



**ABSTRACT OF QUOTATION**  
**SOLICITATION Number: RSU-62-19**  
**ABC: PhP5,505,520.84**  
**QTY: 34**

**PROCUREMENT OF SCIENTIFIC EQUIPMENT FOR THE COLLEGE OF ENGINEERING AND TECHNOLOGY**

- LOT-1: CIVIL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP1,203,500.00, QTY: 3)*  
*LOT-2: MECHANICAL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP1,296,000.00, QTY:4)*  
*LOT-3: TRANSFORMER AND GENERATOR EQUIPMENTS (ABC: PhP1,550,000.00, QTY: 4)*  
*LOT-4: ELECTRICAL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP953,750.00, QTY: 20)*  
*LOT-5: SURVEYING DRONE (ABC: PhP125,000.00, QTY: 1)*  
*LOT-6: AGRICULTURAL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP377,270.84, QTY: 2)*

**LOT-1: CIVIL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP1,203,500.00, QTY: 3)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	<b>Los Angeles Abrasion Machine</b> (220V / 60Hz)with Catch Pan and abrasive charge of twelve hardened steel balls. RPM: 30-33; Electrical 5.8 Amps; Drum diameter: 28in (117mm); Product dimensions: 38 x 40 x 46.5in (965 x 1,016 x 1,181mm), WxDxH; Estimated shipping weight: 1200lbs (544.32kg)	1		
unit	<b>Vicat Apparatus with Double-ended Plunger and Needle Assembly</b> , Conical Plastic Mold, Glass Plate. Product dimensions: 12 x 5 x 4in (305 x 127 x 102mm) WxDxH; Estimated shipping weight: 8.0lb (3.63kg)	1		
unit	20,000g Capacity Ohaus Heavy-Duty Solution Balance, 0.1g Readability. Capacity:20,000g; Readability: 1.0g; Selectable weighing unit: gram; Platform size 11in (279mm) diameter; Product dimensions: 34x11x11in (864x279x279mm), WxDxH; Estimated shipping weight: 44.0lb (19.96kg)	1		
<b>TOTAL</b>		<b>QTY 3</b>	<b>ESTIMATED COST</b>	

**LOT-2: MECHANICAL ENGINEERING LABORATORY EQUIPMENTS (ABC: PhP1,296,000.00, QTY:4)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	<b>Solar-powered Mini Iceplant.</b> Brand new; PLC control flake snow ice machine; capacity: 1-ton; output: 500kgs/day; cooling system: air cooling; compressor: Danfoss; piping & storage: stainless steel 304; ice shape: flakes; voltage: 220V/110V (single phase); ice storage capacity: 100 kgs; Power input: 4kW; connected to Grid tie 5kW solar system with complete accessories and or attachment (inverter, charge controller, grid tie net metering, mounting, cables etc.; dimension: 1300mmx1180mmx2100mm; application: fresh cooling; 1 year field service and maintenance; commisioning and in-service training	1		



unit	<b>Fluid-Power equipment</b> (Electric Hydraulic Lift). Brand new; rated Load capacity: 1000 kg; max lifting height: 13m; lift mechanism: telescopic; Motor Power: 3 kw with control and monitoring system and brake safety mechanism; voltage: 300V/220V 50Hz; Table platform size: 2mx1.5m (with secure railings); sturdy base with 4 pcs durable casters; ISO 9001 certification; packed in wooden cases; 1 year maintenance; with commissioning and in-service training; application: fixing ceiling and plastering walls	1		
unit	<b>Digital Planimeter LCD with 6-digit figures</b> ; measuring range: 10m; accuracy: +/- 0.3%; sensor type: photointerrupter; Resolution: 1mm; Power source: 3 pcs (AAA) battery; automatic conversion unit processor; with software installer; 1 year warranty; in-service training.	2		
<b>TOTAL</b>		<b>QTY</b>	<b>4</b>	<b>ESTIMATED COST</b>

**LOT-3: TRANSFORMER AND GENERATOR EQUIPMENTS (ABC: Php1,550,000.00, QTY: 4)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	167 kVA, Single Phase Transformer, complete set (lightning arrester, mounting, etc)	3		
unit	100 kVA, three Phase Generator with Auto transfer switch	1		
<b>TOTAL</b>		<b>QTY</b>	<b>4</b>	<b>ESTIMATED COST</b>

**LOT-4: ELECTRICAL ENGINEERING LABORATORY EQUIPMENTS (ABC: Php953,750.00, QTY: 20)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	<b>3-Phase Power Analyzer</b> Analyzer; 600Vrms, 30Arms/1Arms Internal Shunts; 20Vpk (2mm Banana Plug); 45-850Hz Range; 5-2000V Range; 30A Shunt (1-200A) & 1A Shunt (12.5mA - 5A); 1ph (2-3W), 3ph (3W,4W,3W - 3V3A); USB Host, USB, Ethernet, RS232, GPIB; Power Input - 100Vto240V, 60Hz, 120VA Max.; 5.2"x15.5"x13.2" Dimension	1		
unit	<b>Complete Set PLC Training Equipment</b> (8 Digital I/O; 8 Analog I/O; Temp.Sensor; Humidity Sensor; Floatless Relay; HMI-10" touchscreen Panel; 8 Momentary Button; 8-24V- Pilot Light; 8-24V Dry Contact Relay; 1-PC Set with Software Embedded)	1		
unit	<b>5kV DC Max. Insulation Resistance Tester (Megger)</b> Dimension: 9.1x9.1x9.1 Inches; 2-in-1 insulation Multimeter w/Clamp	1		
unit	<b>Earth Tester</b> 0-20 Ohm Range (0.10 ohm resolution); 0-200ohm range (0.1ohm resolution); 0-2000ohms range (1ohm resolution); + or - 2% reading + 2 Digits or + or - 0.1ohm; 0-200VAC, 40-500Hz; 80% Operating Humidity; 32-104 deg.F., Operating Temperature	1		
unit	<b>Complete Set Electrician Tools</b> (Pliers; Diagonal Side Cutting; Needle Nose Pliers; Strippers; Channel Locks; 6 Models Screwdrivers; Knives&Pocket Knives; Pipe Reamer; Electrician Level; Voltage Detector; Tape Measure; Roto Split; Rock Saw; Multitester; Step Drill Bits; Safety Googles; Cut Resistive Gloves; Blade Cutter)	5		



unit	1-Phase, 230V Automatic Transfer Switch (ATS)	5		
unit	3-Phase, 230V/18V Transformer	5		
unit	<b>Thermal Scanner</b> (8-14 micron spectral wavelengths; 100,000 imaging pixels and up; Facilitate extreme temperature in excess 2000 deg. F.; imaging sensor refresh rate no less than 46 times per second; rechargeable batteries lasts for 5 hrs & up; Video/images is downloadable to a PC using USB; 2.4 GHz Wireless Transmitter)	1		
<b>TOTAL</b>		<b>QTY</b>	<b>20</b>	<b>ESTIMATED COST</b>

**LOT-5: SURVEYING DRONE (ABC: Php125,000.00, QTY: 1)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	Surveying drone. DJI Phantom 4 Advanced. 30min flight time; 7km control range; speed 72kph; video resolution: 4K 60fps; sensor range: 30M; camera resolution: 20Mpixel; App compatibility: iOS 9 or higher and Android 4.4 or higher; Battery life 30min.	1		
<b>TOTAL</b>		<b>QTY</b>	<b>1</b>	<b>ESTIMATED COST</b>

**LOT-6: AGRICULTURAL ENGINEERING LABORATORY EQUIPMENTS (ABC: Php377,270.84, QTY: 2)**

UNIT	ITEM DESCRIPTION	QTY	ESTIMATED UNIT COST	ESTIMATED COST
unit	<b>OVEN NATURAL CONVECTION, STANDARD 50 Liters</b> ThermoStable™ ON Ovens, Gravity Convection-type, 50 liters With 2xWire Shelves, Digital Fuzzy Control, Jog-Dial with Push Button, Digital LCD with Backlight, up to 230°C, ±0.5°C with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System ■ Digital Fuzzy Control System Implementing Superior Temperature Accuracy ■ Optimized Air Flow by Gravity Convection Mechanism ■ Patented Jog-Dial Control System ■ UL / CUL Certified ■ CE Certified ■ GD(Good Design)-mark ■ PL(Product Liability) Insurance; Interior Dimension:370x350x420mm; Exterior Dimension: 518x647x724mm; Heater Power 650W;Temp Range:+5degC to 230degC; Control resolution: +/- 0.1 degC; RS 232 port; Heat up time 30min to 100degC; Display: digital LCD with backlight; External material: powder coated steel; Internal material: stainless steel 304; Insulation: wool; Safety device: Over temperature and over current protector, sensor error detector; Net wt: 44kg; Power consumption: 674 W; Power supply: 1phase, 230V, 6Hz. With desiccators 3 units (6", 8" and 12") borosilicate glass with cover and porcelain plate and 1kg desiccant	1		



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unit	<b>Halogen Moisture Analyzer A&amp;D</b> , Japan Model: MX-50 Capacity: 51g Min. Display-Moisture Content 0.01%/0.1% Min. Display-Weight 0.001 g Temp: 50-200°C With SRA (Secondary Radiation Assist) filter. With SHS (Super Hybrid Sensor). High moisture content measurement at 0.001% resolution. Standard WinCT-Moisture software ( for MS&MX) for real-time graph displaying. With Sodium Tartrate Dihydrate standard for accuracy checking. Laptop for data gathering included; i7 processor.	1		
<b>TOTAL</b>		<b>QTY</b>	<b>2</b>	<b>ESTIMATED COST</b>