UPLB BAC SECRETARIAT
BY: _____ DATE: 12-01-25
DEC 05 2025 10am
UPLB-RQ- 12-561-25-RES
DEADLINE OF SUBMISSION

UNIVERSITY OF THE PHILIPPINES
LOS BANOS
Los Banos, IV-A
VAT Reg. TIN: **000-864-006-00004**

Request for Quotation/ Bid Form (Technical Specifications)
DEPARTMENT OF CHEMICAL ENGINEERING

UPLB-RQ-

DEADLINE OF SUBMISSION:

Suppliers Name: _____

Date: **October 20, 2025**
Fund Code: **N8-453-32**
MOP: **NP - 53.9 SMALL VALUE PROCUREMENT**
Contact No: 09052401001 / (049) 536-2315
Contact Person: Patricia Nadine D. Revilla / pdrevilla@up.edu.ph

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

PR# 25-11-14962

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	ESTIMATED TOTAL APPROVED BUDGET OF THE CONTRACT	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	**single-board microcomputer kit**	Broadcom BCM2712 2.4GHz quad-core 64-bit Arm Cortex-A76 CPU, with Cryptographic Extension, 512KB per-core L2 caches, and a 2MB shared L3 cache Features: • VideoCore VII GPU, supporting OpenGL ES 3.1, Vulkan 1.2 • Dual 4Kp60 HDMI® display output with HDR support • 4Kp60 HEVC decoder • LPDDR4X-4267 SDRAM (8GB) • Dual-band 802.11ac Wi-Fi® • Bluetooth 5.0/Bluetooth Low Energy (BLE) • microSD card slot, with support for high-speed SDR104 mode • 2 × USB 3.0 ports, supporting simultaneous 5Gbps operation • 2 × USB 2.0 ports • Gigabit Ethernet, with PoE+ support (requires separate PoE+ HAT) • 2 × 4-lane MIPI camera/display transceivers • PCIe 2.0 x1 interface for fast peripherals (requires separate M.2 HAT or other adapter) • 5V/5A DC power via USB-C, with Power Delivery support • Standard 40-pin header • Real-time clock (RTC), powered from external battery • Power button	lot	2	8,000.00	16,000.00				

2	**microcontroller development board, 32k memory, 54 I/O, 10-bit ADC**	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 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	pc	3	4,000.00	12,000.00				
3	**bluetooth shield (master/slave), class II**	bluetooth shield, Class II device, uses the HC-05 module	pc	3	700.00	2,100.00				
4	**bluetooth shield (slave), class II**	bluetooth shield, Class II device, uses the HC-06 module	pc	3	700.00	2,100.00				
5	**gsm shield**	Board Size: 85 x 55 x 15 mm(approx) GPRS multi-slot class 10/8 GPRS mobile station class B Compliant to GSM phase 2/2+ Class 4 (2 W @ 850 / 900 MHz) Class 1 (1 W @ 1800 / 1900MHz) Enhanced Commands: SIMCOM AT Commands. Low power consumption: 1.5 mA(sleep mode) Industrial Temperature Range: 40~+85 C Power supply: 5 V~26 V(Recommend 9V power supply)	pc	3	1,700.00	5,100.00				
6	**isolated I/O shield**	Pin header set 40 pins Male PCB Pin Header 40 pins Female PCB Pin Header	pc	3	800.00	2,400.00				
7	**Serial LCD Module (2x16 LCD)**	16x2 LCD Display I2C White on Blue with I2C adapter board	pc	3	500.00	1,500.00				
8	**RTC, on-board 32.768 kHz crystal and backup batteries**	DS3231 RTC High Precision Real-Time Clock Module with AT24C32 EEPROM	pc	3	400.00	1,200.00				

9	**Wifi module**	Wifi module, 802.11 b/g/n Wi-Fi Direct (P2P), soft-AP Integrated TCP/IP protocol stack Integrated TR switch, balun, LNA, power amplifier and matching network Integrated PLLs, regulators, DCXO and power management units +19.5dBm output power in 802.11b mode Power down leakage current of <10uA 1MB Flash Memory Integrated low power 32-bit CPU could be used as application processor SDIO 1.1 / 2.0, SPI, UART STBC, 1×1 MIMO, 2×1 MIMO A-MPDU & A-MSDU aggregation & 0.4ms guard interval Wake up and transmit packets in < 2ms Standby power consumption of < 1.0mW (DTIM3)	pc	3	200.00	600.00				
10	**Wireless Transceiver Module**	2.4GHZ nRF24L01+PA+LNA Voltage:3-3.6V Max output power: +20 dBm Working current in transmit mode (peak): 115 mA Working current in receiver mode (peak): 45 mA Current in-mode: 4.2uA Operating temperature: -20-70 degree Receiver sensitivity: -92 dBm in 2 Mbps mode, -95 dBm in 1 Mbps mode, -104 dBm in 250 kbps mode PA gain: 20 dB LAN gain: 10dB LAN noise figure: 2.6dB Antenna gain (peak): 2 dBI Range: 520m (2 Mbps), 750m (1 Mbps), 1100m (250 kbps) in open areas Receive Mode Current(peak): 45mA Dimension of NRF24L01 Mod	pc	3	200.00	600.00				

11	**RFID module**	Operating Chip: NXP MFRC522 Operating Frequency: 13.56 MHz Supported Protocols: ISO/IEC 14443 Type A (e.g., MIFARE Classic, NTAG) Operating Voltage: DC 3.3V Current Consumption: 13-26mA (operating), <80uA (sleep mode) Interface: SPI (Serial Peripheral Interface) Read Distance: 0 mm to 60 mm (0 to 2.36 inches), varies with tag/card type and antenna tuning. Data Transfer Rate: Up to 10 Mbit/s	pc	3	500.00	1,500.00				
12	**Resistor set**	Resistance Tolerance: ±5% Maximum Power Rating: 2W Resistance Range: 10 Ω → 1MΩ Number of Pieces:480 Mounting Type: Axial Technology: Metal Film Series: CCR-122	pck	1	5,000.00	5,000.00				
13	**Capacitor set**	Capacitance Range: 1 µF → 4700µF Voltage: 16V to 63V Dielectric Material: Aluminium Mounting Type: Through Hole Number of Pieces: 270	pck	1	5,000.00	5,000.00				
14	**pH Sensor**	Module: PH-4502C Supply Voltage: 5V Current: 10mA Dimensions: 42 X 32 X 20 mm Electrode E201-BNC Probe Type: Laboratory Grade. Response Time: 5 sec Detection range: 0 ~ 14. (acid / base) Temperature range: 0 - 80 ° C Working temperature: 10 ~ 50 ° C Working humidity: 95 RH non-condensing	pc	5	1,300.00	6,500.00				