



## **BID BULLETIN 01**

**Project Title:** *Supply and Delivery of Laboratory Equipment for VSU Main and  
Component Colleges (GOODS-20-51)*

**Date:** 05 October 2020

Bidders are hereby informed/reminded of the following addendums/amendments/clarifications:

### **LIST OF ELIGIBILITY REQUIREMENTS**

<b>ELIGIBILITY AND TECHNICAL DOCUMENTS (1st Envelope)</b>	
<b><i>Eligibility Documents</i></b>	
1	PhilGEPS Certificate of Registration (Platinum)
	or
	a. Registration Certificate
	b. Mayor's/Business Permit
	c. Tax Clearance
	d. Audited Financial Statements
2	Statement of On-Going Government & Private Contracts
3	Statement of Bidder's Single Largest Completed Contract (at least 50% of the ABC or P 3,607,125.00)
	or
	Statement of at least two (2) similar completed contracts w/ total amount of at least P 3,607,125.00 and the largest of which should be at least P 1,803,562.50
4	Net Financial Contracting Capacity (at least P 7,214,250.00)
<b><i>Technical Documents</i></b>	
5	Bid Security
6	Technical Specifications
7	SCHEDULE of Requirements/Production and delivery schedule
8	Manpower Requirements
9	After Sales service/parts (at least 1 year from acceptance of delivered goods)
10	Omnibus Sworn Statement
<b>FINANCIAL DOCUMENTS (2<sup>nd</sup> Envelope)</b>	
11	Bid Form

**Please take note:** In the **Technical Specifications**, bidders must state either “Comply” or “Not Comply” **against each of the individual parameters of the specifications** per item stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in the **Bidders Bid** and cross-referenced to that evidence. Evidence shall be in the form of **manufacturer’s un-amended sales literature (Data Sheets), unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data, and Brand and Model** as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of **ITB** Clause 3.1(a)(ii) and/or **GCC** Clause 2.1 (a)(ii).

## **I. Preparation of Electronic Bid (for bidders who prefer electronic bid submission)**

1. Convert all documents into Portable Document Format (PDF) and should be printable.
2. Properly label all documents for prompt identification. Filename of documents, whichever are applicable to the bidder, should be as follows:

<b>Document</b>	<b>Filename (in PDF form)</b>
1. PhilGEPS Certificate of Registration (Platinum)	PhilGEPS
2. Registration Certificate (SEC/DTI)	Registration Certificate
3. Mayor’s/Business Permit	Mayor’s-Business Permit
4. Tax Clearance	Tax Clearance
5. Audited Financial Statements	Audited Financial Statements
6. Statement of On-Going Government & Private Contracts	Statement of On-Going Contracts
7. Statement of Bidder's Single Largest Completed Contract	SLCC
8. Statement of at least two (2) similar completed contracts	Statement of Completed Contracts
9. Net Financial Contracting Capacity	NFCC
10. Bid Security	Bid Security
11. Technical Specifications	Technical Specifications
12. SCHEDULE of Requirements/Production and delivery schedule	Schedule of Requirements
13. Manpower Requirements	Manpower Requirements
14. After Sales service/parts	After Sales
15. Omnibus Sworn Statement	Omnibus Sworn Statement
16. Bid Form	Bid Form

3. Create two (2) folders that are password-protected. The first folder should contain all technical documents (Items 1-15 above, whichever are applicable). The second folder should contain the Bid Form (financial proposal).
4. Compress the two (2) folders and name as follows: a) first folder: **Technical Documents**, b) second folder: **Financial Documents**.
5. Email the 2 compressed folders to Ms. Jessamine C. Ecleo at [jecleo@vsu.edu.ph](mailto:jecleo@vsu.edu.ph) before the deadline.

Original	Amendment
<p>1. A complete set of Bidding Documents may be acquired by interested Bidders <i>on September 21 to October 12, 2020 until 1:59 PM</i> from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of <i>Ten Thousand Pesos (P 10,000.00)</i></p> <p>5. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.</p>	<p>2. A complete set of Bidding Documents may be acquired by interested Bidders <i>on September 21 to October 12, 2020 until 1:00 PM</i> from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of <i>Ten Thousand Pesos (P 10,000.00)</i></p> <p>5. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.</p> <p><b>The Bidders may also deposit the applicable fee to Visayas State University Landbank Account:</b></p> <p><b>Account Name:</b> <b>Visayas State University Fund 164</b></p> <p><b>Account Number:</b> <b><u>3572-1000-13</u></b></p> <p><b>And send the deposit slip to Ms. Jessamine C. Ecleo at <a href="mailto:jecleo@vsu.edu.ph">jecleo@vsu.edu.ph</a></b></p>

## II. Revised List of Goods and Technical Specifications

- Some Specifications were added and/or deleted
- Some Quantities and Unit Prices (ABC) were changed

Item No.	DESCRIPTION	Qty.	Unit	ABC (Pesos)	Total ABC (Pesos)
	<b>FOR VSU MAIN</b>				
	<b>For Items No. 1 to 24 Delivery (FOB) is at VSU Main</b>				
1	<b>Top loading balance</b>	unit	1	56,750.00	56,750.00
	Capacity: 2,100g				-
	Readability: 0.01g				-
	Housing dimension: <b>at least</b> 8.5 x 4 x 13.7				-
	Display: Color Touchscreen				-
	Linearity(g): 0.02				-
	Repeatability(g): 0.01				-
	Power (VAC): 100-240 V				-
2	<b>pH meter</b> with plastic electrode, pHBasic pH Meter, Power Supply, 2 Buffers, Arm, & Electrode: <b>PY-P10-2S-delete</b> (General purpose - pH/ATC, Plastic Body, Liquid 3M KCl refillable, ceramic junction, BuLb style).	unit	1	64,750.00	64,750.00
3	<b>Drying Oven</b> , <b>at least</b> 115 liters Voltage: 230 V 1~ ph 50/60 Hz Performance Data Temperature Temperature range 8 °C above ambient temperature to: 300°C Heating-up time to 150 °C [min]: 60 <b>Width net [mm]: 710-delete</b> <b>Height net [mm]: 735-delete</b> <b>Depth net [mm]: 605-delete</b> Interior volume [L]: at least 115	unit	1	114,750.00	114,750.00
4	<b>Water Bath 4 Holes</b>	set	1	14,000.00	14,000.00
	Package Specifications:				-
	Maintains temperature of collected semen for evaluation				-
	Enables to consistent temperature of water during examination				-
	Prevents boar semen from temperature shock				-
	4 holes, 2 line setup				-
5	<b>Cool Incubator</b>	set	1	19,800.00	19,800.00
	Package Specifications:				-
	Cool Incubator for storage of extended boar semen				-
	Also for storage of semen extender				-
	Temperature range <b>-/+1°C to 17°C</b> with digital display				-
	with build in power on delay				-
	comes with a servo type automatic voltage				-
6	<b>iSperm Sperm Analyzer</b> (1 set)	lot	1	144,000.00	144,000.00

	Package Specifications:				-
	Concentration accuracy interval: 20-500 million/ml $\pm 5\%$				-
	Motility Accuracy interval: concentration between 20-50 million/ml, 0-100%, error $\pm 5\%$				-
	iPad Mini* (this item is required for the iSperm Semen Analyzer to work) (1 pc)				-
7	<b>Complete Kymograph kit</b>	unit	2	11,500.00	23,000.00
	Maintenance free				-
	Microprocessor controlled unit				-
	16x2 LCD Display;				-
	Highly accurate speeds- 0.12,0.25,0.50,0.75,1.00,1.25,2.50 mm/sec				-
	Digital Timer & Time multiplier with Audio & Visual Alarm				-
	Very low power consumption				-
	Easy height adjustment of drum				-
	Auto concentration response curve (CRC) mode & Normal mode				-
	Sturdy, corrosion resistant body				-
	battery backup(optional)				-
8	<b>Spirometer with ipad bundle</b>	unit	1	67,000.00	67,000.00
	Spirometry Parameters:FCV,FEV1,FEV1/FVC%,PEF,FEF25-75; Available with both DISPOSABLE and REUSABLE turbine flowmeter; Pediatric Incentive Animations, iSpirometry®App; Spirobank II® Smart can be also connected to the PC via USB using WinspiroPRO PC Software®;				-
	Materials Included: 1 CD Winspiro PRO®PC software, 1 Rechargeable battery, 1 USB cable, 1 Mouthpiece, 1 Noseclip, 1 Carrying Case;				-
	Technical Specifications: Display-160x80px, Power supply-3.7V, 100mA lithium battery USB rechargeable, Keypad- 6-key membrane keyboard, Data Transmission- USB and Bluetooth® Smart, Dimensions Device - 160x55x25MM, Device Weight (with battery)- 145g, Flow measurement- +16 L/s, Volume Accuracy - + 5% o 200 mL/s, Temperature Sensor - Semiconductor (0-45oC) Automatic BTPS Conversion, Main Sprimetry Parameters - Using iPad software FVC, FEV1, FEV1/FVC%, PEF, FEF25-75, Additional Spirometry Parameters- Using PC Software via USB FVC, FEV1, FEV1/FVC, FEV1/VC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF75-85, Lung Age, Extrap. Volume, FET, Time to PEF, FEV0.5, FEV0.5/FVC, FEV0.75, FEV0.75/FVC, FEV2, FEV2/FVC, FEV3, FEV3/FVC, FEV6, FEV1/FEV6, FIVC, FIV1, FIV1/FIVC, PIF, FIF25, FIF50, FIF75, FEF50/FIF50, VC, IVC, IC, ERV, IRV, Rf, VE, VT, tI, tE, VT/tI, tE/tTOT, MVV (measured), MVV (calculated)				-
9	<b>Digital sphygmomanometer</b>	units	2	10,000.00	20,000.00

	Clinically validated				-
	body movement detection				-
	blood pressure level indicator				-
	irregular heartbeat detection				-
	measurement memory storage				-
	average for at least 3 readings w/ in 10 minutes				-
	intellisense technology				-
10	<b>Nerve Muscle Assembly/ Kymograph Assembly</b>	unit	1	30,000.00	30,000.00
	Universal Kymograph (speeds 0.12, 0.25, 1.25, 2.5, 12.5, 25, 320, 640mm/sec) with inbuilt stimulator				-
	Muscle and heart bath with pair of electrodes, lever assembly, pin and ink marker				-
	Hook and weight set, set of 11g				-
	Hook and weight set, set of 110g				-
	Time Marker				-
	Marriote bottle and stand				-
	Kymograph paper				-
	Dissection tray				-
	Dissection box				-
	Pithing needle				-
	Muscle clip				-
	Connecting wire				-
	<b>REBIDDING MAIN</b>				-
11	Top loading balance, 6kg capacity with two decimal accuracy	1	unit	60,000.00	60,000.00
12	<b>Water Purification system for type 1</b>	1	unit	264,500.00	264,500.00
	Feedwater source: Distilled				-
	Flow Rate: at least 7L/hr at 10°C				-
	Feedwater connector: 3/4 in. NPT				-
	Feedwater connector: 3/4 in. NPT				-
	Net Weight (Metric): at most 25kg				-
	Voltage: 90 to 240V				-
	Hertz: 50/60Hz				-
	Temperature Range (Metric): 2° to 35°C				-
13	Dendrometer bands,	2	unit	80,000.00	160,000.00
	Diameter dendrometer small,				-
	diameter 0-5cm,				-
	11mm range of sensor, $\pm 1.5\mu\text{m} \pm 0.12\%$ (CR1000 logger),				-
	Resolution 0.2-2.6 $\mu\text{m}$ (dependent on used data logger), linearity 1%,				-
	thermal expansion coefficient of the sensor $< 0.2 \mu\text{m/K}$ , -25 to 70 C air temperature,				-
	0 to 100% relative air humidity				-
14	UV-Vis microplate reader/ spectrophotometer	1	unit	750,000.00	750,000.00
	Detection Modes : UV/Vis Absorption Spectra				-

	Measurement Modes : Endpoint and Kinetic Measurements, Well Scanning				-
	Microplate Format : 6 to 1536-well plates, user definable				-
	Microplate Carrier : Robot Compatible				-
	Cuvette Port : Cuvette port for cuvettes with 10 mm path length, micro cuvettes tray cell compatible, beam height 8.5 mm				-
	Light Source : High Energy Xenon Flash Lamp				-
	Detectors : Spectrometers with CCD				-
	Spectral Range : Absorbance spectrometer: 220-1000 nm				-
	Sensitivity : ABS with Spectrometer				-
	Spectral range: 220 to 1000 nm				-
	Full spectrum captured in >1 s/well				-
	Selectable spectral resolution: 1 nm, 2nm, 5nm, 10 nm				-
	OD range: 0 to 4 OD				-
	Accuracy: < 1% at 2 OD				-
	Precision: < 0.5% at 1 OD and < 0.8% at 2 OD				-
	Read Times : Full Spectrum from 220 to 1000 nm in less than one second/well				-
	Shaking : Linear, orbital, and double-orbital with user-definable time and speed				-
	Purge Gas Vent : System to inject an atmosphere or to pull a vacuum into the reader				-
	Integrated : External manual barcode reader				-
	Barcode Reader : (optional)				-
	Incubation : +3 °C above ambient up to 45 °C				-
	Software : Multi-user Reader Control and MARS Data Analysis Software package included				-
	Dimension : Width: 36 cm, depth: 50 cm, height: 16 cm; weight: 10 kg				-
15	Veterinary Portable Ultrasound Machine	1	unit	245,000.00	245,000.00
	Thin Magnesium-alloy body				-
	At least 15.6" LED HD monitor with slim design				-
	Built-in battery providing at least 90 min scanning time				-
	High capacity SSD hard drive making patient data safer				-
	Inbuilt quick & easy locking system				-
	iPower: over 3.5 hours scanning with trolley mounted				-
	battery pack				-
	Noiseless system				-
	Automatic brightness adjustment				-
	Reliable RoHS certified materials				-
16	PORTABLE pH METER WITH PROBE	1	unit	50,000.00	50,000.00
	Maximum pH +14pH				-
	Minimum pH 0pH				-

	pH resolution 0.1pH				-
	Best pH Accuracy ±0.1pH				-
	Maximum Temperature Measurement +60 °C				-
	Minimum Temperature Measurement 0°C				-
	Temperature Measurement Resolution 0.1°C				-
	Best Temperature Measurement Accuracy ±5°C				-
	Maximum Conductivity 4mS/cm				-
	Minimum Conductivity 0mS/cm				-
	Conductivity Resolution 0.01mS/cm				-
	Best Conductivity Accuracy ±2%				-
	Best Total Dissolved Solids Accuracy ±2%				-
	Weight 180g-delete				-
	Battery life 150 h				-
	Maximum Operating Temperature +50°C				-
	Maximum Total Dissolved Solids 1999ppm				-
	Battery Life 9V				-
	Model Number p HI 9813-5N-delete				-
	Length 165mm-delete				-
	Height 45mm-delete				-
	Minimum Operating Temperature 0°C				-
	Minimum Total Dissolved Solids 0ppm				-
	Width 75mm-delete				-
	Dimensions 165 x 75 x 45mm-delete				-
	Total Dissolved Solids Resolution 1ppm				-
	Power source Battery				-
17	Pressure cooker, Heavy duty, Aluminum, Liquid Capacity (Qts.): 30, Inside Diameter, Inches: 12.5, Inside Height, Inches: 14, Size: 38H x 42W x 38D cm, Weight: 10 kg-delete	1	unit	70,000.00	70,000.00
18	Standard Fume hood – <b>Ductless, Fabricated</b>	4	unit	200,000.00	800,000.00
	A. Specification				-
	Color: Aegean blue				-
	External Dimension at least: 1800 x 850x 2400 mm WDH				-
	Internal Dimension at least: 1610 x 700 x 1200 mm WDH				-
	Two-Base Cabinet at least: 1534 x 450 x 815 mm WDH				-
	Flame resistant cabinet				-
	Fluorescent light intensity at least: 400 lux				-
	Noise level at least: < 72 dba				-
	Construction: Main body: (1) Baked epoxy coated 1.2mm				-
	electro-galvanized (EG) steel (2) Interior: Epoxy Resin				-
	(3) Table Top: Epoxy Resin				-



	(4) Sash: Tempered glass at least 6mm thickness				-
	Lighting: at least 2 units energy saver, non-glare				-
	& soft fluorescent light of interior illumination				-
	Suction Fan: Seat fan blower c/w PP Impeller and housing,				-
	IP 55 rated motor				-
	Service Fixtures: (1) Polypropylene oval drip cup				-
	(2) 1-unit gas fixture				-
	(3) 1-unit water fixture and sink				-
	(4) 2 units of electrical socket outlet 220-230V				-
	Microprocessor with VAV/Airflow sensor				-
	Supplied with compatible AVR				-
	Certification for standard compliance such as ASHRAE 110-1995				-
	B. Post Sale: Supplier must provide				-
	Installation: Equipment and accessories installation,				-
	testing and commissioning				-
	Training: Provide operational and safety training				-
	Diagnostic: Troubleshooting and diagnostic				-
	Preventive Maintenance after 1 year of installation				-
	Documentation				-
	Project status reporting for system set-up				-
	Technical and quality documentation				-
	Operating manual where applicable				-
	Necessary accessories and fixtures during installation such as				-
	circuit breakers and other needed materials				-
	At-least 2 years product warranty				-
19	Fire Hose Rack Assembly with Superflex Hose and	4	set	15,000.00	60,000.00
	Dry Chemical Portable Fire Extinguisher in Cabinet, see attached picture				-
	A. Specification				-
	Cabinet				-
	Material: 20 Gage Steel Box , 20 Gage Steel Door,				-
	18 Gage Steel Frame				-
	ADA: ADA Compliant				-
	Inside Box dimension: 30" x 40" x 5"				-
	Capacity: at least 100 ft. of Super Flex Hose				-
	1.5 Inch Fire Hose Rack Assembly				-
	Pressure: at least 65 PSI				-
	GPM: 100				-
	Meets Other Specifications: NFPA/FEMA Class II				-
	Length: 100 ft.				-
	Regularly Furnished: 1.5 Inch U/L Satin Brass Fog Nozzle				-
	Nipple Mounted: 1.5 Inch Satin Brass Hose Rack Nipple				-

	Hand-held Fire Extinguisher				-
	Regularly Furnished: Red glossy polyester-coated steel				-
	cylinder with pressure gauge, wall mounting bracket and				-
	hose or nozzle as indicated. Contents stored under				-
	pressure at approximately 195 PSI (13.4 bars)				-
	Range of Stream: 15 thru 21'				-
	Type of Discharge: Hose & Nozzle				-
	Height: 24"				-
	Diameter: 7"				-
	Capacity: 20 Lbs				-
	Application: A Class Fire , B Class Fire , C Class Fire				-
	B. Post Sale: Supplier must provide				-
	Installation: Equipment and accessories installation,				-
	testing and commissioning				-
	Training: Provide operational and safety training				-
	Diagnostic: Troubleshooting and diagnostic				-
	Preventive Maintenance after 1 year of installation				-
	Documentation				-
	Project status reporting for system set-up				-
	Technical and quality documentation				-
	Operating manual where applicable				-
	Necessary accessories and fixtures during installation such				-
	circuit breakers and other needed materials				-
	At-least 2 years product warranty				-
20	Fume hood , LABCONCO (for replacement)	1	unit	1,200,000.00	1,200,000.00
	5' hood (60.0" x 50.1 x 30.0")				-
	By-pass airflow design;				-
	Curved air foil that lifts off for cleaning ;				-
	Glacier white powder-coated, 16 gauge steel exterior and interior ,				-
	Two-piece adjustable baffle , 3/16" thick tempered safety glass vertical-rising sash with powder-coated steel sash handle;				-
	Removable front panel for access to electrical wiring				-
	; Right side fixture panel factory-prepared for up to three service fixtures, one duplex electrical receptacle and one airflow monitor (fixtures, receptacle and monitor should be included);				-
	Right interior wall factory-prepared for one cupsink and turret (cupsink and turret should be included);				-
	Powder-coated steel 10.3" OD exhaust connection				-
	Must be included				-
	• Remote blower & ductwork (Blower, Damper, Weathercap)				-

	• Work surface. (SpillStopper, Cupsink)				-
	• Base cabinet or stand. (Base Cabinet for acid, solvent or standard storage, Base Stand)				-
	• Service Fixture Kits. (Sash Stop)				-
	• Electrical Duplex Kits. (Airflow Monitor)				-
	• Guardian Airflow Monitor Kits.				-
	• Ceiling Enclosure, Rear Finish Panel Kits and Distillation Grid Kits				-
	Must pass the following Standards conformance & regulations:				-
	CFR 29,				-
	Part 1910;				-
	SEFA 1;				-
	NFPA 45;				-
	ASHRAE 110;				-
	ANSI Z9.5*;				-
	UL 61010-1;				-
	CAN/CSA C22.2 No. 61010.1;				-
	UL 1805; SEFA 8;				-
	CE Conformity Marking (220V models);				-
	Explosion-proof models feature:				-
	Explosion-proof 100-watt light fixture (fully furnished with bulb and electrical connections including wirings and switches for 220 V 60 Hz)				-
	Models with blower module feature:				-
	Belt-driven blower with adjustable sheave;				-
	Powder-coated steel base and housing;				-
	Corrosion-resistant coated steel impeller ;				-
	3/4 HP blower				-
21	Mindray Hematology Reagent Set for Mindray BC 3200 - 3 Part Hematology Analyzer (for VSU existing lab equipment)	1	set	140,000.00	140,000.00
22	7-hp-3-phase electric motor	2	unit	25,000.00	50,000.00
23	12 channel temperature data logger	1	unit	50,000.00	50,000.00
24	Wireless Digital Rain Gauge with Temperature; Self-emptying collector; Total Hourly, Daily, Weekly, Monthly and Yearly rainfall display;	1	unit	5,500.00	5,500.00
	<b>FOR VSU VILLABA</b>				
	<b>For Item No. 25 Delivery (FOB) is at VSU Villaba</b>				
25	<b>Water Bath</b>	unit	1	40,800.00	40,800.00
	water bath, temperature range up to +95°C				-
	with Peltier cooling unit CDP115 from +10°C				-
	size: 22 (internal dimensions 22 liters, 350 x 220 x 290 mm)				-

	extensive range of accessories: e.g. a Peltier cooling unit, flat or gable cover, shaking device, floor shelf, test tube rack, state-of-the-art control technology, optional water level control				-
	high quality, corrosion-resistant and easily cleanable				-
	stainless steel for the working chamber and housing				-
	<b>REBIDDING TOLOSA</b>				
	<b>For Items No. 26 to 41 Delivery (FOB) is at VSU Tolosa</b>				
26	Industrial Balance (30Kg capacity)	1	unit	50,000.00	50,000.00
	Accuracy: 1/2/5g (Triple Accuracy)				
	Outer Body: Metal Body with MS base plate (with dust cover)				
	Display: 0.56" RED LED with				
	Battery: With Inbuilt Dry 6V-4.5Am rechargeable battery				
	Calibration: one touch calibration with external				
	standard weight				
	With after sales services and warranty				
27	Digital binocular microscope	2	unit	80,000.00	160,000.00
	Specifications:				
	1000x				
	3.2 MP Camera				
	With tablet 110/240V				
28	Stereo zoom microscope <del>SZ51-delete</del> , for ringlight, bino	10	unit	31,696.10	316,961.00
	Optics				
	Lighting: none				
	Lamp type: -				
	Magnification: 40				
	Lens type: zoom lens				
	Eyepiece: 10				
	Optical system: Greenough/ <b>CMO</b>				
	Capacity				
	Optical zoom: 0.8-4				
	Mechanics				
	Type of build: binocular				
	Viewing posture (°): 45° viewing angle, interpupillary distance adjustable from 52-76mm				
	Focusing: Coarse movement				
	Specimen stage: Stage plate				
	Working distance (mm): 110				
29	Homogenizer	1	unit	57,200.00	57,200.00
	Specifications:				
	-2,000 - 27,000 rpm				
	-working range 1 - 2,500 ml				

	-digital LCD display on remote controller				
	-timer from 10 sec. up to 15 min.				
	-CE certified and unique serial number for tracing				
	Version: Unit				
	Length (inner): Extension arm: 250 mm				
	Width (Outer): 60mm				
	Length (Outer): 75mm				
	Height (Outer): 215mm				
	Diameter (Outer): Extension arm size : Ø12.7				
	Material: ABS & aluminum die-casting				
	Ideal for: all dispersing and homogenizing applications,				
	designed for liquid and tissue samples				
	Controller: Digital, remote				
	Moisture range: 85% RH				
	Speed: 2000-27000 rpm, resolution: 10 rpm				
	Capacity: 1-2500ml				
	Motor rating: Input: 300W, Output: 160W				
	Temperature range: Ambient temperature +5 - 50°C				
30	Vortex shaker/Mixer	1	unit	98,160.00	98,160.00
	Specifications:				
	Orbital diameter: 4 mm				
	Different modes: Touch, continuous				
	Speed setting: 300-4200 rpm				
	Max. loading capacity: 500 g				
	Dimensions (WxDxH): 205 x 136 x 138.5 mm-delete				
	Weight: 2.8 kg-delete				
31	Gel Electrophoresis System	1	unit	65,866.00	65,866.00
	Specifications:				
	w/ attached power supply				
	Electrophoresis Tank, Safety lid, Power Supply,				
	1 large gel tray and 2 small gel trays,				
	4 combs (13 well and 26 wells) and a gel casting stand				
32	Taste & Odor Free Residential Water Disinfection UV System	1	unit	27,307.00	27,307.00
	Specification:				
	System Working Pressure Resistance: (0.6 MPa)6kg/Cm2				
	Alert System for Lamp: One Set				
	Raw Water Supplying: Running Water				
	<b>Aquatics Fish Egg Tumbler / Incubator Aquarium fish hatchery (for items no. 33 to 36)</b>				
33	Size: ZET-80	5	pc	1,555.00	7,775.00

	Inner Diameter: 80mm -delete				
	Volume: 700ml -delete				
	Overall Size: 8.5cmx27cm				
	Individual Mount: Yes				
	Recommand Use: Big Fish Eggs				
34	Size: ZET-65	5	pc	1,555.00	7,775.00
	Inner Diameter: 65mm				
	Volume: 400ml				
	Overall Size: 7cmx23cm				
	Individual Mount: Yes				
	Recommand Use: Medium Fish Eggs				
35	Size: ZET-55	4	pc	1,555.00	6,220.00
	Inner Diameter: 55mm				
	Volume: 270ml				
	Overall Size: 6cmx21cm				
	Individual Mount: No				
	Recommand Use: Small Fish Eggs				
36	Size: ZET-E55	4	pc	1,555.00	6,220.00
	Inner Diameter: 55mm				
	Volume: 200ml				
	Overall Size: 6cmx16cm				
	Individual Mount: No				
	Recommand Use: Special short model				
37	Refractometer	2	unit	30,000.00	60,000.00
	Specifications:				
	Scale: Brix				
	Measurement Range: Brix: 60 to 100% (Automatic Temperature Compensation)				
	Minimum Scale: Brix: 0.5%				
	Measurement Accuracy: Brix: $\pm 0.5\%$				
	Repeatability: Brix: $\pm 0.25\%$				
	International Protection Class: IP65 (except eye piece)				
	dust-tight and protected				
	against water jets				
	Dimensions & Weight: 1.26 x 1.34 x 6.61in (3.2 x 3.4 x 16.8cm), 4.59oz (130g)-delete				
	Options: 60% Sucrose ( $\pm 0.05\%$ ): RE-110060-delete, Standard liquid LK:				
	RE-99010-delete, Daylight plate for small volume samplings:				
	RE-2311-58M-delete				
	Parts: Daylight plate: RE-2315-60M-delete				
38	Hatch Aquaculture Test Kit:	1	set	30,000.00	30,000.00
	Specifications:				

	Test Factor	Range	Smallest Increment	Tests				
	Alkalinity (P & M)	0-4.8 gpg	0.4 gpg	Up to 100 of each				
	Ammonia	0-3 mg/L as NH <sub>3</sub> -N	0.1 mg/L	300				
	Carbon Dioxide	5-100 mg/L	5 mg/L	100				
	Chloride	5-400 mg/L	5-20 mg/L	100				
	Dissolved Oxygen	0.2-20 mg/L	0.2-1 mg/L	100				
	Hardness	1-30 gpg as CaCO <sub>3</sub>	1 gpg	100				
	Nitrite Nitrogen	0-0.5 mg/L as NO <sub>2</sub> -N	0.01 mg/L	100				
	pH	4-10 pH	0.5 pH	300				
	Temperature	Armored Thermometer	-30°F to 120°F	Unlimited				
39	Haemacytometer: For Cell counting				2	unit	18,000.00	36,000.00
40	Bench top pH/Ion meters				1	unit	140,000.00	140,000.00
	<b>Ph/Ion Meter</b>							
	Specification:							
		<b>Measuring range</b>	<b>Resolution</b>	<b>Accuracy</b>				
	pH	-2.000 to 20.000	0.001 / 0.01 / 0.1	± 0.002				
	mV	-2000.0 to 2000.0	0.1 / 1	± 0.2				
	Ion concentration	0.000 to 1000.0 %	± last significant digit	± 0.5%				
		0.000 to 10000.0 ppm						
		1.00E-9 - 9.99E+9 mg/L,						
		mmol/L, mol/L						
		-2.000 to 20.000 pX						
	Temperature MTC	-30.0 to 130.0°C	0.1°C	± 0.1°C				
	Temperature ATC	-5.0 to 130.0°C	0.1°C	± 0.1°C				
	Connectors	pH Sensor input	BNC (impedance > 3 x 10E+12Ω)					
		Temperature sensor input	Cinch/RCA (NTC30 kΩ or Pt1000)					
		Reference input	2mm Ref.					
		Communication interfaces	RS232, USB-A, USA-B					
		Stirrer connector	Mini-DIN					
	Power requirements	DC 9–12V/10W						
	Size/weight	204 x 174 x 74mm, 890g						
	Ambient conditions	Temperature	+5 to 40°C					
		Relative humidity	5 to 80% (non-condensing)					
41	Forensic Comparison Microscope with CCD Camera, Software & Laptop				1	unit	325,000.00	325,000.00
	REBIDDING ALANGALANG							-
42	Analytical soil balance, *Spectrophotometer) 600 to 620 grms capacity				1	unit	45,000.00	45,000.00
43	Hot Plate w/ Magnetic Stirrer,				1	pc	45,000.00	45,000.00
	Plate size: 7.6" (W) x 7.6" (D)							
	ceramic coated stainless							
	steel plate							
	temperature range: 600 C to 4200 C							

	speed range: 60-1500 rpm				
	heater: 500 W, with 25 cm stainless rod				
44	Laboratory chemical storage cabinet, fabrication of cabinet	1	unit	20,000.00	20,000.00
	glass door with lock				
	Hardwood				
	dimension 48"W x 22" D x 84"H				
45	Laboratory Pressure Cooker, for laboratory	1	unit	40,000.00	40,000.00
	metal - to metal seal				
	aluminum				
	size inner container capacity 41 quart/39liters				
	temperature 15 to 25C, 59 to 77F				
	equipped with ideal gauge				
	control valve, excess pressure relief valve and overpressure plug, used over LPG gas				
46	Laboratory Water Shower with free installation	1	unit	20,000.00	20,000.00
47	Laboratory Table (Biology), 5 meter x 2 m; height: 0.85 m	4	units	20,000.00	80,000.00
	Stainless steel and rubber adjustable feet, it's damping-proof, shipper proof, corrosive-proof				
	and with shock absorbing function and with better weight-bearing				
	C frame with suspended drawer structure				
	artificial stone worktop				
	with two sinks in one end				
	with two L-shaped faucets assigned in each sink				
48	Laboratory Table (Physics), 5-meter x 2 m; height: 0.85 m	4	pcs	18,059.00	72,236.00
	Stainless steel and rubber adjustable feet				
	it's damping-proof, shipper proof, corrosive-proof				
	and with shock absorbing function and with better weight-bearing				
	C frame with suspended drawer structure; artificial stone worktop				
	with two sinks in one end				
	with two L-shaped faucets assigned in each sink				
49	Lab Benches & Cabinets School Laboratory Furniture Standard Lab Bench Height (Center)	1	unit	200,880.00	200,880.00
	Total length: 4 meters height width (users' requirement)				
	Worktops: 13mm thickness of black Phenolic resin tops edge thickened into 26mm				
	Frame: C or H type 60*40*1.5mm thick steel tube with 75µm epoxy resin powder coating				
	Cabinet: 18mm thick MDF covered with 0.4mm high pressure laminate on both sides				
	Cabinet's color: Blue/Sky blue				



	Handle: Embedded aluminium alloy with epoxy resin powder coating				
	Hinge: DTC 105 degree high quality hinge				
	Slideway: Self-closing three section slide rail, no noise				
	Accessories: Pegboard, sink, faucet, gas fitting, sockets, eyewash, exhaust hood lab stools etc				
	Shelves: Cold-rolled steel column with glass shelves (with sockets)				
	PP sink + Faucet: High grade PP sink with three way cold water faucet (304 SUS body with ceramic valve core)				
	Sockets: Aluminum alloy box with electric socket				
	Lab stools				
	Surface: Polyurethane (or other: Stainless steel, PU leather, FRP)				
	Body: Chrome plated, R=260 mm				
	Size: Diameter-325mm, Thickness-35-40mm				
	Control: Screw Jack or Penumatic jack				
	Foot: Fixed foot or moving wheels				
	Height: Adjustable-440-590mm or higher				
	Chair castor: ESD Nylon castor				
50	UV-A/B and UV-C light meters	1	unit	20,900.00	20,900.00
51	Sieve shakers	1	unit	65,000.00	65,000.00
52	Vacuum Filtration System/Vacuum Pump-delete	1	unit	45,000.00	45,000.00
53	CALORIMETER, JOULE 4	1	unit	150,000.00	150,000.00
	3A.Complete with stirrer				
	terminals and heating coil				
	lagged and fitted with outer jacket				
	lid with hole for thermometer				
54	GALVANOMETER, SPOT, general purpose	1	unit	40,000.00	40,000.00
	sensitivity (direct) in the range 22 mm/microA, 2 mm/microV 70 mm/microC				
	double reflecting optical system				
	electrical overload protection				
55	Laboratory Cabinet, <del>Cole-Parmer-delete</del> Wall Cabinet with Glass Sliding,	2	unit	20,000.00	40,000.00
56	Oscilloscope, dual trace, 20 MHz bandwidth, 8x10 cm screen with scale illumination, adapters to take 4 mm plugs	1	unit	15,000.00	15,000.00
57	Lab Benches and Cabinets School Laboratory Furniture Standard Lab Bench Height (Center), Total length: 4 meters (users' requirement	1	Set	200,900.00	200,900.00
	Worktops: 13mm thickness of black Phenolic resin tops edge thickened into 26mm				
	Frame: C or H type 60 mm *40 mm *1.5mm thick steel tube with 75µm epoxy resin powder coating				
	Cabinet: 18mm thick MDF covered with 0.4mm high pressure laminate on both sides				

	Cabinet's color: Blue/Sky blue				
	Handle: Embedded aluminum alloy with epoxy resin powder coating				
	Hinge: DTC 105 degree high quality hinge				
	Slideway: Self-closing three section slide rail, no noise				
	Accessories: Pegboard, sink, faucet, gas fitting, sockets, eyewash, exhaust hood lab stools etc				
	Shelves: Cold-rolled steel column with glass shelves (with sockets)				
	PP sink + Faucet: High grade PP sink with three way cold water faucet (304 SUS body with ceramic valve core)				
	Sockets: Aluminum alloy box with electric socket				
	Lab stools				
	Surface: Polyurethane (or other: Stainless steel, PU leather, FRP)				
	Body: Chrome plated, R=260 mm				
	Size: Diameter-325mm, Thickness-35-40mm				
	Control: Screw Jack or Pneumatic jack				
	Foot: Fixed foot or moving wheels				
	Height: Adjustable-440-590mm or higher				
	Chair castor: ESD Nylon castor				
58	Electric Microscope* Binocular head, inclined 45° and 360° rotation; * Eyepiece: widefield WFX (F.N.18)-delete with pointer installed;	2	unit	60,000.00	120,000.00
	Objective: Achromatic 4X/0.10, 10X/0.25, 40X/0.65, 100X/1.25;				
	Nosepiece: revolving quadruple nosepiece for smooth changes in magnification;				
	Condenser: focusable 1.25 Abbe condenser;				
	Diaphragm: iris diaphragm with filter holder;				
	Focusing: Coaxial coarse and fine focusing adjustment in 2 micron increments with upper limit stop to prevent damage to slide or objective;				
	Illumination: CORDED LED illumination 20mA, 3.5V,70mW with intensity control;				
	Main supply: 220V - 240V; with Dust cover				
59	LABORATORY SIDE TABLE commercial furniture with shelves, Size: user's requirement 2000x750x800mm, Material: stainless steel, Property: corrosion-resistant, Type: Laboratory Furniture with installation	1	set	100,000.00	100,000.00

*Sgnd*

**DILBERTO O. FERRAREN**

BAC Chairman