi 3 Model B with Kit (Original)	Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz, 1GB LPDDR2 SDRAM, 2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2, BLE Gigabit Ethernet over USB 2.0 (maximum throughput 300 Mbps), Extended 40-pin GPIO header, Full-size HDMI, 4 USB 2.0 ports, CSI camera port for connecting a Raspberry Pi camera, DSI display port for connecting a Raspberry Pi touchscreen display, 4-pole stereo output and composite video port, Micro SD port for loading your operating system and storing data, 5V/2.5 A DC power input Operating temperature, 0 - 50°C, Power-over-Ethernet (PoE) support (requires separate PoE HAT).	20
		Latte Panda V1.0	Intel Cherry Trail Z8350 Quad Core Processor Base Frequency: 1.44GHz (1.92GHz Burst Frequency) Operating System: Windows 10 Home Edition (Unactivated) RAM: 4GB DDR3L Storage Capacity: 64GB GPU: Intel HD Graphics, 12 EUs @200-500Mhz, single-channel memory USB 3.0 x 1, USB 2.0 x 2 Wi-Fi 802.11n 2.4G Bluetooth 4.0 Integrated Arduino Co-processor: ATmega32u4 (Arduino Leonardo) Video output: HDMI and MIPI-DSI On-board touch panel overlay connector Supports 100Mbps Ethernet Intel Processor GPIO x 6 ATmega Processor GPIO x 20 Gravity Interface Connectors x 6 Voltage: 5V@2A	02
		Starter Kit for Latte Panda  (Casing, Charge, Cooling Fan, Heat Sinks, HDMI Cable, LAN Cable)	EU standard power supply: the high-quality supply to power up your Latte Panda with a solid 5V@2.5A USB cable Cooling fan: a low noise fan with adhesive pad that can stick on the Latte Panda's metal shielding. Power it from the Latte Panda's CN2 headers. Heatsinks: Keep the Latte Panda cool by covering all the heat sources with these pure coppers heatsinks Enclosure: a solid transparent enclosure for Latte Panda to keep out dust and prevent ESD damage HDMI cable: Length 1m (3') Power supply: 5V@2.5A Plug standard: EU	02
		Gravity: Starter Sensor Set for Latte Panda V1.0	PIR (Motion) Sensor x 1 Analog Gas Sensor (MQ2) x 1 Analog Flame Sensor x 1 Gravity: Analog LM35 Temperature Sensor For Arduino x 1 Analog Ambient Light Sensor x 1	02

		<p>Crash sensor (Left) x 1  Crash sensor (Right) x 1  Digital Push Button (White) x 1  Digital Push Button (Blue) x 1  Analog Rotation Sensor V2 x 1  Digital Blue LED Light Module x 1  Digital RED LED Light Module x 1  Digital White LED Light Module x 1  Relay Module V3.1 (Arduino Compatible) x 1  Gravity Sensor cable x 14</p>	
	<p>CAM 5MP  Mini Camera  OV5647  Sensor 1080p  720p video for  Raspberry Pi  Board</p>	<p>Angle of View: 54 x 41 degrees  Field of View: 2.0 x 1.33 m at 2 m  Full-frame SLR lens equivalent: 35 mm  Fixed Focus: 1 m to infinity  Max frame rate: 30fps  15 cm flat ribbon cable to 15-pin MIPI Camera Serial Interface (CSI) connector</p>	05
	<p>7 Inches  Capacitive  Touch Screen  Display for  Raspberry pi</p>	<p>Turn your Raspberry Pi into a touch screen tablet, infotainment system, or standalone device.  10 finger capacitive touch.  Screen Dimensions: 194mm x 110mm x 20mm.  Viewable screen size: 155mm x 86mm.  Screen Resolution 800 x 480 pixels.</p>	05
	<p>CAM 1.3Mp  HD CMOS  Infrared  Camera  Module with  Adapter board</p>	<p>Microsoft xbox360 Kinect original monochrome infrared camera module  Maxim resolution 1280 x 1024 SXGA at 30 fps  Maxim frame rate 30fps  Shutter type: Electronic rolling shutter (ERS)  Optical size 1/2"  ADC resolution 10-bit  Supports image sizes: SXGA, VGA, QVGA, CIF, QCIF.  Extreme High sensitivity for low-light operation  Low operating voltage for embedded portable apps  Standard I2C two wire interface  Digital Video Port interface  34 pins golden finger FPC cable connector  Easy integrate with STM32, FPGA, DSP, Arduino etc.</p>	02
	<p>Soldering Iron  Kit with  Adjustable  Temperature  (Should be  ISO or ISI  Marked)</p>	<p>Soldering Iron x 1  Desoldering Pump x 1  Different Soldering Iron Tips x 5  Soldering Iron Stand x 1  Anti-Static Tweezers x 2  Soldering Wire X1</p>	15

		<p>Soldering Wick X 1</p> <p>Copper Wire X 1</p> <p>Cleaning Sponge X 1</p> <p>Rosin (Solder Paste) x 1</p> <p>Solder X 1</p> <p>Carry case to meet all your soldering project needs.</p> <p>With Lead 0.8mm Rosin Flux Core Solder Wire Reel.</p> <p>Desoldering pump</p> <p>Precision screw driver 2.5x75mm</p> <p>Screwdriver 5 x 75mm</p> <p>Screwdriver 6 x 125mm</p> <p>Long nose plier 6"</p> <p>Diagonal cutting plier 6"</p> <p>Combination plier 6"</p> <p>Adjustable wrench 6"</p> <p>Electronic screwdriver set</p> <p>Hex key wrench</p> <p>Snap off cutter 135mm</p> <p>Tweezers (Long nose)</p> <p>Zippered Case</p>	
	<p>Driller Tool Kit (Should be ISO and ISI Marked)</p>	<p>Multi-function hammered Drilling, Capable of being operated on a variety of surfaces, such as concrete, wood, metal and plastic. 600 W, Hammer Actioned. Depth Gauge Continuous Drill Mode. Tool set includes an auxiliary handle, a depth gauge, a key chuck, a 5-piece masonry drill bit set (4 - 10 mm in diameter), Metal drill bits (2 - 6 mm in diameter), and 4 wood drill bits (4 - 8 mm in diameter). It also includes an assortment of 10 screwdriver bits, 7 socket wrenches, 10 pieces of screws and 10 pieces of S-Plug.</p>	<p>05</p>

		Claw hammer, measuring tape, an adjustable knife, a wrench, Spirit level and combination pliers.	
	Digital Measuring Unit (Area, Length, volume) (Should be ISO and ISI Marked)	Laser Measure. splash-proof and dust-resistant (IP54 rating) ISO certification, 2mm accuracy.	02
	Cordless Drill with bits  (Should be ISO and ISI Marked)	Pistol Grip Drill (10 mm Chuck Size) Max. Torque (hard screw driving) 50 Nm Torque, max. (Soft screw driving) 18 Nm Max. torque (hard / soft wrapping) 50/18 Nm No-load speed (1st / 2nd gear) 0 - 400/0 - 1700 rev / min Battery Type Li-Ion battery voltage 14 V Battery capacity 1.5 Ah Keyless chuck 13 mm Number of torque levels 20 + 1 A type Li-Ion drilling Capacity Max. Hole in the wood 32 mm Max. dia. holes in steel 10 mm Dia. screws Max. screws 8 mm.	02
	Double Sided Combination Wrench Set (Pack of 12) (Should be ISO and ISI Marked)	ISO Quality	05
	Digital voltage tester with neon bulbs pack of 1 hand tool kit	5-250V  (ISO/ ISI Quality Only)	05
	Allen Key Set	(ISO/ ISI Quality Only)	03
	Cordless Screwdriver (Should be ISO and ISI Marked)	1/4-inch Internal Hexagon Bit Holder. Intuitive operation style – Just push to drive screws (Push & Go). Intelligent E-clutch stops when you want to stop. Torque Minimum: 0.5 Nm Max: 3 Nm Capacity (Max. Screw Diameter) 5 mm	02



		<p>Battery Voltage 3-5 V  No Load Speed 360 rpm  Max Torque (Hard Screw driving Application) 5 Nm  Battery Type Lithium-ion  Accessories</p> <p>Charge Time 1 Micro-USB Cable  60-90 mins.  Battery Capacity 1.5-2 Ah  Drilling Diameter (in Steel) 5 mm  Max Torque (Soft Screw Driving Application) 2.5 Nm</p>	
	PCB Soldering Desk Magnifier LED Light Magnifiers Soldering Iron Helping Hands Auxiliary Clamp Alligator Clip (Should be ISO and ISI Marked)	Material: ABS + Iron + Acrylic Lens Lens Diameter: 108m (PPrimary Lens), 21mm (Auxiliary Lens), 30mm/30mm (Replaceable Auxiliary Lens) Lens Magnification: 2.5 X (Primary Lens), 6X (Auxiliary Lens), 5X/10X (Replaceable Auxiliary Lens) Focal Length: 200mm (Primary Lens), 80mm (Auxiliary Lens), 50mm/25mm (Replaceable Auxiliary Lens) External Power Supply: Input AC 110-220V 50/60Hz, Output: DC 5V Plug Type: Indian Welding Holder Size: 290 x 200 x 260mm (Unfolded) Light Source: 18 LED Light + 6 LED Light Brightness: Both Two Kinds Adjustable Range of Application: Printing, Machinery, Carving, Gardening, Jewellery Identification, Collecting Coins and Stamps, Viewing Flowers and Plants, Soldering or other Repairing Work, Reading, Drawing, Handicrafts, Textile etc.	10
	MOSFET IRF530	As per component ID Specification	100
	MOSFET IRF9540N	As per component ID Specification	50
	AO3402 Field Effect Transistor MOSFET SOT-23	As per component ID Specification	100
	IP122 TO220 Transistor	As per component ID Specification	50

	100V 5A		
	PNP Transistor 2N3906	As per component ID Specification	100
	NPN Transistor BC547B	As per component ID Specification	100
	MOSFET 2N7000 N-Channel TO-92	As per component ID Specification	100
	NPN Transistor 2N2222	As per component ID Specification	50
	FQP30N06L N CHANNEL MOSFET,	As per component ID Specification	20
	BJT, NPN, 2N3904	As per component ID Specification	100
	BJT, PNP, 2N3906	As per component ID Specification	50
	IR Receiver Diode	Very low supply current Photo detector and preamplifier in one package Internal filter for PCM frequency Improved shielding against EMI Supply voltage: 2.5 V to 5.5 V Improved immunity against ambient light Insensitive to supply voltage ripple and noise	50
	Light-to-Frequency Converter TSL237	Nonlinearity Error (Typically 0.2% at 100 kHz) Stable 150 ppm/°C Temperature Coefficient Supply Voltage: 2.7 - 5.5 VDC Operating Temperature range: -25 - 70 °C Typical current draw: 2 mA Output Frequency: 200 - 300 kHz	15
	KY-022 Infrared Sensor Receiver Module	Infrared remote-control distance: more than 8 meters Launch tube infrared wavelength: 940Nm Crystal frequency: 455KHZ crystal Carrier frequency: 38KHZ Encoding: encoding format for the NEC Power: CR2025/1600mAH	50

		Diode 1N4007	Lead and Mounting Surface Temperature for Soldering Purposes: 220°C Max. for 10 Seconds, 1/16" from case Polarity: Cathode Indicated by Polarity Band	100
		Zener Diode 12V, 1W	Zener Voltage 12V Power Dissipation Pd: 1W Operating Temperature Min: -65°C Operating Temperature Max: 200°C No. of Pins: 2 Breakdown Voltage: 12V Diode Type: Zener RoHS Compliant: Yes	100
		Zener Diode 5.1V, 1W	Zener Voltage: 5.1V Power Dissipation Pd: 1W Operating Temperature Min: -65°C Operating Temperature Max: 200°C No. of Pins: 2 Breakdown Voltage: 5.1V Diode Type: Zener RoHS Compliant: Yes	100
		Zener Diode 3.3V, 1W	Zener Voltage: 3.3V Power Dissipation Pd: 1W Operating Temperature Min: -65°C Operating Temperature Max: 200°C No. of Pins: 2 Breakdown Voltage: 5.1V Diode Type: Zener RoHS Compliant: Yes	100
		1N34A Germanium Diode	As per component ID Specification	50
		Si PIN Photodiode	High-speed response Wide spectral response Low dark current Low terminal capacitance	40
		Diode - 1N4002	All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable, Lead and Mounting Surface Temperature for Soldering Purposes: 220°C Max. for 10 Seconds, 1/16" from case Polarity: Cathode Indicated by Polarity Band	150
		Varactor Diode ISV 149	As per component ID Specification	50

	1N4728A Zener Single Diode	3.3 V, 1 W, DO-41, 5 %, 2, 200 °C 3.4 1.2V at 200mA Forward voltage	50
	1N5819 Schottky Rectifier	1N5819 Schottky Rectifier, 40 V, 1 A, Single, DO-41, 2 Pins, 900 mV	50
	4 Digit 7 Segment LED	Overall Display: 40.18 x 12.8 mm (1.58 x 0.50") Digit Height: 10mm (0.39")	35
	7 Segment LED Display	Common Anode/ Cathode Single decimal points. Digit height is 10 mm Overall height is 13 mm	100
	LED Display Module MAX 7219 Dot Matrix	Operating voltage: 5V, with four screws hole (diameter: 3 mm), VCC - 5V, GND – GND, DIN - P22, CS - P21, CLK - P20, Size of the board: 5 x 3.2 cm.	10
	0.28 Inch Mini Digital Battery Voltage Checker Voltmeter	DC 0-200V 3 Cables with Protection - Blue	20
	3S 12V 25A 18650 Lithium Battery Protection Board	11.1V-12.6V High Current with Balanced Circuit Over Charge Over Discharge Over Current and Short Circuit Protection Function. Overcharge voltage range: 4.25-4.35v + 0.05v Over discharge voltage range: 2.3-2.7v + 0.05v  Operating current: 0 - 25A Operating temperature: -40 - +50°C  Instantaneous current: 35 - 40A Storage condition: -40 - +80°C  Quiescent current: less than 30uA Balance current: about 45 - 50mA Effective life: more than 20000 hours  Internal resistance: less than 100m ohm Short-circuit protection: protection, delayed self-recovery	10

		Professional True RMS Digital Multimeters Admittance/Resistance Tester	CE/ISO/ISI Certified DC Voltage: 600 mV-600 V AC Volt Range 600 mV to 600V Display: LCD Display Accuracy: +/- 1.0%+3 DC Voltage: 600mV-600 V Count: 5000-6000 LED Display with backlight Warranty: at least 1 Year Resistance and continuity Min/Max/Average to record signal fluctuations CAT III 600 V safety rate Surge Protections: 6 kV Battery Life: at least 300 hours	02
		Solar System Analyzer (Photovoltaic I-V Curve Tester) with DC Current Clamp, AC Power Clamp, Thermo & Irradiance Meter	CE Certification is mandatory ISO/ISI Certified Standards: EN 61323-1:2006 Class B, EN 61010-1:2010, IEC 6100-4-2:2008, CAT II 1000V, CAT III 250-300V 2 Four-Wire Measurement, Maximum Power Limit is at least 12000W Max. solar system power (Pmax) search by Auto-scan: 1000V, 12A (12000W capability). The analyser and the Remote Solar Detector is connected by Bluetooth wireless communication (Bluetooth 2.1 + EDR Class 1) Moisture-proof Remote Solar Detector Intelligent test logic without personnel attendance in the field.  Measure/Monitor Max. voltage (V <sub>pm</sub> ) at P <sub>max</sub> , Max. current (I <sub>pm</sub> ) at P <sub>max</sub> Voltage at open circuit (V <sub>oc</sub> ), Current at short circuit (I <sub>sc</sub> ) Efficiency (%) calculation of solar PV system Temperature measurement of solar panels Irradiance measurement of sun light Series resistance (R <sub>s</sub> ) calculation of solar panels With data logging/open function, the I-V curves of solar system can be analysed / recorded for a period of time at least 45 Sec Conversion of I-V curve under OPC to data under standard test condition (STC) based upon IEC standard parameters setup option of solar panels Parameters of many solar panels should be measured in one measurement  The Irradiances and Temperatures of solar panels should be continuously measured, monitored and recorded Continuously measure/monitor/record the DC power output of solar system and the AC power output of inverter (1 phase or balanced 3 phases) Calculate the efficiency of DC to AC power conversion and the efficiency of the max. output power.	01

		<p>Save Data with date and time  Feature of retrieving data from the analyzer to the PC.  Rechargeable Lithium Battery, Low Battery Warning  Optical USB Cable for PC Communication  Solar Connector  DC Voltage Measurement  Operation Environment  Accessories Required  Solar Irradiance Meter (Remote Solar Detector) x 1  Infrared Thermometer x 1  USB power cord x 1  User manual x 1  AC adaptor x 1  Optical USB cable x 1  Rechargeable lithium battery (at least 3000mAh) x 1 (installed)  Software CD x 1  Software manual x 1  Carrying bag x 1  Thermal conductive gel x 1  Testing clips (1 black &amp; 1 red) x 1  4-wire to 2-wire connecting cable x 1  4-wire testing cable x 1  Solar 15: DC current probe x 1  Solar 21: AC power clamp x 1  Testing clips (1 black &amp; 1 red) x 1</p>	
	RGB LED Common Anode	Forward Voltage (RGB): (2.0, 3.2, 3.2) V, Luminosity (RGB): (800, 4000, 900) mc	50
	KY-034 Automatic Flashing LED Module	Automatic flashing colourful LED module KY-034 for Arduino: 7 Color flashing LED module uses 5mm round high-brightness light-emitting diode which has the following characteristics: Shape: LED 5mm DIP type Working voltage: DC 3.0V - 4.5V	20
	KY-009 RGB 3 Color Full Color LED SMD Module	RGB trichromatic limiting resistor to prevent burnout, PWM adjusted color mixing, working voltage: 5V, LED drive mode: Common cathode driver.	15
	LED High Quality SMD- 5050 Flexible Strip	50 cms (RGB)  LED Type: 5050 SMD  Color: RGB  LED quantity: 30 LED / 50 cm  Protection class IP60 (Non Waterproof)  Operating voltage: DC 12V	50cm

		<p>Operating current: 6A / 5m</p> <p>Viewing Angle: 120</p> <p>Operating temperature: -20 to 50</p> <p>Size: L50cm × W1.0cm x T0.25cm</p> <p>Source life: &gt; 50,000 hours</p>	
	Ultrasonic Range Sensor SRF005	<p>That can detect objects from 3cm to 3m away.</p> <p>The sensor can be used with the PICAXE system to calculate how far away the object is.</p> <p>The sensor is accurate enough to detect a 3cm broom handle at a distance of 2.4m.</p>	5
	Ultrasonic distance measurement sensor module HY-SRF05	<p>Voltage: DC5V</p> <p>Static current: less than 2mA</p> <p>level output: high-5V</p> <p>level output: the end of 0V</p> <p>Sensor angle: not more than 15 degrees</p> <p>Detection distance: 2cm-450cm</p> <p>High precision: up to 0.3cm</p>	15
	LIDAR-Lite 3 Laser Rangefinder	45mm x 40mm x 20mm module with 50m measuring range	02
	Ultrasonic Ranger	<p>Detecting range: 3cm-4m, best in 30degree angle.</p> <p>Grove interface</p> <p>5V DC power supply</p> <p>Arduino library ready</p>	05
	Hall-Effect Sensor	<p>3.5V to 12V DC operation voltage</p> <p>Low current consumption</p> <p>Temperature compensation</p> <p>Wide operating voltage range</p> <p>Open-Collector pre-driver</p>	20

		<p>50mA maximum sinking output current</p> <p>Reverse polarity protection</p> <p>Lead Free Package: TO-92</p>	
	KY-035 - Class Bihor Magnetic Sensor	Hall effect magnetic sensor module, Operating voltage DC 3~5.5V	20
	KY-021 Mini Magnetic Reed Sensor Module	Working voltage: 3.3V~5V, Fixing bolt holes	15
	9-Axis Gyro + Accelerator + Magnetometer Sensor Module MPU-9250	<p>Chip: MPU9250;</p> <p>Power voltage: 3~5V</p> <p>Communication mode: I2C / SPI</p> <p>Gyro range: +/-250, +/-500, +/-1000, +/-2000dps</p> <p>Accelerator range: +/-2G, +/-4G, +/-8G, +/-16G</p> <p>Magnetometer range: +/-4800uF</p>	05
	Analog Sound Sensor Microphone MIC Controller	<p>Cylinder Microphone, high sensitivity</p> <p>Sensor Indicator LED</p> <p>Pin Definition:</p> <p>Pin1 AO Sensor Analog Output, Pin2 GND Ground,</p> <p>Pin3 VCC Power,3V~24V, Pin4 DO Digital Output</p>	10
	Adafruit 3006 I2S 3W Class D Amplifier Breakout - MAX98357A	<p>Output Power: 3.2W at 4Ω, 10% THD, 1.8W at 8Ω, 10% THD, with 5V supply</p> <p>PSRR: 77 dB type @ 1KHz</p> <p>I2S sample rates from 8kHz to 96kHz</p> <p>Five pin-selectable gains: 3dB, 6dB, 9dB, 12dB, 15dB</p> <p>Excellent click-and-pop suppression</p> <p>Thermal shutdown protection</p>	10
	KY-037 Microphone Sensor Module	Mounting screw hole 3mm, 5V DC power supply, Analog output, Threshold level output flip, High sensitive microphone, Power indicator light, Comparator output is light	20
	KY-031 Hit Sensor	As per IC Code Specification	20



		Module		
		Sensor Module Kit for Arduino	<ul style="list-style-type: none"> <li>✓ 1 x Rotary encoder module KY-040</li> <li>✓ 1 x Detect the heartbeat module KY-039</li> <li>✓ 1 x Microphone sound sensor module KY-038</li> <li>✓ 1 x Sensitive microphone sensor module KY-037</li> <li>✓ 1 x Metal touch sensor module KY-036</li> <li>✓ 1 x Class Bihor magnetic sensor KY-035</li> <li>✓ 1 x Automatic flashing colorful LED module KY-034</li> <li>✓ 1 x Hunt sensor module KY-033</li> <li>✓ 1 x Obstacle avoidance sensor module KY-032</li> <li>✓ 1 x Hit sensor module KY-031</li> <li>✓ 1 x Yin Yi 2-color LED module 3MM KY-029</li> <li>✓ 1 x Temperature sensor module KY-028</li> <li>✓ 1 x Magic light cup module KY-027</li> <li>✓ 1 x Flame sensor module KY-026</li> <li>✓ 1 x Reed module KY-025</li> <li>✓ 1 x Linear magnetic Hall sensors KY-024</li> <li>✓ 1 x XY-axis joystick module KY-023</li> <li>✓ 1 x Infrared sensor receiver module KY-022</li> <li>✓ 1 x Mini magnetic reed modules KY-021</li> <li>✓ 1 x Tilt switch module KY-020</li> <li>✓ 1 x 5V relay module KY-019</li> <li>✓ 1 x Photo resistor module KY-018</li> <li>✓ 1 x Mercury open optical module KY-017</li> <li>✓ 1 x 3-color LED module KY-016</li> <li>✓ 1 x Temperature and humidity sensor module KY-015</li> <li>✓ 1 x Temperature sensor module KY-013</li> <li>✓ 1 x Active buzzer module KY-012</li> <li>✓ 1 x 2-color LED module KY-011</li> <li>✓ 1 x Optical broken module KY-010</li> <li>✓ 1 x 3-color full-color LED SMD modules KY-009</li> <li>✓ 1 x Laser sensor module KY-008</li> <li>✓ 1 x Small passive buzzer module KY-006</li> <li>✓ 1 x Infrared emission sensor module KY-005</li> <li>✓ 1 x Key switch module KY-004</li> <li>✓ 1 x Hall magnetic sensor module KY-003</li> <li>✓ 1 x Vibration switch module KY-002</li> <li>✓ 1 x Temperature sensor module KY-001</li> </ul>	05
		Si7020-A10 Temperature and humidity sensor	Precision Relative Humidity Sensor +-4% RH, 0-80% RH, 0 - 100% RH operating range, High Accuracy Temperature Sensor, +-0.4C, -10 to +85C 3.0V - 5.5V Current: 50uA (Active Mode). 60nA (Standby)	05
		LM35 Temperature Sensor	<ul style="list-style-type: none"> <li>✓ Calibrated directly in ° Celsius (Centigrade)</li> <li>✓ Linear + 10.0 mV/°C scale factor</li> <li>✓ 0.5°C accuracy guarantee able (at +25°C)</li> <li>✓ Suitable for remote applications</li> </ul>	30

		<ul style="list-style-type: none"> <li>✓ Rated for full <math>-55^{\circ}</math> to <math>+150^{\circ}</math> C range</li> <li>✓ Low cost due to wafer-level trimming</li> <li>✓ Operates from 4 to 30 volts</li> <li>✓ Less than 60 <math>\mu</math>A current drain</li> <li>✓ Low self-heating, <math>0.08^{\circ}</math> C in still air</li> <li>✓ Nonlinearity only <math>\pm 1/4^{\circ}</math> C typical</li> <li>✓ Low impedance output, <math>0.1 \Omega</math> for 1 mA load</li> </ul>	
	HS1101 Humidity Sensor	<ul style="list-style-type: none"> <li>✓ Power requirements: 5 to 10 VDC</li> <li>✓ Communication: Capacitive Component</li> <li>✓ Dimensions: 0.25 x 0.40 in Diameter (6.2 x 10.2 mm Diameter)</li> <li>✓ Operating temp range: <math>-40</math> to <math>212^{\circ}</math> F (<math>-40</math> to <math>100^{\circ}</math> C)</li> </ul>	10
	KY-013 Temperature Sensor Module	Multi-point temperature measurement Measures temperatures: $-55^{\circ}$ C / $+125^{\circ}$ C, Accuracy: $\pm 0.5^{\circ}$ C	10
	Hygrometer Detection Sensor for Arduino	VCC: 3.3V-5V, AO: Analog output interface, Soil moisture detector module, 1Probe	10
	Contact-less Infrared Sensor - MLX90614 3V	$-40^{\circ}$ C to $+125^{\circ}$ C for sensor temperature $-70^{\circ}$ C to $+380^{\circ}$ C for object temperature $\pm 0.5^{\circ}$ C accuracy around room temperatures High accuracy of $0.5^{\circ}$ C Cover wide temperature $90^{\circ}$ Field of view 2.7 to 3.6V power I2C interface, 0x5A is the fixed 7-bit address	05
	Safety Kit for working at safe heights/poles.	Harness, Safety Belt, Lanyard, Work positioning lanyard, Full Body Sit Harness, Shock Absorbing Double Hook Lanyard, Safety Equipment for working on Tower, Safety Kit, Tower Kit, Harnesses, Helmet with Light.	10
	Armour Safety Shoes	Free Size	05
	Safety Gloves	Nitrile coated palm and finger with polyester shell. High breathability. Coloured polypropylene overlock binding. Uniform thickness. Improve dexterity, performance productivity. ISO and ISI Standards	20 Pairs
	Safety Goggles	Chemical Protection Safety Goggles and Dust Respirator Mask Combo	20

		Full body dress for workshop technicians (Safety Suit/Industry Suit)	Having Adjustable aids with which it can be wear by any individual comfortably. With Neon Strips so that can be visible in low light conditions. Robust Easy to wear and wash	10
		Safety Helmets	Adjustable Head Girth Safety Hard Construction Helmet with Light and neon strips ISI/ISO Certified Only (15 Yellow), (10 White) and (05 Red)	20
		First Aid Kits	Include all necessary aids	05
		Fire Extinguisher	All fire type 4 KG	05
		Extension Boards	5 Meter Cable, 220-240V AC, 02 (15 Amp Socket), 05 (5 Amp Socket).	10
		15 KVA online pure sine wave UPS (With Battery Setup) and Rack	DSP controlled: IGBT based System and charger blocks  Intelligent LCD display for all system parameters and status with dedicated LED Indications  Smart Bypass selection switch  Output voltage selection: 220V/230V  Equipped with Intelligent fault sense and all required electrical protections.  Designed for Heavy Duty Operation  Capable to run 100% unbalanced loads  Capable to 3 Phase loads  Current Sensor Fail, DC Low Voltage / Over Voltage, Feedback Fail, High Temperature, Input Phase Reversal, Mains Low / High Cut, Overload, Reverse Polarity, Short-circuit  Smart Battery Protections  Intelligent Phase Reversal detection ISO/ISI Certified	01
		DC Motor	Voltage: 12V	10

	32mm, 12V/ 10RPM	Current: 0.4 A RPM: 10 Torque: 1 Kg/m Outer Diameter: 0.32mm	
	Motor 3V - 6V DC	Small circular shaft of diameter 2mm which measures about 8mm long, 1.5 to 4.5V DC and no-load speed of 2300 RPM (@4.5VDC, 70mA).	20
	DC Motor - 6V	This motor runs on 2.5-6 V DC, At 6 volts, with no load, the speed 14500 RPM, Current: 200mA.	10
	Cooling Fan DC 12V, 3 Pin	Dimensions: 40x40x10mm Connector:3 Pin Rated Voltage: DC:12V	10
	Cooling Fan DC 5V, 2 Pin	Dimensions: 40x40x10mm Connector:2p (2.0) PH2.0-2P Rated Voltage: DC:5V Rated Current: 0.14±10% Amp Rated Speed: 5500±10%rpm Air flow:7.9CFM Bearing Type: Sleeve Cable Length: 15cm	10
	N20-DC-gear- Motor	Voltage range: 1.5 V - 12 V Motor shaft length: 10 mm Material: Metal Type: Gear Motor Rated Speed: 3.0V -- 50 RPM/min 6.0V --100 RPM/min 12.0V -- 200 RPM/min	05
	9V Battery Snap	Solder able Copper Wired	50
	Battery Holder - 2 x AA	Can be soldered to supply 1.5V, 3V Can be connected to a DC barrel Jack	20
	Voltage Regulator LM311	It is an excellent Operational amplifier capable of driving DTL, RTL, TTL, or MOS logic. The output can switch voltages to 50 volts at currents to 50 mA.	25
	Stepper Motor- 42BYG	Phase: 2phase, step angle: 1.8+5%/step, Voltage: 2.55V, Current: 1.7a/phase, Resistance: 1.5+-10%/phase, Insulation class: B.	04
	4 Wire 2 Phase Micro	Output Shaft Diameter: 1mm, Outside diameter of 2.8 MM 12	10

	Stepper Motor 25BYJ48	plastic gear teeth	
	20A Brushless Motor Speed Controller	Input voltage: DC 6-16.8V (2-4S Lixx, Running current: 20A (Output: Continuous 20A, Burst 25A up to 10 Sec).	05
	30A Brushless Motor Speed Controller	Input voltage: DC 6-16.8V (2-4S Lixx) Running current:30A(Output: Continuous 30A, Burst 40A up to 10 Secs.)	03
	Copper Insulated Wire Reel- 23 SWG	Diameter 0.6mm	20mtr.
	4 Wire 2 Phase Micro Stepper Motor	12 V Shaft Diameter: 1mm Shaft length: 4.5mm Outside diameter of 2.8 MM	10
	9V Alkaline Battery	Alkaline ion	10
	Battery Charger (2*AA and 2*AAA Size)	Input: DC 5V 0.5 A Output AA : DC 3.0 V 200 mA Output AAA : DC3.0 V 150 mA	02
	AA Chargeable Battery	Alkaline Battery 1300 mAh	04
	AAA Chargeable Battery	Alkaline Battery 750 mAh	04
	Glue Gun	Operating Temperature: 150 - 200°C 100 - 240 V, 60-100 Watt	05
	Glue gun Sticks	Glue gun Sticks Standard Size	40 Pcs
	Transformer 220-12V, 500mA	0-12V, 500mA mini Transformer. Copper Winded	50

	Transformer 220-6V, 500mA	6V, 500mA mini Transformer. Copper Winded	50
	Air Tight Easy Open and Close Plastic Storage Box with Lid	Plastic Multipurpose 4L Storage Box, Transparent, handles to hold, Air tight, (24.2 cm x 20 cm x 18.5 cm ISO/ISI Company	10
	Plastic Storage Box with Compartment Tray	20.7 x 12.8 x 11 cm	10
	Multi Compartment Plastic Storage Box with 3 Removable Layers and at least 10 Dividers	14 x 14 x 12.5 cm, Contains 1 layer storage box with 3 stackable layers, with handles, Air tight, Transparent.	05
	Small Plastic Storage Box with Compartments and Slide-out Tray. Small Plastic Storage Box with Compartments and Slide-out Tray.	Multi Compartment Storage Box has Lid that opens with a slide-out tray and has sections for organizing items. Foldable Storage Box has Dividers that can be Attached or Removed as Per Storage Requirement. 22.8 x 15.4 x 6.6 cm, Transparent	10
	Screw Driver Bit Set  (ISO/ISI Certified)	Screw Driver Set with Carry Case and magnetic head Bit Set Must Consist of the Following, 25mm. Hex-2,2.5,3,4,5,6 25mm. Flat-3,4,5,5,6,6.5 25mm. Torx -T8,T10,T15,T20,T25,T27,T30,T40 25mm. Torx -TT8,TT10,TT15,TT20,TT25,TT27,TT30,TT40 25mm. Philips-PH0,PH1,PH2,PH3 25mm. Adaptor-1/4 SQ. Drive 50mm. Hex-2,2.5,3,4,5,6 50mm. Flat-3,4,5,5,6,6.5 50mm. Torx -T8,T10,T15,T20,T25,T27,T30,T40 50mm. Torx(with hole)- TT8,TT10,TT15,TT20,TT25,TT27,TT30,TT40 50mm. Philips-PH0,PH1,PH2,PH3	02

		50mm. Adaptor-1/4 SQ. Drive 65mm. Two-in-One- PH1xSL4.5,PH2xSL5.5,PH3xSL6.5,PH1xPH1,PH1xPH2, PH2xPH2,PH2xPH3,PH3xPH3 110mm. Two-in-One-PH1xPH1,PH2xPH2,PH3xPH3 60mm. Bit Holder, Ratchet Bit Driver Handle	
	Screwdriver Set ISO/ISI Certified	Total 6 Pcs, with two Extensions	05
	4 Relay Module with Power Supply and Remote	433MHz DC 12V Learning Type Four Way Wireless Remote-Control Switch 4CH Channel Relay Control Module Working Voltage: DC 12V  Static Working Current: $\leq 6\text{mA}$  Working Temperature: $-40^{\circ}\text{C} +80^{\circ}\text{C}$  Receive Sensitivity: $\geq -105\text{dBm}$  Working Frequency: 433MHz Output voltage: AC, DC optional  Output current: $\leq 10\text{A}$	05
	8 Relay Module	High-current relay 10A@250VAC / 10A@30VDC Can control both AC and DC appliances such as Solenoids, Motors, lights, fans, etc. Freewheeling diode to protect your microcontroller 1x 8 Road/Channel Relay Module (with light coupling) 12V	05
	Hc05 Bluetooth Transceiver Module	With TTL Outputs 3.3 V 2.4 GHz Flash memory size 8Mbit	05
*All items should be ISI and ISO Certified.			

### 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)
<b>Total Cost</b>							

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: \_\_\_\_\_