



Republic of the Philippines
BULACAN STATE UNIVERSITY
City of Malolos, Bulacan

REQUEST FOR QUOTATION FOR THE PROCUREMENT OF GOODS AND SERVICES

****Mandatory to fill in****

COMPANY NAME:	Quotation No. 23-10-820
CONTACT No.	Purchase Request No. G-2023-10-1139
Address:	Purpose: For Implementation of projects under program "Educational Robots for Innovative Educational Technology" of Advanced Robotics and Intelligent Control Center (ARICC) (12 months)
TIN No.	ABC: 52,550.00
PhilGEPS Registration No.	Please indicate days of delivery: _____ Calendar Days upon receipt of Purchase Order
EMAIL ADDRESS:	

INSTRUCTIONS TO SUPPLIERS:

1. Please quote your lowest price on the item/s listed below comprising the necessary taxes.
2. It is mandatory to indicate the brand and/or model of the items being offered and to attach a brochure thereof whenever applicable
3. Indicate the warranty period in cases of equipment or whenever applicable.
4. Forthwith submit the accomplished quotation duly signed by your representative.
5. Suppliers are required and mandated to attach and submit the following documentary requirements:
a) Valid Mayor's/ Business Permit; b) BIR Certificate of Registration; c) Authority to Print Receipt; d) PhilGEPS Membership Certificate; e) Omnibus Sworn Statement
6. All items must conform with the internationally accepted standard and sub-standard items shall not be accepted.

ITEM NO.	ITEM & SPECIFICATION	QTY	UNIT	UNIT PRICE	BRAND & MODEL OFFERED	UNIT PRICE	TOTAL PRICE
	ELECTRICAL MOTORS						
1	Stepper Motor Nema 17 3000g-cm Form Factor: Nema 17 Step Angle: 1.8 degrees Motor Length:40 mm Rated Voltage:3.6 V Rated Current: 1.2 A Phase Resistance: 3 Phase Inductance:3.3 mH Holding Torque:3000 g-cm No. of Lead Wires:6 Rotor Inertia:54 g-cm ² Detent Torque:220 g-cm Motor Weight:0.26 kg	6 pcs		900.00			
2	Stepper Motor Nema 17 4500g-cm Form Factor: Nema 17 Step Angle: 1.8 degrees Motor Length:48 mm Rated Voltage:3.6 V Rated Current: 1.2 A Phase Resistance: 3 Ohms Phase Inductance:5 mH Holding Torque:4500 g-cm No. of Lead Wires:4 Rotor Inertia:68 g-cm ² Detent Torque:280 g-cm Motor Weight:0.36 kg	13 pcs		1,000.00			
3	Stepper Motor Nema 23 9kg-cm (125 oz-in) Form Factor: Nema 23 Step Angle: 1.8 deg. Motor Length:56 mm Rated Voltage:3.6 V Rated Current:2 A Phase Resistance: 1.8 Ohms Phase Inductance:2.5 mH Holding Torque:9 kg-cm No. of Lead Wires:6 Rotor Inertia:300 g-cm ² Detent Torque:400 g-cm Motor Weight:0.7 kg	2 pcs		1,500.00			
4	A4988 Stepper Motor Driver Module w/ Heatsink -Low RDS (ON) outputs -Automatic current decay mode detection / selection -Mixed with slow current decay modes -Synchronous rectification for low power dissipation -Internal UVLO -Crossover-current protection -3.3 and 5 V compatible logic supply -Thermal shutdown circuitry -Ground Fault Circuit -Load short-circuit protection -Of five optional step mode: full, 1/2, 1/4, 1/8 and 1/16	8 pcs		200.00			

5	<p>DRV8825 stepper motor driver Breakout Board w/ Heatsink</p> <ul style="list-style-type: none">-Simple step and direction control interface-Six different step resolutions: full-step, half-step, 1/4-step, 1/8-step, 1/16-step, and 1/32-step-Adjustable current control lets you set the maximum current output with a potentiometer, which lets you use voltages above your stepper motor's rated voltage to achieve higher step rates-Intelligent chopping control that automatically selects the correct current decay mode (fast decay or slow decay)-45 V maximum supply voltage-Built-in regulator (no external logic voltage supply needed)-Can interface directly with 3.3 V and 5 V systems-Over-temperature thermal shutdown, over-current shutdown, and under-voltage lockout-Short-to-ground and shorted-load protection	19 pcs	350.00			
6	<p>CNC Shield V3 for Arduino®</p> <ul style="list-style-type: none">-GRBL 0.8c compatible. (Open source firmware that runs on an Arduino UNO that turns G-code commands into stepper signals https://github.com/grbl/grbl)-4-Axis support (X, Y, Z, A-Can duplicate X,Y,Z or do a full 4th axis with custom firmware using pins D12 and D13)-2 × End stops for each axis (6 in total)-Spindle enable and direction-Coolant enable-Uses removable Pololu A4988 compatible stepper drivers. (A4988, DRV8825 and others)-Jumpers to set the Micro-Stepping for the stepper drivers. (Some drivers like the DRV8825 can do up to 1/32 micro-stepping)-Compact design.-Stepper Motors can be connected with 4 pin molex connectors.-Runs on 12-36V DC. (At the moment only the Pololu DRV8825 drivers can handle up to 36V so please consider the operation voltage when powering the board.)	6 pcs	400.00			
7	<p>CNC Stepper Motor Driver Shield Ramps 1.4</p> <ul style="list-style-type: none">-Standard interfaces (as that of extruder)-Reserved GCI like I2C and RS232-MOSFET 3 MOSFET are applied to the heater/fan and thermistor circuit.-Adding another 5A to protect the component parts.-An 11A fuse is added to the hotbed-Support 5 stepper drive board-The adoption of Pin Header makes it more convenient to repair or change.-I2C and SPI are reserved for expanding-All the MOSFET can be controlled by PWM-Adding a SD module for SD ramps module.-LED can indicate the status of the heater (the open and close of MOS).-2 stepper motor for Z axis in parallel.	3 pcs	600.00			
8	<p>TB6600 Stepper Motor Driver</p> <ul style="list-style-type: none">-For two-phase stepper motors-Arduino compatible-Able to output a 4A peak current-8 kinds of current control from 0.5 A to 3.5 A and 7 kinds of micro steps-Power input from 9 to 42VDC	2 pcs	500.00			

