



Republic of the Philippines
TARLAC STATE UNIVERSITY
BIDS AND AWARDS COMMITTEE
GOODS AND SERVICES
Romulo Blvd., San Vicente, Tarlac City
Tel. No.: (045) 982-4630
Website: www.tsu.edu.ph

July 1, 2025

BID BULLETIN NO. 1

SUPPLY AND DELIVERY OF LABORATORY EQUIPMENT
(APP 2025-1ST QUARTER)

This Bid Bulletin no. 1 is issued to clarify items and shall be an integral part of the Bidding Documents.

Please be informed of the modification in the bidding documents.

POSTED TO PHILGEPS	MODIFICATION
<p>Section VI. Schedule of Requirements</p> <p>The delivery date for the Goods covered by the Contract shall be within sixty (60) calendar days upon receipt of the Notice to Proceed.</p>	<p>Section VI. Schedule of Requirements</p> <p>The delivery date for the Goods covered by the Contract shall be within ninety (90) calendar days upon receipt of the Notice to Proceed.</p>



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Item No.	Description	Item No.	Description
1.	96 MICROPLATE ABSORBANCE READER, "96 MICROPLATE ABSORBANCE READER - Control and Display: 7 inch touch screen (800 x 480 pixels); Light Source: Quartz-halogen lamp 6V/10W; Wavelength Range: 340-750nm (405, 450, 492 and 630 nm filters included); Half-Bandwidth of filter : 3~9nm; Readout Range: 0~4.000 Abs; Linearity (405nm): 0~2.000 Abs <+1%, 0~4.000 Abs <+2%; Precision: CV</= 0.2% (0-3) Abs, CV</= 01.0% (3-4) Abs; Test Speed: <6 sec. for 96 well plate; IncubatoR: No; Shaking: 3 modes: slow, medium, fast; User InterfacE: Integrated software, touch screen control; Storage: 200 programs, 100,000 test records; Ports: USB ports for PC, printer, mouse and flash drive; Dimensions: 295 x 440 x 225 mm (11.6 x 17 x 8.75"); Weight:10 kg; with complete filters"Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.	1.	96 MICROPLATE ABSORBANCE READER, "96 MICROPLATE ABSORBANCE READER - Control and Display: 7 inch touch screen (800 x 480 pixels); Light Source: Quartz-halogen lamp 6V/10W; Wavelength Range: 340-750nm (405, 450, 492 and 630 nm filters included); Half-Bandwidth of filter : 3~9nm; Readout Range: 0~4.000 Abs; Linearity (405nm): 0~2.000 Abs <+1%, 0~4.000 Abs <+2%; Precision: CV</= 0.2% (0-3) Abs, CV</= 01.0% (3-4) Abs; Test Speed: <6 sec. for 96 well plate; IncubatoR: No; Shaking: 3 modes: slow, medium, fast; User InterfacE: Integrated software, touch screen control; Storage: 200 programs, 100,000 test records; Ports: USB ports for PC, printer, mouse and flash drive; Maximum Dimensions: 12" x 18" x 10" ; Weight:10 kg; with complete filters"Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.
4.	BIOSAFETY CABINET, NSF Certified Class II Specifications: External Dimensions (mm): 1354x764x1260; Frontal Opening Height (mm): 182; Laminar Flow Speed (m/s): 0.35; Laminar Flow Rate (m3/h): 882; Front Entry Speed (m/s): 0.55; Extraction Flow Rate (m3/h) :402 Sound (dBA):	4.	BIOSAFETY CABINET, NSF Certified Class II or equivalent Specifications: Maximum External Dimensions (mm): 1500x800x2000 ; Frontal Opening Height (mm): 182; Laminar Flow Speed (m/s): 0.35; Laminar Flow Rate (m3/h): 882; Front Entry Speed (m/s): 0.55; Extraction Flow



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<p><58; Lighting (lux): >1.000; Working Consumption (kw): 0.125; Weight (kg): 200; Filters HEPA H14 filters according to EN 1822; Air Quality ISO 4 in accordance with ISO CD 14644-1; EC fans installed- reducing energy consumption; LED Lighting-better more uniform illuminations and reducing energy consumption; Reinforced mechanism for window opening-Gas spring installed; UV light installed in standard configuration, with timer to be to be programable; Compact design-overall height 1260 mm; 10° sloped front window for better working position; V-shaped air slits; 304L stainless Steel chamber with rounded angles; Hardened security glass sides with UV protection; Hermetically closable sealing around front window; Security anti-reflective front window with UV protection; Microprocessor control; Control panel slightly turned to the user to maximize visibility and accessibility; Control panel with international color code indicating cabinet status-acoustic and visual alarms; Main screen in control panel showing laminar Flow speed and filter clogging level; Eco mode function; Easy access to all maintenance areas via front side of the cabinet.; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker, Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>	<p>Rate (m3/h) :402 Sound (dBA): <60; Lighting (lux): >1.000; Working Consumption (kw): 0.125; Weight (kg): 200; Filters HEPA H14 filters according to EN 1822; Air Quality ISO 4 in accordance with ISO CD 14644-1; EC fans installed- reducing energy consumption; LED Lighting-better more uniform illuminations and reducing energy consumption; Reinforced mechanism for window opening-Gas spring installed; UV light installed in standard configuration, with timer to be to be programable; Compact design-overall height 1260 mm; 10° sloped front window for better working position; V-shaped air slits; 304L stainless Steel chamber with rounded angles; Hardened security glass sides with UV protection; Hermetically closable sealing around front window; Security anti-reflective front window with UV protection; Microprocessor control; Control panel slightly turned to the user to maximize visibility and accessibility; Control panel with international color code indicating cabinet status-acoustic and visual alarms; Main screen in control panel showing laminar Flow speed and filter clogging level; Eco mode function; Easy access to all maintenance areas via front side of the cabinet.; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker, Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
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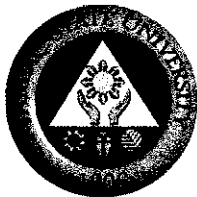
<p>8. DUCTLESS FILTERING FUME HOOD, Meets AFNOR NF X 15 211/ANSI Z9.5-2012 filtration efficiency standard (class 1 and 2); two carbon filtration for gases and vapours (AS: For organic vapours BE+:Polyvalent for acid + organic vapours F:For formaldehyde vapours K:For ammonia vapours); Sensors that detect filter breakthrough of solvents, acids or formaldehyde - Safety back up filter in case of main filter saturation - Continuous monitoring of Air face velocity; No ductwork needed to allows users to move the hood anywhere; Air Flow: 440 m³/h-259 CFM; Air Face Velocity:0.4 to 0.6 m/s-79 fpm to 118 fpm; Voltage/Frequency: 220V/50-60 Hz; Power consumption: 105 W; Structure: Corrosion resistant electro-galvanized steel coated with anti-acid polymer; Side and front panels: Chemical resistant acrylic Filtration module Polypropylene; Communication interface: Simple communication by audible and light pulses: air face velocity, automatic alarm to detect a filtration fault, ventilation settings, fan failure alarm; Filtration technology: 2 columns that can be configured to handle liquids, powders, or both Carbon filtration for gases and vapors; Mobile APP for remote control to monitor the hood and deliver safety alerts immediately to your devices (mobile, tablet and PC); Internal lighting: LED lighting > 650 Lux; Anemometer: Air face velocity alarm; Accessories: Work Surfaces: Tempered; Molecode: Detection sensor for: Type S, for solvents/Type A, for acids / Type F, for formaldehyde Benches: Mobile rolling cart; Particulate Pre-filter: Protects the main filter(s) from dust; Transparent Back Panel: Clear acrylic panel for easy viewing;</p>	<p>8. DUCTLESS FILTERING FUME HOOD, Meets AFNOR NF X 15 211/ANSI Z9.5-2012 filtration efficiency standard (class 1 and 2); two carbon filtration for gases and vapours (AS: For organic vapours BE+:Polyvalent for acid + organic vapours F:For formaldehyde vapours K:For ammonia vapours); Sensors that detect filter breakthrough of solvents, acids or formaldehyde - Safety back up filter in case of main filter saturation - Continuous monitoring of Air face velocity; No ductwork needed to allows users to move the hood anywhere; Air Flow: 440 m³/h-259 CFM; Air Face Velocity:0.4 to 0.6 m/s-79 fpm to 118 fpm; Voltage/Frequency: 220V/50-60 Hz; Power consumption: 105 W; Maximum External Dimensions (mm): 1500x800x2000 Structure: Corrosion resistant electro-galvanized steel coated with anti-acid polymer; Side and front panels: Chemical resistant acrylic Filtration module Polypropylene; Communication interface: Simple communication by audible and light pulses: air face velocity, automatic alarm to detect a filtration fault, ventilation settings, fan failure alarm; Filtration technology: 2 columns that can be configured to handle liquids, powders, or both Carbon filtration for gases and vapors; Mobile APP for remote control to monitor the hood and deliver safety alerts immediately to your devices (mobile, tablet and PC); Internal lighting: LED lighting > 650 Lux; Anemometer: Air face velocity alarm; Accessories: Work Surfaces: Tempered; Molecode: Detection sensor for: Type S, for solvents/Type A, for acids / Type F, for formaldehyde Benches: Mobile rolling cart; Particulate Pre-filter: Protects the main filter(s) from dust;</p>
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	<p>Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Before installation with proper communication on total height of the equipment and height of the working area; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>		<p>Transparent Back Panel: Clear acrylic panel for easy viewing; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Before installation with proper communication on total height of the equipment and height of the working area; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
<p>9.</p>	<p>GENERAL PURPOSE WATER BATH, 20 LITERS-Specifications: Gen. Purpose Water Bath, Digital, 20 L; Display: Full-color TFT; Languages Supported: French, German, Spanish, Chinese, English; Working Temperature Range °C: Ambient +5° to 100 °; Temperature Stability °C : plus/minus 0.1 deg Temperature Calibration Capability: 1- point; Working Access (LWD) cm): 24.1 * 43.2 * 15.2 Flammability Class; Displays actual and set point temperature simultaneously, Programmable pre-sets for frequently used temperatures; Integrated timer; Primary and automatic safety thermostats Also compatible with waterless bath beads; Working Temperature Range °F: Ambient + 10 ^ = to 212 deg Working Temperature Range °C: Ambient 5 deg to 100 deg : Reservoir Capacity (gallons): 5.28; Reservoir Capacity (liters): 20; Reservoir/Tank Material: Stainless Steel; Reservoir Cover: Hinged Gable; Working Access (LWD) (inches) 9.5 * 17 * 6 Working Access (LWD) (cm): 24.1 * 43.2 * 15.2 Temperature Stability ° F / (plus/minus 0.2 deg)</p>	<p>9.</p>	<p>GENERAL PURPOSE WATER BATH, 20 LITERS-Specifications: Gen. Purpose Water Bath, Digital, 20 L; Display: Full-color TFT; Languages Supported: French, German, Spanish, Chinese, English; Working Temperature Range °C: Ambient +5° to 100 °; Temperature Stability °C : plus/minus 0.1 deg or lower but not higher Temperature Calibration Capability: 1-point; Working Access (LWD) cm): At least 24.1 * 43.2 * 15.2 Flammability Class; Displays actual and set point temperature simultaneously, Programmable pre-sets for frequently used temperatures; Integrated timer; Primary and automatic safety thermostats Also compatible with waterless bath beads; Reservoir Capacity (liters): 20; Reservoir/Tank Material: Stainless Steel; Reservoir Cover: Hinged Gable; Working Access (LWD) (inches) at least 9.5 * 17 * 6 Temperature Stability ° F / (plus/minus 0.2 deg) Temperature Stability °C: ±0.1° Display: Full-color TFT; Flammability Class (DIN 12876-1) I (NFL); Over-Temperature Protection/Failsafe</p>



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	<p>Temperature Stability °C: ±0.1° Display: Full-color TFT; Flammability Class (DIN 12876-1) I (NFL); Over-Temperature Protection/Failsafe Heater Control: Yes; Reservoir Drain: Yes; Maximum Ambient Temperature °F: 104 deg Maximum Ambient Temperature °C: 40 deg Overall Dimensions (LWH) inches) 15.1 * 22.5 * 15.1 Overall Dimensions (LWH) cm): 38.4 * 57.2 * 38.4; Shipping Weight (pounds): 25.0; Shipping Weight (kilograms): 11.3; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>	<p>Heater Control: Yes; Reservoir Drain: Yes; Maximum Ambient Temperature °C: 45 deg Maximum Overall Dimensions (LWH) inches) 16 * 23 * 16 Overall Dimensions (LWH) cm): 38.4 * 57.2 * 38.4; Shipping Weight (pounds): 25.0; Shipping Weight (kilograms): 11.3; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
<p>14.</p>	<p>LABORATORY FREEZER, External Size(W*D*H) mm: 775*720*1900; Capacity: 400L; Type: Vertical; Temp. Range: -10°C~-25°C; Temp. Accuracy: 0.1°C; Control System: Microprocessor control; Alarm: alarm and low battery alarm, sensor failure alarm; Open door alarm; High or low temperature alarm; Refrigeration Type: Direct refrigeration; Refrigerant: R134a, CFC free; Condenser & Evaporator: Wire tube; Construction Structure: Unibody; design and thickened environmental protection foam insulation; Internal Material: ABS Material; External Material: Cold-rolled steel coated with anti-bacteria powder; Shelf/Drawer: 6 shelves; Consumption: 330W; Power Supply: AC220V±10%;50HZ; Package Size(W*D*H) mm: 780-840*2008; Gross Weight: 105kg; Additional: Certificate of</p>	<p>14. LABORATORY FREEZER, Maximum External Size (LWH) 800*750*1900, Capacity: Atleast 400L; Type: Vertical; Temp. Range: -10°C~-25°C; Temp. Accuracy: 0.1°C; Control System: Microprocessor control; Alarm: alarm and low battery alarm, sensor failure alarm; Open door alarm; High or low temperature alarm; Refrigeration Type: Direct refrigeration; Refrigerant: R134a or equivalent or better, CFC free; Condenser & Evaporator: Wire tube; Construction Structure: Unibody; design and thickened environmental protection foam insulation; Internal Material: ABS Material; External Material: Cold-rolled steel coated with anti-bacteria powder; Shelf/Drawer: 6 shelves; Consumption: 330W or lower; Power Supply: AC220V±10%;50HZ; Package Size(W*D*H) mm: 780-840*2008;</p>



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	<p>Distributorship from Manufacturer, Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>		<p>Gross Weight: 105kg: Additional: Certificate of Distributorship from Manufacturer, Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
<p>15.</p>	<p>LABORATORY REFRIGERATOR, External Size (W ^ * D ^ * H) mm: 620-575-1980; Capacity: 310L; Temp. Range: 2-8 degree Celsius; Temp. Accuracy: 0.1 degree Celsius; Control System: Microprocessor; Control, Large Screen LED Display; Alarm: Audible and visual alarm for: High and low temperature, Power failure alarm, Sensor failure, Door; 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; Construction: Structure Unibody design and Mono assembly foaming (Rigid polyurethane insulation material); Internal Material: embossed aluminum sheet; sheet; External Material: PCM; Shelves: 5pcs; Consumption: 180W; Power Supply: AC110/220, 50/60Hz; Standard Accessory: LED lamp, shelves, door keys, USB port; Optional Accessory: Temperature recorder; Package Size (W ^ * D ^ * H) mm: 700*650*2030; Gross weight: 84kg; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with</p>	<p>15.</p>	<p>LABORATORY REFRIGERATOR, Maximum External Size (LWH) 800*750*1900, Capacity: Atleast 310L; Temp. Range: 2-8 degree Celsius; Temp. Accuracy: 0.1 degree Celsius; Control System: Microprocessor; Control, Large Screen LED Display; Alarm: Audible and visual alarm for: High and low temperature, Power failure alarm, Sensor failure, Door; 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; Construction: Structure Unibody design and Mono assembly foaming (Rigid polyurethane insulation material); Internal Material: embossed aluminum sheet; sheet; External Material: PCM; Shelves: 5pcs; Consumption: 180W; Power Supply: AC110/220, 50/60Hz; Standard Accessory: LED lamp, shelves, door keys, USB port; Optional Accessory: Temperature recorder; Package Size (W ^ * D ^ * H) mm: 700*650*2030; Gross weight: 84kg; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on</p>



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	<p>Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>		<p>Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
16.	<p>LABORATORY TABLE SET UP, Atleast 2-piece set up, for movement/vibration sensitive equipments and moving/spinning equipment, Precise measurement of the work area; Regular meetings with a design team to tailor the table to user specific needs, including features like sinks and storage. Table includes: Integrated Sink and Plumbing; Durable Surface: Phenolic resin with edges sealed; Sturdy Frame: Powder-coated steel frame, capable of supporting high loads, typically up to 1,000 pounds; Integrated cabinets and drawers; Adjustable shelving units above the work surface; Multiple integrated power outlets, including USB ports; Data ports or network connections integrated into the table, ensuring connectivity for lab equipment or computers; Emergency shut-off switches to cut power to the table in case of a safety breach; Modular components that can be rearranged as needed for different lab setups. Installation and Commissioning on Site; Warranty: One (1) Year on Parts and on Service under normal use.</p>	16.	<p>LABORATORY TABLE SET UP, Atleast 2-piece set up, for movement/vibration sensitive equipment and moving/spinning equipment, Room Dimension is about 5M x 4M; Precise measurement of the work area; Regular meetings with a design team to tailor the table to user specific needs, including features like sinks and storage. Table includes: Integrated Sink and Plumbing; Durable Surface: Phenolic resin with edges sealed; Sturdy Frame: Powder-coated steel frame, capable of supporting high loads, typically up to 1,000 pounds; Integrated cabinets and drawers; Adjustable shelving units above the work surface; Multiple integrated power outlets, including USB ports; Data ports or network connections integrated into the table, ensuring connectivity for lab equipment or computers; Emergency shut-off switches to cut power to the table in case of a safety breach; Modular components that can be rearranged as needed for different lab setups. Installation and Commissioning on Site; Warranty: One (1) Year on Parts and on Service under normal use.</p>
17.	<p>MICROCENTRIFUGE WITH FIXED-ANGLE ROTOR, FOR 24 X 1.5-2ML AND FIXED-ANGLE FOR PCR STRIPS 16 X 0.2ML PCR TUBE-organized and big LCD display, overspeed monitoring: up to 10 programs selection; Zero-maintenance motor, Compact microcentrifuge; Maximum capacity: 24 * 2 m; Motorized lid</p>	17.	<p>MICROCENTRIFUGE WITH FIXED-ANGLE ROTOR, FOR 24 X 1.5-2ML AND FIXED-ANGLE FOR PCR STRIPS 16 X 0.2ML PCR TUBE-organized and big LCD display, overspeed monitoring: up to 10 programs selection; Zero-maintenance motor, Compact microcentrifuge; Maximum</p>



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	<p>lock; Window in lid for external speed monitoring, Short acceleration and braking times; Maximum RCF of 16,163 x g; Inclination angle of Rotor (outer/inner): 32/53 degrees; Specifications: Speed range (rpm): 14,800; Speed increment (rpm): 100; Max RCF (xg): 16,163; RCF Increment (xg): 10; Minimum Speed: 200 rpm; Noise level at maximum speed (approx.) [dB(A)] ;<=54; Timer (s; min: s): 10-99:59; Time increment: 1 second; Maximum Acceleration time: ≤ 15 seconds; Maximum Braking Time: ≤ 12 seconds; Power Consumption: 95 Watts; Height x width x depth: 176 x 266 * 212 mm-Height with open lid: 310 mm; Weight without Rotor: 6 kg; With accessories: Fixed- angle rotor for spin column kits; Max. capacity: 12 * 2ml Max. speed (1-14/1-14K): 14,800/15,000 rpm; Max. RCF (1-14/1-14K): 15,183/15,596 x g; Sealable with polysulphone lid; Tmin at maximum speed: < 4 deg * C ; Angle: 45 deg Fixed-angle rotor for PCR Strip; Max. capacity: 16 * 0.21 PCR tubes; Max. speed (1-14/1-14K): 14,800/15,000 rpm; Max. RCF (1-14/1-14K): 11.755/12074 * g = Closable with polysulphone lid; Tmin at maximum speed: < 4 deg * C ; Angle: 45; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use</p>	<p>capacity: 24 * 2 m; Motorized lid lock; Window in lid for external speed monitoring, Short acceleration and braking times; Maximum RCF of 16,163 x g; Inclination angle of Rotor (outer/inner): 32/53 degrees; Specifications: Speed range (rpm): 14,800; Speed increment (rpm): 100; Max RCF (xg): 16,163; RCF Increment (xg): 10; Minimum Speed: 200 rpm; Noise level at maximum speed (approx.) [dB(A)] ;<=54; Timer (s; min: s): 10-99:59; Time increment: 1 second; Maximum Acceleration time: ≤ 15 seconds; Maximum Braking Time: ≤ 12 seconds; Power Consumption: 95 Watts; Maximum dimensions LWH: 12 x 22 x 14; Weight without Rotor: 6 kg; With accessories: Fixed- angle rotor for spin column kits; Max. capacity: 12 * 2ml Max. speed (1-14/1-14K): 14,800/15,000 rpm; Max. RCF (1-14/1-14K): 15,183/15,596 x g; Sealable with polysulphone lid; Tmin at maximum speed: < 4 deg * C ; Angle: 45 deg Fixed-angle rotor for PCR Strip; Max. capacity: 16 * 0.21 PCR tubes; Max. speed (1-14/1-14K): 14,800/15,000 rpm; Max. RCF (1-14/1-14K): 11.755/12074 * g = Closable with polysulphone lid; Tmin at maximum speed: < 4 deg * C ; Angle: 45; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use</p>
18.	MICROVOLUME UV-VIS SPECTROPHOTOMETER, WITH COMPATIBLE PRINTER,	18. MICROVOLUME UV-VIS SPECTROPHOTOMETER, WITH COMPATIBLE PRINTER,



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<p>BLUETOOTH KEYBOARD MOUSE AND BARCODE READER EQUIPPED WITH BLUETOOTH AND WI-FI</p> <p>Concentration:dsDNA : Pedestal: 27, 500ng / mu * L BSA (IgG): Pedestal: 820 (400) mg/mL; Connections: Three USB-A ports, Ethernet, Bluetooth™ and Wi-Fi; Detection Range: dsDNA: Pedestal: 2ng / mu * L Cuvette: 0.2ng / mu * L BSA (IgG): Pedestal: 0.06 (0.03) * mg / m * L Cuvette: 0.006 (0.003) mg/mL; Detector Type; 2048-element CMOS Linear Image Sensor; Display: 7 in. High Definition Color Display, 1280 x 800 pixels; Dimensions:); Languages: English, others; (LWH) * 20 * 25.4 * 32.3cm (8*10*12.7 in Light Source: Xenon Flashnm FWHM at Hg 254 nm); Voltage: 12 VDC: Wavelength Range: 190 to 850 nm; For Use With (Application) Nucleic Acid A260, A260/A280, A260/A230 and Labeled Nucleic Acids;, Protein A280 and A205, Protein Pierce 660, Protein Bradford, Protein BCA, Protein Lowry, Labeled Proteins, OD600, Kinetics, UV-Vis, and Custom Methods; Keypad: Built-in touchscreen, multipoint capacitive touch; Measurement Time: 8 seconds; Pathlength: 0.030 to 1.0 mm (auto-ranging); Photometric Accuracy: 3% at 0.97 A, 302 nm, (Absorbance expressed at Abs/mm at 25 deg * C ; Photometric Range: 10 mm equivalent: Pedestal: 0-550 A; Cuvette: 0-1.5 A; Power Consumption: Operating: 12 to 18 W; Standby: 5 W; Processor: Android"; Repeatability Typical: 0.002 A (1.0 mm path) or 1%CV, whichever is greater (SD of 10 individual measurements at 0.97 A); Sample Temperature: Temperature Control (cuvette only) 37 deg * C Sample Volume (Metric):</p>	<p>BLUETOOTH KEYBOARD MOUSE AND BARCODE READER EQUIPPED WITH BLUETOOTH AND WI-FI</p> <p>Concentration:dsDNA : Pedestal: 27, 500ng / mu * L BSA (IgG): Pedestal: 820 (400) mg/mL; Connections: Three USB-A ports, Ethernet, Bluetooth™ and Wi-Fi; Detection Range: dsDNA: Pedestal: 2ng / mu * L Cuvette: 0.2ng / mu * L BSA (IgG): Pedestal: 0.06 (0.03) * mg / m * L Cuvette: 0.006 (0.003) mg/mL; Detector Type; 2048-element CMOS Linear Image Sensor; Display: 7 in. High Definition Color Display, 1280 x 800 pixels; Dimensions:); Languages: English, others; Maximum Dimension (LWH): 19" x 19" x 10" Light Source: Xenon Flashnm FWHM at Hg 254 nm); Voltage: 12 VDC: Wavelength Range: 190 to 850 nm; For Use With (Application) Nucleic Acid A260, A260/A280, A260/A230 and Labeled Nucleic Acids;, Protein A280 and A205, Protein Pierce 660, Protein Bradford, Protein BCA, Protein Lowry, Labeled Proteins, OD600, Kinetics, UV-Vis, and Custom Methods; Keypad: Built-in touchscreen, multipoint capacitive touch; Measurement Time: 8 seconds; Pathlength: 0.030 to 1.0 mm (auto-ranging); Photometric Accuracy: 3% at 0.97 A, 302 nm, (Absorbance expressed at Abs/mm at 25 deg * C ; Photometric Range: 10 mm equivalent: Pedestal: 0-550 A; Cuvette: 0-1.5 A; Power Consumption: Operating: 12 to 18 W; Standby: 5 W; Processor: Android"; Repeatability Typical: 0.002 A (1.0 mm path) or 1%CV, whichever is greater (SD of 10 individual measurements at 0.97 A); Sample Temperature: Temperature Control (cuvette only) 37 deg * C Sample Volume (Metric):</p>
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	<p>Minimum 1μL; System Requirements: Windows 8.1, 10 and 11, 64 bit; Wavelength Accuracy: \pm1 nm; Weight (Metric):3.6 kg; Additional: Certificate of Distributorship from Manufacturer, Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>		<p>Minimum 1μL; System Requirements: Windows 8.1, 10 and 11, 64 bit; Wavelength Accuracy: \pm1 nm; Weight (Metric):3.6 kg; Additional: Certificate of Distributorship from Manufacturer, Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>
19.	<p>PAGE APPARATUS (VERTICAL) WITH POWER SUPPLY, Specifications: Unit Dimensions: 26 * 16x 16 cm. (+10%); Capacity: 1-4 gels; Maximum Sample Capacity: 192; Base Buffer Volume: 600 mL; Maximum Buffer Volume: 2,800 mL Gel; Dimensions: 18 * 8 cm.; Includes: Casting Base, Blotting Insert, 2D Insert; Plate Dimensions: 20 * 10 cm.; Mini wide format effectively allows 2 mini gels to be compared within a single gel for gel-to gel reproducibility; Run 1-2 hand cast gels; perfect for users with >20 samples to compare and resolve; Even pressure screw system prevents gel leakage; Combine pl (isoelectric point) separation with speed by resolving 2x 7cm IPG strips or 2x 8cm capillary tube gels per gel using special 2-D gel combs and plates; Ability to perform three techniques in a day: IEF, PAGE and blotting; Power Supply; Output Voltage/Inc.: 0-300v/1v; Output Current/ Inc.: 10-400ma/1ma; Output Power: 60w; Output Type: Constant Voltage Or Constant Current; Control: Microprocessor Controller; Terminal Pairs: 2 Pairs; Timer: 1~999 Minutes With Alarm Or Continuous; Safety Device: No</p>	19.	<p>PAGE APPARATUS (VERTICAL) WITH POWER SUPPLY, Specifications: Unit Dimensions: 26 * 16x 16 cm. (+10%); Capacity: 1-4 gels; Maximum Sample Capacity: 192; Base Buffer Volume: 600 mL; Maximum Buffer Volume: 2,800 mL Gel; Dimensions: 18 * 8 cm.; Includes: Casting Base, Blotting Insert, 2D Insert; Plate Dimensions: 20 * 10 cm.; Mini wide format effectively allows 2 mini gels to be compared within a single gel for gel-to gel reproducibility; Run 1-2 hand cast gels; perfect for users with >20 samples to compare and resolve; Even pressure screw system prevents gel leakage; Combine pl (isoelectric point) separation with speed by resolving 2x 7cm IPG strips or 2x 8cm capillary tube gels per gel using special 2-D gel combs and plates; Ability to perform three techniques in a day: IEF, PAGE and blotting; Power Supply; Output Voltage/Inc.: 0-300v/1v; Output Current/ Inc.: 10-400ma/1ma; Output Power: 60w; Output Type: Constant Voltage Or Constant Current; Control: Microprocessor Controller; Terminal Pairs: 2 Pairs; Timer: 1~999 Minutes With Alarm Or Continuous; Safety Device: No</p>



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	Load Detection; Shrouded Plugs And Sockets; Unit Dimension (Wxlxh): 140x191x84mm; Weight: Approx. 1 Kg; Rated Voltage: Universal, 100-240v; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.		Load Detection; Shrouded Plugs And Sockets; maximum dimension (L x W x H): 8 x 6 x 4in ; Weight: Approx. 1 Kg; Rated Voltage: Universal, 100-240v; Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, Two Years on Parts and on Service under normal use.
21.	PIPETTOR SET, with stand, P2, P20, P200, P1000 0.2 to 2 µL (P2L), 2 to 20 µL (P20L), 20 to 200 µL (P200L), 100 to 1000 µL (P1000L), 500 to 5000 µL and 1000 to 10,000 µL, Autoclavable, Material: Polypropylene, Stainless Steel, With compatible tips in a rack; 10 racks each, Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, One (1) Year on Parts and on Service under normal use.	21.	PIPETTOR SET, with stand, 0.2 to 2 µL, 2 to 20 µL, 20 to 200 µL, 100 to 1000 µL, 500 to 5000 µL and 1000 to 10,000 µL , Autoclavable, Material: Polypropylene and Stainless Steel (inner), With compatible tips in a rack; 5 racks each , Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker; Warranty: For Equipment, One (1) Year on Parts and on Service under normal use.
25.	SMALL RETORT MACHINE, Voltage: 220V/380V Power: 6.2kw Weight: 260 KG Dimension(L*W*H): 1993*1040*1842 Warranty: 2 years Product name: Multi functional small retort machine Material: SS304 or 316 Stainless Steel Design Temperature: 147 Degree Centigrade Heating way: Boiler Steam Heating/electric Sterilizing Type: water immersion	25.	Additional info: what's type of products need to sterilize? -Food products 2. what's the packing? -Retortable pouches and glass jars 3. what's the weight per package? -100 grams to 1000grams 4. what's the capacity per batch do you want? -10kg to 50kg.



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	Feature 01: Meet ASME/CE standard.		
28.	<p>THERMAL CYCLER, Specifications: Unit Dimensions (cm): 24 * 42 * 25((- 10)%) Capacity: 1x 96-well plate; 12 * 8 * 0.2 mL strip tubes; 96 * 0.2mL tubes; Temperature Control: Calculated or block; Heating/Cooling Method: Peltier; Maximum Heating/Cooling Rate: 5°C 3.5 deg * C per second or better, Gradient Temperature Range: 30 - 99 deg * C temperature of each segment may be set independently (or better); Maximum Gradient Temperature Difference: 24 deg * C Lid Temperature: 30 - 115 deg * C Temperature Increments/Decrements: Yes; Time Increments/Decrements: Yes; Temperature Range: 4 * 99.9 deg * C Stability: plus/minus 0.5 deg * C or better; Uniformity: plus/minus 0.5 deg * C Input Voltage: 220V; Includes: AVR/UPS battery back up Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hand on Training to End Users with Certificate with Calibration Certificate and Sticker, Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>	28.	<p>THERMAL CYCLER, Specifications: Unit Maximum Dimension (LWH): 10 x 17 x 10 in; Capacity: 1x 96-well plate; 12 x 8 x 0.2 mL strip tubes; 96 x 0.2mL tubes; Temperature Control: Calculated or block; Heating/Cooling Method: Peltier; Maximum Heating/Cooling Rate: 5°C 3.5 deg C per second or better, Gradient Temperature Range: 30 - 99 deg C temperature of each segment may be set independently (or better); Maximum Gradient Temperature Difference: 24 deg C; Lid Temperature: 30 - 115 deg C Temperature Increments/Decrements: Yes; Time Increments/Decrements: Yes; Temperature Range: 4 - 99.9 deg C Stability: plus/minus 0.5 deg C or better; Uniformity: plus/minus 0.5 deg C Input Voltage: 220V; Includes: AVR, UPS battery back up, sets of PCR plates with cover and other compatible accessories Additional: Certificate of Distributorship from Manufacturer; Training Certificate of Service Engineer from Manufacturer; Installation and Commissioning on Site; Hands on Training to End Users with Certificate with free training materials and consumables to be used in training; with Calibration Certificate and Sticker, Warranty: For Equipment, Two Years on Parts and on Service under normal use.</p>

ATTY. WILMARK J. RAMOS. DBA
Chairperson - Goods and Services