

# Republic of the Philippines City Government of Muntinlupa National Road Putatan Muntinlupa City

**BIDS and AWARDS COMMITTEE** 

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#### REQUEST FOR QUOTATION

Date: 11/10/2022 Quotation No:2022-0271

| Company Name:                        |  |
|--------------------------------------|--|
| Address:                             |  |
| Business Permit No.:                 |  |
| TIN:                                 |  |
| PhilGEPS Registration No.(required): |  |

The City Government of Muntinlupa, through its Bids and Awards Committee, intends to procure for the PROCUREMENT OF MATERIALS & OTHER NECESSARY ITEMS FOR CDM "BATTLE OF THE BOTS 2022" which will be undertaken in accordance with Section 53.9 of the 2016 Revised Implementing Rules and Regulations of Republic Act No.9184.

Please quote your **best offer** for the item/s described herein, subject to the Terms and Conditions provided. Submit your quotation duly signed by you or your duly authorized representative not later than the **DEADLINE** on **November 14, 2022**.

A copy of the following documents are also required to be submitted along with your quotation/proposal:

| 1. Mayor's/Business Permit: (Certified True Copy)     | 3. PhilGEPS Registration (Certified True Copy)     |
|-------------------------------------------------------|----------------------------------------------------|
| 2. Accomplished and Notarized Omnibus Sworn Statement | 4.Certificate of Registration (Certified True Copy |
| (Original)                                            |                                                    |
|                                                       |                                                    |
|                                                       |                                                    |

Quotations/Proposals must be submitted to the BAC Office of the City Government of Muntinlupa for checking & validation.

For any clarification, you may contact Bids & Awards Committee at telephone no.(02)8861-1127



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#### INSTRUCTIONS:

- (2) Do not alter the contents of this in any way.
- (3) technical specifications with asterisks(\*) are mandatory. Failure to comply with any of the mandatory requirements will disqualify your
- (4) Failure to follow these instructions will disqualify your entire quotation.

After having carefully read and accepted the Terms and Conditions, I/we submit our quotation/s for the item/s as follows:

| Procurement Project                                                                | Approved Budget for the Contract (ABC)                                              |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| PROCUREMENT OF MATERIALS & OTHER NECESSARY ITEMS FOR CDM "BATTLE OF THE BOTS 2022" | One Hundred Eleven Thousand Four Hundred Thirty Five Pesos & 29/100 (Php111,435.29) |

**Technical Specifications:** REMARKS ITEM DESCRIPRION Compliance UNIT OF ISSUE 12V 21000RPM Large Power DC Motor for Drill Cutting Grinder Car Model High Speed Motor **★**Specifications★ Model:RS550 6 pc Material: Metal Rated voltage: DC 12V Current Rating: 4.5A Speed: 21000RPM Mobile Platform Kit 4Wd Metal Chassis DC Geared Motor SPECS: Full Vehicle length: 170mm Whole Vehicle Width: 175mm Chassis size: length 170mm x width 120mm and thickness of 2mm Cylinder center hole diameter: 17.5mm Motor Parameters: 6V, 133 rpm, no load 75ma, stalled 1.3A. Wheel Parameters: 65 x 1 26mm, Plastic wheel + Rubber Tire Weight: about 725 grams Each brass coupling is equipped with 1 screw for fastening the motor shaft (2) at the bottom of the reserved hole aperture 3.2mm Servo Motor Specifications: Specification: Model: MG995 Operation Voltage: 4.8 -7.2Volts Color: Black Steering Angle: 360°/180° Cable Length (CM): 29 Dimension: 4.0 cm x 4.4 cm x 2.0 cm. Operating Speed: 0.17sec / 60 degrees (4.8V no load)



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|    |      | Operating Speed: 0.13sec / 60 degrees (6.0V no load) Stall Torque: 13 kg-cm (180.5 oz-in) at 4.8V Stall Torque: 15 kg-cm (208.3 oz-in) at 6V Gear Type: All Metal Gears Operating Temperature (°C): -30 to 60 Weight(gm): 55 Accessories Included: servo arms and screws Package included: 1 x MG995 High Torque Metal Gear Servo motor                                                                                   |  |  |
|----|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|    |      | Describe 12/22000 mark lithium Pattony                                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| 2  | sets | Portable 12V 20000mah Lithium Battery Rechargeable Battery Pack Capacity Specs: Model Number: 12V 20Ah Type: Li-lon Certification: CE Nominal Capacity: 20000mah Set Type: Charger Sets Bundle: Bundle: 1 Replacement Battery: Yes Battery Number: 1-2 Size: 18650                                                                                                                                                        |  |  |
| 1: | рс   | 2.4G 6 Channels 12V Remote Control And<br>Receiver Plate For RC Boat Car<br>Toy[BAOSITY1]<br><b>Specification:</b><br>Material:Plastic<br>Frequency: 2.4Ghz 6 Channel<br>Receiver Plate: DC3.6-6V<br>Max Current: 1.8A<br>Size: approx. 13x15.5cm/5.12x6.10inch.                                                                                                                                                          |  |  |
| 1  | рс   | 433Mhz RF TRANSMITTER Electronic Lock Control DIY Wireless Remote Control Switch DC 12V 1CH Relay Receiver Module SPECIFICATIONS: Frequency: 433MHz Power by 3V Coin Cell Button Battery (Battery included) Material: PVC Button: 2 Buttons Size: 59mm x 28mm x 8mm Operating voltage: 3V Operating current: 12mA Transmit power: 10mw Modulation mode: ASK (AM) Encoding Type: Learning/copy Transfers Distance: 20-50 m |  |  |



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| 1 | рс | 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm  SPECIFICATIONS: 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm                                                | N |
|---|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 3 | pc | M1 5mm Steel Metal Pinion Motor Gear for 1/8 1/5 1/7 Traxxas XMAXX ARRMA RC Car SPECIFICATIONS: 11T                                                                                                                                                                                                                             |   |
| 3 | pc | M1 5mm Steel Metal Pinion Motor Gear for 1/8 1/5 1/7 Traxxas XMAXX ARRMA RC Car SPECIFICATIONS: 34T                                                                                                                                                                                                                             |   |
| 6 | рс | 681 Open Deep Groove Ball Bearings SPECIFICATIONS: Manufacturing materials: Chrome steel Precision grade: ABEC-3 / P6 Bearing features: Stable performance and cost-effective. ZZ: Metal seal 2RS: Rubber seal Open: No seal F: Outer flange S: Stainless steel                                                                 |   |
| 2 | рс | Caster Heavy Duty PU Wheel, push cart wheel. No Steel Frame, 3/4/5 Inch, PU Material  SPECIFICATIONS: Orange outer wheel, black inner ring, wheelbase 10MM, steel shaft below 10MM needs to be inserted High-quality polyurethane 3/4/5-inch casters, factory direct sales 1 piece of 3/4/5 inch each bearing 100KG/110KG/120KG |   |



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| 6 | рс  | 682 Open Deep Groove Ball Bearings SPECIFICATIONS: Manufacturing materials: Chrome steel Precision grade: ABEC-3 / P6 Bearing features: Stable performance and cost-effective. ZZ: Metal seal 2RS: Rubber seal Open: No seal F: Outer flange S: Stainless steel  |  |
|---|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 6 | pc  | 685 Open Deep Groove Ball Bearings  SPECIFICATIONS: Manufacturing materials: Chrome steel Precision grade: ABEC-3 / P6 Bearing features: Stable performance and cost-effective. ZZ: Metal seal 2RS: Rubber seal Open: No seal F: Outer flange S: Stainless steel |  |
| 1 | рс  | STAINLESS ROUND BAR 304 3/8 PER FEET SPECIFICATIONS: STAINLESS STEEL SHAFTING GRADE 304 SOLID ROUND BAR 8.0 mm                                                                                                                                                   |  |
| 1 | рс  | STAINLESS ROUND BAR 304 3/8 PER FEET  SPECIFICATIONS:  STAINLESS STEEL SHAFTING  GRADE 304  SOLID ROUND BAR  10 mm                                                                                                                                               |  |
| 1 | set | Head Stainless Nuts Hex M2 230pcs<br>Assortment Kit Bolts                                                                                                                                                                                                        |  |
| 6 | рс  | Geared DC Motor with Wheels 3V 6V 9V 12V DC Plastic Gear Dynamo 130 Dinamo DiY Arduino Robot 2WD SPECIFICATIONS: Rated Voltage: 3V - 12V DC (Recommended Voltage is 6V - 9V) Continuous No-Load Current: 150mA +/- 10%                                           |  |



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|   |    | Min. Operating Speed (3V): 90+/- 10% RPM Min. Operating Speed (6V): 200+/- 10% RPM Torque: 0.15Nm ~0.60Nm Stall Torque (6V): 0.8kg.cm Gear Ratio: 1:48 Body Dimensions: 70 x 22 x 18mm Wires Length: 200mm 28 AWG Product Weight: 29g / 1.02oz Wheel diameter: 65mm Wheel thickness: 28mm Package Includes: 1 Wheel / 1 Geared DC Motor                                |  |  |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 3 | pc | 30A Firmware Electronic Speed Controller ESC for RC Multicopter SPECIFICATIONS: 30A ESC: Max cont. current: 30A Peak current: 40A (10s) Voltage: 2-3S lixx, BEC: 5V/3A Size: 50x23x8mm Weight: ~30g                                                                                                                                                                    |  |  |
| 1 | эq | TX4 2.4GHz 4CH Radio System Transmitter Controller Remote Control w/ Receiver For RC Car Boat SPECIFICATIONS: Specifications of Transmitter: Channels: 4 Mode Type: RC Car Boat Tank RF Power: Less than 20dbm Response Time:10s-12ms Control Distance: about 200-300m Voltage Input: 4.8V-6Vor 1.5AAA*4 Low Voltage Warning: 4.5V Net Weight: 260G Size: 180*80*145mm |  |  |
| 2 | pc | 12V/16.8V/21V/25V 19500 RPM DC Motor with Two-speed 12 Teeth and High Torque Gear Box for Electric Drill / Screwdriver SPECIFICATIONS: Voltage: 12V/16.8V/21V/25V Output Power: 90W No load Speed: 400 - 19500 rpm Type: Micro Motor Usage: Toy Construction: Series Wound Commutation: Brushless Protect Feature: Explosion proof                                     |  |  |



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| 2 | рс | 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm  SPECIFICATIONS: 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm                                                                                                                                                                     |  |  |  |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 1 | pc | DumboRC X4 2.4G 4CH Transmitter W/ X6F<br>Receiver for 1/10 1/8 Crawler Axial SCX10<br>D90 MN RC Car Boat Tank Model Spare Parts<br>RC Vehicle Parts<br>SPECIFICATIONS:<br>X4 Specification:<br>Channel:4CH<br>Fit For:Rc Car Boat Tank Model, such as JJRC<br>Q65, WPL and so on                                                                                                                                                                    |  |  |  |
|   |    | Modulation Mode: GFSK Spreading Mode: FHSS 67 channel pseudorandom frequency hopping Control Distance: 400-500 meters Remote Control Voltage Range: 4.8-12v Remote Control Working Current: 80-120mA Receiver Voltage Range: 3.3-10V Receiver Operating Current: 30mA RF Power: <20dbm Data Resolution: 4096 levels, 0.5us per level Voltage Alarm: 7.4v 4.8v Transmission Frequency: 2.4GHz ISM band (2400MHz~2483.5MHz) Support Receiver: X6F/X6FG |  |  |  |
| 4 | pc | Yellow DC TT Gear Geared Motor and Wheel Specifications: Motor Voltage: 3 – 12 V Motor Current: 70 mA (typical) – 250 mA (max) Speed: up to 170 RPM Torque: up to 0.8 Kg Gear Ration: 1:48 Wheel Diameter: 66 mm Wheel Width: 27 mm Package Contents: 1 Geared Motor 1 Wheel                                                                                                                                                                         |  |  |  |



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| 4 | рс | S000mAh 11.1V 3S LiPo Pack - XT60 Specifications:  - Minimum Capacity: 2200mAh  - Configuration: 351P / 11.1v / 3Cell  - Constant Discharge: 30C  - Peak Discharge (10sec): 40C  - Pack Weight: 197g  - Pack Size: 108 x 34 x 27mm  - Charge Plug: JST-XH  - Discharge Plug: XT60                                                             |  |
|---|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | рс | 4 Wheel DIY Servo Robot Car 4WD Chassis<br>Smart Car for Arduino Platform with Metal<br>Servo Bearing Kit Steering Gear Control RPI<br>SPECIFICATIONS:<br>Operating Temperature : -10~70<br>Supply Voltage : 5V<br>Package : SMD                                                                                                              |  |
| 2 | pc | Motor DC 6V 7.4V 9V 12V High Speed Dual<br>1.5mm Shaft RC Car Boat                                                                                                                                                                                                                                                                            |  |
| 1 | рс | JGY-370 Worm DC Motor Turbo Drive High<br>Torque Mini Gear Motor 6v 12v 24v 3rpm-<br>210rpm Geared Worm Reduction Motor Self-<br>lock                                                                                                                                                                                                         |  |
| 2 | рс | Stainless Steel Sheet 1.2mm thick, 50mm x 80mm, 2b finish. T304 Grade.  SPECIFICATIONS: T304 Stainless Steel 1.2mm x 50mm x 80mm, 2b finish. Approx 1.2mm thickness due to tolerance.                                                                                                                                                         |  |
| 1 | рс | Arduino DIY RC Robot Arm Tank Acrylic With PS2 Stick  SPECIFICATIONS: duct: RC Robot Tank Materials: Acrylic+Electronic  Components Power: 4* 18650 Lipo Batteries(not included) Controller: 2* AA Batteries(not included) Motor: 33GB520 Voltage: 9-12V Arm Extension(max): 230mm Gripper Extension(max): 75mm Base loading Weight: 2kg(max) |  |



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| 6 | pc | Quick Charging 18650 Battery USB Charger for 21700 and Chargers Va@pe Battery SPECIFICATIONS: Can only fit 1x 26650 size battery at a time Output Current: 1A × 2 Input: MICRO USB DC 5V 2A Output Voltage: 4.2V                                                                                                                                                                         |  |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | pc | RC Car WLtoy 959A/B SPECIFICATIONS:                                                                                                                                                                                                                                                                                                                                                      |  |
| 2 | pc | 2200mAh 3S 25C, 30C, 40c & 60-120C Lipo<br>Pack SPECIFICATIONS:<br>Nominal voltage :11.1V or 3.7v each cell<br>Transport charege: 3.70V per cell<br>Storage charge: 3.80V - 3.88V or 40-50%<br>Maximum full charge: 12.6V or 4.20V per cell                                                                                                                                              |  |
| 1 | pc | 2pcs Y Spindle Pressure Screws For Child<br>Gate Or Pet Gate Baby Gate Screw Bolts<br>Pressure Gates Threaded Spindle Rod Screws<br>Kit For Stair Gate M10 X 10mm<br>SPECIFICATIONS:<br>Size:1(cm)=0.3937008(in)                                                                                                                                                                         |  |
| 2 | pc | Flex Collet Coupler For 5mm Motor Shaft & 4mm Cable RC Boat Stainless Steel 1pc SPECIFICATIONS: This stainless steel flex coulper collet with grub screw fits for 4mm flex cable and 5mm motor shaft lit's for round end cable Length: 31mm Material: stainless steel                                                                                                                    |  |
| 2 | рс | High Power MOSFET Trigger Switch Driver Module PWM Regulating Electronic Switch Control Board  SPECIFICATIONS: Output capacity: DC 5V - 36V, at room temperature, continuous current 15A, power 400W! Lower auxiliary cooling conditions, the maximum current up to 30A.  Operating temperature: -40-85  Dimension: 34mm x 17mm x 12mm  High-power MOSFET Trigger Switch Drive Module x1 |  |



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| 2 | рс | Synchronous Wheel Kit Timing Belt Idler Pulley Aluminum Timing Drive Pully Wheels Gear for 3D Printer Mechanical Drive SPECIFICATIONS: Size: 14*10*10mm/16*12*12mm Material: aluminum Package list:1 Pc GT2 Synchronous Wheel Kit                                                                                                                                     |  |  |
|---|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1 | рс | 100pcs Multipurpose Nylon Cable Tie Zip<br>Ties Adjustable Durable Self locking Nylon<br>Zip Cable Ties                                                                                                                                                                                                                                                               |  |  |
| 1 | рс | BRUSH CUTTER BLADE 2T SILVER  SPECIFICATIONS:  Product Description: Material: Metal Color: silver // black Blade length:305mm(12") Thickness:1.6mm Hole:25.4mm                                                                                                                                                                                                        |  |  |
| 1 | рс | Dc Motor Shaft Drill Adapter For Saw Blade<br>Connection Coupling Joint Connector<br>Coupler Sleeve Tools Accessories<br>SPECIFICATIONS:<br>size: Match The Motor Shaft Diameter:5mm<br>Match Saw Blade Inner Hole:10mm (M10)                                                                                                                                         |  |  |
| 2 | pc | Stainless Square Tubular Stainless Steel<br>SUS304<br>SPECIFICATIONS:<br>Stainless Square Tubular<br>3.8 x 3.8, 1.2mm (2ft)                                                                                                                                                                                                                                           |  |  |
| 1 | рс | Nuts Bolts Set Hex Bolts Nut and Washer Assortment Screws Bolts M3 Tool Kit with Plastic Box (Black)  SPECIFICATIONS:  [Material]Cap head hex is made of steel ,sturdy and durable  [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 - 25pcs, M3 x 6 - 25pcs, M3 x 8 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, Hex nuts M3 - 50pcs,Flat washers M3 - 50pcs,Spring washer M3 - 50pcs. |  |  |



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| 1 | рс | Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass through 3mm diameter screws) Diameter of the center large hole at the bottom: 10mm |  |
|---|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | рс | DC High-speed Large Torque Motor with Ball Bearing and Fan Blades for DIY Model Car / Small Drill Micro-machine SPECIFICATIONS: Voltage: 12V Output Power: 100W No load Speed: 12000 rpm Type: MicroMotor Construction: Permanent Magnet Commutation: Brush Protect Feature: Explosion proof Torque: 1 N.m                                                                                                                    |  |
| 1 | рс | DC Buck Step Down Power Converter Board 5- 16V To 1.25V 1.5V 1.8V 2.5V 3.3V 5V 3A  SPECIFICATIONS: Chip: MP1495 Input Voltage: DC 5-16V Output Voltage: 1.25V/1.5V/1.8V/2.5V/3.3V/5V(default 1.25V) Maximum Output Current: 3A Maximum Conversion Efficiency: 90% Board Size: 3x2cm/1.18x0.79" (LxW)                                                                                                                          |  |



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| 1  | pc | Mini Nano V3.0 ATmega328P Microcontroller Board w/USB Cable For Arduino SPECIFICATIONS: Nano V3.0 ATmega328P Microcontroller Board w/USB Cable For Arduino Fully Compatible to Arduino Nano V3.0 ATmega328P-AU ATmega328P-AU Operating Voltage (For Arduino Software Microcontroller ATmega328P-AU Operating Voltage (Focommended) 7V-12V Input Voltage (Iimits) 6V-20V Digital I/O Pins 14 (of which 6 provide PWM output) |  |
|----|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |    | Analog Input Pins 8 DC Current per I/O Pin 40 mA DC Current for 3.3V Pin 50 mA Flash Memory 32 KB (ATmega328) of which 2 KB used by bootloader SRAM 2 KB EEPROM 1 KB Clock Speed 16 MHz Dimention:Approx. 45x17x19mm Cable Length:245mm Color:Blue(as the picture shows) Package: 1 xNano V3.0 ATmega328P Arduino Compatible Board 1 xMini USB Cable                                                                        |  |
| 4  | pc | Bluetooth HC-05 HC 05 HC-06 HC 06 Transceiver RF Wireless Slave Module RS232 / TTL SPECIFICATIONS: - Built-in CSR company Bluetooth chip BC417143 - Bluetooth® Technology v2.0 + EDR - TTL data transparent transfer between a host Bluetooth device - Compatible with all Bluetooth adapters that support SPP - Coverage up to 30 ft / 10 m - Built-in antenna - Power input: +3.3VDC (Bluetooth module)                   |  |
| 10 | pc | Breadboard connecting Jumper Wires Dupont Wire Cable Arduino Prototyping SPECIFICATIONS: 28AWG (7 strands @ 36 AWG) (Male to Male)                                                                                                                                                                                                                                                                                          |  |



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|----|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------|------|
| 10 | рс  | Breadboard connecting Jumper Wires Dupont Wire Cable Arduino Prototyping SPECIFICATIONS: 28AWG (7 strands @ 36 AWG) (Female to Female)                                                                                                 | = |      |      |
| 10 | pc  | Breadboard connecting Jumper Wires Dupont Wire Cable Arduino Prototyping SPECIFICATIONS: 28AWG (7 strands @ 36 AWG) (Male to Female)                                                                                                   |   |      |      |
| 1  | рс  | Thickness Carbon Fiber Cloth Plain Carbon Fabric For Commercial Car Part Sport Equipment SPECIFICATIONS: Technics:Woven Color: Black Width: 20cm Length: 30cm, 60cm 150cm 300cm Thickness: 2mm Material: Carbon Fiber Yarn Size: 3K    |   |      |      |
| 1  | Set | Epoxy Resin 750grams SET (hardener included) SPECIFICATIONS: ODORLESS                                                                                                                                                                  |   |      |      |
| 8  | pc  | AA Battery                                                                                                                                                                                                                             |   |      |      |
| 1  | pc  | rubber and plastic insulation Specification: (1/4" x 5/8" 15 mm) insulation pipe for air conditioner                                                                                                                                   |   |      |      |
| 1  | pc  | UNO R3 Development Board with USB Cable (ATmega328p + ATmega16u2) SPECIFICATIONS: Board Size: 75 x 54 x 15 mm Supply Voltage: 7 V to 12 V DC Digital I/O: pin 0 to 13 Analog Inputs: pin A0 to A5 I/O Voltage: 5 V Clock Speed: 16 MHz |   |      |      |
| 1  | pc  | Clear Transparent Acrylic Sheet Pre Cut & Customized Size Plastic Glass Plexiglass Perspex Plate SPECIFICATIONS: 5 by 5 inches Material: Acrylic Color: Transparent Item: 1PC of Clear Acrylic Sheet                                   |   |      |      |
| 4  | рс  | 12V DC MOTOR                                                                                                                                                                                                                           |   |      |      |



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| 5  | Set | 4X Battery Holder Storage Box Case 4 Slot Battery Container With Wire Lead For Arduino DIY KIT SPECIFICATIONS: Type: Voltage Regulator Operating Temperature: -40-+85  L298N DC Dual H-Bridge Stepper Motor Driver Board Module L298 SPECIFICATIONS:                                                                                                                                 |  |  |  |
|----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| ,  | PC  | Driver: L298 Dual H Bridge DC Motor Driver<br>IC                                                                                                                                                                                                                                                                                                                                     |  |  |  |
|    |     | Operating Voltage: 7 to 35V Peak current: 2A Maximum power consumption: 20W (when the temperature T = 75 °C) Driver Board Size: 55mm * 49mm * 33mm (with fixed copper pillar and the heat sink height) Driver Board Weight: 33g                                                                                                                                                      |  |  |  |
| 2. | рс  | 2Pcs 58mm Plastic Omni Wheel for Robot Kit<br>Servo Motor Omni Wheel 14135<br>SPECIFICATIONS:<br>Load capacity:3 KG<br>Colour: Black Grey<br>Material: Nylon+TPR<br>Size: Wheel Diameter: 58mm, Roller<br>Diameter: 13mm                                                                                                                                                             |  |  |  |
| 4  | рс  | Dc Motor 555 550 545 540 5 Series Motor Base Mounting Bracket Holder Seat  SPECIFICATIONS:  550/545/555 motor base (black L type) [Size]: bottom 40 * 43mm, height 47mm [Thickness]: 3mm thick aluminum alloy [Center aperture]: about 12.8mm [Fixed hole pitch]: 25mm [Bottom fixed pitch]: 25mm, 30mm (horizontal) [Side fixed aperture]: M3 hole [Bottom fixed aperture]: M3 hole |  |  |  |
| 1  | pc  | 240 pcs Computer M2 M2.5 M3 Suit micro-<br>type digital Electronic Screw<br>SPECIFICATIONS:<br>Screw Type:Set Screws<br>Head Style:Round<br>Color:black<br>Material:Carbon Steel<br>size:15*5*4 cm                                                                                                                                                                                   |  |  |  |
| 1  | рс  | BOT CHASSIS-ACRYLIC BOT CHASSIS                                                                                                                                                                                                                                                                                                                                                      |  |  |  |

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| 5   | рс  | JGA25-370 DC MOTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
|-----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1   | 1   | ARDUINO MEGA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
| 4   | рс  | 3D PRINTER FILAMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 4 : | pc  | 65MM RUBBER WHEEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| 8   | pc  | ULTRASONIC SENSOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| 1   | рс  | HEAT SINK(8in x 2in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 2   | рс  | 12V RECHARGEABLE BATTERY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| 10  | рс  | 320-OHM RESISTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 1   | рс  | RELAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| 3   | рс  | PROXIMITY SENSOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 2   | рс  | MINI BREADBOARD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| 1   | рс  | 10 METER SOLID WIRE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 1   | Set | UNO R3 Advance Upgraded Starter Arduino Kit 2022 with PDF Manual Full Set Makerlab Electronics SPECIFICATIONS: Package List: 1xUNO R3 Board based on Arduino® 1xUSB Cable 1x (16×2) LCD with I2C Adapter 1xRC522 Module 1xRFID Card 1xKey Chain 1xJoystick Module 1xKey Board 1xRTC Module 1xWater Level Sensor 1xDHT11 Humidity Sensor 1xRGB Module 1xULN2003 Motor Driver Module 1x28BYJ-48 Stepper Motor 1x1-Channel Relay Module 1xMB-102 Breadboard 65xJumper Wire 10xFemale-Male Jumper Cable 1xSound Sensor Module 1xRemote |  |

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|   |    | 1x10K Potentiometer 1x1 Digital Tube 1x4 Digital Tube 1xMatrix Tube 1xSG90 Micro Servo 2xBuzzer 2xBall Switches 3xPhotoresistance 5xTactile Switches with Caps 1x9V Battery Clip with DC Jack 15x5mm LED 30xResistance (220ohm, 1K ohm, 10K ohm) 1xFlame Sensor 1xIR Receiver Sensor 1x74HC595 1xLM35DZ                                                                                                                              |  |  |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1 | рс | 4WD Smart Car Kit RC Robotics Learning Kit Electric Toys DIY Car Chassis Kits with Speed Encoder For Arduino SPECIFICATIONS: Type:Voltage Regulator Operating Temperature:4WD Smart Car Kit Supply Voltage:4WD Smart Car Kit Dissipation Power:4WD Smart Car Kit Package:TQFP                                                                                                                                                        |  |  |
| 2 | рс | MG996R Metal Gear Digital Servo Motor Robot RC Torque 15KG For Truck Car Boat JR SPECIFICATIONS: Dimension: 40 x 19 x 43mm Weight: 55g Operating Speed: 0.17sec / 60 degrees (4.8V no load) Operating Speed: 0.13sec / 60 degrees (6.0V no load) Stall Torque: 13 kg-cm (180.5 oz-in) at 4.8V Stall Torque: 15 kg-cm (208.3 oz-in) at 6V Operation Voltage: 4.8 - 7.2Volts Gear Type: All Metal Gears Connector Wire: 11.81" (300mm) |  |  |



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| 2 | рс | JF-0826B 12V/2A 10mm 20N push pull type open frame solenoid electromagnet SPECIFICATIONS: Rated Voltage: DC 12V Rated Current: 2A Stroke: 10mm Force: 20N/2Kg/4.4LB Metal Frame Size: 26 x 25 x 22mm/1.02" x 0.98" x 0.87"(L*W*H) Coil Size: 19 x 17mm/0.75" x 0.67"(L*D) Total Lenght: 57mm/2.24" Plunger Diameter: 7.4mm/ 0.3" Cable Length: 20cm/ 7.9" |  |  |
|---|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 2 | рс | 12V 775 DC High-speed Large Torque Motor with Ball Bearing and Fan Blades for DIY Model Car / Small Drill Micro-machine SPECIFICATIONS: Voltage: 12V Output Power: 100W No load Speed: 12000 rpm Type: Micro Motor Construction: Permanent Magnet Commutation: Brush Protect Feature: Explosion proof Torque: 1 N.m                                       |  |  |
| 2 | рс | 14.8V 3000mAh 4S 30C Lipo Pack with XT-60 SPECIFICATIONS: Minimum Capacity: 3000mAh Configuration: 4S1P / 14.8v / 4Cell Constant Discharge: 30C Peak Discharge (10sec): 40C Pack Weight: 346g Pack Size: 137 x 43 x 25mm Charge Plug: JST-XH Discharge plug: XT-60                                                                                        |  |  |
| 1 | pc | PLA Pellets Biodegradable Plastic Particles<br>Food Grade Polylactic Acid Resin Polylactide<br>3D Printing Grains<br>Specification:<br>500 grams                                                                                                                                                                                                          |  |  |
|   |    |                                                                                                                                                                                                                                                                                                                                                           |  |  |
|   |    |                                                                                                                                                                                                                                                                                                                                                           |  |  |
|   |    |                                                                                                                                                                                                                                                                                                                                                           |  |  |



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|     | otation<br>Summary | of Approved Budget                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     | OFFER            | ED QUOTATION     |             |
|-----|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------|------------------|-------------|
| QTY | UNIT OF ISSUE      | ITEM DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | QTY | UNIT OF<br>ISSUE | ITEM DESCRIPTION | TOTAL PRICE |
| 6   | pc                 | 12V 21000RPM Large Power DC Motor for Drill Cutting Grinder Car Model High Speed Motor ★Specifications★ Model:RS550 Material: Metal Rated voltage: DC 12V Current Rating: 4.5A Speed: 21000RPM                                                                                                                                                                                                                                                                                                      |     |                  |                  |             |
| 1   |                    | Mobile Platform Kit 4Wd Metal Chassis DC Geared Motor SPECS: Full Vehicle length: 170mm Whole Vehicle Width: 175mm Chassis size: length 170mm x width 120mm and thickness of 2mm Cylinder center hole diameter: 17.5mm Motor Parameters: 6V, 133 rpm, no load 75ma, stalled 1.3A. Wheel Parameters: 65 x 26mm, Plastic wheel + Rubber Tire Weight: about 725 grams Each brass coupling is equipped with 1 screw for fastening the motor shaft (2) at the bottom of the reserved hole aperture 3.2mm |     |                  |                  |             |
| 1   | pc                 | Servo Motor Specifications: Specification: Model: MG995 Operation Voltage: 4.8 - 7.2Volts Color: Black Steering Angle: 360°/180° Cable Length (CM): 29 Dimension: 4.0 cm x 4.4 cm x 2.0 cm. Operating Speed: 0.17sec / 60 degrees (4.8V no load) Operating Speed: 0.13sec / 60 degrees (6.0V no load) Stall Torque: 13 kg-cm (180.5 oz-in) at 4.8V                                                                                                                                                  |     |                  |                  |             |



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|   |      | Stall Torque: 15 kg-cm (208.3 oz-in) |   |   |   |
|---|------|--------------------------------------|---|---|---|
|   |      | at 6V                                |   |   |   |
|   |      | Gear Type: All Metal Gears           |   | 1 |   |
|   |      | Operating Temperature (°C): -30 to   |   | 1 |   |
|   |      | 60                                   | 1 | 1 |   |
|   |      | Weight(gm): 55                       |   |   |   |
|   |      | Accessories Included: servo arms and |   |   |   |
|   |      | screws                               |   | 1 |   |
|   |      | Package included:                    |   |   |   |
|   |      | 1 x MG995 High Torque Metal Gear     |   |   |   |
|   |      | Servo motor                          |   |   |   |
|   |      | Portable 12V 20000mah Lithium        |   | 1 |   |
|   |      | Battery Rechargeable Battery Pack    |   |   |   |
|   |      | Capacity                             |   |   | 1 |
|   |      | Specs:                               |   |   |   |
|   |      | Model Number: 12V 20Ah               |   |   |   |
|   |      | Type : Li-lon                        |   |   |   |
| 2 | sets | Certification : CE                   |   |   |   |
|   |      | Nominal Capacity: 20000mah           |   |   |   |
|   |      | Set Type: Charger Sets               |   |   | 1 |
|   |      | Bundle: Bundle 1                     |   |   |   |
|   |      | Replacement Battery : Yes            |   |   |   |
|   | 1    | Battery Number : 1-2                 |   |   |   |
|   |      | Size : 18650                         |   |   |   |
|   |      | 2.4G 6 Channels 12V Remote Control   |   |   |   |
|   | 1    | And Receiver Plate For RC Boat Car   |   |   |   |
|   |      | Toy[BAOSITY1]                        |   | 1 |   |
|   | 1    | Specification:                       | 1 | 1 | ſ |
|   |      | Material:Plastic                     |   |   |   |
| 1 | pc   | Frequency: 2.4Ghz 6 Channel          |   |   |   |
|   |      | Receiver Plate: DC3.6-6V             |   |   |   |
|   |      | Max Current: 1.8A                    |   |   |   |
|   |      | Size: approx.                        |   |   |   |
|   |      | 13x15.5cm/5.12x6.10inch.             |   |   |   |



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|     |       |                                     |   |    | <br> |
|-----|-------|-------------------------------------|---|----|------|
|     |       | 433Mhz RF TRANSMITTER Electronic    |   |    |      |
|     |       | Lock Control DIY Wireless Remote    |   |    |      |
|     |       | Control Switch DC 12V 1CH Relay     | 1 |    |      |
|     |       | Receiver Module                     |   |    |      |
|     |       | SPECIFICATIONS:                     |   |    |      |
|     |       | Frequency: 433MHz                   |   |    |      |
|     |       | Power by 3V Coin Cell Button        |   |    |      |
|     |       | Battery (Battery included)          |   |    |      |
| 1   | рс    | Material: PVC                       |   |    |      |
| _   |       | Button: 2 Buttons                   |   |    |      |
|     |       | Size: 59mm x 28mm x 8mm             |   |    |      |
| 1 1 |       | Operating voltage: 3V               |   |    |      |
|     |       | Operating current: 12mA             |   |    |      |
|     |       | Transmit power: 10mw                |   |    |      |
|     |       | Modulation mode: ASK (AM)           |   |    |      |
|     |       | Encoding Type: Learning/copy        |   |    |      |
|     |       | Transfers Distance: 20-50 m         |   |    |      |
|     |       | 2GT pulley GT2 synchronous pulley   |   |    |      |
|     |       | belt kit 20 teeth 60 teeth 1:3      |   |    |      |
|     |       | reduction ratio mechanical          |   |    |      |
|     |       | transmission assembly bandwidth     |   |    |      |
|     |       | 6mm                                 |   |    |      |
| 1   | pc    | SPECIFICATIONS: 2GT                 |   |    |      |
|     |       | pulley GT2 synchronous pulley belt  |   |    |      |
|     |       | kit 20 teeth 60 teeth 1:3 reduction |   |    |      |
|     |       | ratio mechanical transmission       |   |    |      |
|     |       | assembly bandwidth 6mm              |   | ļ. | 1    |
|     |       | M1 5mm Steel Metal Pinion Motor     |   |    |      |
|     |       | Gear for 1/8 1/5 1/7 Traxxas XMAXX  |   |    |      |
| 2   | nc nc | ARRMA RC Car                        |   |    |      |
| 3   | pc    | SPECIFICATIONS: 11T                 |   |    |      |
|     |       | STEERICATIONS.                      |   |    |      |
|     |       | M1 5mm Steel Metal Pinion Motor     |   |    |      |
| _   |       | Gear for 1/8 1/5 1/7 Traxxas XMAXX  |   |    | 1    |
| 3   | pc    | ARRMA RC Car                        |   |    |      |
|     |       | SPECIFICATIONS: 34T                 |   |    |      |
|     |       | 681 Open Deep Groove Ball Bearings  |   |    |      |
| 6   |       | SPECIFICATIONS:                     |   |    |      |
| 6   | рс    | Manufacturing materials: Chrome     |   | 1  |      |
|     |       | steel                               |   |    |      |



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| 2 | рс | Caster Heavy Duty PU Wheel, push cart wheel, No Steel Frame, 3/4/5 Inch, PU Material SPECIFICATIONS: Orange outer wheel, black inner ring, wheelbase 10MM, steel shaft below 10MM needs to be inserted High-quality polyurethane 3/4/5-inch casters, factory direct sales 1 piece of 3/4/5 inch each bearing 100KG/110KG/120KG |  |  |  |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 6 | рс | 682 Open Deep Groove Ball Bearings SPECIFICATIONS: Manufacturing materials: Chrome steel Precision grade: ABEC-3 / P6 Bearing features: Stable performance and cost-effective. ZZ: Metal seal 2RS: Rubber seal Open: No seal F: Outer flange S: Stainless steel                                                                |  |  |  |
| 6 | рс | 685 Open Deep Groove Ball Bearings SPECIFICATIONS: Manufacturing materials: Chrome steel Precision grade: ABEC-3 / P6 Bearing features: Stable performance and cost-effective. ZZ: Metal seal 2RS: Rubber seal Open: No seal F: Outer flange S: Stainless steel                                                                |  |  |  |
| 1 | pc | STAINLESS ROUND BAR 304 3/8 PER FEET SPECIFICATIONS: STAINLESS STEEL SHAFTING GRADE 304 SOLID ROUND BAR 8.0 mm                                                                                                                                                                                                                 |  |  |  |



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### **BIDS and AWARDS COMMITTEE**

| 1 | pc  | STAINLESS ROUND BAR 304 3/8 PER FEET SPECIFICATIONS: STAINLESS STEEL SHAFTING GRADE 304 SOLID ROUND BAR 10 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |
|---|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 1 | set | Head Stainless Nuts Hex M2 230pcs<br>Assortment Kit Bolts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |
| 6 | рс  | Geared DC Motor with Wheels 3V 6V 9V 12V DC Plastic Gear Dynamo 130 Dinamo DiY Arduino Robot 2WD SPECIFICATIONS: Rated Voltage: 3V - 12V DC ( Recommended Voltage is 6V - 9V) Continuous No-Load Current: 150mA +/- 10% Min. Operating Speed (3V): 90+/- 10% RPM Min. Operating Speed (6V): 200+/- 10% RPM Torque: 0.15Nm ~0.60Nm Stall Torque (6V): 0.8kg.cm Gear Ratio: 1:48 Body Dimensions: 70 x 22 x 18mm Wires Length: 200mm 28 AWG Product Weight: 29g / 1.02oz Wheel diameter: 65mm Wheel thickness: 28mm Package Includes: 1 Wheel / 1 Geared DC Motor |  |  |  |
| 3 | рс  | 30A Firmware Electronic Speed Controller ESC for RC Multicopter SPECIFICATIONS: 30A ESC: Max cont. current: 30A Peak current: 40A (10s) Voltage: 2-3S lixx, BEC: 5V/3A Size: 50x23x8mm Weight: ~30g                                                                                                                                                                                                                                                                                                                                                             |  |  |  |



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|   |    | TX4 2.4GHz 4CH Radio System Transmitter Controller Remote Control w/ Receiver For RC Car Boat SPECIFICATIONS: Specifications of Transmitter:                                                                                                                                                                                       |  |  |  |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 1 | рс | Channels: 4 Mode Type: RC Car Boat Tank RF Power: Less than 20dbm Response Time:10s-12ms Control Distance: about 200-300m Voltage Input: 4.8V-6Vor 1.5AAA*4 Low Voltage Warning: 4.5V Net Weight: 260G Size: 180*80*145mm                                                                                                          |  |  |  |
| 2 | рс | 12V/16.8V/21V/25V 19500 RPM DC Motor with Two-speed 12 Teeth and High Torque Gear Box for Electric Drill / Screwdriver SPECIFICATIONS: Voltage: 12V/16.8V/21V/25V Output Power: 90W No load Speed: 400 - 19500 rpm Type: Micro Motor Usage: Toy Construction: Series Wound Commutation: Brushless Protect Feature: Explosion proof |  |  |  |
| 2 | pc | 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm SPECIFICATIONS: 2GT pulley GT2 synchronous pulley belt kit 20 teeth 60 teeth 1:3 reduction ratio mechanical transmission assembly bandwidth 6mm                                                    |  |  |  |



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| 1 | pc | DumboRC X4 2.4G 4CH Transmitter W/ X6F Receiver for 1/10 1/8 Crawler Axial SCX10 D90 MN RC Car Boat Tank Model Spare Parts RC Vehicle Parts SPECIFICATIONS: X4 Specification: Channel:4CH Fit For:Rc Car Boat Tank Model,such as JJRC Q65, WPL and so on Modulation Mode: GFSK Spreading Mode: FHSS 67 channel |  |  |
|---|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|   |    | pseudo-random frequency hopping<br>Control Distance: 400-500 meters                                                                                                                                                                                                                                            |  |  |
|   |    | Remote Control Voltage Range: 4.8- 12v Remote Control Working Current: 80- 120mA Receiver Voltage Range: 3.3-10v Receiver Operating Current: 30mA RF Power: <20dbm Data Resolution: 4096 levels, 0.5us per level Voltage Alarm: 7.4v 4.8v Transmission Frequency: 2.4GHz ISM band (2400MHz~2483.5MHz)          |  |  |
| 4 | pc | Yellow DC TT Gear Geared Motor and Wheel Specifications: Motor Voltage: 3 – 12 V Motor Current: 70 mA (typical) – 250 mA (max) Speed: up to 170 RPM Torque: up to 0.8 Kg Gear Ration: 1:48 Wheel Diameter: 66 mm Wheel Width: 27 mm Package Contents:                                                          |  |  |



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| 4 | рс | 5000mAh 11.1V 3S LiPo Pack - XT60 Specifications: - Minimum Capacity: 2200mAh - Configuration: 3S1P / 11.1v / 3Cell - Constant Discharge: 30C - Peak Discharge (10sec): 40C - Pack Weight: 197g - Pack Size: 108 x 34 x 27mm - Charge Plug: JST-XH - Discharge Plug: XT60 |  |  |  |
|---|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 1 | рс | 4 Wheel DIY Servo Robot Car 4WD Chassis Smart Car for Arduino Platform with Metal Servo Bearing Kit Steering Gear Control RPI SPECIFICATIONS: Operating Temperature: -10~70 Supply Voltage: 5V Package: SMD                                                               |  |  |  |
| 2 | pc | Motor DC 6V 7.4V 9V 12V High<br>Speed Dual 1.5mm Shaft RC Car Boat                                                                                                                                                                                                        |  |  |  |
| 1 | pc | JGY-370 Worm DC Motor Turbo<br>Drive High Torque Mini Gear Motor<br>6v 12v 24v 3rpm-210rpm Geared<br>Worm Reduction Motor Self-lock                                                                                                                                       |  |  |  |
| 2 | pc | Stainless Steel Sheet 1.2mm thick,<br>50mm x 80mm, 2b finish. T304<br>Grade.<br>SPECIFICATIONS:<br>T304 Stainless Steel 1.2mm x 50mm<br>x 80mm, 2b finish. Approx 1.2mm<br>thickness due to tolerance.                                                                    |  |  |  |



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|   |    |                                                                                                                                                                                                                                                                                                              | <br> |  |  |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|--|
| 1 | рс | Arduino DIY RC Robot Arm Tank Acrylic With PS2 Stick SPECIFICATIONS:     duct: RC Robot Tank     Materials: Acrylic+Electronic Components     Power: 4* 18650 Lipo Batteries(not included)     Controller: 2* AA Batteries(not included)     Motor: 33GB520     Voltage: 9-12V     Arm Extension(max): 230mm |      |  |  |
|   |    | Gripper Extension(max): 75mm<br>Base loading Weight: 2kg(max)                                                                                                                                                                                                                                                |      |  |  |
| 6 | pc | Quick Charging 18650 Battery USB Charger for 21700 and Chargers Va@pe Battery SPECIFICATIONS: Can only fit 1x 26650 size battery at a time Output Current: 1A × 2 Input: MICRO USB DC 5V 2A Output Voltage: 4.2V                                                                                             |      |  |  |
| 1 | рс | RC Car WLtoy 959A/B<br>SPECIFICATIONS:                                                                                                                                                                                                                                                                       |      |  |  |
| 2 | рс | 2200mAh 3S 25C, 30C, 40c & 60-<br>120C Lipo Pack<br>SPECIFICATIONS:<br>Nominal voltage :11.1V or 3.7v each<br>cell<br>Transport charege: 3.70V per cell<br>Storage charge: 3.80V - 3.88V or 40-<br>50%<br>Maximum full charge: 12.6V or                                                                      |      |  |  |
| 1 | рс | 2pcs Y Spindle Pressure Screws For<br>Child Gate Or Pet Gate Baby Gate<br>Screw Bolts Pressure Gates Threaded<br>Spindle Rod Screws Kit For Stair Gate<br>M10 X 10mm<br>SPECIFICATIONS:<br>Size:1(cm)=0.3937008(in)                                                                                          |      |  |  |



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|   |    |                                                                                                                                                                                                                                                                                                                                                                                      | <br> | <br> |  |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--|
| 2 | рс | Flex Collet Coupler For 5mm Motor Shaft & 4mm Cable RC Boat Stainless Steel 1pc SPECIFICATIONS: This stainless steel flex coulper collet with grub screw fits for 4mm flex cable and 5mm motor shaft It's for round end cable Length: 31mm Material: stainless steel                                                                                                                 |      |      |  |
| 2 | рс | High Power MOSFET Trigger Switch Driver Module PWM Regulating Electronic Switch Control Board SPECIFICATIONS: Output capacity: DC 5V - 36V, at room temperature, continuous current 15A, power 400W! Lower auxiliary cooling conditions, the maximum current up to 30A. Operating temperature: -40-85 Dimension: 34mm x 17mm x 12mm High-power MOSFET Trigger Switch Drive Module x1 |      |      |  |
| 2 | рс | Synchronous Wheel Kit Timing Belt Idler Pulley Aluminum Timing Drive Pully Wheels Gear for 3D Printer Mechanical Drive SPECIFICATIONS: Size: 14*10*10mm/16*12*12mm Material: aluminum Package list:1 Pc GT2 Synchronous                                                                                                                                                              |      |      |  |
| 1 | pc | 100pcs Multipurpose Nylon Cable Tie<br>Zip Ties Adjustable Durable Self<br>locking Nylon Zip Cable Ties                                                                                                                                                                                                                                                                              |      |      |  |
| 1 | pc | BRUSH CUTTER BLADE 2T SILVER SPECIFICATIONS: Product Description: Material: Metal Color: silver // black                                                                                                                                                                                                                                                                             |      |      |  |



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| Dc Motor Shaft Drill Adapter For Saw Blade Connection Coupling Joint Connector Coupler Sleeve Tools Accessories SPECIFICATIONS: size: Match The Motor Shaft Diameter: Smm Match Saw Blade Inner Hole:10mm  Stainless Square Tubular Stainless Steel SUS304  Pc Steel SUS304 SPECIFICATIONS: Stainless Square Tubular 3.8 x 3.8, 1.2mm (2ft)  Nuts Bolts Set Hex Bolts Nut and Washer Assortment Screws Bolts M3 Tool Kit with Plastic Box (Black) SPECIFICATIONS: [Material]Cap head hex is made of steel, sturdy and durable Steel, sturdy and durable Steel, sturdy and durable Steel, sturdy and durable Steel, sturdy and steel steel, sturdy and  |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------|
| Connector Coupler Sleeve Tools Accessories Accessories SPECIFICATIONS: size: Match The Motor Shaft Diameter-Smm Match Saw Blade Inner Hole:10mm Masch Stale Sturion Match Say Blade Inner Hole:10mm Match Saw Blade Inner Hole:10mm Match Saw Blade Inner Hole:10mm Match Saw Blade Inner Hole:10mm Match Say Blade Inner Hole |   |      | Dc Motor Shaft Drill Adapter For Saw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |                                                  |
| Accessories SPECIFICATIONS: size: Match The Motor Shaft Diameter:5mm Match Saw Blade Inner Hole:10mm  Stainless Square Tubular Stainless Steel SUS304 SPECIFICATIONS: Stainless Square Tubular 3.8 x 3.8, 1.2mm (2ft)  Nuts Bolts Set Hex Bolts Nut and Washer Assortment Screws Bolts M3 Tool Kit with Plastic Box (Black) SPECIFICATIONS: [Material]Cap head hex is made of steel, sturdy and durable [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 - 25pcs, M3 x 6 - 25pcs, M3 x 10 - 25pcs, M3 x 6 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, Hax nuts M3 - 50pcs, Flat washers M3 - 50pcs, Flat washers M3 - 50pcs, Flat washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |      | Blade Connection Coupling Joint                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     | 1                                                |
| 1 pc SPECIFICATIONS: size: Match The Motor Shaft Diameter:5mm Match Saw Blade Inner Hole:10mm Match Saw Blade Inner Hole:10mm Match Saw Blade Inner Hole:10mm Stainless Steel SUS304 SPECIFICATIONS: Stainless Square Tubular 3.8 x 3.8, 1.2mm (2ft)  Nuts Bolts Set Hex Bolts Nut and Washer Assortment Screws Bolts M3 Tool Kit with Plastic Box (Black) SPECIFICATIONS: [Material]Cap head hex is made of steel, sturdy and durable [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 - 25pcs, M3 x 6 - 25pcs, M3 x 8 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, Spring washer M3 - 50pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs. M3 x 5 - 30pcs, Spring washer M3 - 50pcs, Spring washer M3 - 5 |   |      | Connector Coupler Sleeve Tools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     | 1                                                |
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| 2 pc  SPECIFICATIONS: Stainless Square Tubular 3.8 x 3.8, 1.2mm (2ft)  Nuts Bolts Set Hex Bolts Nut and Washer Assortment Screws Bolts M3 Tool Kit with Plastic Box (Black) SPECIFICATIONS: (Material]Cap head hex is made of steel ,sturdy and durable [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 - 25pcs, M3 x 10 - 25pcs, M3 x 8 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, Hex nuts M3 - 50pcs,Flat washers M3 - 50pcs,Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |      | Control of the Contro |     |                                                  |
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| 1 pc [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 - 25pcs, M3 x 6 - 25pcs, M3 x 8 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, Hex nuts M3 - 50pcs, Flat washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   | ł    | [Material]Cap head hex is made of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 1 |                                                  |
| 25pcs, M3 x 6 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, M3 x 10 - 25pcs, Flat washers M3 - 50pcs, Flat washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |      | steel ,sturdy and durable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |                                                  |
| 25pcs, M3 x 6 - 25pcs, M3 x 8 - 25pcs, M3 x 10 - 25pcs, M3 x 12 - 25pcs, Hex nuts M3 - 50pcs,Flat washers M3 - 50pcs,Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 | pc   | [M3 Sizes]M3 x 4 - 25pcs, M3 x 5 -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                                  |
| 25pcs, Hex nuts M3 - 50pcs, Flat washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |      | The second secon |     |                                                  |
| 25pcs, Hex nuts M3 - 50pcs, Flat washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |      | 25pcs, M3 x 10 - 25pcs, M3 x 12 -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                                  |
| washers M3 - 50pcs, Spring washer M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |      | III have the first than the second that the se |     |                                                  |
| M3 - 50pcs.  Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| Motor Fixed Bracket Holder for JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |      | Washington and Washington                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |                                                  |
| JGA25 310 370 GA25 Brushless DC Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     | <del>                                     </del> |
| Electric Motors Gearbox Gearmotor Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| Mount Metal SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     | 1 1                                              |
| SPECIFICATIONS: DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   | 1    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| DC Geared Motor similar to 310 and 370 motors. M3-sized screws can fit in the holes. The aperture of fixed side of motor: M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| 370 motors. M3-sized screws can fit in the holes.  The aperture of fixed side of motor:  M3  Bottom size: 30 x 26mm  4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| in the holes. The aperture of fixed side of motor:  M3 Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |      | DC Geared Motor similar to 310 and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                                  |
| The aperture of fixed side of motor:  M3  Bottom size: 30 x 26mm  4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |      | 370 motors. M3-sized screws can fit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                                  |
| The aperture of fixed side of motor:  M3  Bottom size: 30 x 26mm  4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 | nc   | in the holes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |                                                  |
| Bottom size: 30 x 26mm 4 small holes on the bottom diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1 | l pc | The aperture of fixed side of motor:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |                                                  |
| 4 small holes on the bottom<br>diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |      | M3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                                  |
| diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |      | Bottom size: 30 x 26mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |                                                  |
| diameter: about 4mm (can pass                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |      | 4 small holes on the bottom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |                                                  |
| through 3mm diameter screws)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| PRODUCTION OF ACCOMPANIES OF ACCOMPANIES AND A |   |      | CONTRACTOR COSTS CONTRACTOR STATES COSTS STATES CONTRACTOR COSTS STATES CONTRACTOR CONTR |     |                                                  |
| Diameter of the center large hole at                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| the bottom: 10mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |
| Diameter of the center large hole at                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                  |



National Road Putatan Muntinlupa City

### **BIDS and AWARDS COMMITTEE**

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|---|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|--|
| 1 | рс | DC High-speed Large Torque Motor<br>with Ball Bearing and Fan Blades for<br>DIY Model Car / Small Drill Micro-<br>machine<br>SPECIFICATIONS:<br>Voltage: 12V<br>Output Power: 100W                                                                                                                            |      |      |  |
|   |    | No load Speed: 12000 rpm Type: MicroMotor Construction: Permanent Magnet Commutation: Brush Protect Feature: Explosion proof Torque: 1 N.m                                                                                                                                                                    |      |      |  |
| 1 | рс | DC Buck Step Down Power Converter Board 5-16V To 1.25V 1.5V 1.8V 2.5V 3.3V 5V 3A SPECIFICATIONS: Chip: MP1495 Input Voltage: DC 5-16V Output Voltage: 1.25V/1.5V/1.8V/2.5V/3.3V/5V(default 1.25V) Maximum Output Current: 3A Maximum Conversion Efficiency: 90% Board Size: 3x2cm/1.18x0.79" (LxW)            |      |      |  |
| 1 | pc | Mini Nano V3.0 ATmega328P Microcontroller Board w/USB Cable For Arduino SPECIFICATIONS: Nano V3.0 ATmega328P Microcontroller Board w/USB Cable For Arduino Fully Compatible to Arduino Nano V3.0 ATmega328P-AU ATmega328 Microcontroller Bootloader installed, ready to upload sketches from Arduino software |      |      |  |



National Road Putatan Muntinlupa City

### **BIDS and AWARDS COMMITTEE**

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|------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---|------|
|      |       | Microcontroller ATmega328P-AU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   |      |
|      |       | Operating Voltage :5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |   |      |
|      |       | Input Voltage (recommended) 7V-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | 12V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | - 1 |   |      |
|      |       | Input Voltage (limits) 6V-20V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   |      |
|      |       | Digital I/O Pins 14 (of which 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | provide PWM output)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |   |      |
|      |       | Analog Input Pins 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     | 1 |      |
|      |       | DC Current per I/O Pin 40 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |      |
|      |       | DC Current for 3.3V Pin 50 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   |      |
|      |       | Flash Memory 32 KB (ATmega328)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |   |      |
| 1    |       | The property of the contract o | 1   | í |      |
|      |       | of which 2 KB used by bootloader                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |      |
|      |       | SRAM 2 KB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |   |      |
|      |       | EEPROM 1 KB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |   |      |
|      |       | Clock Speed 16 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |      |
|      |       | Dimention:Approx. 45x17x19mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |      |
|      |       | Cable Length:245mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |      |
|      |       | Color:Blue(as the picture shows)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |      |
| 1    |       | Package:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |   |      |
|      |       | 1 xNano V3.0 ATmega328P Arduino                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | Compatible Board                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |      |
| -    |       | Bluetooth HC-05 HC 05 HC-06 HC 06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |   |      |
|      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | Transceiver RF Wireless Slave                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   |      |
| 1 1  |       | Module RS232 / TTL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |      |
| 1 1  |       | SPECIFICATIONS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | - Built-in CSR company Bluetooth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |   |      |
| 1 1  |       | chip BC417143                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   | 1    |
|      |       | - Bluetooth® Technology v2.0 + EDR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |      |
| 1 1  |       | - TTL data transparent transfer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
| 4    | рс    | between a host Bluetooth device                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
| 1 1  |       | - Compatible with all Bluetooth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
| 1    |       | adapters that support SPP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |   |      |
|      |       | - Coverage up to 30 ft / 10 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |   |      |
|      |       | - Built-in antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |   |      |
| 1 1  |       | - Power input: +3.3VDC (Bluetooth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |   | 1    |
|      |       | module)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |   |      |
|      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
|      |       | Breadboard connecting Jumper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |   |      |
|      |       | Wires Dupont Wire Cable Arduino                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   | 1    |
|      |       | Prototyping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |   |      |
| 10   | рс    | SPECIFICATIONS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
| -1-5 | (E.O) | 28AWG (7 strands @ 36 AWG)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |   | 1    |
|      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |   |      |
| 1    |       | (Male to Male)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |   |      |



National Road Putatan Muntinlupa City

### **BIDS and AWARDS COMMITTEE**

|      |      | T- 11                                                        |   |   |   | Т |   |
|------|------|--------------------------------------------------------------|---|---|---|---|---|
|      |      | Breadboard connecting Jumper Wires Dupont Wire Cable Arduino |   |   |   |   |   |
|      |      | Prototyping                                                  |   |   |   |   | } |
| 10   | pc   | SPECIFICATIONS:                                              |   |   |   |   |   |
| 10   | PC   | 28AWG (7 strands @ 36 AWG)                                   |   |   |   |   |   |
|      |      | (Female to Female)                                           |   |   |   |   |   |
|      |      | (3)                                                          |   |   |   |   |   |
|      |      | Breadboard connecting Jumper                                 |   |   |   |   |   |
|      |      | Wires Dupont Wire Cable Arduino                              |   |   |   |   |   |
| 10   | рс   | Prototyping                                                  |   |   |   |   |   |
|      |      | SPECIFICATIONS:                                              |   |   |   | } | 1 |
|      |      | 28AWG (7 strands @ 36 AWG)                                   |   |   |   |   |   |
|      |      | (Male to Female)                                             |   |   |   |   |   |
|      |      | Thickness Carbon Fiber Cloth Plain                           |   |   |   |   |   |
|      |      | Carbon Fabric For Commercial Car                             |   |   |   |   |   |
|      |      | Part Sport Equipment                                         |   |   |   |   |   |
|      |      | SPECIFICATIONS:                                              |   |   |   |   |   |
| 1    | pc   | Technics:Woven                                               |   |   |   | * |   |
| -    | ) pc | Color: Black                                                 |   |   |   |   |   |
|      |      | Width: 20cm                                                  |   |   |   |   |   |
|      |      | Length: 30cm, 60cm 150cm 300cm<br>Thickness: 2mm             |   |   |   |   |   |
|      |      | Material: Carbon Fiber Yarn                                  |   |   |   |   |   |
|      |      | Size 2K                                                      |   |   |   |   |   |
|      |      | Epoxy Resin 750grams SET (hardener                           |   |   |   |   |   |
|      | 6-1  | included)                                                    |   |   |   |   |   |
| 1    | Set  | SPECIFICATIONS:                                              |   |   |   |   |   |
|      |      | ODORLESS                                                     |   |   |   |   |   |
| 1990 |      | AA Battery                                                   |   |   |   |   |   |
| 8    | pc   |                                                              |   |   |   |   |   |
|      |      | rubber and plastic insulation                                |   |   |   |   |   |
|      |      | Specification:                                               |   |   |   |   |   |
| 1    | pc   | (1/4" x 5/8" 15 mm)                                          |   |   |   |   |   |
|      |      | insulation pipe for air conditioner                          |   |   |   |   |   |
|      |      | UNO R3 Development Board with                                |   |   |   |   |   |
|      |      | USB Cable (ATmega328p +                                      |   |   |   |   |   |
|      |      | ATmega16u2)                                                  |   |   |   |   |   |
|      |      | SPECIFICATIONS:                                              |   |   |   |   |   |
| 1    | рс   | Board Size: 75 x 54 x 15 mm                                  |   |   |   |   |   |
| -    | PC   | Supply Voltage: 7 V to 12 V DC                               |   |   |   |   |   |
|      |      | Digital I/O: pin 0 to 13                                     |   |   |   |   |   |
|      |      | Analog Inputs: pin A0 to A5                                  |   |   |   |   |   |
| ł    |      | I/O Voltage: 5 V                                             | ľ | t | • |   | ĺ |
|      |      | Clock Speed: 16 MHz                                          |   |   |   |   |   |



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### **BIDS and AWARDS COMMITTEE**

| 1 | pc  | Clear Transparent Acrylic Sheet Pre Cut & Customized Size Plastic Glass Plexiglass Perspex Plate SPECIFICATIONS: 5 by 5 inches Material: Acrylic Color: Transparent Item: 1PC of Clear Acrylic Sheet                                                                                                                                                        |  |  |  |
|---|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 4 | рс  | 12V DC MOTOR                                                                                                                                                                                                                                                                                                                                                |  |  |  |
| 5 | Set | 4X Battery Holder Storage Box Case 4 Slot Battery Container With Wire Lead For Arduino DIY KIT SPECIFICATIONS: Type: Voltage Regulator Operating Temperature: -40-+85                                                                                                                                                                                       |  |  |  |
| 6 | рс  | L298N DC Dual H-Bridge Stepper Motor Driver Board Module L298 SPECIFICATIONS: Driver: L298 Dual H Bridge DC Motor Driver IC Operating Voltage: 7 to 35V Peak current: 2A Maximum power consumption: 20W (when the temperature T = 75 °C) Driver Board Size: 55mm * 49mm * 33mm (with fixed copper pillar and the heat sink height) Driver Board Weight: 33g |  |  |  |
| 2 | pc  | 2Pcs 58mm Plastic Omni Wheel for<br>Robot Kit Servo Motor Omni Wheel<br>14135<br>SPECIFICATIONS:<br>Load capacity:3 KG<br>Colour: Black Grey<br>Material: Nylon+TPR<br>Size: Wheel Diameter: 58mm, Roller<br>Diameter: 13mm                                                                                                                                 |  |  |  |



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### **BIDS and AWARDS COMMITTEE**

|      |      |                                     |   |   |   | <br>     |
|------|------|-------------------------------------|---|---|---|----------|
|      |      | Dc Motor 555 550 545 540 5 Series   |   |   |   |          |
|      |      | Motor Base Mounting Bracket         |   |   |   |          |
|      |      | Holder Seat                         |   |   |   | 1        |
| 1    |      | SPECIFICATIONS:                     |   |   |   |          |
|      |      | 550/545/555 motor base (black L     |   |   |   |          |
|      |      | type)                               |   |   |   |          |
|      |      | [Size]: bottom 40 * 43mm, height    |   |   |   |          |
| 1    |      | 47mm                                |   |   |   |          |
| 1    |      | 3 USB MINASA                        |   |   |   |          |
| 4    | pc   | [Thickness]: 3mm thick aluminum     |   |   |   |          |
| 1    |      | alloy                               |   |   |   |          |
|      |      | [Center aperture]: about 12.8mm     |   |   | 1 | 1        |
| 1    |      | [Fixed hole pitch]: 25mm            |   |   |   |          |
|      |      | [Bottom fixed pitch]: 25mm, 30mm    |   |   |   |          |
|      |      | (horizontal)                        |   |   |   |          |
|      |      | [Side fixed aperture]: M3 hole      |   |   |   |          |
|      |      | [Bottom fixed aperture]: M3 hole    |   |   |   |          |
|      |      |                                     |   |   |   |          |
|      |      | 240 pcs Computer M2 M2.5 M3 Suit    |   |   |   |          |
|      |      | micro-type digital Electronic Screw |   |   | 1 |          |
| 1    |      | SPECIFICATIONS:                     |   |   | 1 |          |
|      |      | Screw Type:Set Screws               |   |   |   |          |
|      |      | Head Style:Round                    |   |   |   |          |
| 1    | pc   |                                     |   |   |   |          |
|      |      | Color:black                         |   |   |   |          |
|      |      | Material:Carbon Steel               |   |   |   |          |
|      |      | size:15*5*4 cm                      |   |   |   |          |
|      |      | BOT CHASSIS-ACRYLIC BOT CHASSIS     |   |   |   | <b>—</b> |
| 1    | рс   | BOT CHASSIS-ACRITER BOT CHASSIS     |   |   |   |          |
|      | OI . |                                     |   |   | - | <br>+    |
| 5    | pc   | JGA25-370 DC MOTOR                  |   |   |   |          |
| 5    | pc   |                                     |   |   |   |          |
|      |      | ARDUINO MEGA                        |   |   |   |          |
| 1    | 1    |                                     |   |   | 1 |          |
|      |      | 3D PRINTER FILAMENT                 |   |   |   |          |
| 4    | рс   | 35 TRIVIER TEAMER                   |   |   |   | 1        |
|      |      |                                     |   | - |   | <br>     |
| a.   |      | 65MM RUBBER WHEEL                   |   |   |   |          |
| 4    | рс   |                                     |   |   |   |          |
|      |      | ULTRASONIC SENSOR                   |   |   |   |          |
| 8    | pc   |                                     |   |   |   |          |
|      |      | HEAT SINK(8in x 2in)                | 1 | 1 |   |          |
| 1    | рс   | TIEM SHAMON A ZIN                   |   |   |   |          |
| 2000 |      |                                     | - |   |   | +        |
|      |      |                                     |   |   |   |          |
| 2    | рс   | 12V RECHARGEABLE BATTERY            | 1 |   |   |          |



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### **BIDS and AWARDS COMMITTEE**

|    |     | 320-OHM RESISTOR                                                                                                                                                                                                                                                                      | 1 |  |  |
|----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|--|
| 10 | pc  | 320-OHM RESISTOR                                                                                                                                                                                                                                                                      |   |  |  |
| 1  | рс  | RELAY                                                                                                                                                                                                                                                                                 |   |  |  |
| 3  | рс  | PROXIMITY SENSOR                                                                                                                                                                                                                                                                      |   |  |  |
| 2  | рс  | MINI BREADBOARD                                                                                                                                                                                                                                                                       |   |  |  |
| 1  | рс  | 10 METER SOLID WIRE                                                                                                                                                                                                                                                                   |   |  |  |
| 1  | Set | UNO R3 Advance Upgraded Starter Arduino Kit 2022 with PDF Manual Full Set Makerlab Electronics SPECIFICATIONS: Package List: 1xUNO R3 Board based on Arduino® 1xUSB Cable 1x (16×2) LCD with I2C Adapter 1xRC522 Module 1xRFID Card                                                   |   |  |  |
|    |     | 1xKey Chain 1xJoystick Module 1xKey Board 1xRTC Module 1xWater Level Sensor 1xDHT11 Humidity Sensor 1xRGB Module 1xULN2003 Motor Driver Module 1x28BYJ-48 Stepper Motor 1×1-Channel Relay Module 1xMB-102 Breadboard 65xJumper Wire 10xFemale-Male Jumper Cable 1xSound Sensor Module |   |  |  |



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### **BIDS and AWARDS COMMITTEE**

|     |    | 1x10K Potentiometer                  | ĺ | 1 |   |   |          |
|-----|----|--------------------------------------|---|---|---|---|----------|
| 1   |    | 1×1 Digital Tube                     | 1 |   |   |   |          |
| 1   |    | 1×4 Digital Tube                     | 1 |   |   | 1 | }        |
| (   |    | 1xMatrix Tube                        | 1 |   |   |   |          |
| - 1 |    | 1xSG90 Micro Servo                   |   |   |   | 1 |          |
|     |    | 2xBuzzer                             | 1 |   |   |   |          |
|     |    | 2xBall Switches                      |   |   |   |   |          |
|     |    | II .                                 |   |   |   |   |          |
| 1   |    | 3xPhotoresistance                    |   |   |   |   |          |
|     |    | 5xTactile Switches with Caps         |   |   |   | 1 |          |
|     |    | 1x9V Battery Clip with DC Jack       |   |   |   | 1 |          |
| Į   |    | 15x5mm LED                           |   |   |   | 1 |          |
|     |    | 30xResistance (220ohm, 1K ohm,       |   |   |   | 1 |          |
|     |    | 10K ohm)                             |   |   |   | 1 |          |
|     |    | 1xFlame Sensor                       |   |   |   |   |          |
|     |    | 1xIR Receiver Sensor                 |   |   |   | 1 |          |
|     |    | 1x74HC595                            |   |   |   |   |          |
|     |    | 1xLM35DZ                             |   |   |   |   |          |
|     |    | 4WD Smart Car Kit RC Robotics        |   |   |   |   |          |
|     |    | Learning Kit Electric Toys DIY Car   |   |   |   |   |          |
|     |    | Chassis Kits with Speed Encoder For  |   |   |   |   |          |
|     |    | Arduino                              |   |   |   |   |          |
|     |    | SPECIFICATIONS:                      |   |   |   |   |          |
|     |    |                                      |   |   |   |   |          |
|     |    | Type:Voltage Regulator               |   |   |   |   |          |
| 1   | рс | Operating Temperature: 4WD Smart     |   |   |   | 1 |          |
|     |    | Car Kit                              |   |   |   |   |          |
|     |    | Supply Voltage: 4WD Smart Car Kit    |   |   |   |   |          |
| ]   |    | Dissipation Power: 4WD Smart Car     |   | ł | } | i | <u>U</u> |
|     |    | Kit                                  |   |   |   |   |          |
|     |    | Package:TQFP                         |   |   |   |   |          |
|     |    |                                      |   |   |   |   |          |
|     |    | MG996R Metal Gear Digital Servo      |   |   |   |   |          |
|     |    | Motor Robot RC Torque 15KG For       |   |   |   |   |          |
|     |    | Truck Car Boat JR                    |   |   |   |   |          |
|     |    | SPECIFICATIONS:                      |   |   |   |   |          |
|     |    | Dimension: 40 x 19 x 43mm            |   |   |   |   |          |
|     | 1  | Weight: 55g                          |   | 1 |   |   | ľ        |
|     |    | Operating Speed: 0.17sec / 60        |   |   |   |   |          |
|     |    | degrees (4.8V no load)               |   |   |   |   |          |
| 2   | рс | Operating Speed: 0.13sec / 60        |   |   |   |   |          |
|     | 1  | degrees (6.0V no load)               |   |   |   |   | 1        |
|     |    | Stall Torque: 13 kg-cm (180.5 oz-in) |   |   |   |   |          |
|     |    | at 4.8V                              |   |   |   |   | 1        |
|     |    | Stall Torque: 15 kg-cm (208.3 oz-in) |   |   |   |   |          |
|     |    |                                      | } | 1 | ł |   | İ        |
|     |    | at 6V                                |   |   |   |   |          |
|     |    | Operation Voltage: 4.8 - 7.2Volts    |   |   |   |   |          |
| 1   | 1  | Gear Type: All Metal Gears           |   | 1 |   |   |          |



National Road Putatan Muntinlupa City

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| 1 | рс | PLA Pellets Biodegradable Plastic Particles Food Grade Polylactic Acid Resin Polylactide 3D Printing Grains Specification: 500 grams                                                                                                                                                                                        |  |  |
|---|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 2 | pc | 14.8V 3000mAh 4S 30C Lipo Pack with XT-60 SPECIFICATIONS: Minimum Capacity: 3000mAh Configuration: 4S1P / 14.8v / 4Cell Constant Discharge: 30C Peak Discharge (10sec): 40C Pack Weight: 346g Pack Size: 137 x 43 x 25mm Charge Plug: JST-XH Discharge plug: XT-60                                                          |  |  |
| 2 | pc | 12V 775 DC High-speed Large Torque Motor with Ball Bearing and Fan Blades for DIY Model Car / Small Drill Micro-machine SPECIFICATIONS: Voltage: 12V Output Power: 100W No load Speed: 12000 rpm Type: Micro Motor Construction: Permanent Magnet Commutation: Brush Protect Feature: Explosion proof Torque: 1 N.m         |  |  |
| 2 | pc | pull type open frame solenoid electromagnet SPECIFICATIONS: Rated Voltage: DC 12V Rated Current: 2A Stroke: 10mm Force: 20N/2Kg/4.4LB Metal Frame Size: 26 x 25 x 22mm/1.02" x 0.98" x 0.87"(L*W*H) Coil Size: 19 x 17mm/0.75" x 0.67"(L*D) Total Lenght: 57mm/2.24" Plunger Diameter: 7.4mm/ 0.3" Cable Length: 20cm/ 7.9" |  |  |



National Road Putatan Muntinlupa City

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www.muntinlupacity.gov.ph

#### TERMS AND CONDITIONS:

- Bidders shall provide correct and accurate information required in this form.
- 2. Bidders must quote for all or all the items.
- 3. Price quotation/s must be valid for a period of thirty (30) calendar days from the date of submission.
- 4. Price quotation/s, to be denominated in Philippine peso shall include all taxes, duties and/or levies payable.
- Quotations exceeding the Approved Budget for the contract shall be rejected.
- 6. Award of contract shall be made to the lowest quotation (for goods and infrastructure) or, the highest rated offer (for consulting services) which complies with the minimum technical specifications and other terms and conditions stated herein.
- 7. Any interlineations, erasures overwriting shall be valid only if they are signed or initialed by you or any of your duly authorized representative/s.
- The Item/s shall be delivered according to the requirements specified in the Technical Specifications.
- The GSO shall have the right to inspect and/or to test the goods to confirm their conformity to the technical specifications.

| Signature over Printed Name |                  |  |
|-----------------------------|------------------|--|
| Positi                      | on/Designation   |  |
| Office                      | e Telephone No.  |  |
| Mobile                      | Phone No./Fax No |  |
| -                           | ail address/es   |  |