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Bids & Awards Committee

SUPPLEMENTAL BID BULLETIN No. 02

RE: BIDDING FOR THE SUPPLY, DELIVERY, INSTALLATION & COMMISSIONING OF VARIOUS LABORATORY FACILITIES & EQUIPMENT

This addendum No. 02 is issued to modify or amend items in the Bid documents. This shall form an integral part of the Bid Documents:

<p>Original</p> <p>Awarding – per line item</p>	<p>New</p> <p>Awarding will be on a lot basis. Items have been grouped into lots, to wit:</p> <table border="1"> <thead> <tr> <th>ABC/Lot</th><th>Cost of Bidding Documents (Non-refundable)</th></tr> </thead> <tbody> <tr> <td>Lot 1 - ₱10,546,000.00</td><td>₱11,000.00</td></tr> <tr> <td>Lot 2 - ₱3,600,000.00</td><td>₱4,000.00</td></tr> <tr> <td>Lot 3 - ₱10,300,000.00</td><td>₱10,500.00</td></tr> <tr> <td>Lot 4 - ₱1,354,000.00</td><td>₱1,500.00</td></tr> </tbody> </table> <p>NOTE: Please refer to attachments.</p>	ABC/Lot	Cost of Bidding Documents (Non-refundable)	Lot 1 - ₱10,546,000.00	₱11,000.00	Lot 2 - ₱3,600,000.00	₱4,000.00	Lot 3 - ₱10,300,000.00	₱10,500.00	Lot 4 - ₱1,354,000.00	₱1,500.00
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TECHNICAL SPECIFICATIONS											
<p>Original Tech. Specs.</p> <p>2. AUTOCLAVE Capacity: at least 20 L Sterilization Temperature: up to 134 C Sterilization Time: at least 4 mins-20 min Working pressure: at least 0.21 MPa Chamber Material: Stainless Steel Tray: at least 3 Water tank: Water fed from the outside tank Chamber dimensions: at least 250 x 490 mm (Dia X Depth) Overall Dimension: at least 480 X 690 X 430 mm (L X W X H)</p> <p>4. VISCOMETER Measured Range(mPa-s): 100~6,000,000 Rotation Speed(rpm): 0.1,0.3,0.6, 1.5, 3, 6, 12, 30, 60 Number of Spindle: 4 types(L1~L4) Measurement Accuracy: ±3%(FS)(Newtonian Fluid) Repeatability: ±0.5%(FS)(Newtonian Fluid) Power Supply: AC220V±10%, 50/60HZ; 110V±10%, 50/60HZ</p>	<p>Revised Tech. Specs.</p> <p>2. PRESSURE COOKER Material: Aluminum Liquid Capacity (Qts.): at least 20L Inside Diameter, Inches: 12.5 Inside Height, Inches: 14 The professional quality deluxe cast aluminum Pressure Cooker / Canner with the exclusive ""Metal-To-Metal"" seal Does not use gaskets with ""Metal-To-Metal"" seal Size: 38H x 42W x 38D cm Weight: 10 kg</p> <p>4. VISCOMETER with small adapter Measured Range(mPa-s): 100 ~ 6,000,000 Rotation Speed(rpm): 0.1,0.3,0.6, 1.5, 3, 6, 12, 30,60 Number of Spindle: 4 types(L1~L4) Measurement Accuracy : ±3%(FS)(Newtonian Fluid) Repeatability: ±0.5%(FS)(Newtonian Fluid) Power Supply: AC220V±10%, 50/60HZ;</p>										

Standard accessory / Optional accessory: RTD temperature probe LOspindle is for Option Measured Range (mPa.s): 10~6000 Package Size : 470*395*245 G.W.: 8.5kg	Standard accessory / Optional accessory: RTD temperature probe LOspindle is for Option Measured Range (mPa.s): 10~6000 Package Size: 470*395*245 G.W.: 8.5kg
6. SCALE BALANCE Measuring system Adjustment options: •External calibration Linearity: 30 mg n/a: 20 g •Readout [d]: 10 mg •Recommended adjusting weight: 1 kg (F1) •Reproducibility: 10 mg •Resolution: 100000 •Stabilization time: 3 s •Warm up time: 2 h •Weighing range [Max]: 1 kg •Weighing system: Strain gauge • Weighing units: ct dwt g gn lb mo oz oz t l (HK) t l (Tw) tol Display Display digit height: 1,500 cm Counting Counting resolution: 50000 •Minimum piece weight at piece counting (Laboratory): 20 mg •Minimum piece weight at piece counting (Normal): 200 mg •Functions Counting function: yes Percentage determination: yes Suspended weighing: Hook Vibration-free weighing (Animal weighing program): yes	6. SCALE BALANCE/TOP LOADING BALANCE Measuring system Adjustment options: External calibration Linearity: 30 mg n/a: 20 g Readout [d]: 10 mg Recommended adjusting weight: 1 kg (F1) Reproducibility: 10 mg Resolution: 100000 Stabilisation time: 3 s Warm up time: 2 h Weighing range [Max]: 1 kg Weighing system: Strain gauge Weighing units: ct dwt g gn lb mo oz oz t l (HK) t l (Tw) tol Display Display digit height: 1,500 cm Counting Counting resolution: 50000 Minimum piece weight at piece counting (Laboratory): 20 mg Minimum piece weight at piece counting (Normal): 200 mg Functions Counting function: yes Percentage determination: yes Suspended weighing: Hook Vibration-free weighing (Animal weighing program): yes
16. KJELDAHL ANALYZER Water Consumption 1.5L/Min Ambient Temperature 5~40°C Ambient Humidity 80% Measure Range 0.1mg~200mg Analysis Time 5~10min Recovery Ratio ≥99.5% Sample Amount Solid ≤ 5g; Liquid ≤20ml Burette Accuracy 2μL/ step Reproducibility ±0.5% Consumption 2000W Power Supply AC110/220 V±10%, 60/50Hz Packing size(W*D*H) 455*391*730mm 38kg Gross weight Main body: 52.7kg 12.5kg	16. KJELDAHL ANALYZER (titration and distillation) Water Consumption 1.5L/Min Ambient Temperature 5~40°C Ambient Humidity 80% Measure Range 0.1mg~200mg Analysis Time 5~10min Recovery Ratio ≥99.5% Sample Amount Solid ≤ 5g; Liquid ≤20ml Burette Accuracy: 2μL/ step Reproducibility ±0.5% Consumption 2000W Power Supply AC110/220 V±10%, 60/50Hz Packing size(W*D*H): 455*391*730mm; 38kg; Main body: 52.7kg Gross weight 12.5kg
18. DIFFERENTIAL SCANNING CALORIMETER Parameters details: •Temperature range: room temperature ~1500°C •Temperature resolution:0.1°C •Heating rate:0.1~80°C/min ; •Temperature control mode;; rise in temperature ; constant temperature (Programs control automatically) •BKSC range:0~±200mW •BKSC resolution:0.01mW •BKSC sensitivity:0.1mW •Working power supply:AC 220V 50Hz or custom-made •Atmosphere control of gas :nitrogen ;oxygen (instrument changes automatically) •10 Gas flow:0-200mL/min •Gas pressure:0.2MPa •Accuracy of gas flow:0.2mL/min	18. DIFFERENTIAL SCANNING CALORIMETER Temperature range (max.) -170°C to 600°C Max. cooling rate/max. heating rate 500 K/min Measuring range/ weighing range (max.): ± 750 mW Enthalpy accuracy: < 1% TGA resolution: n/a Indium Response Ratio (*): > 100 Exchangeable sensors n/a Cooling options: - Air compressor: RT to 600°C - Compressed air: < 0°C to 600°C - Intracooler: -70°C to 600°C - Liquid nitrogen: -170°C to 700°C Gas atmospheres: Inert, oxidizing, static and dynamic Mass flow controller for purge/protective gas: 3, integrated (0 to 250 ml/min) Gas flow regulation: Software-controlled

<ul style="list-style-type: none">•Matching crucible: Alumina crucible Ø6.7*3mmParameter standard: equipped with standard material(indium ,tin, zinc) the user can correct the temperature and enthalpy•Data interface: standard USB interface•Display mode: 24bit color 7 inch LED touch screen display•Output mode: computer and printer	<p>Automatic Sample Changer (ASC): Yes (optional) Software: min. Proteus® 8 Proteus® software extensions included - SmartMode</p> <ul style="list-style-type: none">- ExpertMode- AutoCalibration- (Advanced) BeFlat®- AutoEvaluation- Identify <p>Proteus® software extensions (optional): -Temperature modulation</p> <ul style="list-style-type: none">- Specific heat capacity (cp)- Proteus® Protect- Purity Determination <p>Advanced Software extensions (optional): - Peak Separatioin</p> <ul style="list-style-type: none">- Kinetics Neo- Thermal Simulations <p>Size (W x H x D) – incl. ASC, without physical connections 350 mm x 445 mm x 560 mm</p>
<p>20. ROTARY EVAPORATOR with accessories</p> <p>Specifications</p> <p>Estimated Shipping Weight: 69.0 lbs </p>	

<p>Specifications</p> <p>Estimated Shipping Weight: 69.0 lbs</p> <p>Estimated Shipping Weight metric: 31.0 kg</p> <p>Dimensions: 35.75" w x 9" d x 26.88" h</p> <p>Dimensions metric: 91 x 23 x 68 cm</p> <p>Electrical: 115 V</p>	<p>Min temp (°C) : Ambient +30</p> <p>Temp uniformity (°C): ±5.0 @ 250°C</p> <p>Heat-up time (mins): 23</p> <p>Recovery time (mins): 3</p> <p>Dimensions: 295 x 300 x 320 Internal H x W x D (mm)</p> <p>Dimensions:440 x 590 x 465 External H x Wx D (mm)</p> <p>Shelves fitted / accepted: 43500</p> <p>Shelf loading each / total (kg): 43758</p> <p>Volume (litres) : 28</p> <p>Air changes / hr : 65</p> <p>Max power (W): 1000</p> <p>Holding power (W): 342</p> <p>Weight (kg): 24</p>																									
<p>24. FAT EXTRACTOR WITH ACCESSORIES</p> <p>Specifications</p> <p>Estimated Shipping Weight: 69.0 lbs</p> <p>Estimated Shipping Weight metric: 31.0 kg</p> <p>Dimensions: 35.75" w x 9" d x 26.88" h</p> <p>Dimensions metric: 91 x 23 x 68 cm</p> <p>Electrical: 115 V,</p>	<p>24. FAT ANALYZER/EXTRACTOR</p> <p>Temp. Range RT +5°C~300°C</p> <p>Measuring Range 0~100%</p> <p>Temperature Accuracy ±1°C</p> <p>Sample Weight 0.5~15g(generally 2~5g, depending on sample)</p> <p>Capacity 6pcs/batch</p> <p>Solvent Cup Volume 80ml</p> <p>Solvent Recovery ≥80%</p> <p>Consumption 1KW</p> <p>Power Supply AC 220V±10%, 50HZ</p> <p>External Size(W*D*H) 650*320*715mm</p> <p>Package Size(W*D*H) 735*410*880mm</p> <p>Gross Weight 54.5kg</p>																									
<p>25. PORTABLE TOXICITY ANALYZER</p> <p>Size: 20cm x 18cm x 10cm (8" x 7" x 4")</p> <p>Weight: 1 kg (2.2 lbs)</p> <p>Power: Self-contained Lithium ion battery or a universal power adapter : (15 V dc @ 4 amps)</p> <p>Instrument Operational Temp: 0°C - 40°C</p> <p>Reagent Operational Temp: 10°C - 28°C</p> <p>Dynamic Test Range: CE</p> <p>Approvals: 10°C - 28°C</p> <p>Display Output: Backlight LCD – 8 lines x 20 characters</p> <p>Data I/O: Standard serial USB for data transfer and firmware updates</p> <p>Data Storage: 6.5k byte storage area (approx. 600 reads)</p> <p>Data Handling: Stand alone or download capability to PC</p> <p>Test Reagent: Freeze-dried luminescent bacteria (Vibrio fischeri)</p> <p>Toxicity Reagent Storage Freeze-dried -15°C to -25°C</p> <p>Rehydrated 2 hours (ambient temperature)</p> <p>ATP Reagent Storage Refrigerate</p> <p>Test Modes Toxicity (Q-Tox and B-Tox) and ATP measurement</p> <p>Test Durations 1-60 minute exposure</p> <p>Repeatability (Precision) <20% coefficient of variation for B-Tox and</p> <p>Q-Tox mode testing Sensitivity and Range: The analyser can detect photon counts from 0 to 60 million</p> <p>Capacity 16L</p> <p>Control system Analog Microprocessor</p> <p>Temp control ON / OFF PID</p> <p>Temp setting Analog Digital</p> <p>Temp readout Thermometer Digital</p> <p>Air convection Natural (Gravity) Forced convection</p>	<p>25. PORTABLE TOXICITY ANALYZER</p> <p>Displays Up To 5 Gases</p> <ul style="list-style-type: none">• LEL (PPM Optional)• Oxygen• Carbon Monoxide• Hydrogen Sulfide• Hydrogen Cyanide (Optional) <p>Sensor Specifications</p> <table><tr><th>Type</th><th>Resolution</th><th>Range</th><th>Accuracy</th><th>Response T90 Times</th></tr><tr><td>LEL</td><td>0.1%</td><td>0-100%</td><td>±10%</td><td>< 10% Sec</td></tr><tr><td>Oxygen</td><td>0.1%</td><td>25%</td><td>±2% or 10%**</td><td>< 10% Sec</td></tr><tr><td>Carbon Monoxide</td><td>1 ppm</td><td>0-999*</td><td>±5 ppm or 10%**</td><td>< 10% Sec</td></tr><tr><td>Hydrogen Sulfide</td><td>1 ppm</td><td>0-100 ppm</td><td>±2 ppm or 10%**</td><td>< 20% Sec</td></tr></table>	Type	Resolution	Range	Accuracy	Response T90 Times	LEL	0.1%	0-100%	±10%	< 10% Sec	Oxygen	0.1%	25%	±2% or 10%**	< 10% Sec	Carbon Monoxide	1 ppm	0-999*	±5 ppm or 10%**	< 10% Sec	Hydrogen Sulfide	1 ppm	0-100 ppm	±2 ppm or 10%**	< 20% Sec
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Temp uniformity $\pm 5.0^{\circ}\text{C}$ at 37°C $\pm 3.0^{\circ}\text{C}$ at 37°C Temp stability $\pm 3.0^{\circ}\text{C}$ at 37°C $\pm 1.0^{\circ}\text{C}$ at 37°C Over-temp alarm & shutout At 80°C 4°C to the set point Timer Mechanical, 180 min + HOLD Temperature range Ambient + 5°C to 75°C Standard accessory 2 S/S mesh shelves, adjustable	Hydrogen Cyanide 0.1 ppm 0-30 ± 1 ppm or 10%** < 20% Sec Nitrogen Dioxide 1 ppm 0-250 ± 2 ppm or 10%** < 20% Sec Sulfur Dioxide 0.1 ppm 0-20 ± 1 ppm or 10%** < 20% Sec Phosphine 0.1 ppm 0-10 ± 1 ppm or 10%** < 20% Sec Ethylene Oxide 0.1 ppm 0-10 ± 1 ppm or 10%** < 20% Sec
26. LABORATORY INCUBATOR Chamber Stainless steel SUS#304 Temperature Range Ambient + 5°C to 75°C (Adjustable) Control System Microprocessor controlled system Temperature Control PID Temperature Display Digital LED Sensor PT-100 Standard Accessory 2 stainless shelves, interval is adjustable Capacity Available 16L Timer Mechanical, 180min + HOLD Temperature setting/Display Digital LED Temperature uniformity $\pm 2^{\circ}\text{C}$ at 37°C Temperature Stability $\pm 0.1^{\circ}\text{C}$ at 37°C Resolution 0.1°C Over-heat alarm and shutout point Yes, 4°C above the set point Air Convection Natural convection Air Vent Yes Quality standard ISO, CE, GMP, FDA, Japan	26. LABORATORY INCUBATOR Chamber Stainless steel SUS#304 Temperature range Ambient + 5°C to 75°C (Adjustable) Control system Microprocessor controlled system Temperature control PID Temperature display Digital LED Sensor PT-100 Standard Accessory 2 stainless steel shelves, interval is adjustable Capacity available 16L Timer Mechanical, 180min + HOLD Temperature setting/Display Digital LED Temperature uniformity $\pm 2^{\circ}\text{C}$ at 37°C Temperature stability $\pm 0.1^{\circ}\text{C}$ at 37°C Resolution Yes, 4°C above the set point Over-heat alarm & shutout Natural convection Air convection Yes Air vent ISO, CE, GMP, FDA, Japan Quality standard
35. ATOMIC ABSORTION SPECTROPHOTOMETER w/ACCESSORIES 1 unit Atomic Absorption Spectrophotometer Optics Wavelength range: 185.0 to 900.0 nm	35. ATOMIC ABSORTION SPECTROPHOTOMETER 1 unit Atomic Absorption Spectrophotometer

Monochromator: Aberration-corrected Czerny-Turner mounting
No. of grating grooves: 1800lines/mm
Focal length: 298mm
Bandwidth: 0.2, 0.7, 1.3, 2.0L nm (4 step automatic switching)
Detector: Photomultiplier tube
Optics: Optical double-beam
Background correction: BGC-SR (High-speed self-reversal method) (185.0 to 900.0 nm) BGC-D2 (D2 lamp method) (185.0 to 430.0 nm)
Number of HC lamps: 6-lamp turret, 2 lamps simultaneously lit (1 for measurement, 1 warming up for the next measurement)
Lamp mode: EMISSION, NON-BGC, BGC-SR, and BGC-D2
Software requirements: Microsoft Windows
Parameter settings: Wizard method
Measurement mode: Flame continuous method (standard), flame micro sampling method (option), furnace method (option), flame emission method
Baseline correction: Automatic correction of the baseline drift through offset processing in peak height/ peak area mode
Sensitivity correction: Automatic calibration curve correction with sensitivity monitoring
Electronic records: FDA 21 CFR 11 compliant
Power requirements: 230VA, 50/60Hz
Dimensions & Weight: W 700 x D 588 x H 714mm, 72kg (not including the protruding parts)

Burner unit

Type: Air-cooled pre-mix type
Burner head: Made of titanium, 10cm slot (5cm slot for N₂O-C₂H₂ flame available as an option)
Nebulizer: Pt-Ir capillary. PTFE orifice. Ceramic impact bead (capable of handling hydrofluoric acid)
Chamber: Engineering plastics
Positioning control: Automatic search for the optimal burner height, automatic adjustment of vertical position, manual adjustment of back and forth position
Gas control unit
Flow rate control: Automatic fuel gas flow rate setting (0.1L/min step). Auto search of optimum gas flow rate
Safety measures:

- Automatic gas leak check.
 - Automatic Air-N₂O switching as C₂H₂ flow rate increases.
 - Flame monitor.
 - Prevention of wrong burner head use.
 - Gas pressure monitor.
 - Drain tank level monitor.
 - Automatic flame extinction upon power outage or sudden power interruption.
 - Automatic flame extinction via flame vibration sensor.
- Internal fan stop sensor**
 •Total lamp lit time for lamp life management (GLP/GMP compliance)
 •Capable of trace sample analysis using Micro Sampling: approximately 50 to 90 uL

Includes the following items

Optics

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	<p>Accessories:</p> <table> <tr> <th>Items</th><th>Quantity</th></tr> <tr> <td>Vernier Caliper</td><td>20</td></tr> <tr> <td>Micrometer Caliper</td><td>20</td></tr> <tr> <td>Set of weights</td><td>10</td></tr> <tr> <td>Force table</td><td>20</td></tr> <tr> <td>Meter stick</td><td>50</td></tr> <tr> <td>Spring balance</td><td>50</td></tr> <tr> <td>Dynamic cart</td><td>10</td></tr> <tr> <td>Friction less dynamic track set</td><td>5</td></tr> <tr> <td>Linear air track with blower and trolley set</td><td>5</td></tr> <tr> <td>Centripetal force apparatus set</td><td>5</td></tr> </table>	Items	Quantity	Vernier Caliper	20	Micrometer Caliper	20	Set of weights	10	Force table	20	Meter stick	50	Spring balance	50	Dynamic cart	10	Friction less dynamic track set	5	Linear air track with blower and trolley set	5	Centripetal force apparatus set	5
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<p>39. FORENSIC TABLES, CABINET FIXTURES & ACCESSORIES</p> <p>LAB CENTER TABLE Dim 2400mm L x 1000mm W x 850mm H</p> <p>DEMONSTRATION TABLE WITHOUT GAS OUTLET AND SINK Dim 1680mm L x 600mm W x 850mm H</p> <p>PLATFORM Dim 4800mm L x 1650mm W x 169mm Elevation</p> <p>LABORATORY STOOLS Dim 300mm dia x 550mm H</p>	<p>39. FORENSIC TABLES, CABINET FIXTURES & ACCESSORIES</p> <p>LAB CENTER TABLE 6 pcs Dim 2400mm L x 1000mm W x 850mm H</p> <p>DEMONSTRATION TABLE WITHOUT GAS OUTLET AND SINK 1 pc Dim 1680mm L x 600mm W x 850mm H</p> <p>PLATFORM 1 pc Dim 4800mm L x 1650mm W x 169mm Elevation</p> <p>LABORATORY STOOLS 40 pcs Dim 300mm dia x 550mm H</p> <p>LAB SIDE TABLES WITH 1 SINK 1 pc Dim 2440mm L x 650mm W x 850mm H</p> <p>Accessories:</p> <table> <tr> <th>Glasswares</th><th>Quantity (pcs)</th></tr> <tr> <td>Beaker (25, 50, 100, 250 ml capacity)</td><td>50 each</td></tr> <tr> <td>Erlenmeyer (125, 250 capacity)</td><td>50 each</td></tr> <tr> <td>Graduated Cylinder (10, 50, 100 ml)</td><td>20 each</td></tr> <tr> <td>Volumetric Flask Clear (25,50, 100, 250, 500, 1L)</td><td>10 each</td></tr> <tr> <td>Acid Burets 50ml</td><td>10</td></tr> <tr> <td>Base Burettes 50 ml</td><td>10</td></tr> <tr> <td>Burette stand with Burette Clamp</td><td>5</td></tr> <tr> <td>Wash bottles plastic</td><td>10</td></tr> <tr> <td>Deionized Water bottle</td><td>10</td></tr> </table>	Glasswares	Quantity (pcs)	Beaker (25, 50, 100, 250 ml capacity)	50 each	Erlenmeyer (125, 250 capacity)	50 each	Graduated Cylinder (10, 50, 100 ml)	20 each	Volumetric Flask Clear (25,50, 100, 250, 500, 1L)	10 each	Acid Burets 50ml	10	Base Burettes 50 ml	10	Burette stand with Burette Clamp	5	Wash bottles plastic	10	Deionized Water bottle	10		
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<p>40. RESEARCH LABORATORY TABLES, CABINET FIXTURES & ACCESSORIES</p> <p>LAB CENTER TABLE WITH END SINK Dim. 3600mm L x 1200mm W x 850mm H</p> <p>LAB SIDE TABLE WITH 2 SINKS (L-shape) Dim 3090mm (side A) x 7480mm (Side B) L x 650mm W x 850mm H</p> <p>FUMEHOOD (Model 1200) Dim. 1200mm x W 760mm D x 2400mm H</p> <p>DISPLAY CABINET Dim 1200mm L x 500mm W x 2100 H</p> <p>LAB TABLE WITH 1 SINK Dim. 2440mm L x 650mm W x 850mm H</p> <p>LAB SIDE TABLE Dim. 1680mm L x 650mm W x 850mmH</p> <p>LABORATORY STOOLS</p>	<p>40. RESEARCH LABORATORY TABLES, CABINET FIXTURES & ACCESSORIES</p> <p>LAB CENTER TABLE WITH END SINK 2units Dim. 3600mm L x 1200mm W x 850mm H</p> <p>LAB SIDE TABLE WITH 2 SINKS (L-shape) 1 unit Dim. 3090mm (Side A) x 7480mm (Side B) L x 650mm W x 850mm H</p> <p>DISPLAY CABINET 3 units Dim 1200mm L x 500mm W x 2100 H</p> <p>LAB SIDE TABLE 2 units Dim. 1680mm L x 650mm W x 850mmH</p> <p>LABORATORY STOOLS 30 units Dim 300mm dia x 550mm H</p> <p>EYEWASH COMBINED WITH SHOWER 1 unit</p> <p>Accessories:</p> <table> <tr> <th>Glasswares</th><th>Quantity (pcs)</th></tr> </table>	Glasswares	Quantity (pcs)																				
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Dim 300mm dia x 550mm H

EYEWASH COMBINED WITH SHOWER - KC4R

MATERIAL SPECIFICATIONS

LAB COUNTER TOP

Acid Resistant, heat resistant and stain resistant

One piece molded resin counter top bullnose edge finished
32mm thickness finish

LAB SINK BOWL

Acid Resistant, heat resistant and stain resistant

One piece molded resin sink (300mm deep type) and drain
board, seamless and rounded edges and corners with drain
fittings and polyvinyl p- trap

LAB PEG BOARD

Acrylic clear glass board 3/8" thick machine cut with
rounded corners and polished edge crystal finished. 19
pegs flanged type white ABS ½ OD x 8" L epoxy coated steel
brackets and stainless mounting bolts and nuts. Dim
600mm W x 450mm H

LAB FIXTURES (WATER AND GAS FITTINGS)

Solid brass construction, high gloss epoxy powder, resistant
to most chemicals. UV fading and heat. Water static
pressure max 10 bar. Detachable brass serrated nozzle,
splash controlled water filter attached. Ergonomic, high
grade PP Knob handle. With 3600 swing gooseneck spout

LAB FIXTURES (Electrical outlets)

Two gang box, removable face plate and duplex 3- wired
polarized grounding receptacle rated for 220VAC

LAB BASE CABINET

Main Carcass - epoxy type coated marine plywood
18mm thick for sidings and bottom plate and 6mm thick for
backing

Drawer face – epoxy coated marine plywood with grab
handle

Drawer box – epoxy coated marine plywood ½ " thick
sidings and ¼" thick bottom plate

Door Panels – epoxy coated marine plywood with grab
handle, concealed hinges swing type with self-closing
mechanism

Adjustable shelf – Epoxy coated marine plywood with
plated metal tox

Baseboard assembly – epoxy coated marine plywood base
board panel with adjustable leveler.

Beaker (25, 50, 100, 250 ml capacity) 50 each

Erlenmeyer (125, 250 capacity) 50 each

Graduated Cylinder (10, 50, 100 ml) 20 each

Volumetric Flask Clear (25,50, 100, 250, 500, 1L) 10 each

Reagent Bottles Clear (500ml) 10

Reagent Bottles Amber (500mm) 10

Acid Burets 50ml 10

Base Burettes 50 ml 10

Burette stand with Burette Clamp 5

Wash bottles plastic 10

Deionized Water bottle 10

Watch glass 50

Test tubes small 100

Test tubes medium 100

Test tube rack 40 and 60 holes 10 each

MATERIAL SPECIFICATIONS

LAB COUNTER TOP

Acid Resistant, heat resistant and stain resistant

One piece molded resin counter top bullnose edge finished
32mm thickness finish

LAB SINK BOWL

Acid Resistant, heat resistant and stain resistant

One piece molded resin sink (300mm deep type) and drain
board, seamless and rounded edges and corners with drain
fittings and polyvinyl p- trap

LAB PEG BOARD

Acrylic clear glass board 3/8" thick machine cut with
rounded corners and polished edge crystal finished. 19 pegs
flanged type white ABS ½ OD x 8" L epoxy coated steel
brackets and stainless mounting bolts and nuts. Dim 600mm
W x 450mm H

LAB FIXTURES (WATER AND GAS FITTINGS)

Solid brass construction, high gloss epoxy powder, resistant
to most chemicals. UV fading and heat. Water static pressure
max 10 bar. Detachable brass serrated nozzle, splash
controlled water filter attached. Ergonomic, high grade PP
Knob handle. With 3600 swing gooseneck spout

LAB FIXTURES (Electrical outlets)

Two gang box, removable face plate and duplex 3- wired
polarized grounding receptacle rated for 220VAC

LAB BASE CABINET

Main Carcass - epoxy type coated marine plywood 18mm
thick for sidings and bottom plate and 6mm thick for backing

Drawer face – epoxy coated marine plywood with grab
handle

Drawer box – epoxy coated marine plywood ½ " thick sidings
and ¼" thick bottom plate

Door Panels – epoxy coated marine plywood with grab
handle, concealed hinges swing type with self-closing
mechanism

Adjustable shelf – Epoxy coated marine plywood with plated
metal tox

Baseboard assembly – epoxy coated marine plywood base
board panel with adjustable leveler.

41. SPLIT TYPE AIRCON WALL MOUNTED 2HP

Cooling Capacity (Kj/hr) 2,080 – 20,000
Power supply (V-ph-Hz): 230V, 60Hz, 1Ph
Power Consumption (W) 145 – 1,530
Energy Efficiency Ratio (EER) (Kj/W-hr) 14.3 – 9.8
Rating Current (A) 1.3 – 7.0
Refrigerant type (g) R410A
Air flow (high/med/low) (m3/h) 500 / 390 / 300
Sound pressure level 40 / 35 / 31
Weight (kg) 9.0 / 12.0
Indoor Dimension (W*H*D) (mm) 812 x 192 x 300

Outdoor Dimension (W*H*D) (mm) 770 x 300 x 555
Recommended Cooling Area 21 to 28 sqm

41. SPLIT TYPE AIRCON WALL MOUNTED 2HP

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Power supply (V-ph-Hz): 230V, 60Hz, 1Ph
Power Consumption (W) 145 – 1,530
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Air flow (high/med/low) (m3/h) 500 / 390 / 300
Sound pressure level 40 / 35 / 31
Weight (kg) 9.0 / 12.0
Indoor Dimension (W*H*D) (mm) 812 x 192 x 300
Outdoor Dimension (W*H*D) (mm) 770 x 300 x 555

Recommended Cooling Area 21 to 28 sqm

For guidance and information of all concerned.


EPHRAIM L. CALOPE

BAC Chairperson

Date: February 5, 2020

LOT 1 – SCIENCE LABORATORY EQUIPMENT

₱10,546,000.00

1. ANALYTICAL BALANCE

Technical data:

Construction

- Casing material: Plastic
- Dimensions housing (WxDxH): 210 mm x 340 mm x 325 mm
- Gross weight: 9 kg
- Net weight: 6 kg
- Level indicator
- Material weighing plate: stainless steel
- Revolving screw feet
- Weighing space (WxDxH): 174 mm x 162 mm x 227 mm
- Weighing surface (d): 91

Display

- Display digit height: 1,400 cm

Power supply

- Input voltage: 110 V - 230 V AC

Functions

- Counting function
- Function to save totals
- Mixture function
- Net total function
- Percentage determination
- Standby function
- Weighing with tolerance range

Measuring system

- Adjustment options: External calibration
- Linearity: 0,300 mg
- Readout [d]: 0,100 mg
- Recommended adjusting weight: 200 g (E2)
- Reproducibility: 0,200 mg
- Stabilisation time: 3 s
- Weighing range [Max]: 220 g
- Weighing units: g ct mg

Environmental conditions

- Maximum humidity: 85 %
- Maximum operating temperature: 30 °C
- Minimum ambient temperature: 10 °C
- Minimum humidity: 20 %

Counting

- Counting resolution: 220000
- Minimum piece weight at piece counting: 1 mg
- Reference quantity: 5 10 20 50 100

2. PRESSURE COOKER

Material: Aluminum

Liquid Capacity (Qts.): at least 20L

Inside Diameter, Inches: 12.5

Inside Height, Inches: 14

The professional quality deluxe cast aluminum Pressure Cooker / Canner with the exclusive ""Metal-To-Metal"" seal

Does not use gaskets with ""Metal-To-Metal"" seal

Size: 38H x 42W x 38D cm

Weight: 10 kg

3. DEEP FREEZER

External size (W*D*H) mm	1350*735*880
Capacity	358L
Temp. Range	-10°C~-25°C
Temp. Accuracy	0.1°C(When the temperature is -10°C~-20°C),1°C(When the temperature is -20°C~-25°C)
Control System	Microprocessor control & LED display
Alarm	High or low temperature alarm, Temperature sensor failure alarm
Refrigeration type	Direct refrigeration
Refrigerant	R600a, CFC free
Condenser & Evaporator	Internal-mounted condenser and coil type evaporator
Construction	Structure
	Whole foaming, freon cyclopentane/isopentane high density polyurethane foam
	Internal Material
	Aluminum
	External Material
	Cold-rolled steel coated with anti-bacteria powder
Basket	1pc
Consumption	240W
PowerSupply	AC220V±10%,50HZ
PackageSize(W*D*H)	1420*780*945
GrossWeight	69kg

4. VISCOMETER with small adapter

Measured Range(mPa·s)	100 ~ 6,000,000
Rotation Speed(rpm)	0.1,0.3,0.6, 1.5, 3, 6, 12, 30, 60
Number of Spindle	4 types(L1~L4)
Measurement Accuracy	±3%(FS)(Newtonian Fluid)
Repeatability	±0.5%(FS)(Newtonian Fluid)
PowerSupply	AC220V±10%, 50/60HZ;
Standard accessory	
Optional accessory	RTD temperature probe
LOspindle is for Option	
Measured Range (mPa.s)	10~6000
Package Size	470*395*245
G.W.	8.5kg

5. HOTPLATE MAGNETIC STIRRER

Number of Stirring Positions	1
Top Size	4.62 x 11 x 15.37 inches
Power	230V, 50Hz
Amperage	4.9
Watts	1113
Stir Range	60 rpm
Temperature Range	5 to 550° C (41 to 1022°F)
Dimensions L x W x H	40.1 x 26.9 x 12.2 cm (approx.)

6. SCALE BALANCE/TOP LOADING BALANCE

Measuring system Adjustment options:

External calibration Linearity: 30 mg n/a: 20 g

Readout [d]: 10 mg

Recommended adjusting weight: 1 kg (F1)

Reproducibility: 10 mg

Resolution: 100000

Stabilisation time: 3 s

Warm up time: 2 h

Weighing range [Max]: 1 kg

Weighing system: Strain gauge

Weighing units: ct dwt g gn lb mo oz ozt tl (HK) tl (Tw) tol

Display Display digit height: 1,500 cm Counting

Counting resolution: 50000

Minimum piece weight at piece counting (Laboratory): 20 mg

Minimum piece weight at piece counting (Normal): 200 mg

Functions Counting function: yes

Percentage determination: yes

Suspended weighing: Hook Vibration-free weighing

(Animal weighing program): yes

7. LABORATORY REFRIGERATOR

External Size(W*D*H) mm	500*550*1300
Capacity	130L
Temp. Range	2°C~8°C
Temp. Accuracy	0.1°C
Control System	Microprocessor Control, Large Screen LED Display
Alarm	Audible and visual alarm for: High and low temperature, Power failure alarm, Sensor failure, Door ajar
Refrigeration Type	Forced air refrigeration system
Refrigerant	R600a, CFC Free
Condenser & Evaporator	Bundy tube condenser
Defrost	Auto defrost
Door	Glass door with heat reflection film
Structure	Unibody Design & Mono-assembly foaming (Rigid polyurethane insulation material)
Construction	Internal
	Material
	Embossed aluminum sheet
	External
	Material
	PCM

Shelves	4 pcs
Door	Glass door with heat reflection film
Consumption	136W
Power Supply	AC110/220V±10%, 50/60Hz
Standard Accessory	LED Lamp, shelves, door keys, USB port, probe access port(BPR-5V588 & BPR-5V1000)
Optional Accessory	Temperature recorder
Package Size(W*D*H)mm	590*595*1380
Gross weight	51kg

8. MULTIPARAMETER WATER QUALITY METER

Range (pH)	-2.000 to 20.000pH
Resolution (pH)	0.1, 0.01, 0.001pH
Accuracy (pH)	±0.002pH
Range (mV)	±2000.0mV
Range (Relative mV)	±2000.0mV
Range (ORP)	±2000.0mV
Resolution (mV)	0.1mV
Accuracy (mV)	±0.2 mV or ±0.05% of reading whichever is greater
Range (ISE)	0.0001 to 19900 with selectable units of ppm, Molar, mg/L, %, ppb or none
Resolution (ISE)	0.0001 minimum, 1 to 3 significant digits (user selectable)
Accuracy (ISE)	±0.2 mV or ±0.05% of reading whichever is greater
Advanced ISE Functions	Segmented (point-to-point) slope, non-linear selectable auto-blank, low concentration range stability
Isopotential Point	7.000pH
Range (Conductivity)	0.001 µS/cm to 3000 mS/cm
Resolution (Conductivity)	0.001 µS minimum, auto ranging up to 4 significant digits
Accuracy (Conductivity)	0.5% of reading ±1 digit > 3 µS; 0.5% of reading ±0.01 µS ≤ 3 µS

Range (TDS)	0.001 to 200.0 ppm
Resolution (TDS)	0.001 ppm minimum, auto ranging up to 4 significant digits
Accuracy (TDS)	0.5% of reading ± 1 digit
TDS Factor Range	Linear (0.02 to 9.99)
Range (Salinity)	0.06 to 80.00 psu, 0.05 to 42.00 ppt
Resolution (Salinity)	0.01 psu or 0.01 ppt minimum, auto ranging
Accuracy (Salinity)	0.5% of reading ± 1 digit
Salinity Measurement Modes	Practical salinity (psu) or natural sea water (ppt)
Range (Resistivity)	2 ohm to 100.0 meg-ohm
Resolution (Resistivity)	1 ohm or 0.1 meg-ohm, auto ranging
Accuracy (Resistivity)	0.5% of reading ± 1 digit
Cell Constant	0.001 to 199.9cm ⁻¹
Temperature Compensation	Linear, nLFn (non-linear ultra pure water), nLFu (non-linear ultra pure degassed water), EP (off with warning) or off
Temperature (Metric) Reference	5, 10, 15, 20, 25°C
Range (Polarographic DO)	0.00 to 90.00mg/L
Resolution (Polarographic DO)	0.01, 0.1mg/L
Accuracy (Polarographic DO)	± 0.2 mg/L or $\pm 2\%$ of reading, whichever is greater
Range (RDO)	0.00 to 50.00mg/L
Resolution (RDO)	0.01, 0.1mg/L
Accuracy (RDO)	± 0.1 mg/L up to 8mg/L, ± 0.2 mg/L from 8 to 20mg/L, $\pm 10\%$ of reading up to 50mg/L
Percent Saturation Range (Polarographic DO)	0.0 to 600.0 % saturation
Percent Saturation Range (RDO)	0.0 to 500.0 % saturation
Percent Saturation Relative Accuracy (Polarographic DO)	± 2 % saturation or $\pm 2\%$ of reading whichever is greater

Percent Saturation Relative Accuracy (RDO)	$\pm 2\%$ saturation $\leq 200\%$ saturation, $\pm 10\%$ saturation $> 200\%$ saturation
Percent Saturation Resolution (Polarographic DO)	0.1, 1 % saturation
Percent Saturation Resolution (RDO)	0.1, 1 % saturation
Barometric Pressure Correction	400 to 850mmHg, automatic using built-in barometer or manual entry
Pressure Range	400 to 850mmHg
Pressure Resolution	1mmHg
Accuracy (Barometer)	± 6 mmHg
Salinity Factor	0.0 to 45.0 ppt, automatic correction using conductivity reading or manual entry of sample salinity
Calibration	pH with calibration editing option, ion concentration (ISE) with calibration editing option, relative mV (RmV), ORP, conductivity with calibration editing option, dissolved oxygen and temperature
Calibration Points	1 point relative mV (RmV) mode, 1 point ORP mode
Calibration Points (ISE)	1 to 5
Calibration Points (Conductivity)	Up to 5
Calibration Modes	Water-saturated air, air-saturated water, manual (Winkler titration), zero point
Range (Temperature)	-5.0° to 105.0° C, 22.0° to 221.0° F
Resolution (Temperature)	0.1°C, 0.1°F
Accuracy (Temperature)	$\pm 0.1^\circ\text{C}$
Temperature Selection	Manual or automatic with ATC temperature probe
Temperature Probe Calibration	1 point temperature offset calibration
Channels	3
Display Type	Graphic LCD with backlight
Backlight Option	Yes, selectable

Keypad	Comprehensive with menu-specific function keys and dual purpose scroll/shortcut keys
Measurement Modes	pH, mV, relative mV (RmV) or ORP with temperature; conductivity, TDS, salinity or resistivity with temperature; dissolved oxygen as % saturation or mg/L with temperature and barometric pressure
Stability	Selectable fast, medium, slow or Smart Stability setting; Selectable off or Automatic Smart averaging setting
Data Management Details	Transfer single, range or all data points to printer or computer
Data Points	5000 with date and time stamp
Log Function Type	Automatic data logging with Auto-Read and Timed measure modes; manual data logging with Continuous measure mode
Memory	Non-volatile memory preserves data log, calibration log and meter settings
Alarm Output	High/low limit alarm, calibration due alarm
Languages	English, Spanish, French, Italian, German and Chinese; Portuguese and Korean available with software update
Inputs	BNC (pH or ORP electrode), pin-tip (reference electrode), 8 pin MiniDIN (conductivity sensor with built-in temperature or ATC temperature probe), 9 pin MiniDIN (RDO optical or polarographic DO sensor with built-in temperature)
Outputs	USB, RS232
Power Supply	4 AA batteries (included) or universal AC adapter (sold separately)
AC Adapter	Universal 50-60 Hz, 100-240 VAC power adapter (sold separately, Cat. No. 1010003)
Battery Life	800 hours
Battery Type	Four AA (included)
IP Rating	IP-67
Certifications/Compliance	CE, TUV 3-1, FCC Class A
Temperature (English) Operating	41° to 113°F (ambient)
Temperature (Metric) Operating	5° to 45° C (ambient)

Relative Humidity Range	5 to 85 %, non-condensing
Dimensions (L x W x H)	24cm x 10cm x 6.5cm (9.5 in. x 3.9 in. x 2.6 in.)
Weight (English)	1.2 lb.
Weight (Metric)	0.5kg
Calibration Points (pH)	1 to 5
Methods	10 per channel with password protection
Warranty	3 year meter warranty
Unit Size	Each

9. MICROSCOPE (TRINOCULAR)

Trinocular LED

Viewing Head: Seiddentop Bonocular Head, inclined at least 30-35 degree

Interpupillary Distance: at least 45- 75 mm

Eyepiece: High Quality, anti fungus field eyepiece

Objective: Automatic Objective 4 x 10 x 40 x 100x anti fungal coated

Nosepiece: Backward Quadruple Nosepiece

Stage: Double Layer Mechanical Stage of at least 132 x 142 mm/ 75 x 40mm

Focusing Coaxial Coarse and fine adjustment, moving range 24 mm

Fine Division: 0.004 mm

Condenser: 0 with Iris Diaphragm & Filter

Illumination: S-LED Brightness Adjustable, white light

Memory at least 32 gb

Inclusion: Camera, viewing panel/ monitor

Manual , Lock screw, Black cap (small) & (big), Allen

Wrench, Dust Cover, Objective Case, Rubber Eyepiece, Cord Holder, AC Cord, Thumb Screw

Moticam 3 plus (New) includes: Manual, Dust Cap, Focusable lens,

Eyepiece adapter, C-Ring, USB cable, calibration slide, macro tube, centering guide,
software,

Laptop Monitor

0.5X C mount camera Adapter for 1/2" Chip Sensors

10. pH meter

C Adapter	Universal 50-60 Hz, 100-240 VAC power adapter
Accuracy (pH)	±0.002pH
Alarm Output	High/low limit alarm, calibration due alarm
Battery Life	800 hr.
Calibration	pH with calibration editing option, relative mV (RmV), ORP and temperature
Certifications/Compliance	CE, TUV 3-1, FCC Class A
Data Management Details	Transfer single, range or all data points to printer or computer
Display Type	LCD (Graphic with Backlight)
Accuracy (mV)	±0.2 mV or ±0.05% of reading whichever is greater
Accuracy (Temperature)	±0.1°C
Backlight Option	Yes, selectable
Battery Type	4 x AA (sold separately)
Calibration Points	1 to 5
Channels	1
Data Points	2000 with Date and Time Stamp
Dimensions (L x W x H)	24cm x 18cm x 11cm (9.5 in. x 7.1 in. x 4.3 in.)

11. PIPETTE SET

UV Resistant with vertical stand

Single Channel,

Variable Volume: 0.2-2 ul, 0.5-10 ul, 2-20 ul, 10-100ul, 20- 200 ul, 100-100ul

12. HI TEMP DATA LOGGER with accessories

Memory	65,536 readings
Reading Rate	1 reading every second up to 1 reading every 24 hours
Baud Rate	125,000
Battery Life	1 year typical (1 minute reading rate at 25 °C/77 °F)
Material	316 Stainless Steel

13. WATER ACTIVITY METER

Measurement		Range	Resolution	Accuracy
PH		0 to 14 PH	0.01 PH	± (0.02 PH + 2 d)
mV		0 to 1999 mV	1 mV	± (0.5% + 2 d)
	μS	0 to 200.0 μS	0.1 μS	
Conductivity		0.2 to 2.000 mS	0.001 mS	± (2% F.S. + 1 d)
	mS	2 to 20.00 mS	0.01 mS	
		20 to 200.0 mS	0.1 mS	
		0 to 132 PPM	0.1 PPM	
		132 to 1,320 PPM	1 PPM	
Total Dissolved Solids		1,320 to 13,200 PPM	10 PPM	± (2% F.S. + 1 d)
		13,200 to 132,000 PPM	100 PPM	
Temperature		0 to 60°C	0.1°C	± 0.8°C
Salt		0 to 12% salt	0.01% salt	± 0.5% salt
Dissolved oxygen	mg/L	0 to 20.0 mg/L	0.1 mg/L	± 0.4 mg/L
	% O ₂	0 to 100.0% O ₂	0.1% O ₂	± 0.7% O ₂
Circuit		Custom one-chip of microprocessor LSI circuit		
Sampling time		1 second		
Data storage		SD memory card 1 to 16 GB		
Interface		RS232, USB PC interface		
Functions		Data hold, Record max./ min., Auto power off		
Power requirement		Battery AA x 6		
Dimensions/ Weight		177 x 68 x 45 mm/ 489 g		

14. COLORIMETER

Illuminating/Viewing Geometry	8/d
Measuring Aperture	Φ4mm
Detector	Silicon photoelectric diode
Color Space	CIE L*a*b*C*h* CIE L*a*b*
Color Difference Formula	ΔE^*_{ab} $\Delta L^*_{a^*b}$ $\Delta E^*_{C^*h}$
Light Source	D65
Light Source Device	LED blue light excitation
Display	TFT LCD
Errors Between Each Equipment	$\leq 0.80 \Delta E^*_{ab}$
Storage	100pcs standards, 5000pcs samples
Repeatability	Standard deviation within ΔE^*_{ab} 0.08 Average of 30 measurements of standard white plate
Lamp Life	3 years, more than 1 million time
Charging Time	8 hours-100% electricity
Measurement Times Before Recharging	3000 times in 8 hours
Ambient Temp./Humidity Range	-10~40°C, relative humidity 0~85% without condensation
Data Interface	USB
Optional Accessory	Miniature thermal printer, Powder test box
Power Supply	Rechargeable li-ion battery 3.7V@3200mAh
External Size(W*D*H)	205×67×80mm
Package Size(W*D*H)	450*230*380mm
Net Weight	
Gross Weight	2.5kg

15. VACUUM OVEN

Capacity	25L
Temp.Range	50~200°C
Temp. Fluctuation	±1°C
Vacuum Degree	<133 Pa

Vacuum Control

Shelves No.

1 pc

Power Consumption

500W

Power Supply

AC110V/220V±10%,50/60Hz

Internal Size (W*D*H)mm

300*300*280

External Size (W*D*H)mm

580*570*450

Packing Size (W*D*H)mm

740*620*640

Gross Weight (kg)

50

16. KJELDAHL ANALYZER (titration and distillation)

Water Consumption

1.5L/Min

Ambient Temperature

5~40°C

Ambient Humidity

80%

Measure Range

0.1mg~200mg

Analysis Time

5~10min

Recovery Ratio

≥99.5%

Sample Amount

Solid ≤ 5g;
Liquid ≤20ml

Burette Accuracy

2μL/ step

Reproducibility

±0.5%

Consumption

2000W

Power Supply

AC110/220 V±10%, 60/50Hz

Packing size(W*D*H)

455*391*730mm 38kg

Gross weight

Main body: 52.7kg
12.5kg

17. MUNSELL BOOK OF COLOR

18. DIFFERENTIAL SCANNING CALORIMETER

Temperature range (max.)

-170°C to 600°C

Max. cooling rate/max. heating rate

500 K/min

Measuring range/ weighing range (max.)

± 750 mW

Enthalpy accuracy	< 1%
TGA resolution	n/a
Indium Response Ratio (*)	> 100
Exchangeable sensors	n/a
Cooling options	<ul style="list-style-type: none"> - Air compressor: RT to 600°C - Compressed air: < 0°C to 600°C - Intracooler: -70°C to 600°C - Liquid nitrogen: -170°C to 700°C
Gas atmospheres	Inert, oxidizing, static and dynamic
Mass flow controller for purge/protective gas	3, integrated (0 to 250 ml/min)
Gas flow regulation	Software-controlled
Automatic Sample Changer (ASC)	Yes (optional)
Software	min. Proteus® 8
Proteus® software extensions included	<ul style="list-style-type: none"> - SmartMode - ExpertMode - AutoCalibration - (Advanced) BeFlat® - AutoEvaluation - Identify
Proteus® software extensions (optional)	<ul style="list-style-type: none"> - Temperature modulation - Specific heat capacity (c_p) - Proteus® Protect - Purity Determination
Advanced Software extensions (optional)	<ul style="list-style-type: none"> - Peak Separatioin - Kinetics Neo - Thermal Simulations
Size (W x H x D) – incl. ASC, without physical connections	350 mm x 445 mm x 560 mm

19. CONSISTOMETER

Determines consistency of almost any viscous substance by measuring the distance a material flows under its own weight during a given time interval

Specifications: L x W x H 35.6 x 8.9 x 14 cm (14x3 ½ x 5 ½)

20. ROTARY EVAPORATOR with accessories

Lift	Hand lift or Motor lift
Rotation speed range	10 - 280 rpm
Rotation speed indicator	3.5" LCD Display
Heating capacity	1,300 W
Overheat protection bath	cut-off at 5 °C over set temperature via separate PT 1000
Bath temperature setting	3.5" LCD Display
Heating bath temperature control	electronic / digital
Max. size evaporating flask	5 L
Condensing surface	1,400 cm ²
Condensing surface XL condenser	2,200 cm ²

21. SOLVENT FILTRATION ASSEMBLY WITH SINGLE PUMP

Funnel	Pore Size of Filter	Material Support Screen	Receiving Bottle	Membrane
500ml	10 µm	glass	2000ml	Φ60mm

Standard Accessories:

Solvent Filter system consists of solvent filter

Filter include:

- * Triangle fluid bottle
- * Core filter head
- * Filter bowl
- * Clamp
- * Dust cover
- * Rubber hose
- * Hose linker

Single Vacuum Pump

22. FORENSIC/BULLET MICROSCOPE



THE ULTIMATE ANSWER TO DIGITAL FORENSICS

24" ULTIMATE DESKTOP VIDEO MAGNIFIER

MAGNIFICATION UP TO 67x

The Ultimate Desktop Video Magnifier provides high-definition magnification with the sharpest image and the crispest text.

With its extra features and computer connectivity, the Ultimate Desktop Video magnifier is the choice for those looking for maximum productivity in work and school environments.

MAGNIFIES UP TO 67x

TEXTS, PRESCRIPTIONS, PHOTOS, DOCUMENTS, HANDWRITINGS, QUESTIONED DOCUMENTS, FINGERPRINT, FOOT PRINT, PALM RECORD CARDS, LATENT PRINTS, TRACE EVIDENCE, ETC.

FEATURES at a Glance:

FORENSIC/BULLET COMPARISON MICROSCOPE

SHARPEST, CLEAREST IMAGE WITH THE WIDEST FIELD OF VIEW

MAGNIFICATION up to 67x

Eye viewing is synchronous with CCD

Matching with high eye point large

view field wide angle eyepiece

Built In 3 mega pixels color digital

video recording system

FREEZE FRAME, FOCUS LOCK, FIND FEATURE AND POSITION LOCATOR

DIRECTED LED LIGHTING FOR A BRIGHT WORK SURFACE WITHOUT GLARE

8.25 INCHES OF WORKSPACE UNDER THE CAMERA

Main technical parameter:

30 HIGH-CONTRAST TEXT COLOR MODES PLUS TRUE COLOR AND ENHANCED FULL

Optic magnification range: 2.5x-120x

COLOR MODES: FULL BLACK, BLACK ON WHITE, WHITE ON BLACK, YELLOW ON BLUE, YELLOW ON

Objective view field diameter:

BLACK, PLUS ENHANCED FULL COLOR AND 27 ADDITIONAL, CONFIGURABLE COLOR MODES

Color video recording system: 3 mega

pixels color digital

video recording system

Match camera port

PC CONNECTIVITY

WORKING SPACE UNDER CAMERA 8.25 in. (21 cm.)

Illumination: Cold light source

adjustable

Objective stage: L-100mm x-y-z 50-50

-50mm

Objective: 0.6x 1.2x 2x 3.5x 5x (0.5x

2.0 x optional)

Working distance: 100mm

DIMENSIONS:

25 in. x 17.2 in. x 17.3 in. (63.5 cm. x 43.7 cm. x 43.9 cm.)

TOTAL UNIT WEIGHT: 24" MONITOR: 43.7 lbs. (19.8 kg.)

CONTROLS:

On/Off/Color Mode/Magnification/ Freeze frame/Brightness/Find/Focus Lock and Position Locator/

Marks/Lines select/Marks/lines position/Toggle PC and camera views

POWER SUPPLY: Single wall plug, 50-60 Hz, 100-240V AC

23. LABORATORY OVEN

Max temp (°C)	250
Min temp (°C)	Ambient +30
Temp uniformity (°C)	±5.0 @ 250°C
Heat-up time (mins)	23
Recovery time (mins)	3
Dimensions:	295 x 300 x 320
Internal H x W x D (mm)	
Dimensions:	440 x 590 x 465
External H x W x D (mm)	
Shelves fitted / accepted	43500
Shelf loading each / total (kg)	43758
Volume (litres)	28
Air changes / hr	65
Max power (W)	1000
Holding power (W)	342
Weight (kg)	24

24. FAT ANALYZER/EXTRACTOR

Temp. Range	RT +5°C~300°C
Measuring Range	0~100%
Temperature Accuracy	±1°C
Sample Weight	0.5~15g(generally 2~5g, depending on sample)
Capacity	6pcs/batch
Solvent Cup Volume	80ml
Solvent Recovery	≥80%
Consumption	1KW
Power Supply	AC 220V±10%, 50HZ
External Size(W*D*H)	650*320*715mm
Package Size(W*D*H)	735*410*880mm
Gross Weight	54.5kg

25. PORTABLE TOXICITY ANALYZER

Displays Up To 5 Gases

- LEL (PPM Optional)

- Oxygen
- Carbon Monoxide
- Hydrogen Sulfide
- Hydrogen Cyanide (Optional)

Sensor Specifications

Type	Resolution	Range	Accuracy	Response T90 Times
LEL	0.1%	0-100%	±10%	< 10% Sec
Oxygen	0.1%	25%	±2% or 10%**	< 10% Sec
Carbon Monoxide	1 ppm	0-999*	±5 ppm or 10%**	< 10% Sec
Hydrogen Sulfide	1 ppm	0-100 ppm	±2 ppm or 10%**	< 20% Sec
Hydrogen Cyanide	0.1 ppm	0-30	±1 ppm or 10%**	< 20% Sec
Nitrogen Dioxide	1 ppm	0-250	±2 ppm or 10%**	< 20% Sec
Sulfur Dioxide	0.1 ppm	0-20	±1 ppm or 10%**	< 20% Sec
Phosphine	0.1 ppm	0-10	±1 ppm or 10%**	< 20% Sec
Ethylene Oxide	0.1 ppm	0-10	±1 ppm or 10%**	< 20% Sec

26. LABORATORY INCUBATOR

Chamber	Stainless steel SUS#304
Temperature range	Ambient + 5°C to 75°C (Adjustable)
Control system	Microprocessor controlled system
Temperature control	PID
Temperature display	Digital LED
Sensor	PT-100
Standard Accessory	2 stainless steel shelves, interval is adjustable
Capacity available	16L
Timer	Mechanical, 180min + HOLD
Temperature setting/Display	Digital LED
Temperature uniformity	±2°C at 37°C
Temperature stability	±0.1°C at 37°C
Resolution	0.1°C
Over-heat alarm & shutout	Yes, 4°C above the set point
Air convection	Natural convection
Air vent	Yes
Quality standard	ISO, CE, GMP, FDA, Japan

27. VIDEO SPECTRAL COMPARATOR

Light sources*	incident	
	2 oblique	
	23 oblique for hologram examination	
	external oblique	
	coaxial	
White	bottom with adjustable intensity	254
		313
		365
		400
		365
Ultraviolet, nm	incident	700
		870
		950
	bottom (external)	
infrared, nm	incident	

	2 oblique	870
	bottom with adjustable intensity	870
	royal blue	450
	blue	470
high-intensity incident, nm	cyan	505
	green	530
	amber	590

* – all light sources are LEDs except ultraviolet 313, 254 nm

Specifications			
Video camera	video signal type and resolution		4 Mp, CMOS, USB (YUV)
	magnification, times:	optical	20
		digital	2
		on-screen	100*
	maximum field of view, mm		202×113
Video output parameter	maximum resolution, pixels		1920×1080 (Full HD)
	frame rate with maximum resolution, frame/sec		25
Connection interface			USB 3.0

* – all magnifications are approximate and based upon a 24 inch monitor

Camera filters:

- fixed with bandpass, nm — 420–1100
- automatically installed with threshold, nm:
 - IR low-pass — 700
 - IR high-pass — 600, 650, 700

RFID reader:

- standards — ISO 14443: A and B types of RFID tags
- PC/SC-protocol support
- data exchange rate, Kbaud — 106, 212, 424, 848
- reading an RFID tag regardless of its position in the document
- anticollision: reading an RFID tag according to the MRZ

Maximum document size, mm — 210×300 (A4)

OS — Microsoft Windows XP (SP3), Windows Vista, Windows 7, Windows 8, Windows 10

ICAO MRZ reading for ID-1, ID-2, ID-3 documents — Yes

RFID reader (ISO 14443) — Yes (built-in)

1D and 2D Barcodes — Yes

QR — Yes

Hidden image (IPI) — Yes

Dimensions (length×width×height), mm — 380×260×420

Weight, kg — 10,5

Power supply, V — 12 ± 2

Power consumption, W — 60

Optionally: power supply through vehicle on-board system 12 V

PC requirements

- Minimum configuration:
 - OS — Microsoft Windows 7 (Service Pack 1)
 - processor — Intel® Core™ i5 3.0 GHz
 - RAM, GB — 4
 - minimum free disk space, GB — 1
 - display resolution, pixels — 1600×1200
 - connection interface — USB 3.0
- Recommended configuration:
 - OS — Microsoft Windows 7 (Service Pack 1)
 - processor — Intel® Core™ i7 3.4 GHz
 - RAM, GB — 16
 - minimum free disk space, GB — 1
 - display resolution, pixels — 1920×1200 or higher
 - connection interface — USB 3.0

28. COMPUTERIZED POLYGRAPH WITH ACCESSORIES

Size: 7 3/8"W x 2 3/4"D x 1 3/8"H (20cm x 6.98cm x 3.49cm)

Weight: 0.52 lbs (235g)

Power Requirements: Receives all required power through USB connection

Transfer rate: Up to 360 samples per second/channel

Resolution: 24-bit analog to digital conversion

Temperature:

Operating: 50 to 95 degrees F (10 to 35 degrees C)

Storage: -40 to 115 degrees F (-40 to 46.1 degrees C)

Relative Humidity: 20% to 80% non-condensating

LX5000 Sensor Channels:

1 Cardio Channel: 0 to 140 mmHg

2 Pneumatic Pneumo Channels: upper and lower chest assembly with extended pressure range

2 EDA Channels: GSR: 4 μ A constant current, range of 10 k Ω to 2.3 M Ω ; GSC: range of 5 k Ω to 4.0 M Ω ; Isolation: 2 KV RMS

1 PPG Channel: PPG finger clip: 0.47 second time constant, 635 nm

3 Activity Sensor Channels: 0 to 4 V Analog Input

29. DIGITAL CENTRIFUGE

Dimension: 270 x 270x 250 mm

Timer: Mechanical , 60min

Power indicator : LED lamp

Rotor : A-0815 for 8pcs x 15ml (10ml) testing tubes

Speed : 4500rpm, Maximum

30. LABORATORY SHAKER

Shaking motion	Orbital / Linear
Motor type	Brushless DC motor
Max. load capacity(with platform) [kg]	7.5
Orbital diameter [mm]	5
Speed display	LED
Speed range [rpm]	30-500
Time display	LED
Time range	0-99H59Min
Operation type	Continuous / timed operation
Protection class acc. to DIN EN60529	IP21

Voltage [VAC]	100-240
Frequency [Hz]	50/60
Power [W]	40
Dimensions [W x D x H, mm]	450 x 400 x 105
Weight [kg]	13.5 kg

31. DIGITAL WATER BATH

Tank: Capacity 10 L (1204F49) and 20 L (1204F50);

Stainless steel reservoir, corrosion resistant;

Temperature Setting: Digital;

Temperature Readout: LED;

Temperature Control: PID;

Temperature Sensor: 100 ohm Platinum RTD;

Temperature Range: Ambient + 5° to 100° C;

Stability: +/- 0.2; Power: 110V (220V available);

Accessories: Lid (flat or gabled), test tube rack

32. DESSICATOR WITH SILICA GEL

Description	Internal Volume	No of shelves	Height	1
Clear	1.2 cu. ft.	2	31.4cm (12.4")	

33. MOISTURE ANALYZER

IR moisture analyzer, Halogen Lamp Moisture Meter

100g

Back Light LCD

AC(110~240V) 50Hz/60Hz

3.3kg

34. MICROWAVE OVEN

33 Liters Inverter Microwave Oven

6 Quick & Easy Menus

Reheat Options • 1,200 W

Other Features

Door Type Push Door Button

Features Stylish glass door

320mm Carousel turntable

Australian developed menus

9 Sensor cook menus

5 Sensor reheat menus

6 Quick and easy meal menus

4 Melt/soften menus

2 Express defrost menus

5 Easy defrost menus

11 Power levels

Stylish stainless steel fascia

More/less setting

Instant cook/start

Child lock

Demonstration mode

LCD display

Alarm function

LOT 2 – SOIL ANALYSIS EQUIPMENT**- ₱3,600,000.00****1. UV VIS SPECTROPHOTOMETER**

<u>QTY</u>	<u>ITEM / DESCRIPTION</u>
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1 unit	Double-beam UV-VIS Spectrophotometer and accessories
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Specifications:

Wavelength range	190 to 1,100 nm
Spectral bandwidth	1.00 \pm 0.20 nm
Wavelength accuracy	\pm 0.1 nm (656.1 nm: D2), \pm 0.3 nm (for entire wavelength range)
Wavelength repeatability	\pm 0.1 nm
Wavelength slew rate	14,500 nm/min
Wavelength scanning speed (normal scan):	3,000 to 2 nm/min
Wavelength scanning speed (survey scan):	29,000 nm/min
Light source switching	Automatic switching linked to the wavelength. The switching Wavelength can be set freely in the range of 295 to 364 nm.
Stray light	Less than 0.5 % (198 nm, KCl) Less than 0.02 % (220 nm, NaI) Less than 0.02 % (340 nm, NaNO ₂)
Photometric system	Double beam optics
Photometric range Absorbance:	-4 to 4 Abs, Transmittance: 0 to 400 %
Photometric accuracy	\pm 0.002 Abs (0.5 Abs) \pm 0.004 Abs (1 Abs) \pm 0.006 Abs (2 Abs) Measured using an NIST930D/NIST1930 or equivalent filter.
Photometric repeatability	\pm 0.0002 Abs (0.5 Abs) \pm 0.0002 Abs (1 Abs) \pm 0.0010 Abs (2 Abs)
Noise	Less than 0.00005 Abs (700 nm)
Baseline flatness	\pm 0.0006 Abs (190 to 1,100 nm) One hour after light source turned ON
Baseline stability	Within 0.0003 Abs/h (700 nm) One hour after light source turned ON
Light source	20 W halogen lamp, deuterium lamp Built-in automatic light source position adjustment mechanism

Monochromator	Czerny-Turner monochromator Blazed, holographic gratings used
Detector	Silicon photodiode
Sample compartment Internal dimensions:	W110 mm D250 mm H115 mm
	Distance between light beams: 100 mm
Power requirements	100/120/220/230/240 V AC, 50/60 Hz, 140 VA
Environmental requirements	15 to 35 °C
	30 to 80 % (no condensation, 70 % max. at 30 °C or higher)
Dimensions	W450 mm D501 mm H244 mm
Weight	16.6 kg
Output device	USB flash drive (option)
	Data files saved in text format or UVPC format
	UVPC-format files can be read directly by UVProbe.
Computer compatibility	UVProbe software (Ver.2.70) provided as standard
	External control is possible via USB.
Includes the following accessories:	
2 pieces	Square cell Quartz Cuvette, 10mm
1 set	Computer
1 set	printer
2 units	1KVA UPS

2. ATOMIC ABSORTION SPECTROPHOTOMETER

<u>QTY</u>	<u>ITEM/ DESCRIPTION</u>
1 unit	Atomic Absorption Spectrophotometer
	<i>Optics</i>
	Wavelength range: 185.0 to 900.0 nm
	Monochromator: Aberration-corrected Czerny-Turner mounting
	No. of grating grooves: 1800lines/mm
	Focal length: 298mm
	Bandwidth: 0.2, 0.7, 1.3, 2.0L nm (4 step automatic switching)
	Detector: Photomultiplier tube
	Optics: Optical double-beam
	Background correction: BGC-SR (High-speed self-reversal method) (185.0 to 900.0 nm)
	BGC-D2 (D ₂ lamp method) (185.0 to 430.0 nm)
	Number of HC lamps: 6-lamp turret, 2 lamps simultaneously lit (1 for measurement, 1 warming up for the next measurement)

Lamp mode: EMISSION, NON-BGC, BGC-SR, and BGC-D2
Software requirements: Microsoft Windows
Parameter settings: Wizard method
Measurement mode: Flame continuous method (standard), flame micro sampling method (option), furnace method (option), flame emission method
Baseline correction: Automatic correction of the baseline drift through offset processing in peak height/ peak area mode
Sensitivity correction: Automatic calibration curve correction with sensitivity monitoring
Electronic records: FDA 21 CFR 11 compliant
Power requirements: 230VA, 50/60Hz
Dimensions & Weight: W 700 x D 588 x H 714mm, 72kg (not including the protruding parts)

Burner unit

Type: Air-cooled pre-mix type
Burner head: Made of titanium, 10cm slot (5cm slot for N₂O-C₂H₂ flame available as an option)
Nebulizer: Pt-Ir capillary. PTFE orifice. Ceramic impact bead (capable of handling hydrofluoric acid)
Chamber: Engineering plastics
Positioning control: Automatic search for the optimal burner height, automatic adjustment of vertical position, manual adjustment of back and forth position

Gas control unit

Flow rate control: Automatic fuel gas flow rate setting (0.1L/min step). Auto search of optimum gas flow rate

Safety measures:

- Automatic gas leak check.
- Automatic Air-N₂O switching as C₂H₂ flow rate increases.
- Flame monitor.
- Prevention of wrong burner head use.
- Gas pressure monitor.
- Drain tank level monitor.
- Automatic flame extinction upon power outage or sudden power interruption.
- Automatic flame extinction via flame vibration sensor. Internal fan stop sensor
- Total lamp lit time for lamp life management (GLP/GMP compliance)

- Capable of trace sample analysis using Micro Sampling: approximately 50 to 90 uL

Includes the following items

1 unit	Branded Computer & Printer
6 Pcs	Lamps (Pd, Ni, Cu, Zn, Fe, Cd)
1 unit	Fumehood
1 Pc	Festo Filter
1 Pc	Regulator
1 unit	Compressor
6 bots	Standards
10 Pcs	Volumetric flask (100 mL)
10 Pcs	Volumetric Flask (50 mL)
1 Pc	Pipette (10-100 uL)
1 unit	3KVA UPS

LOT 3 – FURNITURE & FIXTURES and ACCESSORIES - ₱10,300,000.00

1. CHEMISTRY LABORATORY TABLES, CABINET FIXTURES & ACCESSORIES PER SET

DESCRIPTION	Total no. of Units
CHEMISTRY TABLE	6
Dim 2400mm L x 800mm W x 850mm H	
DEMONSTRATION TABLE WITH GAS OUTLET	1
Dim 1680mm L x 600 mm W x 850mm H	
PLATFORM	1
Dim 4800mm L x 1650mm W x 160mm Elevation	
LABORATORY STOOLS	50
Dim 300mm dia x 550mm H	
EYEWASH COMBINED WITH SHOWER	1
FUMEHOOD	1
Dim 1000mm W x 760mm D x 2400mm H	
LAB SIDE TABLES WITH 6 SINKS	1
Dim 4880mm L x 650mm W x 850mm H	

Accessories:

Glasswares	Quantity (pcs)
Beaker (25, 50, 100, 250 ml capacity)	50 each
Erlenmeyer (125, 250 capacity)	50 each
Graduated Cylinder (10, 50, 100 ml)	20 each
Volumetric Flask Clear (25,50, 100, 250, 500, 1L)	10 each
Reagent Bottles Clear (500ml)	10
Reagent Bottles Amber (500mml)	10
Acid Burets 50ml	10
Base Burettes 50 ml	10
Burette stand with Burette Clamp	5
Wash bottles plastic	10
Deionized Water bottle	10
Watch glass	50
Test tubes small	100
Test tubes medium	100
Test tube rack 40 and 60 holes	10 each

2. PHYSICS LABORATORY TABLES, CABINET FIXTURES & ACCESSORIES

PHYSICS TABLE		6
Dim 2400mm L x 1000mm W x 850mm H		
DEMONSTRATION TABLE WITHOUT GAS OUTLET AND SINK		1
Dim 1680mm L x 600mm W x 850mm H		
PLATFORM		1
Dim 4800mm L x 1650mm W x 169mm Elevation		
LABORATORY STOOLS		40
Dim 300mm dia x 550mm H		
DISPLAY CABINET		2
Dim 1200mm L x 500mm W x 2100 H		
LAB SIDE TABLES WITH 1 SINK		1
Dim 2440mm L x 650mm W x 850mm H		

Accessories:

Items	Quantity unit
Vernier Caliper	20
Micrometer Caliper	20
Set of weights	10
Force table	20
Meter stick	50
Spring balance	50
Dynamic cart	10
Friction less dynamic track set	5
Linear air track with blower and trolley set	5
Centripetal force apparatus set	5

3. FORENSIC TABLES, CABINET FIXTURES & ACCESSORIES

LAB CENTER TABLE		6
Dim 2400mm L x 1000mm W x 850mm H		
DEMONSTRATION TABLE WITHOUT GAS OUTLET AND SINK		1
Dim 1680mm L x 600mm W x 850mm H		
PLATFORM		1
Dim 4800mm L x 1650mm W x 169mm Elevation		
LABORATORY STOOLS		40
Dim 300mm dia x 550mm H		
LAB SIDE TABLES WITH 1 SINK		1
Dim 2440mm L x 650mm W x 850mm H		

Accessories:

Glasswares	Quantity (pcs)
Beaker (25, 50, 100, 250 ml capacity)	50 each
Erlenmeyer (125, 250 capacity)	50 each
Graduated Cylinder (10, 50, 100 ml)	20 each
Volumetric Flask Clear (25,50, 100, 250, 500, 1L)	10 each
Acid Burets 50ml	10
Base Burettes 50 ml	10
Burette stand with Burette Clamp	5
Wash bottles plastic	10
Deionized Water bottle	10

4. RESEARCH LABORATORY TABLES, CABINET FIXTURES & ACCESSORIES

LAB CENTER TABLE WITH END SINK		2
Dim. 3600mm L x 1200mm W x 850mm H		
LAB SIDE TABLE WITH 2 SINKS (L-shape)		1
Dim. 3090mm (Side A) x 7480mm (Side B) L x 650mm W x 850mm H		
DISPLAY CABINET		3
Dim 1200mm L x 500mm W x 2100 H		
LAB SIDE TABLE		2
Dim. 1680mm L x 650mm W x 850mmH		
LABORATORY STOOLS		30

Dim 300mm dia x 550mm H		
EYEWASH COMBINED WITH SHOWER		1

Accessories:

Glasswares	Quantity (pcs)
Beaker (25, 50, 100, 250 ml capacity)	50 each
Erlenmeyer (125, 250 capacity)	50 each
Graduated Cylinder (10, 50, 100 ml)	20 each
Volumetric Flask Clear (25,50, 100, 250, 500, 1L)	10 each
Reagent Bottles Clear (500ml)	10
Reagent Bottles Amber (500mml)	10
Acid Burets 50ml	10
Base Burettes 50 ml	10
Burette stand with Burette Clamp	5
Wash bottles plastic	10
Deionized Water bottle	10
Watch glass	50
Test tubes small	100
Test tubes medium	100
Test tube rack 40 and 60 holes	10 each

MATERIAL SPECIFICATIONS

LAB COUNTER TOP

Acid Resistant, heat resistant and stain resistant

One piece molded resin counter top bullnose edge finished

32mm thickness finish

LAB SINK BOWL

Acid Resistant, heat resistant and stain resistant

One piece molded resin sink (300mm deep type) and drain board, seamless and rounded edges and corners with drain fittings and polyvinyl p- trap

LAB PEG BOARD

Acrylic clear glass board 3/8" thick machine cut with rounded corners and polished edge crystal finished. 19 pegs flanged type white ABS ½ OD x 8" L epoxy coated steel brackets and stainless mounting bolts and nuts. Dim 600mm W x 450mm H

LAB FIXTURES (WATER AND GAS FITTINGS)

Solid brass construction, high gloss epoxy powder, resistant to most chemicals. UV fading and heat. Water static pressure max 10 bar. Detachable brass serrated nozzle, splash controlled water filter attached. Ergonomic, high grade PP Knob handle. With 360° swing gooseneck spout

LAB FIXTURES (Electrical outlets)

Two gang box, removable face plate and duplex 3- wired polarized grounding receptacle rated for 220VAC

LAB BASE CABINET

Main Carcass - epoxy type coated marine plywood 18mm thick for sidings and bottom plate and 6mm thick for backing

Drawer face – epoxy coated marine plywood with grab handle

Drawer box – epoxy coated marine plywood ½ “ thick sidings and ¼” thick bottom plate

Door Panels – epoxy coated marine plywood with grab handle, concealed hinges swing type with self-closing mechanism

Adjustable shelf – Epoxy coated marine plywood with plated metal tox

Baseboard assembly – epoxy coated marine plywood base board panel with adjustable leveler.

LOT 4 – ICT & OFFICE EQUIPMENT**- ₱1,354,000.00****1. SPLIT TYPE AIRCON WALL MOUNTED 2HP**

Cooling Capacity (Kj/hr)	2,080 – 20,000
Power supply (V-ph-Hz):	230V, 60Hz, 1Ph
Power Consumption (W)	145 – 1,530
Energy Efficiency Ratio (EER) (Kj/W-hr)	14.3 – 9.8
Rating Current (A)	1.3 – 7.0
Refrigerant type (g)	R410A
Air flow (high/med/low) (m3/h)	500 / 390 / 300
Sound pressure level	40 / 35 / 31
Weight (kg)	9.0 / 12.0
Indoor Dimension (W*H*D) (mm)	812 x 192 x 300
Outdoor Dimension (W*H*D) (mm)	770 x 300 x 555
Recommended Cooling Area	21 to 28 sqm

2. SPLIT TYPE FLOOR MOUNTED 3TR**WALL MOUNTED AIR CONDITION 4HP/3TR****Cooling Capacity**

Power Supply 230 V / 1 Ph / 60 Hz

Refrigerant R22

PERFORMANCE DATA

Cooling Capacity 37,980 kJ/Hr

Power Input 4,180 Watts

Energy Efficiency Ratio (EER) 9.1 kJ/W-Hr

Sound Level @ Low 54 dBA

PHYSICAL DATA**Indoor Unit**

Net Dimension (W x H x D) 508 x 1,806 x 288 mm

Packaging Dimension (W x H x D) 590 x 1,910 x 380 mm

Unit Weight (Net/Gross) 42.5 / 46 kg

Outdoor Unit

Net Dimension (W x H x D) 936 x 722 x 336 mm

Packaging Dimension (W x H x D) 1,074 x 765 x 415 mm

Unit Weight (Net/Gross) 62 / 64.5 Kg

Compressor Type Rotary

Refrigerant Piping Connection Flare

3. NOTE BOOK COMPUTER

Operating System : Windows 10 Home

Processor : Intel Core i7-8565U Processor (8M Cache, up to 4.6 GHz)

Graphics : 2GB NVIDIA GeForce MX250

Display : 14-inch (16:9) LED-backlit FHD (1920x1080) 60Hz Anti-Glare Panel

Memory : 4GB DDR4 2400

Keyboard : Illuminated chiclet keyboard

Storage : 1TB HDD + 500GB SSD

Connectivity : Integrated Wi-Fi 5 (802.11 ac (2x2))

Ports : 1 x COMBO audio jack

1 x Type-A USB2.0

1 x Type-A USB 3.0 (USB 3.1 Gen 1)

1 x Type-C USB 3.0 (USB 3.1 Gen 1 / Gen 2)

1 x HDMI

Battery : 2 -Cell 37 Wh Battery

Webcam : HDWebcam

4. DESKTOP COMPUTER

Processor : Intel Core i7-7700 (8MB Cache, Quadcore Processor 3.6 GHZ MaxFrequency 4.20 Ghz)

Memory : 8GB DDR4 2133 MHz

Storage : 1TB 3.5-inch 7200 RPM + 500 GB SSD

Graphics : NVIDIA GeForce GT 1050, 2 GDDR5 (supporting: DVI-D, HDMI, DP)

Optical Drive : 8X Super-Multi drive, 9.0 mm slim, tray-load

Connectivity : 802.11ac/a/b/g/n wireless Gigabit LAN and Bluetooth

Front/Side Ports : Card reader: Yes

Audio jack(s): 2

USB 3.0 port(s): 2

Rear I/O Ports : HDMI port(s): 2 (out)

LAN port(s): 1

Audio jack(s): 3

USB 2.0 port(s): 4

USB 3.0 port(s): 1"

Number of PCIe x16 slot(s): 1

Number of PCIe x1 slot(s): 1

M.2 slot (for SSD): 1

M.2 slot (for WLAN): 1

Power Supply : 300W CR

Accessories : Wired Keyboard and mouse
Display port : DVI to D-Sub
Monitor : Acer R231 bmid 23" Monitor
VGA + DVI + HDMI
Operating System : Win 10 SL 64 Bit
Warranty : 1 Years Part - 1 Years Labor Only (1-1-0)
with UPS

5. LCD PROJECTOR

Front/Side Ports : Card reader: Yes
Audio jack(s): 2
USB 3.0 port(s): 2
Rear I/O Ports : HDMI port(s): 2 (out)
LAN port(s): 1
Audio jack(s): 3
USB 2.0 port(s): 4
USB 3.0 port(s): 1"
Number of PCIe x16 slot(s): 1
Number of PCIe x1 slot(s): 1
M.2 slot (for SSD): 1
M.2 slot (for WLAN): 1
Power Supply : 300W CR
Accessories : Wired Keyboard and mouse
Display port : DVI to D-Sub
Monitor : Acer R231 bmid 23" Monitor
VGA + DVI + HDMI
Operating System : Win 10 SL 64 Bit
Warranty : 1 Years Part - 1 Years Labor Only (1-1-0)

6. 3D PRINTER WITH ACCESSORIES

3D printer 12"
Dimensions: 193X193X23.2 in
Build Volume: 11.8X11.8X11.8in
Technology: LPD
Layer Resolution: 140-
300microns
Wall Thickness: 800microns
Material Diameter: 1.75mm
Nozzle Diameter: 0.40mm
Extruder Max Temp.: 380°C
Heated Platform
Connectivity: SD Card

7. ALL IN ONE TANK SYSTEM PRINTER

Printing Technology:

Print Method:

Precision Core Print Head

Maximum Print Resolution:

4,800 x 1,200 dpi

Minimum Ink Droplet Volume:

2.8pl

Printer Language:

ESC/P-R

Automatic Duplex Printing:

Yes, up to A3 size

Control Panel:

4.3" TFT Colour LCD

Print Speed:

Draft, A4 (Black / Colour):

Up to 32 ppm / 20 ppm

ISO 24734, A4 Simplex (Black / Colour):

Up to 18 ipm / 10 ipm

ISO 24734, A4 Duplex (Black / Colour):

Up to 8.7 ipm / 6.0 ipm

ISO 24734.2, A3 Simplex (Black / Colour):

Up to 10 ipm / 6.0 ipm

ISO 24734.2, A3 Duplex (Black / Colour):

Up to 6.0 ipm / 3.7 ipm

Photo Default:

Approx. 42 sec per photo (with Border)

Copy Function:

Copy Resolution:

600 x 600 dpi

Max Copies:

999 copies

Reduction / Enlargement:

25 - 400%, Auto Fit Function

Maximum Copy Size:

A3