

UNIVERSITY OF THE PHILIPPINES

LOS BANOS Los Banos, IV-A

Los Banos, IV-A VAT Reg. TIN: 000-864-006-00004

Request for Quotation/ Bid Form (Technical Specifications)

TYPE END USER/DEPARTMENT UNIT

UPLB BAC SECRETARIAT
BY: DATE: 3-3-21

AUG 1 1 2021 | 2000

UPLB-RQ- 8-238-21-12cs
DEADLNE OF SUBMISSION

UPLB-RQ-

| DEADLINE OF | |
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| SUBMISSION: | |
| | |

| ppliers Name: | Date | |
|---------------|--------------------|---------------------|
| , | Fund Code: MOP: | N9-B06-32 |
| | MOP: | SHOPPING |
| | Contact No: | 9453211347 |
| | Contact Person | MEL VINCENT A. AMPO |
| | | |

Please quote your lowest price on the item/s listed below, subject to the General Conditions below.

Note:

- 1. Bidders shall provide correct and accurate information required in this form. All entries must be typewritten or in print and properly accomplished. Do not leave blank entries, put N/A for not applicable.
- 2. Price quotation/s to be denominated in Philippine Peso shall include all taxes, duties, and/ or levies payable.
- 3. Bidders must indicate the BRAND and MODEL NUMBER for equipment and its accessories or peripherals. Evidence shall be in the form of manufacturer's un-amended sale literature, unconditional statement of specification and compliance issued by the manufacturer and sample.
- 4. Quotation through fax/email is acceptable. Winning bidder shall submit original signed RQ before issuance of Puchase order (P.O.).
- 5. Quotations exceeding the Appoved Budget for Contract shall be rejected.
- 6. Documentary requirements per Memorandum No. 03 Series of 2017 shall be attached upon submission of the quotation
- 7. Others:

| ITEM No. | GENERAL NAME OF THE ITEM | REQUIRED SPECIFICATIONS | UNIT OF MEASURE | QTY | ESTIMATED UNIT APPROVED BUDGET OF THE CONTRACT | TOTAL | OFFERED SPECIFICATION Suppliers must state here the detailed technical specifications of their offer against each of the individual parameters of each requirements. | QUOTED UNIT PRICE | TOTAL QUOTED PRICE | EVALUATION (Leave this space blank. For BAC/ Evaluators only) |
|-------------|---------------------------------|---|--------------------|-----|--|----------|--|----------------------|--------------------|---|
| 1 | Epoxy-coated Light Dependent Re | Brand new Epoxy-coated Diameter: 20mm Max Voltage: 500V Max Power Consumption: 500 mW Operating Temperature: -30 to 70°C Light Resistance: 5-100kΩ Dark Resistance: 1-8MΩ with supplier's warranty | pc | 5 | 60.00 | 300.00 | | | | |
| 2 | Hermetic-sealed Light Dependent | Brand new TO-8 Hermetically sealed package Max Voltage: 170 V Power Dissipation @25°C: 500 mW Operating Temperature: -60 to 75°C Storage Temperature: -60 to 75°C Soldering Temperature: 260°C Light Resistance @ 2 FtCd, 2854°K: 1 kΩ(Min), 1.5 kΩ(Typ), 2 kΩ(Max) Light Resistance @ 100 FtCd, 2854°K: 150 Ω Dark Resistance: 100 kΩ Spectral Peak: 550 nm with supplier's warranty | pc | 3 | 366.66 | 1,099.98 | | | | |

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|---|--------------------|---|-----|---|----------|----------|------|------|
| 3 | 37 in 1 Sensor Kit | 37 in 1 Sensor Kit for Arduino, preferrably branded, brand new, with the following sensors: Temperature sensor module; Vibration switch module; Hall magnetic sensor module; Key switch module; Infrared emission sensor module; Small passive buzzer module; Laser sensor module; 3-color full-color LED SMD modules; Optical broken module; 2-color LED module; Active buzzer module; Temperature sensor module; Temperature and humidity sensor module; 3-color LED module; Mercury open optical module; Photo resistor module; 5V relay module; Tit switch module; Mini magnetic reed modules; Infrared sensor receiver module; XY-axis joystick module; Linear magnetic Hall sensors; Reed module; Flame sensor module; Magic light cup module; Temperature sensor module; Yin Yi 2-color LED module 3MM; Knock Sensor module; Obstacle avoidance sensor module; Hunt sensor module; Automatic flashing colorful LED module; Class Bihor magnetic sensor; Metal touch sensor module; Sensitive microphone sensor module; Microphone sound sensor module; Detect the heartbeat module; Rotary encoder module With warranty of 3 - 6 months | set | 3 | 1,366.66 | 4,099.98 | | |
| 4 | Photodiode | Planar silicon PN photodiode Package type: Leaded Package form: TO-5, hermetically sealed, cathode connected, flat glass window Diameter: 8.13 mm Radiant sensitive area: 7.5 sq. mm. Angle of half sensitivity: ±50° Range of Spectral Bandwidth: 400 to 1100 nm Forward Voltage: 1.0-1.3 V Breakdown Voltage: 1.0-1.3 V Breakdown Voltage: 10 V Reverse Dark Current: 2-30 nA Diode Capacitance(5V, 1MHz): 400 pF Open Circuit Voltage: 300-500 mV Temperature Coefficient of Vo: -2 mV/K Short Circuit Current: 20-60 µA Temperature Coefficient of Ik: 0.1 %/K Reverse Light Current(1kix, 5V): 20-60µA Wavelength of Peak Sensitivity: 920 nm Rise Time: 3.4 µs Fall Time: 3.7µs | рс | 3 | 533.33 | 1,599.99 | | |

| 5 | CMOS VGA Camera Module | Low-cost image sensor Vario Pixel method for sub-sampling Auto Image Control: AEC, AGC, AWB, ABF, ABLC Image Quality Control: Color saturation, hue, gamma, sharpness, and anti- blooming ISP includes noise reduction and defect correction Support image scaling Lens shading correction Flicker 50/60Hz auto-detection Color saturation level auto adjust Edge enhancement level auto adjust De-noise level auto adjust Standard sccb interface, compatible with I2C interface. Photosensitive array 640X480 IO voltage 2.5V to 3.0V (internal LDO to core supplies) Power operation 60mW/15fpsVGAYUV Sleep mode < 20 µ A Temperature operation from -30 ° C to 70 ° C 0 ° C to 50 ° C (8 -bit) output format YUV/YCbCr4 RGB565/555/444 GRB4: 2:2: 2:2 Raw RGB Data Optical size of 1/6 " Field of view angle of 25 ° Maximum Frame rate 30fps VGA Sensitivity 1.3V / (Lux-sec) Signal to noise ratio of 46 dB Dynamic range of 52 dB Browsing mode progressive Electronic exposure Area of 3.6 µm x 3.6 µm Dark current 12 mV/s at 60 ° C | рс | 1 | 900.00 | 900.00 | | |
|---|------------------------|---|----|---|----------|----------|--|--|
| 6 | | Image Sensor: Sony IMX 219 PQ CMOS image sensor in a fixed-focus module Resolution: 8-megapixel Still picture resolution: 3280x2464 Max Image Transfer Rate: 1080p: 30fps (encode and decode) 720p: 60fps Connection to Raspberry Pi: 15-pin ribbon cable, to the dedicated 15-pin PIPI Camera Serial Interface (CSI-2) Image Control Functions: Automatic exposure control, automatic white balance, automatic band filter, automatic 50/60 Hz luminance detection; automatic blaack level calibration Temp Range: -20°C to 60°C Lenz Size: 1/4° Dimensions: 23.86x9mm Weight: 3g | рс | 1 | 1,800.00 | 1,800.00 | | |

| 7 | TMP36 Temperature Sensor | 3-lead TO-92 Low voltage operation: 2.7 V to 5.5 V Supply Current: 50 µA Scale factor: 10mV/°C Specified Range: -40°C to 125°C Accuracy over typ temperature: ±2°C Typ Linearity: ±0.5°C Quiscent current: < 50 µA Shutdown current: 0.5 µA max Long Term Stability: 0.4°C Output Voltage Typ: 750mV | pc | 3 | 123.33 | 369.99 | | |
|----|----------------------------|---|----|---|--------|----------|--|--|
| 8 | LM35 Temperature Sensor | 3-lead TO-92 Scale Factor: 10 mV/°C Ensured Accuracy @25°C: 0.5 °C Temperature Range: -55°C to 150°C Operating Voltage: 4V to 30 V Current Drain: <60µA Self-Heating: 0.08°C in Still Air Non-Linearity: ±1/4 °C Low-Impedance Output: 0.1Ω for 1 mA load | pc | 3 | 136.66 | 409.98 | | |
| 9 | TMP37 Temperature Sensor | 3-lead TO-92 Low voltage operation: 2.7 V to 5.5 V Supply Current: 50 µA Scale factor: 20mV/°C Specified Range: 5°C to 100°C Accuracy over typ temperature: ±2°C Typ Linearity: ±0.5°C Quiscent current: < 50 µA Shutdown current: 0.5 µA max Long Term Stability: 0.4°C Output Voltage Typ: 500mV | pc | 3 | 106.66 | 319.98 | | |
| 10 | Capacitive Humidity Sensor | Humidity and temperature sensor module Vdd: 3.3-5.5V Resolution: 0.1 %RH, 0.1°C, 16 bit Range: 0 to 99.9 %RH, -40 to 80°C Accuracy: ±2%RH, ±0.5°C Repeatability: ±0.3 %RH, ±0.2°C Response: <5 S for RH, <10 S for Temp Drift: <0.5%RH/yr, ±0.3°C/yr Average Power Consumption: 300 μA Low level output voltage: 300 mV High Output Voltage: 90-100% Vdd Low input voltage: 30% Vdd High Input Voltage: 70-100% Vdd Pull-up resistance: 45 kΩ Output current: 10μA-8 mA Sampling period: 2 S SDA output With high performance 8-bit microcontroller | рс | 3 | 383.33 | 1,149.99 | | |

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|----|-----------------------------------|---|----|---|----------|----------|--|--|
| 11 | Temperature and Humidity Sensor | loT-finished, chasis-mounted QFN4 package 2C slave interface 30x13x7.6 module Accuracy: ±0.2°C, ±3.5%RH Range: 0% to 100% RH, -40°C to 100°C Resolution: 0.016°C, 0.03%RH Temp response time: 1 s RH response time: 3 to 5 s Repeatability: -0.1 to 0.1 °C, ±0.1%RH Drift: 0.005°C/yr, 0.25%RH/yr Operating Voltage: 1.71 to 3.6 V Standard (100kbit/s) and fast (400kbit/s) I2C Active current: 6.6µA Standby current: 40nA Continuous run mode current: 58 µA High-level input voltage: 0.7Vdd to Vdd+0.5 Low-level output current: 3 mA | рс | 3 | 283.33 | 849.99 | | |
| 12 | Capacitve Polymer Humidity Sens | Chemical resistant Dew formation resistant 10.2x5.1x1.8 mm Operating Voltage: 2.7 to 5.5 V Nominal Current consumption at 1 Hz: <22µA to 850µA max Sleep current consumption: <1µA Digital Interface: 12C, 0x28 Range: 0 to 100%RH, -40 to 125°C Accuracy: ±1.8%RH, ±0.2K Repeatability: ±0.2%RH, ±0.1K Resolution: 0.03%RH, 0.015°C Response Time: RH<4 s, temp<5s Drift: <0.5%RH/yr, <0.05K/yr Measuring Principle: capacitive polymer humidity sensor, PTAT | рс | 1 | 2,100.00 | 2,100.00 | | |
| 13 | Corrosion Resistant Soil Moisture | Corrosion resistant 3-pln Capacitive soil moisture sensor With on-board voltage regulator Operating Voltage: 3.3 to 5.5V DC Output Voltage: 0 to 3.0 V DC Operating Current: 5mA Interface: PH2.0-3P Dimensions: 3.86"x0.905" Weight: 15g | pc | 5 | 400.00 | 2,000.00 | | |
| 14 | Analog Soil Moisture Sensor | With electroless nickel immersion gold surface plating Operating Voltage: 3.3V or 5.5 V Output Voltage: 0 to 4.2 V Current: 35 mA Interface: PH2.0-3P Dimensions: 2.36"x0.79"x0.2" Weight: 15 g | pc | 5 | 400.00 | 2,000.00 | | |

| 15 | pH Sensor Kit | pH probe with BNC connector Gain adjustment potentiometer PH2.0 sensor interface Module Power: 5.00V Module Size: 43mmx32mm Measuring Range: 0-14 pH Measuring Temperature: 0-60°C Accuracy: ±0.1pH (25°C) Response Time: ≤1 min Cable length: 660mm | set | 1 | 1,900.00 | 1,900.00 | | |
|----|-------------------------|--|-----|---|----------|----------|--|--|
| 16 | Soil pH Sensor | Two electrode probe Sealed in ABS engineering plastic Waterproof grade IP68 Output signal: LoRa/LoRaWAN, GPS, WIFI, NB-IoT,RS485 (standard Modbus-RTU protocol, device default address:01) with standard 2 meter cable. Measuring Range: 3 to 9 pH Measurement Accuracy: ±0.3 pH Resolution: 0.1 pH Current Loop: 4 to 20 mA Output Voltage: 5V/ 10V Supply Voltage: 12 to 24 V Working Temperature Range: -30°C to 70°C Stabilization Time: 5 to 10 mins after power on Package size: 15x12x4 cm Gross Weight: 0.250 kg | рс | 1 | 6,000.00 | 6,000.00 | | |
| 17 | Horizontal Float Switch | Material: plastic Color: black Switch Power: 10 W Switching Voltage: 100 V Switching Current: 0.5 A Breakdown Voltage: 220 V Carry Current: 1A Contract Resistance: 100 mΩ Temperature Rating: -20°C to 80°C Float Length: 85 mm Cable Length: 377 mm | рс | 5 | 240.00 | 1,200.00 | | |
| 18 | 12V Solenoid Valve | Normally closed Unidirectional Gasket arrangement NPS: 1/2" Working Pressure: 0.02 Mpa-0.8Mpa Working Temperature: 1°C to 75°C Voltage: 6 V to 12 V Current: 0.6A | рс | 3 | 300.00 | 900.00 | | |

| 19 | Peristaltic Pump | Suction Stroke: ≥3m Working environment: temp 0 to 40°C, RH <80% Flow rate: 100 mL/min Voltage: 6V No load current: ≤350mA Motor size: diameter 32mm, height 23mm Pump head size 40x40 Mounting hole distance: 46 Pump tube: 3mm/5mm Color: white | pc | 2 | 2,160.00 | 4,320.00 | | |
|----|-----------------------|--|----|----|----------|----------|--|--|
| 20 | 4.5V Solenoid Valve | Normally closed Working Voltage: 4.5 V Pulse width: 30 ms Pipe size: G1/2" Working Pressure: 0.02-1.0MPa Medium Temperature: 1 to 80 °C Service Life: about 300000 times Dimension: approx. 7.2cmx6.5cm Material: plastic Color: Silver | pc | 33 | 456.66 | 1,399.98 | | |
| 21 | Voltage Sensor Module | Single phase With high-precision voltage transformer and op amp circuit Board Size: 49.5mm x 19.4 mm Rated input current: 2mA Output Signal: 0 to 5V analog Operating Temperature: 40°C to 70°C Supply Voltage: 5 to 30 V | pc | 3 | 180.00 | 540.00 | | |
| 22 | Current Sensor Module | Microcontroller-compatible Typical Bandwith: 120 kHz Step input current rise time: 3μs Conductor Resistance: 100 μΩ Operating Voltage: 3.3 V to 5 V Peak Measuring Voltage: 3000 V AC, 500 V DC Current Measuring Range: -50 to 50 A Sensitivity: 40 mV/A Operating Temperature: -40 to 150°C Dimension: 34x34mm | pc | 2 | 950.00 | 1,900.00 | | |
| 23 | Relay Module | Single channel Optocoupler high-current relay: 20 VDC, 250 VAC, 30 A Voltage: 5V Static Current: 5 mA Working Current: 190 mA Trigger Current: 2-4 mA Rated Current: 16 A Fixing Hole Diameter: 3mm Fixing Hole Center Distance: 44x27.5 mm Dimension: 50x33x22mm Weight: 36.5 g | pc | 3 | 183.33 | 549.99 | | |

| 24 | Circuit Breaker | Insulated terminals(IP20) Double clip dismounting, comb busbar and distribution compatibility Contact position Indicator Current Rating: 25 A; Number of Poles: 2 Tripping Characteristics: Type C Breaking Capacity at Maximum Voltage Rating: 6 kA Dimesions: height 85mm x width 36mm x depth 78.5 mm Physical Characteristics: Toggle control, trip indicator local signalling, fixed mounting mode, DIN rail mounting support, separate block earth-leakage protection, four 9mm pitches, 0.25 kg, white; Standards: IEC 60898-1, IEC 60947-2, EN 60898-1, EN 60947-2 Tightening torque: 2 Nm top or bottom Wire Stripping length: 14mm for top or bottom connections Mechanical durability: 20000 cycles; Electrical durability: 10000 cycles Overvoltage Category: IV; Network frequency: 60 Hz; Magnetic trippinng limit: 8 x In ±20% | pc | 1 | 1,800.00 | 1,800.00 | | |
|----|------------------------|---|----|---|----------|----------|--|--|
| 25 | Magnetic Contactor | Utilisation Category: AC-1, AC-3 Poles: 3P Power pole contact composition: 3 NO Rated operational voltage: ≤690 V AC 25400 Hz for power circuit; ≤690 V DC for power circuit Rated operational current: 18 A (≤60°C) at ≤400 V AC AC-3 for power circuit; 32 A (≤60°C) at ≤440 V AC AC-1 for power Motor power kW: 4 kW at 220 to 230 V AC 60 Hz Control circuit type: AC 60 Hz Control circuit voltage: 220 V AC 60 Hz Dimensions: height 77mm x width 45 mm x depth 86 mm Physical Characteristics: With safety cover, plate rail mounting support, fire resistance (850°C conforming to IEC 60695-2-1), flame retardance (V1 conforming to UL 94) | рс | 1 | 4,900.00 | 4,900.00 | | |
| 26 | LoRa Development Board | Microcontroller: SAMD21 Cortex-MO+ 32 bit low power; ARM MCU Board Power Supply (US/VIN): 5V Supported Batteries: 2x AA or AAA Circuit Operating Voltage: 3.3V Digital I/O pins: 8; PWM pins: 12; UART: 1 SPI: 1; I2C: 1 Analog input pins: 7 (ADC 8/10/12 bit) Analog output pins: 1(DAC 10 bit) External interrupts: 10 DC current per I/O pin: 7 mA Flash Memory: 256 kB SRAM: 32 kB; Clock Speed: 32.768 kHz (RTC), 48 MHz LED builtin: 6; Antenna Power: 2dB Carrier frequency: 433/868/915 MHz Dimensions: 67.64 mm x 25 mm; Weight: 32 g | pc | 2 | 2,800.00 | 5,600.00 | | |

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|----|---------------------------------|---|----|---|----------|----------|------|------|
| 27 | Microcomputer Board Starter Kit | Microcomputer Board Starter Kit which contains the following: 1 x 4GB Microcomputer 1 x Aluminum alloy case 3 x Heatsink 1 x CPU fan with heat sink 1 x Small screwdriver 1 x Adapter 1 x Cable 1 x 5V 3A power plug 1 x SD card reader 1 x 32 GB micro SD card | рс | 1 | 8,200.00 | 8,200.00 | | |
| 28 | LoRaWAN Shield | ST ultra-low-power STM32L052T8Y6 MCU, Cortex -M0+ based with 64 k bytes of flash memory, 8 kb of RAM, 2 kb EEPROM, T-RNG Semtech SX1272 radio transceiver supporting LoRa, FSK, GFSK, MSK, GMSK, and OOK modulation High sensitivity down to -137 dBm Frequency: 860 MHz to 1020 MHz Output power: 14dBm to 20 dBm Voltage range: 2 to 3.6 V Temperature range: -40°C to 85 °C Embedded 32 kHz and 32 MHz crystals USART communication interface ST accelerometer and magnetometer sensor (LSM303AGR) ST relative humidity and temperature sensor (HTS221) ST pressure sensor (LPS22HB) Arduino connectors SMA connector (antenna included in the kit) Microcontroller board-compatible | рс | 2 | 2,700.00 | 5,400.00 | | |
| 29 | LoRaWAN Expansion Module | LoRa GPS HAT Single Channel LoRa & GPS expansion module; Microcomputer-compatible; Frequency Band: 868 MHz/433 MHz LoRa Spec: 188 dB maximum link budget. +20 dBm - 100 mW constant RF output vs. +14 dBm high efficiency PA. Programmable bit rate up to 300 kbps. High sensitivity: down to -148 dBm. Bullet-proof front end: IIP3 = -12.5 dBm. Excellent blocking immunity. GPS Spec: Based on MT3339. Power Acquisition:25mA,Power Tracking:20mA. Compliant with GPS, SBAS. Programmable bit rate up to 300 kbps. Serial Interfaces UART: Adjustable 4800~115200 bps, Default: 9600bps. Update rate:1Hz (Default), up to10Hz. I/O Voltage:2.7V ~ 2.9V. Protocols:NMEA 0183,PMTK. | pc | 2 | 2,250.00 | 4,500.00 | | |

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|----|---------------------------------|--|----|----|----------|----------|-------|------|
| 30 | LoRa Transceiver Breakout Board | Supplied with headers, 3.3 V voltage regulator and level shifter that can handle 3 to 5 V dc power and logic Ready-to-go Arduino libraries SX1276 LoRa based module with SPI interface Simple wire antenna or spot for U.FL/SMA antenna Power Output Capability: 5 to 20 dBm up to 100 mW 100 mA peak during +20 dBm transmit, 30 mA during active radio listening Range: approximately 2 km Dimensions: 29mm x 25mm x 4 mm Weight: 3.1 g | рс | 4 | 1,150.00 | 4,600.00 | | |
| 31 | Balance Charger | Integral equalizer for six-cell lithium-polymer (LiPo), Lithium High Voltage, Lithium iron phosphate (LiFe) and Lithium-lon (Lilon) batteries Dual Power AC/DC input Temperature probe socket 2-6S XH Plug-in balance sockets LiHV Mode Available With different charging modes PC control, real-time monitoring of voltages and other data AC input voltage: 100-240V DC input voltage: DC 11-18V Circuit Power: Max charge: 50 W; Max discharge: 5W Charge current range: 0.1 to 2.0 A LiPo/LiFe/Lilon Cells: 1 to 6 NIMH/NICd Cells: 1 to 15 Pb battery voltage: 2 to 20 V Net Weight: 632 g Dimensions: length 144mm x width 135mm x 36 mm With AC Power cord, DC cable with alligator clip charging connector, T plug banana connector charging cable, T plug with XT60 connector charging cable, T plug with Futaba connector charging cable, T plug with JST connector charging cable, and instruction manual | рс | 1 | 3,300.00 | 3,300.00 | | |
| 32 | LiPo Battery Pack | Lithium Polymer battery pack Gold plated connectors and balance connectors; Battery pack assembled using IR matched cells Minimum Capacity: 2200 mAh Configuration: 2S1P/ 7.4 V/ 2Cell Constant Discharge: 30C Peak Discharge(10 sec): 40C Pack Weight: 135g Pack Size: 105mm x 34mm x 16mm Pack Color: Blue Charge Plug: JST-XH Discharge Plug: XT60 | рс | 2 | 1,000.00 | 2,000.00 | | |
| 33 | Universal PCB | Single-sided universal printed circuit board Size: 7" x 9" | pc | 10 | 48.00 | 480.00 | | |

| 34 | Single-sided Presensitized PCB | Single-sided presensitized printed circuit board Positive Acting 25g Developer Included 100mm x 150mm x 1.6mm (4" x 6") Base Material: Paper Phenolic PP for single side Typical Exposure Time using Fluorescent Lamp: 6-10 min | pc | 10 | 216.00 | 2,160.00 | | |
|----|---------------------------------|--|------|----|----------|----------|--|--|
| 35 | Jumper Wires | 20 cm breadboard jumper wires 1 pack of 40 female to female 1 pack of 40 male to female 1 pack of 40 male to male | pack | 3 | 83.33 | 249.99 | | |
| 36 | 830 Point Solderless Breadboard | 830 point MB102 solderless breadboard Self-adhesive Interlockable 2 power lanes, 100 holes each lane 16.5cm x 5.5 cm Hole spacing: 0.1*/2.54mm for jumper cables and headers | pc | 2 | 100.00 | 200.00 | | |
| 37 | Digital Multimeter | Input impedance for DC voltage: 10MΩ Range DC Voltage: 200mV/20V/200V/1000V ±(0.5% + 1 digit) AC Voltage: 2V/200V/1000V ±(0.8% + 3 digits) DC Current: 2mA/200mA/20A ±(0.8% + 1 digit) AC Current: 2mA/200mA/20A ±(1% + 3 digits) Resistance: 200Ω/2kΩ/200kΩ/2MΩ/20MΩ ±(2.5%+5 digits) Capacitance: 20nF/200nF/2μF/100μF ±(2.5%+5 digits) Inductance: 2mH/20mH/20mH/20H ±(2%+10 digits) Safety Rating: CAT II 1000V, CAT III 600V Power: 9V Battery (6F22) LCD Size: 60mm x 54mm Included Accessories: battery, test lead, holster, multi-purpose socket, and Instruction manual | рс | 2 | 2,800.00 | 5,600.00 | | |

| | | | | | | | TOTAL QUOTED AMOUNT IN WORDS: | |
|----|----------------------------|---|------|----|----------|----------|-------------------------------|--|
| 41 | Mini Solderless Breadboard | Mini solderless breadboard 170 tie-points With peel and stick adhesive and two M2 mounting holes White Approximately 5cm x 3.75 cm | рс | 10 | 59.00 | 590.00 | | |
| 40 | Ferric Chloride Powder | Ferric Chloride Powder, 1kg etching agent for engraving circuit boards | pack | 1 | 1,300.00 | 1,300.00 | | |
| 39 | Energy Meter | Single-phase, three-wire, multifunction socket type smart meter based on ANSI standard. Active energy: "kWh-kW" meter Memory: Non-volatile memory Load performance accuracy: accuracy class 0.5% Working voltage: 80% to 120% Un Maximum voltage: 415 V(48 hours) Short-time withstand Over-voltage(1 min): 600V AC Nominal Voltage: 240V (three wire) Frequency: 80 Hz ±5% Diameter: 17.70cm/15.80cm Thickness: 8cm(10.57cm) Applicable Standard: ANSI C12.1, ANSI C12.10, ANSI C12.7, ANSI C12.20, ANSI C12.18, IEEE C37.90.1 2002, STS standard | pc | 1 | 4,000.00 | 4,000.00 | | |
| 38 | Soldering Station | Main Station Power Input: 220V Station Dimensions: 188mm x 126mm x 250mm Weight: 5.6 kg Soldering Iron Power Consumption: 60W Temperature Range: 200°C to 480°C Heating Element: Ceramic Heater Output Voltage: 24 V Hot Air Gun Power Consumption: 500W Temperature Range: 100°C to 480°C Heating Element: Metal Heating Core Motor Type: 888A Sirocco Fan 1 box with assorted tips and nozzles, sponge and rack, power cord, iron, hot air gun, handles, tweezer, and rework station | set | 1 | 5,700.00 | 5,700.00 | | |

Reviewed and Checked By:

Joselito Villena

BAC TWG

Please quote at your government price (including VAT) and state that the time within which you can make delivery. It will be appreciated if we can have your quotation in the office as soon as possible on or before the deadline stated herein.

| | MEL VINCENT A AMPO | |
|---|--------------------|--|
| - | BUYER/ END-USER | |

TERMS AND CONDITIONS:

- 1. Price quotation/s shall be valid for a period of at least (30) calendar days from the date of submission.
- 2. In order to assure that manufacturing defects shall be corrected by supplier, a warranty security shall be required from the contract awardee for a minimum period of three (3) months, in the case of EXPENDABLE SUPPLIES, or a minimum of one (1) year warranty and two (2) to three (3) years extended warranty (if applicable) in the case of NON-EXPENDABLE SUPPLIES after acceptance by End-user of the delivered supplies.
- 3. Delivery period within _____ calendar days.
- 4. Award of contract shall be made to the lowest quotation wich complies with the technical specifications, and other terms and condition stated herein
- 5. UPLB reserves the right to reject any or all offers as may be considered most advantageous to the University.
- 6. Any interlineations, erasure, or overwriting shall be valid only if they are signed or initiated by you or any of your duly authorized representative/s.

Regularments for Suppliers (GPPB Resolution No. 21-2017)

| REQUIREMENTS | Shopping (Section 52) | Procurement- Small Value Procurement (Section 53.9) | Procurement- Lease of Real Property or Venue (Section 53.10) | Negotiated Procurement- Scientific, Scholarly or Artistic Work, Exclusive Technology and Media Services (Section 53.6) | Negotiated Procurement- Emergency (Section 53.2) |
|--|--------------------------|--|---|---|---|
| Mayor's/Business Permit | / | / | 1 | / | 1 |
| PhilGEPS Registration Number | / | 1 | / | / | / |
| Professional license/ CV (consulting services) | | / | 日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本 | / | |
| PCAB License (for infrastructure) | | / | AND THE STATE OF | | DE LA CE |
| Income / Business tax returns (except for government agencies as lessor) | | FOR ABC'S ABOVE 500K | / | / | FOR ABC'S ABOVE 50K |
| Omnibus Sworn Statement | 707 | FOR ABO'S ABOVE SOK | | | FOR ABC'S ABOVE 500K |
| NFCC for infrastructure with ABC above Ph500k | | 1 | | | FOR ABC'S ABOVE 50K |

| After having carefully read and accepted your General Conditions, I/We quote you Name of the Company: | ou on the Item at prices noted above. |
|---|---------------------------------------|
| Address | Tel No.: |
| | Fax No. |
| Signature over Printed Name of Representative: | Email Address: |
| Position: | Date: |