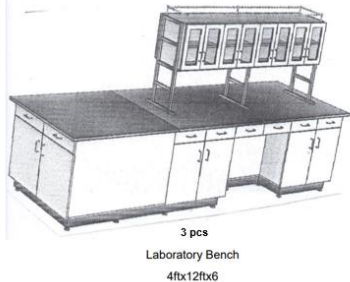
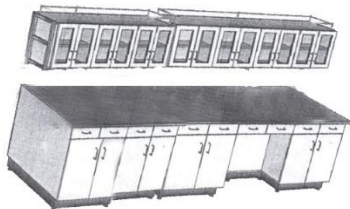


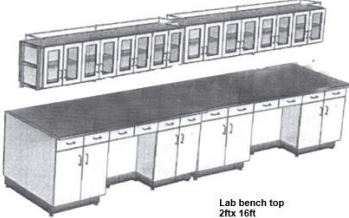

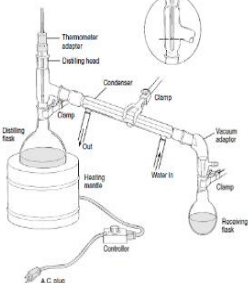



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SUPPLY, DELIVERY, AND INSTALLATION OF LABORATORY EQUIPMENT FOR RESEARCH CENTER

ABC: Php 4,716,000.00

Item No.	Qty / Unit	Item Description	Specifications	Unit Price (Php)	Total Price (Php)	
1	3 sets	Soxhlet Extraction Set Up	<p>A Soxhlet extractor has three main sections:</p> <ol style="list-style-type: none"> percolator (boiler and reflux) which circulates the solvent, thimble (usually made of thick filter paper) which retains the solid to be extracted, siphon mechanism, which periodically empties the thimble. <p>Complete glass ware set up Capacity: 500mL (3 sets), 250mL (3 sets) With Heating Mantle for each set</p>	108,000.00	324,000.00	
2A	3 units	Stainless Steel Counter Laboratory Bench with Lab stool	<p>Rack Dimension: 4ft x 12ft x 6ft</p> <ul style="list-style-type: none"> 10 Cabinet (bottom) 2 swing door per cabinet with adjustable shelves 14 drawers 2 legroom 16 swing door cabinet (top) 2 laboratory stool, stainless steel frame with fiber glass top seat 	252,000.00	756,000.00	
2B	1 unit	Stainless Steel Counter Laboratory Bench with Lab stool	<p>Rack Dimension: 4ft x 14ft height:3ft</p> <ul style="list-style-type: none"> 8 Cabinet(bottom) swing door 10 drawers 1 legroom 14 swing door wall cabinet (top) 2 laboratory stool, stainless steel frame 	252,000.00	252,000.00	


			with fiber glass top seat			
2C	1 unit	Stainless Steel Counter Laboratory Bench with Lab stools	<p>Rack Dimension: 4ftx16ft x height 3ft</p> <ul style="list-style-type: none"> • 8 Cabinet (bottom) swing door per cabinet • 12 drawers • 2 legroom • 16 swing door cabinet (top) • 2 laboratory stool, stainless steel frame with fiber glass top seat 	252,000.00	252,000.00	 <p>Lab bench top 2ft x 16ft height 3ft Cabinet: 12ft x 1.5ft x 1.5ft</p>
3	3 units	Laboratory Grinder/Blender With Timer	<ul style="list-style-type: none"> • Capacity: at least 1 Liter/1.2 Liter • Switch Settings: Two Speed <ul style="list-style-type: none"> a) 60 Second Mechanical Timer b) Automatic shutoff c) Push button speed control operation for <ul style="list-style-type: none"> ▪ 18,000 rpm ▪ 22,000 rpm • Base: Epoxy Coated Motor Housing • Container: <ul style="list-style-type: none"> a) Stainless steel with handle b) Two-piece vinyl and styrene lid. c) Heat resistant glass with handle and two-piece vinyl and styrene lid. <ul style="list-style-type: none"> • Overall Height: at least 15 inches 	36,000.00	108,000.00	
4	3 sets	Distillation Set Up with Heating Mantle (500mL and 250 mL Distillation Apparatus Set with Hardware & Mantle)	<ul style="list-style-type: none"> • Glassware, Hardware and Heating Mantle included • Distillation Apparatus with 24/40 Joint <p>(1) - 500 ml Borosilicate Glass Round Bottom Distillation Flask with Side Arm.</p> <ul style="list-style-type: none"> a) Top Joint Size - 24/40. Cap Included for this Joint. b) Side Arm Joint Size - 24/40. c) Borosilicate Glass Graham Condenser with 24/40 Joint. d) Jacket Length - 300 mm / 12 inch. 			 <p>Figure 14.1 Distillation with the standard macroscopic lab kit.</p>

			<p>e) Overall Length - 400mm / 16 inch.</p> <p>f) Joint Size - 24/40.</p> <p>(2) - 250 ml Erlenmeyer Flask, Borosilicate Glass</p> <p>a) Glass Stopper, 24/40 Joint, Borosilicate Glass</p> <p>b) Keck Clamp # 24</p> <ul style="list-style-type: none"> • 6 x 9 Support Stand with 24 Inch Rod • Swivel Utility Clamp • Extension Clamp • Clamp Holder • 5 Inch Hammertone Finish Support Ring • 500 ml Electric Heating Mantle 			
5	1 unit	Photo Microscope complete with software Laptop/Computer	<ul style="list-style-type: none"> • Infinity Optical System • Sidentopf-type Trinocular Tube • Right Hand Stage holder with two specimen holder • Provision for Bright field/Dark field & Phase contrast observations • Eye piece : wide field (FOV greater than 22), 10X with Diopter adjustment facility on both • Objectives At least plan achromat (4x/5x, 10x, 20x, 40x, 100x) <ul style="list-style-type: none"> • 20x - Suitable for Bright field/Dark field, Phase contrast observations • 40x - Suitable for Bright field/Dark field & Phase contrast observations • 100x – oil immersion, Suitable for Bright field/Dark field and Phase contrast observations • Suitable phase contrast turret Condenser & centering Telescope • Illumination : <ul style="list-style-type: none"> • High intensity halogen/LED • Stage micrometer • Image documentation: With Built in Camera • High sensitivity/high resolution dedicated digital camera (15 Mega Pixel or more with 30 	306,000.00	306,000.00	

			<p>FPS or more) with firewire connectivity</p> <ul style="list-style-type: none"> • Image analysis : Software for analyzing (Measuring image stitching, object counting, time laps etc) and documenting the captured images <p>Suitable Desktop/Laptop computer</p> <ul style="list-style-type: none"> • Core i5 or equivalent processor • 4GB RAM, • high end 2 GB Video Card, • at least 125 SSD • 1TB HDD, • 27" LED Monitor, for analyzing /archiving the images • UPS capable of 30mts backup • Microscope, Digital Camera and image analysis Software should be from same manufacture for better synchronization & compatibility • Minimum 1 year warranty 			
6	1 unit	Freeze Dryer, Upright	<ul style="list-style-type: none"> • Compact and movable upright type freeze dryer • Automatic operating start and stop and temperature setting • Freezing performance to start drying in 15min ~ 30min • Cold Trap Temp : at least -90°C • Capacity (total) : at least 12L • Trap Size (mm): about Φ 300 x L375 • Dimension (mm) : (Approximately) W850 x D800 x H100 • Power : 220V, 50/60 Hz • Microprocessor Controller <ul style="list-style-type: none"> ○ Auto/Manual start-up controller ○ Display cold trap ○ Temperature 	540,000.00	540,000.00	

			<ul style="list-style-type: none"> ○ vacuum pressure (2000mTorr ~ 0mTorr) ○ printer set ○ Auto Defrost ○ auto vacuum release to prevent a back flow of contaminated oil or gas ○ Automatic vacuum pump start & Stop controller system ○ One touch type automatic operation of freezing & vacuum function ○ With compatible AVR 			
7	2 sets	Horizontal Gel Electrophoresis System (2 sizes, mini and midi)	<ul style="list-style-type: none"> ● Rubber casting gates ● Two-piece comb design (1.5 mm thick combs), with gel trays, ● Small benchtop footprint <p>Midi Unit Dimensions: approximately 12.5W x 22L x 9H cm Gel Size: 10 x 7 cm Max. Sample Capacity: 100 Samples Tank Buffer Volume: 300 mL Thickness: 0.75, 1.0, 1.5, 2.0 mm No. of teeth: 1, 2, 4, 8, 10, 12, 16 Plug and play Casting 1pair Dams supplied Running conditions: 90 V, 45-60 minutes</p> <p>Mini Unit Dimensions: approximately 9 W x 21L x 9H cm Gel Size: 7 x 7 cm Max. Sample Capacity : at least 60 Samples Tank Buffer Volume: 225 mL Thickness: 0.75, 1.0, 1.5, 2.0 mm No. of teeth: 1, 2, 4, 8, 10, 12, 16, 20, 25 Plug and play Casting 1pair Dams supplied</p>	90,000.00	180,000.00	

			<p>Running conditions: 80 V, 45-60 minutes</p> <ul style="list-style-type: none"> • Power: 220 V • With compatible AVR 			
8	1 unit	Laboratory Stomacher with Compatible AVR	<ul style="list-style-type: none"> • Optimal blending Volume: 200-4000 mL • Window door • Variable blending speed (1.5 – 3 – 4.5 - 6 strokes/sec.) • Variable blending time (1sec. - 1h or open running/countdown) • Adjustable blending power • Accessory: Drip tray, Stand <p>Applications</p> <ul style="list-style-type: none"> • Food microbiology • Sterility tests of disposable products • Ideal for E-Coli O157H7 • Trichinella testing of pork • Microbiological or chemical residue detection in fibrous products • Industrial mixing (powder, polymer ...) • Evaluation of risks in drinking water by analysis of microscopic particulate analysis • Blending of bulky water filters (Cryptosporidium and Giardia parasites extraction) 	180,000.00	180,000.00	
9	1 unit	Controlled Temperature Shaker Incubator	<ul style="list-style-type: none"> • Capacity: at least 110L • Dimension: approx. 500 x 400 x 400 mm • Heater: about 350 W • With flask placer for 1000ml (6 pcs), 500ml (12 pcs), 250ml (16 pcs) and 100ml (24 pcs) • Working temperature: Ambient + 5°C to 75°C adjustable • Temperature uniformity: ± 2°C at 37°C • Temperature stability: ± 0.1°C at 37°C • Resolution: 0.1°C • Lamp: Yes, 23 W • Timer: LED digital set and display, 99 hours 59 minutes + HOLD (indefinite) 	258,000.00	258,000.00	

			<ul style="list-style-type: none"> • Indicators: LED lamps for Power, Heat, PV, SV, Alarm, Time, Operation, Speed • Safety devices: Over heat alarm & shutout to 2°C above set point. • Standard accessory: 2 stainless steel shelves + 1 stainless steel platform & rubber sheet for shaker • With compatible AVR 			
10	4 units	Top Loading Balance	<ul style="list-style-type: none"> • Maximum Capacity : at least 2200 g • Resolution: 0.01 g • Repeatability : ± 0.01 g • Linearity : ± 0.03 g • Settling time : at most 1.5 s • Weighing pan dimensions: about 160 mm diameter • Power : 240 V, 50/60 Hz • External/ internal automatic calibration • LCD with backlight with adjustable contrast • Plastic protection cover 	24,000.00	96,000.00	
11	5 units	20L Laboratory water distillation apparatus	<ul style="list-style-type: none"> • Material: Stainless steel • Volume: 20 L • Power: 220 V, 50/60Hz, 15 kW • Yield: ≥ 20 L/hr • Type: Single distilling 	24,000.00	120,000.00	
12	1 unit	Liquid Nitrogen Tank	<ul style="list-style-type: none"> • 30liter capacity • Compact and lightweight, easy to transport and store • Excellent heat insulation effect. • (Outer tank) Aluminum, (Inner tank) Stainless steel (SUS304), (Outer tank bottom) Rubber 	72,000.00	72,000.00	
13	2 sets	Benchtop pH meter with 2 types Buffer solution each set	<ul style="list-style-type: none"> • Resolution (Temperature): 0.1°C • Range (pH): 0 to 14 • Outputs: Recorder (± 2000 mV) • Temperature Probe Calibration: Offset in 0.1 °C increments; Offset range: ± 5 °C • Memory: 100 data sets • Temperature Range (Metric): 0.0°C to 100.0°C 	66,000.00	264,000.00	

			<ul style="list-style-type: none"> • Resolution (mV): 0.1 mV (± 199.9 mV); 1 mV beyond ± 200 mV • Electrical Requirements: AC/DC 9 V adapter (110/220 VAC, 50-60 Hz) • Range (mV): ± 1999 mV 			
14	1 unit	Ultra low temperature freezer	<ul style="list-style-type: none"> • Upright Temperature range: -10°C to -86°C • Precision: 0.1 °C • Capacity: at least 8.5 – 13 cu. Ft • Foaming insulation: About 155 with VIP board or its equivalent • Power requirements: 220 V; 50/60 Hz, 100-1500W • Door Inner: 2-3, Outer : 1 • CO2 Standby power supplier (in case for power failure) • Vacuum Insulated Panel Insulation • Stainless steel interior • Display : Digital Temp; Keyboard lock • Audible and visual alarm system : High/low temp, low battery, open door • Filter blocking alarm, system failure alarm • Safety inside door lock • Refrigeration System <ul style="list-style-type: none"> ○ Dual-stage compressors parallel connection ○ -4 hours to reach -86°C ○ mixture completely environmentally friendly refrigerant • Accessories: CO₂ back up, storage racks, boxes • with compatible AVR 	360,000.00	360,000.00	
15	1 unit	Fumehood	<ul style="list-style-type: none"> - Internal Size (W*D*H) approx. 1800 x 800 x 2515 mm - Max Opening 750mm - Work Surface Height approx. 900mm - Air Velocity: 0.3~0.8m/s - System Exhaust Volume: 1140 m/h - Noise: ≤ 60dB - LED Lamp: 16W *1 - Blower: Built-In PP Centrifugal Blower 			

			<ul style="list-style-type: none"> - Front Window: Manual, 5 mm Toughened Glass, Height Adjustable - Power Supply: 220V±10%, 50 /60Hz; - Material: <ul style="list-style-type: none"> o Exterior: 1.0mm Cold-Rolled Steel with Bacteria Power Coating. o Interior High Grade Melamine Board with Good Acid and Alkali Resistance Function. - Work Table: Chemical Resistant Phenolic Resin - Standard Accessory: <ul style="list-style-type: none"> o Water Tap, Water Sink, LED Lamp, Total Load of 2 Waterproof Sockets: 500 W, Built-In Polypropylene Blower - Adjustable Air Speed: 9 Levels - Complete Installation (including ducting) 			
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Warranty:

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Prepared by:


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