REPUBLIC OF THE PHILIPPINES
CITY OF LAPU-LAPU 6015
*BIDS AND AWARDS COMMITTEE*

BAGONG PILIPINAS

## INVITATION TO BID FOR
## *TECHNICAL AND SCIENTIFIC EQUIPMENTS ( SECONDARY EDUCATION)*

1) The **City of Lapu-Lapu**, through the **MOOE FUNDS 3322-1-07-05-140-25s2, 3322-1-07-05-140-25s3, 3322-1-07-05-140-25s4,3322-1-07-05-140-25s1** intends to apply the sum of **Two Million Nine Hundred Twenty-Eight Thousand Pesos (₱ *2,928,000.00* )** being the Approved Budget for the Contract (ABC) to payments under the contract for *the procurement of* **TECHNICAL AND SCIENTIFIC EQUIPMENTS ( SECONDARY EDUCATION) under P.R No. 26-02-0198,26-02-0204,26-02-0205,26-02-0223.** Bids received in excess of the ABC shall be automatically rejected at bid opening.

2) The **City of Lapu-Lapu** now invites bids for **TECHNICAL AND SCIENTIFIC EQUIPMENTS ( SECONDARY EDUCATION).** *(DEP.ED)*

| **1. P.R. No. 26-02-0198<br>ABC: 204,000.00** | | | |
|---|---|---|---|
| **ITEM NO.** | **QTY.** | **UNIT OF ISSUE** | **ITEM DESCRIPTION** |
| **1.** | 2 | set | **TECHNICAL AND SCIENTIFIC EQUIPMENT- CHEMISTRY SET-UP (SCIENCE AND MATERIALS)**<br><br>Each Set of Chemisty Basic Equipment Kit shall include:<br>1.) 1x Wireless Temperature Sensor<br>Specifications :<br>" Range : -40 to 125°C<br>" Resolution : 0.01°C<br>" Accuracy : ±0.5°C<br>" Maximum Sample Rate : 10 Hz<br>" Connectivity : Bluetooth 5.2<br>" Logging : Yes<br>" Battery Type : Coin Cell<br>2.) 1x Wireless pH Sensor<br>Specifications :<br>" pH Range : 0 to 14 pH<br>" Resolution : 0.02 pH<br>" Accuracy : ±0.1 pH with calibration<br>" Temperature Range : 5°C to 60°C<br>" Connectivity : Bluetooth 5.2<br>" Logging : Yes<br>" Battery : Coin Cell<br>3.) 1x Wireless Conductivity Sensor<br>Conductivity :<br>" Range: 0 to 40,000 µS/cm (0 to 28,000 mg/L TDS) |

| | | | |
|---|---|---|---|
| | | | " Resolution: 0.1 µS/cm<br>" Accuracy (200 - 40,000): ±5% of value<br>Accuracy (below 200): ±25 %<br>" Total Dissolved Solids :<br>" Range: 0 to 30,000 ppm<br>" Resolution: 0.1 ppm<br>" Accuracy: 10% between 100-30,000 ppm<br>" Response Time : 95% of final reading in 5 seconds or less<br>" Probe Environmental Tolerance (Min-Max) : 0-80°C<br>" Temperature Compensation : 0-35°C<br>" Temperature Accuracy : ±0.5°C<br>" Waterproof : IPX7 rated (1 meter for 30 min)<br>" Connectivity : Bluetooth 5.2<br>" Logging : Yes<br>" Battery Type : Coin Cell<br>4.) 1x Molecular Model Set<br>" An ideal set for introductory chemistry. All the components needed to create simple to complex molecules with 88 Atoms and 153 Bonds<br>5.) 1x Electrode Support<br>" Product Specifications :<br>" Thumbscrew clamp : Accepts rods with diameters from 0.5 cm to 1.3 cm<br>" Small hole diameter : 0.6 cm<br>" Large hole diameter : 1.3 cm<br>6.) 1x Condenser<br>" Designed to cool the vapors from a liquid sample that is being heated (distilled), and capture the condensation. The clear plastic top of the Condenser has a small opening in the center to hold a temperature sensor or other temperature sensing device. The hole can be plugged with a small rubber stopper (included).<br>7.) 1x Periodic Trend Cards<br>" Designed to cool the vapors from a liquid sample that is being heated (distilled), and capture the condensation. The clear plastic top of the Condenser has a small opening in the center to hold a temperature sensor or other temperature sensing device. The hole can be plugged with a small rubber stopper (included).<br>8.) 1x Spectrum Cards<br>" The Spectrum Cards are used in Lab 24.A, Spectroscopy, in the Essential Chemistry curriculum. Students use the cards to learn about the emission spectra of know elements. Then, they use the known spectra to identify unknown elements and mixtures of elements based on their given spectrum.<br>9.) 1x Periodic Table 11 X 8.5 |

| | | | |
|---|---|---|---|
| | | | " This set of four laminated Periodic Tables is designed to support student groups during multiple labs in Essential Chemistry. The information shown on the front includes element names and symbols, atomic numbers, and atomic masses. The elements are also color coded to signify which group they belong to. The information on the back includes common element properties, unit conversion information, key formulas and constants, a pictogram showing atomic orbital types along the periodic table, and a list of common polyatomic ions.<br>10.) 2x Storage Case<br>Delivery period: Sixty (60) Calendar days upon receipt of Purchase Order/ NOA.<br>Delivery place: DEPED Division of Lapu-Lapu. Upon delivery of said items please coordinate with DEPED Division. |
| **2. P.R. No. 26-02-0204<br>ABC: 878,000.00** | | | |
| **ITEM NO.** | **QTY.** | **UNIT OF ISSUE** | **ITEM DESCRIPTION** |
| **1.** | 2 | set | **TECHNICAL AND SCIENTIFIC EQUIPMENT- BIOLOGY SET-UP (LIFE SCIENCE)**<br><br>Life Science 1 set EcoZone System 3 interconnectable polycarbonate chambers for building your own ecosystems. Designed to easily integrate sensors for quantitative environmental measurements.<br>Includes:<br>1x Three individual EcoChambers with lids<br>1x Custom tray for holding EcoChambers in a connected ecosystem<br>1x Stoppers and connectors<br>1x Cotton wick<br>1x Syringe and plastic tubing<br>1 unit Wireless Temperature Sensor Specifications : Range : -40 to 125C Resolution : 0.01C Accuracy : ±0.5C Maximum Sample Rate : 10 Hz Connectivity : Bluetooth 5.2 Logging : Yes Battery Type : Coin Cell Battery & Logging: Stored Data Points Memory (Logging) 1 -55,000 Battery - Connected (Data Collection Mode) 2 -275 hr (2-3yrs of normal classroom use)* Battery - Logging (Data Logging Mode) 3-35 days Battery Type Coin Cell 1 unit Wireless pH Sensor Specifications : pH Range : 0 to 14 pH Resolution : 0.02 pH Accuracy : ±0.1 pH with calibration Temperature Range : 5°C to 60°C Connectivity : Bluetooth 5.2 Logging : Yes Battery : Coin Cell Battery & Logging : Stored Data Points Memory (Logging) 1 >55,000 Battery - Connected (Data Collection Mode) 2 >220 hr (2-3yrs of normal classroom use)* Battery - Logging (Data Logging Mode) 3 90 days Battery Type Coin Cell 1 unit Wireless Conductivity Sensor |

| | | | |
|---|---|---|---|
| | | | Specifications : Conductivity : Range: 0 to 40,000 S/cm (0 to 28,000 mg/L TDS) Resolution: 0.1 S/cm Accuracy (200 - 40,000): ±5% of value Accuracy (below 200): ±25 % Total Dissolved Solids : Range: 0 to 30,000 ppm Resolution: 0.1 ppm Accuracy: 10% between 10030,000 ppm Response Time : 95% of final reading in 5 seconds or less Probe Environmental Tolerance (Min-Max) : 080°C Temperature Compensation : 035°C Temperature Accuracy : ±0.5°C Waterproof : IPX7 rated (1 meter for 30 min) Connectivity : Bluetooth 5.2 Logging : Yes Battery Type : Coin Cell Battery & Logging : Stored Data Points Memory (Logging) 1 >35,000 Battery - Connected (Data Collection Mode) 2 >195 hr (2-3yrs of normal classroom use) Battery - Logging (Data Logging Mode) 3 >3 days Battery Type : Coin Cell 1 unit Wireless CO2 Sensor (Carbon Dioxide) Specifications : Range : 0 to 100,000 ppm Resolution : 2 ppm Accuracy : 1,000 10,000 ppm Range: ±5% of reading + 100ppm 10,000 50,000 ppm Range: ±10% of reading 50,000 100,000 ppm Range: ±15% of reading Warm-up Time : 3 min Response Time : 90% in 30 sec Operating Temperatures : -10 to 50°C (5 to 30°C ideal for LiPo charging) Metabolism Bottle Volume : 250 mL Metabolism Bottle Care : Warm soapy water (not boiling) Connectivity : USB and Bluetooth 5.2 Logging : Yes Battery Type : Rechargeable LiPo Battery Life : =18 hours of continuous use Battery & Logging : Stored Data Points Memory (Logging)<br>1 -55,000 Battery - Connected (Data Collection Mode)<br>2 -15 hr Battery - Logging (Data Logging Mode)<br>3 -18 hr Battery Type LiPo 1 unit Dissolved CO2 Waterproof Sleeve The Wireless CO2 Sensor can be equipped for aqueous measurements using this semipermeable sleeve. The sleeve is waterproof but allows CO2 gas to pass through the membrane, creating a headspace around the sensor. Monitor photosynthesis and respiration of aquatic plants or animals with the sample bottle or with other chambers. (Please note: Improper use will void sensor warranty.)<br>Includes:<br>5x Sleeves<br>5x O-rings 1 unit Wireless Optical Dissolved Oxygen Sensor Specifications : Range : 0 to 20 mg/L, 0 to 200% saturation Resolution<br>: 0.01 mg/L Accuracy (with calibration)<br>: ±0.2 mg/L or 1% (whichever is greater) Accuracy (out of the box)<br>: ±0.5 mg/L or 3% (whichever is greater) Response Time<br>: 90% in 20 sec Measurements<br>: Concentration (mg/L), Saturation (%), O2 Gas (in air, qualitative) (%), Temperature (°C) Waterproof Depth (probe) |

| | | | |
|---|---|---|---|
| | | | : Length of cable (3m) Splash Resistance of Bluetooth Sensor Box<br>: Not submersible (wipe dry if splashed) Cable Length<br>: 3 m Connectivity<br>: USB and Bluetooth 5.2 Logging<br>: Yes Battery Type<br>: Rechargeable LiPo Battery - Logging (Data Logging Mode) 45 hrs Stored Data Points Memory (Logging) >25,000 Battery - Connected (To Data Collection Device) > 40 hrs Battery - Logging (Data Logging Mode) 45 hrs Battery Type<br>: LiPO 1 unit SK128+BTI8<br><br>Plus Microscope with pointer<br>[1] Digital Monocular head<br>[2] 30° inclined<br>[3] With 8 LCD Touch screen with Android OS, CMOS camera, WiFi input/output<br>[4] Widefield eyepiece WF10x/18mm with pointer<br>[5] Reversed quadruple revolving nosepiece<br>[6] Achromatic objectives EA 4x, 10x, 40x S, 100x S-Oil<br>[7] Coaxial coarse and fine focusing system<br>[8] Built-in low position coaxial mechanical stage<br>[9] Square shape 120x120mm, built-in X-Y axis, movable range 75x26mm<br>[10] Spiral mounted 1.25 N.A. Abbe condenser with iris diaphragm [11] Dust cover, immersion oil (5ml), charger and batteries<br>[12] Cordless LED illumination 20mA, 3.5V, 70mW with intensity control<br><br>8 Tablet Touch screen camera:<br>[1] 8 LCD screen with major 1920x1080 pixels resolutions.<br>[2] 1/3" CMOS sensor<br>[3] Image Captures Resolution: 4MP<br>[4] Video Captures Quality: H264 or MJPEG<br>[5] Image area : 5.44 x 3.07mm<br>[6] 2.0 x 2.0um Pixel size<br>[7] Wi-Fi output (2.4G/5G (Support 802.11ac). Default [8]IP:192.168.1.151<br>[9] Operating Temperature -10 - +50EC<br>[10] Progressive Scan mode<br>[11] USB 5V Output<br>[12] Bundled software MotiConnect for Android/iOS/Windows/MacOS<br>[13] Frame rate is up to 30fps 1 set Microscope Prepared Slide Set, Kingdoms Survey Algae, Fungus, Plant, Invertebrate, and Onion root tip meiosis slides.<br><br>Calibration slide for setting scale.<br>Includes: |

| | | | |
|---|---|---|---|
| | | | 1x Prokaryote and Eukaryote example<br>1x Lichen (algae and fungus example)<br>1x Elodea leaf (plant example)<br>1x Earthworm cross section (invertebrate example)<br>1x Onion root tip (plant in mitosis example)<br>1x 1 mm, 100 division calibration slide<br><br>Delivery period: Thirty(30) days upon receipt of Purchase Order/NOA.<br>Delivery place: DEPED Division of Lapu-Lapu City. Upon delivery of said items please coordinate with DEPED Division. |
| **3. P.R. No. 26-02-0205<br>ABC: 700,000.00** | | | |
| **ITEM NO.** | **QTY.** | **UNIT OF ISSUE** | **ITEM DESCRIPTION** |
| **1.** | 2 | set | **TECHNICAL AND SCIENTIFIC EQUIPMENT- EARTH AND SPACE SCIENCE SET-UP**<br>**EARTH AND SPACE SCIENCE**<br><br>1 unit Wireless Weather Sensor with GPS<br>Specifications :<br>Water-resistant : Splash proof and designed to withstand the elements<br>Barometric Pressure :<br>Range: 225 to 825 mm Hg<br>Resolution: 0.02 mmHg<br>Accuracy: ± 0.1 mmHg<br>Ambient Temperature :<br>Range: -40 to 125 °C<br>Resolution: 0.1 °C<br>Accuracy: ± 0.2 °C<br>Wind Speed :<br>Range: 0.5 to 15 m/s (winds of up to ~ 33 mph)<br>Resolution: 0.1 m/s<br>Accuracy: 3% of reading<br>Relative Humidity :<br>Range: 0 - 100%<br>Resolution: 0.1%<br>Accuracy: ± 2%<br>Illuminance Range* (Light Level) : 0 to 130,000 lux<br>PAR Range (Based on Solar Radiance) : 0 to 2400 mol/m2/s<br>Irradiance Range (Based on Solar Radiance) : 0 to 1362 W/m2<br>UV Index :<br>Range: 1 to 12<br>Resolution: 1<br>Accuracy: ± 1<br>Position (via GPS) :<br>Range: ± 90 Lat ± 180 Lon |

| | | | |
|---|---|---|---|
| | | | Resolution: 0.00001°<br>Accuracy: ±0.00005° ~3m (50% CEP)<br>Altitude (via GPS) :<br>Range: 0 to 18,000 m<br>Resolution: 0.5 m<br>Accuracy: ~ 5 m (50% CEP)<br>Speed (via GPS) :<br>Range: 0 to 515 m/s<br>Resolution: 0.05 m/s<br>Accuracy: 0.05 m/s<br>Operating Environment (Temperature) - 20 to 150°C<br>Operating Environment (Max Wind Speed) : 65 mph<br>GPS Channels : 66<br>GPS Warm Up Time : 35 s<br>USB Connector Type : Micro USB<br>Connectivity : USB and Bluetooth 5.2<br>Logging : Yes<br>Battery Type : Rechargeable LiPo<br>Battery & Logging :<br>Stored Data Points Memory (Logging) 1 >35,000<br>Battery - Connected (Data Collection Mode) 2 >44 hr<br>Battery - Logging (Data Logging Mode) 3 1.5 days (with GPS), 11 days (w/o GPS)<br>Battery Type Rechargeable LiPo<br><br>1 unit Weather Vane Accessory<br>Turn your Wireless Weather Sensor with GPS into a portable weather<br>station for long-term logging experiments with the Weather Vane<br>Accessory.<br>Includes"<br>1x Tripod<br>1x Tripod adapter<br>1x Weather vane<br>1 set Basic Rock and Mineral Kit<br>With this basic rock and mineral kit, which is actually two kits in one,<br>The rock portion of the kit includes 15 classic examples of igneous,<br>metamorphic, and sedimentary rocks, as well as an identification guide.<br>The mineral part of the kit includes 15 different samples that can be<br>identified by hardness, luster, streak, color, cleavage, and other<br>characteristic properties. It also includes a streak plate, hand lens, and<br>mineral identification guide.<br><br>1 unit ECO T-30C Ecoline Microscope |

| | | | |
|---|---|---|---|
| | | | Model: EcoLine T-30C<br>Observation Tube: Binocular head<br>Interpupillary distance: 52-78mm<br>Diopter adjustment: On the left tube, +/- 5 diopter<br>Inclination: 45° inclined<br>Eyepieces: WF10X/20mm<br>Objectives system: Turret changer<br>Objectives magnification: 2X-4X<br>Working distance: 50mm<br>Stand: Fixed arm type stand<br>Base: 225x170mm<br>Column/Arm: 260mm high<br>Head holder: Fixed<br>Focus mechanism: Coarse focusing system<br>Focusing stoke: 40mm<br>Incident illumination: LED 3.5V/350mW with intensity control<br>Transmitted illumination: LED 3.5V/100mW with intensity control<br>Transformer: External<br>Power supply: Charger 100-240V or rechargeable batteries<br>Accessories included: Black, white and frosted stage plates, dust cover,<br>charger and batteries<br>Length x Width x Height: 225x170x260mm<br>Weight: 3.5Kg<br><br>1 unit Horizon Renewable Energy Education Set<br>Product Description:<br>The Renewable Energy Science Kit demonstrates the workings of a<br>clean energy technology system on a miniature scale. Power an<br>electrical circuit by solar panel or a wind turbine with profiled blades<br>based on NASA aeronautics. Generate hydrogen through water<br>electrolysis and convert it into electricity using a PEM fuel cell. Whichever combination of technologies you want to explore, this<br>science kit is a comprehensive introduction to the principles behind<br>renewable microgrids.<br>EXPERIMENTS & ACTIVITIES<br>Solar Energy Experiments<br>1. The Effect of Heat on Solar Panels<br>2. The Effect of Shade on Solar Panels<br>3. The Effect of Tilt Angle on Solar Panels<br>4. Finding the Solar Panels Maximum Power Point<br>Energy from Hydrogen Experiments |

| | | | |
|---|---|---|---|
| | | | 1. Electrolysis Mode Generating H2 and O2<br>2. Fuel Cell Mode Generating Electricity from H2 and O2<br>3. Determining the Minimum Water Decomposition Voltage<br>4. Polarization States for Hydrogen Fuel Cells<br>Wind Energy Experiments<br>1. How Many Blades Are Best - 1, 2, 3 ... More<br>2. Using Three Different Curved Blade Shapes<br>3. Using Blades You Make Yourself<br>4. Turbine Efficiencies<br>5. Measuring RPM<br>6. Tuning For Maximum Power<br>7. How Blade Angle or Pitch Affects Output Power<br>8. To Generate Hydrogen<br><br>Kit Content:<br>Wind turbine body<br>Rotor head for profiled blades<br>9 profiled blades for turbine<br>Rotor head adapter for sheet blades<br>3 polypropylene sheet blades for turbine<br>Rotor unlocking tool<br>Turbine Support base<br>Aluminum wind turbine post<br>PEM Electrolyzer<br>PEM Electrolyzer base<br>PEM Fuel cell<br>PEM Fuel cell base<br>Hydrogen tank<br>Oxygen tank<br>Inner Gas containers<br>Circuit board module base<br>100 ohm Variable Resistor module<br>1 Watt Solar panel<br>Adaptors, tubing clincher & purging valve<br>Assembly instructions<br>CD with curriculum manuals<br>Water/gas tank module base<br>Flexible 2mm banana connecting leads<br>Transparent silicon tubing<br>Plastic plug pins for electrolyzer<br>Battery pack with connecting leads<br>Syringe<br><br>1 unit Moticam X5 Plus Microscope<br>Model : Moticam X5 Plus<br>Sensor type : CMOS<br>Sensor size : 1/3"<br>Imaging area : 5.44x3.07mm<br>Capture resolution : 4MP<br>Pixel size : 2.0x2.0m |

| | | | |
|---|---|---|---|
| | | | Scan mode : Progressive<br>Shutter mode : Rolling Shutter<br>Data transfer : Wi-Fi (2.4 & 5 GHz), Ethernet (RJ45)<br>Exposure time : 0.06~918ms<br>Operating temperature : From -10 to +50 degrees celsius non condensing<br>Operating Humidity : 30~80%RH<br>Lens mount : C-Mount<br>Frames per second (fps*) : 1120 mv with 1/30s \| 0.15 mv with 1/30s<br>USB : USB 5V Output<br>RJ45 : LAN Port, Default IP: 192.168.2.151<br>WiFi : 2.4G/5G (Suport 802.11ac), Default IP:192.168.1.151<br>Image Compression Engine : H264 or MJPEG<br>Stream Resolution : Major: 1920 x 1080, 1280 x 720 \| Minor: 640 x 360<br>Software : MotiConnect for Android/iOS; Motic Images Plus 3.1 for Windows/Mac OS<br>Package includes : 12V Power Adapter, CS Ring, Motic 4-dot calibration slide, Dust Cap,<br>Manual, 12mm lens, Adapter f30/ f38, Macro Tube, Macro Calibration card<br><br>Delivery period: Thirty(30) calendar days upon receipt of Purchase order/ NOA.<br>Delivery place: DEPED Division of Lapu-Lapu City.<br>Upon delivery of said items please coordinate with DEPED Division. |
| **4. P.R. No. 26-02-0223<br>ABC: 1,146,000.00** | | | |
| **ITEM NO.** | **ITEM NO.** | **ITEM NO.** | **ITEM NO.** |
| **1.** | 2 | LOT | **TECHNICAL AND SCIENTIFIC EQUIPMENT-PHYSICAL LAB SET-UP (FORCE, MOTION AND ENERGY)**<br><br>LOT A - FORCE, MOTION AND ENERGY<br>Item 1 - Wireless Temperature Sensor<br>Quantity: 1 unit<br>Specifications:<br>" Range: -40 to 125°C<br>" Resolution: 0.01°C<br>" Accuracy: ±0.5°C<br>" Maximum Sample Rate: 10 Hz<br>" Connectivity: Bluetooth 5.2<br>" Logging Capability: Yes<br>" Battery Type: Coin Cell<br>Item 2 - Wireless Light and Color Sensor<br>Quantity: 1 unit<br>Specifications:<br>" Spectral Response: 340 nm to 1150 nm<br>" Illuminance Range: 0 to 131,000 lux |

| | | | |
|---|---|---|---|
| | | | " Irradiance Range: 0 to 1362 W/m²<br>" PAR Range: 0 to 2400 µmol/m²/s<br>" UV Index Range: 0 to 12 (typical in daylight)<br>" RGB Range: 0 to 100% of combined colored light<br>" Maximum Sample Rate:<br>o 2 Hz (ambient)<br>o 20 Hz (spot)<br>" Connectivity: Bluetooth 5.2<br>1.) Item 3 - Standard Smart Cart PAStrack System<br>Quantity: 1 set<br>Inclusions:<br>" 1 Smart Cart (Red)<br>" 1 Smart Cart (Blue)<br>" 1 Smart Cart Rod Stand Adapter<br>" 1 Cart Mass (Set of 2)<br>" 1 PAStrack<br>" 1 Dynamics Track End Stop (2-pack)<br>" 1 Elastic Bumper<br>" 1 Dynamics Track Spring Set<br>" 1 Super Pulley with Clamp<br>" 1 Angle Indicator<br>" 1 Friction Block<br>" 1 Track Rod Clamp<br>" 1 Bumper Accessory Set<br><br>Item 4 - Essential Physics Modular Circuits Kit<br>Quantity: 1 set<br>Description:<br>The Essential Physics Modular Circuits Kit shall include modules for Wireless Current Sensor and Wireless Voltage Sensor applications. The kit shall support experiments involving RC and RLC circuit analysis, electric motors, and Kirchhoff's Laws.<br>Inclusions:<br>" 1 Wireless Voltage Sensor<br>" 1 Wireless Current Sensor Module<br>" 5 Straight Modules<br>" 2 Tee Modules<br>" 4 Corner Modules<br>" 45 Jumper Clips<br>" 2 Battery Holder Modules<br>" 2 AA-cell Batteries<br>" 3 Light Bulb Modules (with bulb)<br>" 1 SPST Switch Module<br>" 1 SPDT Switch Module<br>" 1 Potentiometer Module<br>" 1 1000-Turn Coil/Inductor Module<br>" 1 Motor Module<br>" 1 0.33 F Capacitor Module<br>" 1 10 ? Resistor Module<br>" 1 33 ? Resistor Module |

| | | | |
|---|---|---|---|
| | | | " 1 100 ? Resistor Module<br>" 1 LED Module<br>" 1 Spring Clip Module<br>" 2 1000 ? Resistors<br>" 2 330 ? Resistors<br>" 1 220 ? Resistor<br>" 1 22 ? Resistor<br>" 1 100 µF Capacitor<br>" 1 330 µF Capacitor<br>" 1 Diode<br>" 8 Cylindrical Magnets (0.5 in × 0.25 in)<br>" 1 Compass<br>" 1 Gratnells Case<br><br>Item 5 - Physics Lab Station: Optics<br>Quantity: 1 set<br>Description:<br>The Physics Lab Station: Optics shall include a Basic Optics Ray Table, Light Source, and accessories for conducting a wide range of optics experiments.<br>Inclusions:<br>" 1 Concave/Convex Mirror<br>" 1 Basic Optics Viewing Screen<br>" 1 Basic Optics Ray Table<br>" 1 Basic Optics Light Source<br>" 1 Dynamics Track Optics Carriages (Set of 4)<br>" 1 Basic Optics Geometric Lens Set<br>" 1 Accessory Lens Set<br><br>Item 6 - Ray Optics Kit<br>Quantity: 1 set<br>Description:<br>A basic set of lenses and mirrors intended for ray and color experiments.<br>Inclusions:<br>" 1 Double-Convex Lens<br>" 1 Double-Concave Lens<br>" 1 Acrylic Trapezoid<br>" 1 Triangular Mirror Accessory with concave, convex, and plane reflective surfaces<br>" 1 Hollow Lens for use with liquid or air lens experiments<br>" 1 Storage Box/Water Tank with foam insert and white plastic sheet<br><br>Item 7 - Mini Launcher Wireless Smart Gate System<br>Quantity: 1 set<br>Inclusions:<br>" 1 Mini Launcher<br>" 1 Photogate Mounting Bracket<br>" 1 Wireless Smart Gate |

| | | | |
|---|---|---|---|
| | | | " 1 Stainless Steel Rod, 45 cm<br>" 1 Aluminum Table Clamp<br><br>Item 8 - Time-of-Flight Accessory<br>Quantity: 1 set<br>Description:<br>The Time-of-Flight Accessory shall be designed primarily for freefall and projectile motion experiments and shall be compatible with all PASCO launchers.<br>Inclusions:<br>" 1 Time-of-Flight Accessory<br>" 1 Instruction Manual<br>" 1 Experiment Guide<br><br>Delivery period: Ninety (90) days upon receipt of Purchase Request/NOA.<br>with 5 year warranty<br>Delivery place: DEPED Division of Lapu-Lapu. Upon delivery of said items please coordinate with DEPED Division of Lapu-Lapu. |

Delivery of items are to be delivered ***within Thirty- Ninety (30-90) Calendar Days upon receipt of Notice of Award/Purchase Order.*** Bidders should have completed, within ten (10) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.

3) Bidding will be conducted through competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the IRR of RA No. 12009.

   ***i)*** Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

4) Interested Bidders may obtain further information from *the* ***City of Lapu-Lapu*** *through the Bids and Awards Committee, located* **at the 2/F City General Services Office, City Hall, Pusok, Lapu-Lapu City** and inspect the Bidding Documents at the address given below from **8:00 a.m to 4:00 p.m.**

5) A complete set of Bidding Documents may be acquired by interested Bidders from ***June 8, 2026 (from 8 a.m. to 5 p.m.) until on or before 12 noon of June 30, 2026*** from ***BAC Office located at the 2/Floor of the City General Services Office, City Hall, Pusok, Lapu-Lapu City*** and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **₱ 5,000.00**. The Procuring Entity shall allow the bidder to present its proof of payment for the fee for the Bidding Documents during the period provided in the preceding paragraph.

6) The *City of Lapu-Lapu/ BAC* will hold a **Pre-Bid Conference** on ***June 16, 2026 (1:30 P.M.)*** at ***BAC Conference Room located at 2/Floor City General Services Office, Pusok, Lapu-Lapu City***, which shall be open to prospective Bidders.

7) Bids must be duly received by the Bids and Awards Committee (BAC) Secretariat through the given address above **on or before 12 Noon of *June 30, 2026.*** Late bids shall not be accepted.

8) All Bids must be accompanied by a Bid Security in any of the acceptable forms and in the amount stated in ITB Clause 16.1.

9) Bid opening shall be on ***June 30, 2026 (1:30 P.M.)*** at **BAC Conference Office, located at 2/Floor City General Services Office, Pusok, Lapu-Lapu City.** Bids will be opened in the presence of the Bidders' representatives who choose to attend the activity.

10) The City of Lapu-Lapu/ BAC reserves the right to reject any all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 70 of R.A. No. 12009, without incurring any liability to the affected Bidder of Bidders.

For further information, please refer to:
***Vanessa Jeanne A. Dela Serna***
*BAC Secretariat*
*City General Service Office*

You may visit the following:
PhilGeps: ___ Website: ✓ JUN 0 8 2026
3 Conspicuous Place:
CEO Bulletin: ___ CGSO: ✓ Market: ___

SIGNED

**RONALDO D. MALACORA**
***OFFICER-IN-CHARGE- CGSO***
***BAC CHAIRPERSON***

*8th Day of June, 2026*
*( PhilGeps Posting Date)*