



VISAYAS
STATE UNIVERSITY

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Supply and Delivery of Laboratory Equipment and Supplies (GOODS-21-25)

Government of the Republic of the Philippines

June 9, 2021; 9:00 AM
Cooperative Building, VSU Market, Visca, Baybay City,
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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

CDA - Cooperative Development Authority.

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means “delivered duty paid.”

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

Foreign-funded Procurement or Foreign-Assisted Project– Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

STFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Section I. Invitation to Bid



INVITATION TO BID FOR SUPPLY AND DELIVERY OF LABORATORY EQUIPMENT AND SUPPLIES

- The Visayas State University through the *GF, STF, TF 2021* intends to apply the sum of *Ten Million Sixty-Five Thousand Six Hundred Sixty-Four Pesos (PhP 10,065,664.00)* being the ABC to payments under the contract for *Supply and Delivery of Laboratory Equipment and Supplies (GOODS-21-25)*. Bids received in excess of the ABC shall be automatically rejected at bid opening.

The *Visayas State University – Main Campus*, through the *GF, STF, TF 2021* intends to apply the following ABC per item to payments under the contract for each item, to wit:

Item No.	Item Description and Specifications	Unit	Qty	ABC/Unit	Total ABC
1	Temperature Data Logger	pcs	5	900.00	4,500.00
	☐High accuracy temperature logger				
	☐Logger can be connected to the PC				
	☐via USB for data import and export to excel or pdf.				
	☐Temperature & Humidity Monitoring				
	☐Measures material moisture				
2	Stirring Rod	pc	9	50.00	450.00
	☐Standard Size				
	☐Good Quality				
	☐with rubber policeman				
3	Erlenmeyer Flask	pc	29	400.00	11,600.00
	☐Material: Glass/Borosilicate Glass				
	☐Capacity: 250mL				
	☐Good Quality				
4	Petri dish	pc	12	200.00	2,400.00
	☐comprise a lid and base				
	☐high clarity glass				
	☐borosilicate glass				
	☐size:				
	◀Cover int. dia mm : 95				
	◀Base ext. dia mm: 94				
	◀Size: 100 x 20				
5	Styrofoam Box Z1	box	10	180.00	1,800.00
	☐8.5 x 8.5 x 6.75 inches				
6	Pipette Tip Holder Box 28 Vents	box	4	1,000.00	4,000.00
	☐For use with 5ml pipette tips				
7	Pipette Tips 5ml	packs	2	1,400.00	2,800.00
	☐100 pcs of 5-ml pipette tips per pack				
	☐7-slot universal Pipette Carousel Stand				

8	Contact cleaner	pcs	10	350.00	3,500.00
	☐Anti-rust				
	☐Wet-type Lubricant				
	☐Spray-type				
	☐Penetrating-type				
	☐360ml/can				
9	Methanol	gallon	1	2,500.00	2,500.00
	☐AR grade				
10	Alcohol, Ethyl, 70% solution, 1 gallon	gallons	14	600.00	8,400.00
11	Reagent Bottles	btls	2	500.00	1,000.00
	☐Autoclavable				
	☐amber bottle with ground glass cover				
	☐250 mL capacity				
	Material: Borosilicate Glass				
12	Lactophenol Cotton Blue Solution	btl	1	2,500.00	2,500.00
	☐250ml per bottle				
13	Polyethylene Glycol (PEG) 6000,	btl	1	700.00	700.00
	☐250g per bottle				
14	Safranin O Solution	btl	1	1,800.00	1,800.00
	☐250ml per bottle				
15	IAA (Indole-3-Acetic Acid),	btl	1	4,500.00	4,500.00
	☐500g per bottle, AR				
16	Sodium bromide, NaBr	btl	1	1,500.00	1,500.00
	☐250g/bottle, AR				
	Chemical property- Sodium bromide is a colorless cubic crystal or white granular powder. It is odorless, and has slightly bitter and briny taste but high toxicity. It is easily soluble in water (at 100 °C, the solubility in 100ml water solubility is 121g), but slightly soluble in alcohol.				
	☐Specifications:				
	◀Appearance: White, Crystalline Solid				
	◀Assay: ≥99%				
	◀Chloride: ≤1.0%				
	◀Loss on Drying: ≤0.5%				
	◀Sulfate: ≤0.05%				
	◀pH value: 6.5~8.5 (5% @ 72 °F)				
17	Magnesium chloride, MgCl₂	btl	1	3,000.00	3,000.00
	☐1kg per bottle				
	☐colorless crystalline solid				
	☐Properties:				
	◀Quality Level: 300				
	◀Grade: anhydrous				
	◀Assay: ≥98%				
	◀Form: powder				

	◀Impurities: ≤0.5% Insolubles				
	◀bp: 1412 °C/1 atm (lit.)				
	◀mp: 714 °C (lit.)				
	◀Density: 2.32 g/mL at 25 °C (lit.)				
18	Petroleum Ether, AR	gallon	1	3,500.00	3,500.00
19	pH Meter	pcs	1	2,500.00	2,500.00
	▣0.1 pH resolution				
	▣water-resistant/proof				
	pen type				
20	Burette Brush	piece	2	150.00	300.00
	▣big size for 50 mL burette				
21	Filter Paper, 12.5 cm. Ashless #42, 100pcs. per box	boxes	4	1,800.00	7,200.00
22	1 kb Plus DNA Ladder	btl	1	7,700.00	7,700.00
	▣1ml per bottle				
23	Agarose LE	btl	1	5,680.00	5,680.00
	▣100g per bottle				
24	CTAB	btl	1	3,000.00	3,000.00
	▣500g per bottle, AR				
25	Custom oligo primers	unit	10	1,100.00	11,000.00
	▣HPLC-CE purified				
26	Delicate Task Wipes	boxes	12	120.00	1,440.00
	▣4.4 x 8.4 inches (11 x 21 cm)				
	▣280 sheets/box				
	▣lint-free				
27	LB Agar	btl	1	3,700.00	3,700.00
	▣500g per bottle				
28	Filter Paper	box	6	2,000.00	12,000.00
	▣Filter Paper No.1				
	▣Qualitative Circles 125mm (12.5cm)				
	▣Qty/box: 100 pieces per box				
	▣Porosity: Medium				
	▣Flow Rate: Medium				
29	EDTA	btl	1	6,900.00	6,900.00
	▣500g per bottle				
	▣A.R				
	▣monobasic				
30	PCR loading dye	unit	1	9,600.00	9,600.00
	▣10x, 1 ampule				
31	LB Broth	btl	1	1,150.00	1,150.00
	▣100g/bottle				
32	Gloves, Nitrile, Large	box	10	500.00	5,000.00

	☑Glove Type: Chemical Resistant Disposable Gloves				
	☑Glove Material: Nitrile				
	☑Powder-Free				
	☑1 box of 100 or 50 pairs				
	☑Food Safe				
	☑Size: large				
33	Gloves, Nitrile, Medium	box	8	500.00	4,000.00
	☑Glove Type: Chemical Resistant Disposable Gloves				
	☑Glove Material: Nitrile				
	☑Powder-Free				
	☑1 box of 100 or 50 pairs				
	☑Food Safe				
	☑Size: Medium				
34	Dropping Bottle	pc	3	900.00	2,700.00
	☑Dropping Bottle, Bulb and Pipette				
	☑With Glass Stopper				
	☑Capacity: 125mL				
	☑Dimension: 5mm diameter and 150mm height				
	☑Material: Borosilicate Glass				
35	Brush Suitable for 10mL Graduated Cylinder	pc	3	200.00	600.00
	☑Bristle Material: Black Nylon				
	☑Suitable for 10mL Graduated Cylinder				
36	Brush Suitable for 50mL Graduated Cylinders	pc	3	200.00	600.00
	☑Bristle Material: Black Nylon				
	☑Suitable for 50mL Graduated Cylinder				
37	Brush Suitable for 100mL Graduated Cylinders	pc	3	200.00	600.00
	☑Bristle Material: Black Nylon				
	☑Suitable for 100mL Graduated Cylinder				
38	Apron	pc	3	3,500.00	10,500.00
	☑Heavy Duty Industrial Chemical Laboratory Apron				
	☑Material: Neoprene				
	☑Color : Black				
	☑Chemical Resistant (Suitable protection against wide range of chemicals)				
	☑Light weight				
	☑Sizes : at least 35" X 43"				
39	Alcohol Burner	btl	2	170.00	340.00
	☑Burner Lamp				
	☑Clear Glass Lab				
	☑150mL				
40	Wash Bottle, 250mL cap.	pc	11	200.00	2,200.00
	☑Material: Plastic (good quality)				
41	Water Quality Test Meter	piece	3	2,000.00	6,000.00

	☑2 in 1 kit, with calibration packets and user's manual				
	◀1 TDS meter				
	◀1 pH meter				
	☑Hand-held and portable, pen-sized				
	☑Color: yellow (pH) + blue (TDS)				
	☑Material: plastic + metal				
	☑Size: length at 15-20cm				
	☑Accurate reading				
	☑Good quality				
	☑Durable				
42	Burette with Rubber Tube, stopper and dropper	pc	2	3,800.00	7,600.00
	☑Burette with Rubber Tube, stopper and dropper				
	☑Material: Glass/Borosilicate Glass				
	☑Capacity: 50mL				
	☑For Base				
43	Burette with Glass Stopcock	pc	2	4,000.00	8,000.00
	☑Burette with Glass Stopcock				
	☑Material: Glass/Borosilicate Glass				
	☑Capacity: 50mL				
	☑For Acid				
44	Temperature-Humidity Data Logger	piece	4	2,000.00	8,000.00
	☑Portable and hand-held				
	☑16000 data recording capacity.				
	☑Adjustable record interval: 10s~24hour				
	☑Multi-function LCD				
	☑Internal NTC temperature thermal sensor with optional external sensor				
	☑Data export in PDF/EXCEL via data management software				
	☑Selectable °F/°C temperature unit				
	☑Size: approx. 84 (L) x 44(W) x 20 (H) mm				
	☑Good quality				
	☑Durable				
45	Dissolved Oxygen Meter	piece	1	11,000.00	11,000.00
	☑Pen-type, portable, easy to carry and durable				
	☑LCD display for simultaneous display of dissolved oxygen and temperature.				
	☑Highly sensitive probe for fast response and accurate measurement				
	☑Unit switching function, Celsius and Fahrenheit				
	☑Removable probe design, easy to change measurement, equipped with three spare probe covers for intimate protection.				
	☑The pen body design is compact, lightweight, easy to carry and easy to measure.				
	☑Measurement Range: 0.00-20.00mg/L				

	☑Basic Measurement Error: 0.4 mg/L				
	☑Dissolved Oxygen Temperature Compensation: 0-40 degrees Celsius				
	☑Power Supply: 4 LR44 1.5V button batteries				
	☑Color: Blue And Gray				
	☑Dissolved Oxygen Meter: at least 140x40x40mm				
	☑Pen: at least 160x13x13mm				
	☑Lead Length: at least 2930mm				
	☑Probe Length: at least 3090mm				
	☑Full Length: at least 3230mm				
	☑Weight: approximately 253g				
	☑Package Included:				
	◀1 x Host				
	◀3 x Probe Covers				
	◀1 x USB Data Cable				
	◀1 x Portable Cloth Bag				
	◀1 x Color Box				
	◀1 x Factory Certificate				
	◀1 x Instruction Manual				
	◀1 x Dissolved Oxygen Filling Solution				
	◀10 x Reagent A				
	◀10 x Reagent B				
46	Laboratory Burette Stand	pc	3	1,000.00	3,000.00
	☑Standard laboratory burette stand				
	☑Good quality White PE Burette Stand				
	☑Heavy duty white polyethylene burette stand comes with a polyethylene coated metal rod which screws into the base.				
	☑Whichever is available, with the hole in the center (center weighted) or at the short edge (edge weighted) as long as the 3 burette stands are the same (ex. if center weighted, then all 3 should be center weighted).				
47	Analytical Balance	pc	1	29,240.00	29,240.00
	☑max capacity 120 g				
	☑readability 0.1mg				
	☑linearity +/- 0.2 mg				
	☑pan size 80 mm dia				
	☑Motor-driven built-in calibration weight				
	☑PSC: touch-key with built-in or external weight calibration mode				
48	Burette clamp	pc	3	1,510.00	4,530.00
	☑Good Quality Double Burette Clamp				
	☑Can Hold 50mL Burette				
49	Micro pipette, with stand, P10 (0.5-10ul)	unit	1	8,060.00	8,060.00
50	Micro pipette, with stand, P1000 (200-1000ul)	unit	1	8,060.00	8,060.00
51	Micro pipette, with stand, P100 (10-100ul)	unit	1	8,060.00	8,060.00

52	Micro pipette, with stand, P200 (20-200ul)	unit	1	8,060.00	8,060.00
53	Micro pipette, with stand, P2 (0.2-2ul)	unit	1	8,060.00	8,060.00
54	Watch Glass	pack	1	1,500.00	1,500.00
	☑Material: Glass/Borosilicate Glass				
	☑Autoclavable: Yes				
	☑Outer diameter: 75 mm (7.5cm),				
	☑fits 250 mL beakers,				
	☑12pcs/pack,				
	☑good quality				
55	Graduated Pitcher	pc	2	1,000.00	2,000.00
	☑material used: Polypropylene				
	☑capacity: 2L				
	☑Design: Pitcher-type (with handle)				
56	Pipette Dropper with Rubber Head	pack	2	400.00	800.00
	☑Pipette Dropper with Rubber Head				
	☑Capacity: 10mL				
	☑Material: Glass/Borosilicate Glass				
	☑12PCS/PACK				
57	Reagent Bottle.	pc	3	300.00	900.00
	☑With Stopper/Screw Cap				
	☑Material: Glass/Borosilicate Glass				
	☑Color: Clear/Transparent Flask				
	☑Capacity: 2000mL				
	☑Graduation: 1800mL				
58	Beaker	pc	9	400.00	3,600.00
	☑250ml Low Form Beaker				
	☑Borosilicate Glass				
	☑Transparent Beaker				
	☑Thickened With Spout				
59	Beaker, Glass	pc	14	380.00	5,320.00
	☑150ml Low Form Beaker				
	☑Borosilicate Glass				
	☑Transparent Beaker				
	☑Thickened With Spout				
60	Graduated Cylinder	pc	2	600.00	1,200.00
	☑Material: Glass/Borosilicate Glass				
	☑Capacity: 250mL				
	☑Good Quality				
61	Graduated Cylinder	pc	2	1,500.00	3,000.00
	☑Material: Glass/Borosilicate Glass				
	☑Capacity: 1000mL (2L)				
	☑Good Quality				

62	Brush for cleaning 250mL Erlenmeyer Flask	pc	3	250.00	750.00
	☐Bristle Color: White Bristle				
	☐Brush+Handle Length: 12"				
	☐Brush Diameter: 1 3/8"				
	☐Brush Length: 3 1/2"				
	☐Suitable for cleaning 250mL Erlenmeyer Flask				
63	Brush Suitable for cleaning 500mL Erlenmeyer Flask	pc	3	250.00	750.00
	☐Bristle Color: White Bristle				
	☐Brush+Handle Length: 14"				
	☐Brush Diameter: 1 1/2"				
	☐Brush Length: 4"				
	☐Suitable for cleaning 500mL Erlenmeyer Flask				
64	Burette with PTFE Stopcock	pc	2	3,800.00	7,600.00
	☐Burette with PTFE Stopcock				
	☐Material: Glass/Borosilicate Glass				
	☐Capacity: 50mL				
65	Multi-Functional LCD Digital Multimeter Auto Range DMM with Temperature Detector DC AC Voltage	unit	25	2,000.00	50,000.00
	☐Large LCD display of 41mm character height				
	☐Measure DC/AC voltage/current, diode, resistance, capacitance, temperature and continuity test.				
	☐Max. display value: 6000.				
	☐Can test the temperature with unit of °C / °F.				
	☐Includes relative value testing, duty cycle test, data hold, MAX/MIN value hold and auto power off function.				
	☐With overload protection on all ranges.				
	☐Low battery indication and warning alarm function.				
	☐Equipped with a back bracket for supporting multimeter, and also can collect test probe.				
	☐Protected by rubber for drop protection.				
	☐Great for troubleshooting automotive and household electrical problems.				
66	Potassium Chloride	kgs	6	1,500.00	9,000.00
	☐Chemical must be plant tissue culture tested for at least 20 years				
	☐ISO complaint				
	☐ACS REAG				
	☐PH EUR				
	☐meets USP Standards				
	☐Bioreagent suitable for cell culture				
67	Activated Acid-washed Charcoal	pack	1	15,000.00	15,000.00
	☐Chemical must be plant tissue culture tested for at least 20 years				
	☐ISO complaint				
	☐ACS REAG				
	☐PH EUR				

	☑meets USP Standards				
	☑Bioreagent suitable for cell culture				
	☑2.5kg per pack				
68	Ethanol	btl	10	300.00	3,000.00
	☑USP 95% (food grade), 2.5 L				
69	Sodium EDTA dihydrate,	btl	4	5,400.00	21,600.00
	☑Chemical must be plant tissue culture tested for at least 20 years				
	☑ISO compliant				
	☑ACS REAG				
	☑PH EUR				
	☑meets USP Standards				
	☑Bioreagent suitable for cell culture				
	☑250g per bottle				
70	Calcium Chloride Dihydrate	btl	3	2,000.00	6,000.00
	☑Branding the chemical to be purchase is following the protocol set for the project's protocol and standards				
	☑Chemical must be plant tissue culture tested for at least 20 years				
	☑ISO compliant				
	☑ACS REAG				
	☑PH EUR				
	☑meets USP Standards				
	☑Bioreagent suitable for cell culture				
	☑500g per bottle				
71	Naphthaleneacetic Acid, 5g per bottle	btl	5	3,400.00	17,000.00
	☑Branding the chemical to be purchase is following the protocol set for the project's protocol and standards				
	☑Chemical must be plant tissue culture tested for at least 20 years				
	☑ISO complaint				
	☑ACS REAG				
	☑PH EUR				
	☑meets USP Standards				
	☑Bioreagent suitable for cell culture				
72	Potassium Nitrate	packs	15	5,800.00	87,000.00
	☑AR grade				
	☑Formula: KNO3				
	☑Molar wt: 101.1032 g/mo				
	☑1kg/pack				
73	Phytigel, Sigma	kl	7	40,000.00	280,000.00
	Branding the chemical to be purchase is following the protocol set for the project's protocol and standards				
	☑Chemical must be plant tissue culture tested for at least 20 years				
	☑ISO compliant				

	☑ACS REAG				
	☑PH EUR				
	☑meets USP standards				
	☑Bio reagents suitable for cell culture				
74	Analytical Balance, at least 220g capacity	unit	1	53,000.00	53,000.00
	☑4 decimal places				
	☑Automatic Internal Calibration, LCD back-lit display				
	☑Capacity: at least 220g				
	☑Readability: 0.1 mg				
	☑Repeatability (std dev): 0.1 mg				
	☑Linearity (+/-): 0.2 mg				
	☑Pan size (mm/inch): 90 Ø/3.5Ø				
	☑Response time: 3 sec				
	☑Calibration: Perfect Self Auto Calibration (temperature / time /power on)				
	☑Display: Bright LCD Display with LED backlight				
	☑Unit of measure: gram, Milligram				
	☑Tare Range: Full				
	☑Operating Temperature: 10°C to 40°C				
	☑Dimension (WxDXH) mm : 342.5X212x341				
	☑Power Supply: AC Adapter 100V- 240V +/- 20% 50-60Hz				
	☑Net weight with Packing: 8 kgs				
75	Laminar Flow Hood	unit	1	200,000.00	200,000.00
	☑Horizontal				
	☑with HEPA Filters				
	☑UV Germicidal Light				
76	PCR Thermal Cycler	unit	1	250,000.00	250,000.00
77	Orbital shaker	unit	1	53,000.00	53,000.00
	☑Bench top shaker (Medium size)				
	☑Shaking System : Orbital				
	☑Shaking Plate Size (WxD mm) 480x380				
	☑Shaking Rate (RPM) 20 to 300				
	☑Shaking Width (mm) 25				
78	Dispensing pump for culture media	unit	1	60,000.00	60,000.00
	☑Single Pump				
	☑Continuous				
	☑Multi-dose				
	☑(predetermined volume, with a pause between each dose)				
	☑Digital control screen				
	☑Rotating button for easy navigation and program settings				
	☑Compact: only 16 cm wide				
	☑Up to 1% precision				

	☑Dispenses liquid from 50 μ L to 99 μ L				
	☑Step-by-step instructions on screen				
	☑Calibration possible with chosen volume				
	☑High quality Watson Marlow TM pump heads				
	☑Heavy duty polycarbonate top shell and durable stainless steel				
79	Pressure cooker for laboratory use	unit	1	52,000.00	52,000.00
	☑Heavy Duty, 41.5 quarts				
	☑Professional quality, extra heavy duty cast aluminum construction throughout for fast & even heating				
	☑Stay-cool bakelite top handle				
	☑Geared steam gauge				
	☑Equipped with 2 automatic venting features which provide an extra margin of safety (the safety control valve				
	☑ overpressure plug)				
	☑Pressure regulator weight with settings of 5, 10 and 15 psi				
	☑Smooth, easy to clean satin finish				
	☑Double thickness edges for additional protection on points of heaviest wear				
80	pH meter	unit	1	54,000.00	54,000.00
	☑Digital				
	☑with pH electrode				
	☑with pH 4, 7 and 10 (1L each) pH standard				
	☑Size: Measuring range:0 ~ 14.00pH Accuracy:±0.012pH				
	☑Note:				
	◀Conventional pH measurement used in the experiment room				
	◀accord with the most simple to use.				
	☑Category: Bench Type PH meter				
81	Autoclave High Steam Sterilizer	unit	1	200,000.00	200,000.00
	☑(High Pressure Steam Sterilizer) , Automatic, Vertical Autoclave				
	☑Portable, Top-loading Autoclave				
	☑Space-saving design with lid opening upward.				
	☑Dual-sensing lid interlock prevents lid opening when chamber is pressurized or when temperature exceeds 97°C.				
	☑One-touch lever to easily open and close chamber lid				
	☑Door-closure sensor provides a prompt and the cycle will not start unless the door is closed properly.				
	☑In-process display shows status and progress of sterilization cycle				
	☑Agar sterilization mode for sterilizing agar and then automatically maintaining it at liquid temperature				
	☑Sterilization timer is activated only when load temperature reaches set temperature				
	☑Temperature Range: 105°C to 135°C				

	■Agar warming range: After sterilization, agar can be maintained from 45°C to 60°C (programmable) for up to 24 hours to prevent coagulation.				
	■Sterilization Timer: 1 to 300 minutes				
	■Cooling Fan: Switch to turn fan on or off				
	■Safety Features: Circuit breaker with GFCI, low-water power cut-off, over-temp power cutoff, over-pressure power cut-off, safety valve, sensor for improper lid closing				
	■Power Requirements: 220V, 50/60 Hz, single phase				
	■Power Consumption: 3.9 KwShipping Weight: 255 lb (116 kg)				
82	Microbead Sterilizer	unit	1	52,000.00	52,000.00
	■Plain metal cover, glass-cup and glassbeads (150g),				
	■220 or 240 V, 90 W				
	■Glassbead container: Stainless steel				
	■Glassbeads (filling portion) : 150g				
	■Inside dimensions: 3x4cm				
	■Casing dimensions (HxWxD): 14.4x12.5x14cm				
83	Digital microscope with camera	unit	1	52,000.00	52,000.00
	■Compound Biological Trinocular Digital Microscopes				
	■with Camera and Software (2.0MP)				
84	Distilling Apparatus	unit	1	150,000.00	150,000.00
	■Note: Distilling apparatus in cart is beyond the budget allocated.				
	■Housing made of stainless steel				
	■Pilot switch light				
	■with thermostat				
	■Distillation capacity L/H; 4				
	■Water consumption L/Min : 1				
	■Equipment measures HxWX Depth (mm): 435x370x220				
	■Heaters: 3000W				
	■Electricity : 230V-50/60 Hz 13A				
	■Equipment wt: 8				
85	Boric Acid, Analytical Reagent	kgs	2	1,400.00	2,800.00
86	Dimethyl sulfoxide, Analytical reagent	L	3	2,500.00	7,500.00
87	Calcium Nitrate standard for AAS, Analytical reagent	btls	1	3,100.00	3,100.00
88	Sodium Hydroxide, Technical grade, 1kg/bottle	kgs	24	100.00	2,400.00
89	Cadmium Nitrate Standard for the AAS	500cc	1	4,000.00	4,000.00
90	ammonium meta vanadate, AR>	gms	1	3,500.00	3,500.00
91	Storage Solution for ROSS electrode	btl	1	5,600.00	5,600.00
	■Orion application solution				
	■Orion Cat No. 810001.				
	■One bottle is 475mL.				
92	ROSS reference electrode filling solution (3M KCl)	pack	1	7,300.00	7,300.00
	■Orion cat. No. 810007				

	☐One pack is composed of 5 bottles				
	☐(60 ml. capacity)				
93	Barium acetate AR	500gms	1	1,800.00	1,800.00
94	potassium antimony tartrate (III) hydrate, AR	gms	1	3,000.00	3,000.00
95	Ethanol	btls	3	1,800.00	5,400.00
	☐AR, at least 95%v/v, 4L per bottle				
96	Potassium dihydrogen phosphate, AR	500gms	2	500.00	1,000.00
97	Triethanolamine, AR	liters	3	3,000.00	9,000.00
98	Alcohol, Denatured	gallons	7	253.00	1,771.00
99	Test Tube	pieces	12	105.00	1,260.00
	☐with Screw Cap				
	☐Glass				
	☐Graduated, 50mL				
100	Test Tube	pieces	12	100.00	1,200.00
	☐with Screw Cap				
	☐Glass				
	☐Graduated, 20mL				
101	Microscope Slides and cover slips	pieces	11	370.00	4,070.00
	☐Pre-Cleaned Blank slides with 100 22 x 22 mm square Cover Slip				
102	Vacutainer EDTA Tubes	tubes (box)	2	1,650.00	3,300.00
	☐blood collection tubes, 2 ml				
	☐Stainless Steel				
	☐Single Prong				
	☐5 inches				
	☐10 pieces/pack				
103	Sodium Hydroxide, AR 500G	btls	12	800.00	9,600.00
	☐500 g/bottle, AR, Pellets				
104	Hydrochloric Acid	btl	1	600.00	600.00
	☐AR grade				
	☐2.5 liter/btl.				
	☐36.5-38%				
	☐impurities <1ppm free chlorine				
105	Drager Aspirator Bulb	pieces	2	200.00	400.00
106	Stirring Rod	pieces	2	100.00	200.00
	☐big size, => 10 inches long, fire polished ends with no policeman				
107	Glass Jar 12oz	box	15	384.00	5,760.00
	☐Clear				
	☐12oz				
	☐M-7101				
	☐with cap				
	☐24pcs/box				

108	Glass Jar 8oz	box	15	312.00	4,680.00
	☐Clear				
	☐8oz				
	☐M-7177				
	☐with cap				
	☐24pcs/box				
109	L-Glutamine	btls	2	3,500.00	7,000.00
	☐AR, 100g per bottle				
110	Myo-inositol	btls	3	1,600.00	4,800.00
	☐AR, 100g per bottle				
111	Acetone	gallon	1	1,600.00	1,600.00
	☐AR, 1gallon				
112	Agar (E-406)	btl	1	2,400.00	2,400.00
	☐Pronadisa				
	☐500g				
	☐For plant tissue culture				
113	Scalpel Handle	pcs	8	70.00	560.00
	☐#4, Stainless steel				
114	Scalpel Blade	box	8	280.00	2,240.00
	☐Stainless steel				
	☐100 blades/box				
115	Distilled Water, 6 liters per bottle	btl	6	150.00	900.00
116	Phenolphthalein Powder Indicator	btl	1	12,000.00	12,000.00
	☐Analytical Grade				
	☐500 grams per bottle				
117	Potassium Hydroxide	btl	1	4,200.00	4,200.00
	☐Flakes				
	☐Analytical Grade				
	☐1kg per bottle				
118	Potassium Hydrogen Phthalate (KHP)	btl	1	12,000.00	12,000.00
	☐Powder				
	☐500g per bottle				
	☐Analytical Grade				
119	Sulfuric Acid	btl	4	1,750.00	7,000.00
	☐Analytical Grade (98%)				
	☐2.5 Liters per bottle				
	☐specific gravity 1.84				
120	Isopropyl alcohol	btl	1	7,000.00	7,000.00
	☐2 liters per bottle				
	☐Anhydrous,				
	☐99.5%,				
121	Ethanol (Ethyl alcohol)	btl	2	4,500.00	9,000.00

	☑95%,				
	☑4 Liters per bottle				
	☑Analytical Grade				
122	Toluene	btl	1	7,300.00	7,300.00
	☑2.5 Liters per bottle				
	☑Analytical Grade				
	☑99.5%,				
123	Hair Net	pack of 100's	6	300.00	1,800.00
	☑High Quality				
	☑Latex Free, Breathable, Lint-free; Lightweight, Soft and Breathable Material for user comfort				
	☑Color Blue				
	☑Stretchable				
124	Volumetric Flask 10ml	pc	3	800.00	2,400.00
	☑10 mL (± 0.02 mL)				
	☑Class A				
	☑Borosilicate Glass with Glass Standard Taper Stopper				
	☑calibrated				
125	Volumetric Flask	pc	3	360.00	1,080.00
	☑50mL, (± 1 mL)				
	☑Borosilicate glass with glass standard taper stopper,				
	☑Class A				
	☑Calibrated				
126	Volumetric Flask 100ml	pc	3	500.00	1,500.00
	☑100 mL (± 0.01 mL)				
	☑Borosilicate glass with glass standard taper stopper,				
	☑Class A				
	☑Calibrated				
127	Top Loading Weighing Scale, capacity-6kg; accuracy-0.01g	unit	1	35,000.00	35,000.00
	☑Usage/Application: Laboratory				
	☑Capacity: 6 kg				
	☑accuracy: 0.01g				
	☑Display: Digital				
128	96 well plates, polypropylene	pack	1	18,500.00	18,500.00
	☑96 Well Microplate				
	☑well working volume 50-300 μ L				
	☑clear polypropylene wells round bottommaximum volume 355 μ L				
	☑DNAse/RNase free				
	☑Non-pyrogenic by LAL method to <0.06 EU/mL				
	☑at least 100 EA per pack				
129	Atomic Absorption Spectrophotometer	lot	1	1,854,108.00	1,854,108.00

	☐double beam spectrophotometer for fast sequential flame multi-element absorption and emission.				
	☐Instrument is capable of measuring at least four elements in the fast sequential mode. in single sample.				
	☐All elements determined sample by sample in fast sequential AAS, and all samples determined element by element by conventional AAS				
	☐Provides dramatic reduction in sample analysis time from reduced sample delay				
	☐Lamp support: four fixed lamp positions with fast automatic lamp selection to enable fast sequential multi-element determination sample by sample				
	☐All lamps operated simultaneously in Fast Sequential mode				
	☐Auto pre-warming of next lamp in sequence.				
	☐Fitted with high speed, high intensity deuterium background corrector covering wavelength range 185-425 nm. with automated self-calibrating Czerny-Turner monochromator and automated slit selection .				
	☐Gas control: Hammer programmable gas control/PC controlled gas flows with automatic setting of gas flows for each element				
	☐Flame safety system: Separate ignite and flame-off buttons. Safety interlocks monitor burner type, liquid trap, pressure relief bung, flame shield, flame operation, mains power, oxidant safety reservoir and deuterium lamp cover.				
	☐supplied with 6 pcs. hollow cathode lamps (single element) (K, Ca, Mg, Na, Cu, Zn)				
	☐Electrical requirements: Single phase AC supply with three-wire system terminated at an appropriate receptacle. 220 or 240 VAC $\pm 10\%$ 50/60 Hz. Rated current 15 A.				
	☐The power supply should be on a separate mains circuit protected by delayed action fuses and/or circuit breakers.				
	☐Spray chamber: Fluorinated high density polyethylene suitable for both organic & inorganic solutions				
	☐Typical performance: Absorbance >0.9 with precision of <0.5%RSD from ten 5 second integrations for 5 mg/L Cu standard.				
	☐With 6 pcs. hollow cathode lamps, branded computer, windows 10 OS, 19" monitor and desk jet printer				
	☐Laptop				
	☐On-site installation with Exhaust system and ductworks				
	☐Includes training of end-users at site				
	☐at least one year warranty on parts and service under normal use of the instrument				
	☐Supplied with software				
130	hotplate with magnetic stirrer	unit	10	30,000.00	300,000.00
	☐voltage requirements 210V-240V				
	☐digital temperature and speed display				
	☐external temperature control				
	☐closed loop with 2" magnetic stirrer				
	☐and thermometer holder				

131	Nutrient Agar, 500g per bottle	btl	1	6,000.00	6,000.00
132	Alcohol, Ethyl, 95% (Tech)	liters	2	115.00	230.00
133	Ammonium Acetate, AR	kgs	2	1,800.00	3,600.00
134	Potassium Chloride, AR, 1000g per bottle	btl	1	2,500.00	2,500.00
135	Tri-power Stereo Microscope	unit	4	25,000.00	100,000.00
	■45° advance viewing head which can rotate 360°				
	■locked on 15x wide-field eye piece with diopter adjustment on one ocular tube				
	■magnification of paired objectives: 30x parfocal, 45x parcentered, and 60x achromatic				
	■led lighting				
	■rack and pinion focusing with slip clutch and tension adjustment				
	■adjustable pole mounted cycle				
	■includes a 95mm black and white reversible stage plate				
	■rugged all metal construction				
	■corded				
	■power source: 220-240 V 50/60Hz				
	■with warranty				
136	Table Type vacuum packaging machine	unit	1	33,900.00	33,900.00
	■voltage: 220V/50-60Hz				
	■power: 0.75W				
	■heat-sealing power: .6 Kw				
	■lowest absolute pressure of vacuum case: 1.33 kpa				
	■volume of vacuum case: 380 x 380 x 80 mm				
	■heat sealing strip length and width: 260 x 8 mm				
	■number of heat sealing strips: 1 or 2 pcs				
	■exhaustment of vacuum pump: 10m3/h				
	■material of vacuum case and null: stainless steel				
	■dimension: 470 x 330 x 300 mm (l x w x h)				
	■weight: 45 kgs				
137	Laboratory Refrigerator with 10.6 cubic foot/300 L capacity	unit	2	70,000.00	140,000.00
	■Temperature range: +2°C to +8°C				
	■Inner cabinet: white epoxy painted				
	■Inner shelves: epoxy plastic coated steel rod				
	■CFC Free Eco-friendly refrigerant R 134a				
	■CFC Free, environment friendly Cyclopentene foaming PUF insulation				
	■No frost, fan-assisted cooling circulation system				
	■Ultra fast pull down, auto defrost with self-evaporating drip tray				
	■Rear-to-front hot air anti-condensation				
	■Digital temperature controller				
	■Double glazed glass doors				

	☑Full length illumination				
	☑Fitted with castors, front two with brakes				
	☑Low noise, green technology and energy saving				
	☑Self closing hinge doors				
	☑Lock as standard				
	☑Input 220/240V, 50 Hz with power cord & plug				
	☑Automatic voltage stabilizer with time delay restart				
	☑gross volume: ≥ 300 L				
138	Electric Compound Binocular Microscope (4)	unit	4	55,000.00	220,000.00
	☑Objective Lenses: DIN standard Achromat 4x, 10x, 40xR, 100xR oil immersion objectives are parfocalled, parcentered, color coded and mounted in reverse facing quadruple;				
	☑Eyepieces: Wide field 10x eyepieces, FN18. Interpupillary adjustment 55-75mm. Eyepiece can be fitted with a 20mm diameter reticle				
	☑Total Magnification: 40x, 100x, 400x, 1000x				
	☑Specimen Stage: Large 125mm x 115mm stage, with built-in mechanical stage. Mechanical stage provides X-Y movement of 55mm x 75mm				
	☑Focusing: Rack and pinion coarse focus with tension adjustment, separate fine focus. Coarse focus knob control moves the stage up or down 20mm. Fine focus moves 0.2mm per				
	☑Condenser: Abbe NA 1.25 condenser with iris diaphragm and filter holder for 32mm filter				
	☑Illumination: 1W LED illumination with on/off switch with intensity control. Corded microscope is voltage sensing 100~240V				
	☑Warranty: 5-year warranty, excluding LED bulb				
	☑Includes: Dust cover and blue filter				
139	Semi-automatic rotary microtome	unit	1	500,000.00	500,000.00
	☑For paraffin-embedded tissue sectioning				
	☑Section thickness total range in (μ): 0.5 - 100				
	☑Trimming total range in (μ): 1 - 600				
	☑Specimen feed in (mm): 27-29				
	☑Vertical stroke in (mm) for sectioning og mega-cassettes: 71-73				
	☑User interface: 6"-8" capacitive touchscreen display				
	☑Operating modes: Rotational or Rocking (selectable)				
	☑Specimen retraction total range (μ): Selectable between 5 – 250, Default value: 40 μ				
	☑Motorized coarse feed (μ m/sec): 300 - 1800				
	☑Blade Holder Type: Two in One for high and low profile blades				
	☑Max. specimen size (mm): 50x60x40 (w x h x d)				
	☑Specimen orientation: $\pm 8^\circ$ horizontal and vertical, Rotational capability: 360°				
	☑Power requirements: 100-240 VAC / 50-60Hz				

	☐Dimensions in (mm): 460-470 (width) x 540-545 (depth with tray) x 295-300 (height)				
140	Micro bead sterilizer with 1000g glass beads	unit	2	48,000.00	96,000.00
	☐Capacity: 300g/11oz.				
	☐Chamber diameter: 1.6 in/ 40mm				
	☐Height: 15.5 cm/6.1 in				
	☐Length: 14.5 cm/5.5 in				
	☐Temperature range: 100 to 300 °C				
	☐Power source: 220-240V 50/60hz				
141	Portable electric balance/weighing scale with AC adapter and storage cover	unit	1	30,000.00	30,000.00
	☐Capacity: 8200 g				
	☐readability: 1g				
	☐linearity: + 1g				
	☐pan shape: square				
	☐level bubble adjustment feet				
	☐wide LCD display with backlight				
	☐multiple weighing mode				
	☐power source: AC (220 - 240 V 50/60Hz) and DC (AA-Battery)				
142	Rechargeable precision top loading balance	unit	1	30,000.00	30,000.00
	☐Capacity: 10 kg				
	☐readability: 0.1 g				
	☐linearity: +/- 0.3g				
	☐repeatability: 0.3g				
	☐weighing units: gram, kilogram, pound, carat, Newton				
	☐display: LCD				
	☐Built-in application: check weighing, parts counting, percent setup, unstable conditions, peak hold				
	☐interface: RS-232 port				
	☐Operating temperature range: 15 to 30 degrees C				
	☐Compliance: CE				
	☐Power: rechargeable battery with 240V AC adapter				
	☐weight: 2.8 -3 kg				
	☐weighing pan: 195 x 195 mm (W x D)				
	☐overall dimension: 97 x 206 x 333 mm (H x W x D)				
143	40x-2000x LED Biological Trinocular Compound Microscope with 5MP Camera and Macbook Pro Laptop	unit	1	300,000.00	300,000.00
	☐Head: trinocular, 45 degree inclined, 360 degree swiveling				
	☐Nosepiece: revolving quadruple				
	☐Objective: Achromatic, DIN 4X, 10X, 40X(Spring), 100X(Spring, Oil)				
	☐Eyepiece: WF10X and 20X				
	☐Stage: 3D double layer, size 5.5 x 5 in (14 x 12.7 cm), X-Y stroke: 3x2 in (7.6 x 5.3 cm)				

	☑Focusing: coaxial coarse and fine				
	☑Condenser: Abbe, NA=1.25, with iris diaphragm				
	☑Illumination: LED				
	☑Power Supply: 100-240VAC, 0.35A adapter to DC6V, 2A				
	☑Achromatic optical system with precise optical glass elements				
	☑Adjustable ocular diopter on left ocular tube				
	☑High resolution images over a wide field of view				
	☑Heavy-duty metal framework				
	☑5MP USB camera with Windows/Mac software				
	☑GS and CE approval				
	☑Excellent five (5) year warranty				
	☑Camera specifications				
	◀Sensor: Aptina MT9P001 (color)				
	◀Sensor Type: CMOS				
	◀Sensor Size: 5.7x4.3mm (1/2.5" class)				
	◀Pixel Size: 2.2 micrometers				
	◀Resolution: 5.1MP				
	◀Frame Rate: 55fps @ 640x480, 18fps @ 1280x960, 6.8fps @ 2592x1944				
	◀Sensitivity: .53V/Lux-sec				
	◀Connectivity: USB 2.0				
	◀Compatibility: Windows (32/64 bit) XP/Vista/7/8/10, Mac OSX, Linux				
	◀Mounting Sizes: 23mm, 30mm, 30.5mm, and C-mount				
	☑Packing List:				
	◀Trinocular Microscope Body				
	◀Four Achromatic DIN Objectives, 4X, 10X, 40X(S), 100X(S, Oil)				
	◀One Pair of WF10X Eyepieces				
	◀One Pair of WF20X Eyepieces				
	◀Bottle of Immersion Oil				
	◀Dust Cover				
	◀AC Adapter				
	◀User's Manual Download				
	◀One 5.0MP Color Digital Camera - MU500B				
	◀One 0.5X C-mount Relay Lens				
	◀One 6' (1.8m) USB Cable				
	◀Two Eyepiece Adapters, 30.0mm 30.5mm				
	◀Two Rubber Seal Rings				
	◀One CD with Software, Driver and User's Instructions				
	☑Macbook Pro Laptop Specifications				
	◀13-inch Retina display with True Tone				
	◀Apple M1 chip with 8-core CPU, 8-core GPU, and 16-core Neural Engine				

	◀8GB unified memory				
	◀256GB SSD storage				
	◀Magic Keyboard				
	◀Touch Bar and Touch ID				
	◀Force Touch trackpad				
	◀Two Thunderbolt / USB 4 ports				
144	Upright Flourite Objectives Fluorescence Microscope including a microscope camera, a c-mount camera	unit	1	600,000.00	600,000.00
	▣Head: Trinocular				
	▣Objectives: Plan Achromat or UPlanFL 4x, 10x, 40x, 100x oil				
	▣Eyepieces: 10x Eyepieces				
	▣Nosepiece: 6 position				
	▣Stage: Graduated mechanical XY stage				
	▣Fluorescence: 4 Position Fluorescence Attachment, 100 Watt Mercury Lampouse & Power Supply				
	▣Fluorescence Dichroic Filter Cubes: FITC – U-MNB. Blue light shines on slide, green light in eyepieces, TRITC – Orange. Green light shines on slide, orange light in eyepieces, Four-Place rotary filter cube turret, Includes blank light blockers on the empty spaces to protect against harmful UV entering the viewing head.				
	▣Transmitted Halogen Lighting: High power 100W halogen illumination , Built-In Transmitted Light Filters: neutral density ND6, neutral density ND25, LBD (Daylight compensation), Condenser U-AC2: 1.1 numerical aperture				
	▣Frame has Autovolt Voltage Input: 220 – 240 VAC auto volt, 50 – 60 HZ.				
	▣Travel focus lock stop				
	▣Photography: Top camera port. 3-Position prism slider. 100 percent to eyepieces, 100 percent to camera, or split to eyepieces and camera				
	▣One year warranty				
	▣Microscope Camera specification				
	◀Image Sensor: 1 in. color CMOS				
	◀Resolution (max.): 4104 (W) x 2174 (H) pixels				
	◀Pixel Size: 3.45 x 3.45 μ m				
	◀Binning: 2 x 2				
	◀A/D Converter: 10 bits				
	◀Exposure Times: 27 μ s–15 s				
	◀Data Transfer: USB 3.1 Gen1				
	◀PC Control: Windows 10 Pro (64 bit)				
	◀Compatible with the desktop computer				
	▣Camera Adapter Specification				
	◀must be compatible with the fluorescence microscope				
	◀must be compatible with the microscope camera				
	▣Desk top computer specification				

	◀must be compatible with the microscope camera				
	◀with license Windows 10 Pro (64 bit)				
	◀brand new				
	◀Processor: Intel Core i5 9400F or higher				
	◀Motherboard: Intel H310 Chipset, Anti-Sulfur Resistors Design, Gaming LAN with Bandwidth Management				
	◀Memory: 16GB (2x8) DDR4 or higher				
	◀SSD: 500GB M.2,				
	◀Optical Drive: DVD-RW				
	◀Casing: W/ 700W PSU,				
	◀Monitor: 23" IPS FHD,				
	◀Keyboard and mouse combo				
	◀500W IC controlled AVR				
	◀Stereo speakers				
145	Basic Bench pH meters with replaceable electrode and buffer	unit	1	60,000.00	60,000.00
	☑Accuracy temperature: $\pm 0.3^{\circ}\text{C}$				
	☑Accuracy pH: ± 0.1				
	☑Electrical requirements: AC/DC 9 V adapter (220 VAC, 60 Hz)				
	☑Resolution (mV): 0.1 mV (± 199.9 mV); 1 mV beyond ± 200 mV				
	☑Temp probe calibration: offset in 0.1°C increments; offset range $\pm 5^{\circ}\text{C}$				
	☑Range pH: 0 to 14				
	☑Accuracy mV: ± 0.2 mV (± 199.9 mV), ± 2 mV beyond ± 200 mV				
	☑Calibration points: 1 to 5 points with automatic buffer recognition (ABR)				
	☑Include 13-620-AE6 3-in-1 single junction gel pH/ATC electrode				
	☑Memory: 100 datasets				
	☑Resolution temperature: 0.1°C				
	☑Temperature compensation: automatic or manual (0 to 100°C)				
	☑Temperature range metric: 0.0 to 100.0°C				
	☑Range mV: ± 1999 mV				
	☑Resolution pH: 0.01				
	☑Power source: 220 - 240 50/60 Hz				
	☑Warranty: 2-year meter warranty; 6-month electrode warranty				
146	Hotplate stirrer including magnetic bar and retriever kit	unit	1	70,000.00	70,000.00
	☑Heating temperature range: 50°C - 500°C				
	☑Heating rate heating plate: 5K/min				
	☑Heat output: 1000W				
	☑Heat control: LED				
	☑Motor rating output: 1.5W				

	☐Stirring bar length max: 80 mm				
	☐Speed range: 100 rpm - 1500 rpm				
	☐Speed control : sacel 0 - 6				
	☐Fixed safety circuit: 550 °C				
	☐Set-up plate dimensions: 180 x 180 mm				
	☐Set-up plate material: ceramic				
	☐Power output: 1020W				
	☐Power source: 220 - 240 V 50/60 Hz				
	☐Depth: 330 - 335 mm				
	☐Height 105 - 110 mm				
147	(1) TCM400 Inverted Biological Microscope with Fluorescence Kit	set	1	1,095,000.00	1,095,000.00
	(2)TC 10 Temperature Control System for Recording Chamber (heat only)				
	☐one channel DC 12V /2.5 A				
	☐two thermometers				
	☐Including: One H-OBJ Microscope Object Mantle Heater.				
	☐Connects directly to HOT-1				
	☐For connection to npi temperature controllers the adapter cable HOBJ-DIN is required and One H-OBJ-DIN DIN cable for H-OBJ				
	☐HCS or HEATINGPAD for connecting to npi controller (TC4-CABLE).				
	(3)RMS60X-PFOD - 60X Plan Fluorite Oil Immersion Objective with Iris, 1.25-0.65 NA, 0.12 mm WD				
	(4)acA1300-30gm (monochrome)				
	(5)PCle-8236 Frame Grabber				
148	Laminar Flow Hood	unit	1	250,000.00	250,000.00
	☐Horizontal Flow				
	☐Heavy plastic laminate work surface				
	☐enamel finish standard color				
	☐white flourescent type self contained lighting				
	☐Dimensions: 43" wide, 22" deep, 34" high				
149	ELISA READER	unit	1	580,000.00	580,000.00
	☐(Filter wheel-type) (Bio-rad iMark)				
	☐Wavelength range: nm400-750 or wider				
	☐Compatible plate/strips: flat, U, or V-bottom microplates or 8- or 12- well strip plates.				
	☐Number of filters accommodated: at least 8				
	☐includes 415, 450, 490, 595, 655 and 750 nm filters.				
150	MICRO CENTRIFUGE , (Ventilated)	unit	1	45,000.00	45,000.00
	☐Capacity : 24 x1.5/2mL				
	☐Max. Speed : 13,300rpm				
	☐Max. RCF : 17,000 x g				
	☐Noise Level: 56dbA				
	☐Temperature Range : Ambient temperature				

	☑Certifications/Compliance : CSA, CE, IVD				
	☑Type : Benchtop Centrifuge				
	☑Includes: 24 x 1.5/2.0mL rotor, 32 x 0.2mL rotor with Click Seal, Biocontainment lid				
	☑Description: Micro CL17 Centrifuge Ventilated				
	☑Electrical Requirements: 110/240V 50/60Hz				
	☑Run Time: 1 to 99min (1min increments); hold				
	☑Standards : IEC 61010-1, IEC 61010-2-020				
	☑Dimensions (HWD): 8.9 x 9.6 x 13.8in. (22.5 x 24.3 x 35.2cm)				
	☑Net Weight : 23.1lb. (1.41kg)				
151	Micropipette set	sets	2	75,000.00	150,000.00
	☑Fully autoclavable Pipettes with Carousel Stand with volume capacity:0.2-2ul, 1-10ul, 2-20ul, 10- 100ul,20-200ul,100-1000ul				
	☑Fully Autoclavable at 121 °C for 20 minutes				
	☑Triple-Speed Turbo (one rotation of triple dial is equal to 3.5 rotations of the ordinary push- button dial) and with lock lever				
	☑Mushroom-shaped button and color coded				
	☑Digital indicator				
	☑Inclusions: 200µl, Standard Tip, Graduated, Natural, PP Rack, Sterilized; 1000µl, Standard Tip, Graduated, Natural, System Rack(PP), Sterilized; 20µl, Filter Tip, System Rack(PP), Sterilized, 96 tips/rack, 10 rack/unit				
	☑Inclusions: 200µl, Standard Tip, Graduated, Natural, PP Rack, Sterilized; 1000µl, Standard Tip, Graduated, Natural, System Rack(PP), Sterilized; 20µl, Filter Tip, System Rack(PP), Sterilized, 96 tips/rack, 10 rack/unit				
152	Mlni CENTRIFUGE	unit	1	40,000.00	40,000.00
	☑Description:				
	◀Quiet & Compact				
	◀Spins multiple micro sample tube sizes				
	◀Ideal for Quick Spin-Downs				
	◀Fast Starting & Stopping				
	☑Specifications:				
	◀RPM: 6,600 rpm				
	◀RCF: 2,200 xg				
	◀Microtube Rotor: 2 x 8-strips or 16 x 0.2mL tubes				
	◀Dimensions (WxDxH): +4°C to 50°C				
	◀Electrical: 100V to 230VAC, 50/60 HZ, 0.1 A				
	◀Warranty: 1 year				
153	PCR Machine	set	1	1,100,000.00	1,100,000.00
	☑Excitation source: Quartz-tungsten halogen lamp				
	☑Excitation range: 350 to 750 nm				
	☑Detector: Photomultiplier tube (PMT)				
	☑Detection range: 350 to 830 nm				

	<ul style="list-style-type: none"> Filters: FAMTM/SYBR® Green I (492nm-516nm), HEXTM/JOETM/VICTM (535nm-555nm), ROXTM/Texas Red® (585nm-610nm), Cy5TM (635nm-665nm) and Cy3 (545-568) 				
	<ul style="list-style-type: none"> Thermal system: Peltier-based, 96-well block thermal cycling system; temperature range 25-99°C 				
	<ul style="list-style-type: none"> Sample format: Standard 96-well plates, 8-strip tubes, 200 µl tubes, optimized for 25µl reactions 				
	<ul style="list-style-type: none"> Linear dynamic range: 10 orders of magnitude, standard curve method 				
	<ul style="list-style-type: none"> Temperature uniformity: +/- 0.25 °C at 72 °C; ramp rate: up to 2.5 °C/second 				
	<ul style="list-style-type: none"> Amplification rate: standard 40 cycle 2-step QPCR reaction completed in 90 minutes. 				
	<ul style="list-style-type: none"> Discrimination: distinguish samples with 5,000 and 10,000 template copies with a 99.7% confidence level 				
154	THERMALBLOCK	unit	1	45,000.00	45,000.00
	<ul style="list-style-type: none"> Max. temperature control range: 110 °C 				
	<ul style="list-style-type: none"> Min. temperature control range: -10 °C 				
	<ul style="list-style-type: none"> Temperature accuracy: Max. ±0.5 °C at 20 – 45 °C1 				
	<ul style="list-style-type: none"> Temperature settings: -10 °C/110 °C (110 °C when using the (Smart Blocks 12 mm or cryo) 				
	<ul style="list-style-type: none"> Timer: 15 s to 99:30 h, continuous 				
	<ul style="list-style-type: none"> Heating rate: Max. 9 °C/min (when using the Smart Block PCR 384)1 				
	<ul style="list-style-type: none"> Cooling rate Max.: 5.0 °C/min between 110 °C and RT1 				
	<ul style="list-style-type: none"> Interfaces: USB interface 				
	<ul style="list-style-type: none"> Power supply: 220 – 240 V, 50 – 60 Hz 				
	<ul style="list-style-type: none"> Max. power consumption: 200 W 				
	<ul style="list-style-type: none"> Dimensions (W × D × H): 20.6 × 30.4 × 13.6 cm 				
	<ul style="list-style-type: none"> Weight w/o accessories: 4.3 kg 				
	<ul style="list-style-type: none"> Temperature range Min: 30 °C below RT, max: 110 °C (110 °C when Using the Smart Blocks 12 mm or cryo) 				
155	VORTEX MIXER	unit	1	40,000.00	40,000.00
	<ul style="list-style-type: none"> Description: 				
	<ul style="list-style-type: none"> ◀Vortex mixer with powerful motor comes equipped with standard cup head 				
	<ul style="list-style-type: none"> ◀200-3200 rpm speed range 				
	<ul style="list-style-type: none"> ◀Economical and effective vortexes for general lab processes 				
	<ul style="list-style-type: none"> ◀Features::Q-Drive Dynamic Balance System, Touch or Continuous Operation 				
	<ul style="list-style-type: none"> ◀Two–Year Manufacturer Warranty 				
	<ul style="list-style-type: none"> Specifications: 				
	<ul style="list-style-type: none"> ◀Electrical Specifications: 120V, 1.5A, 172.5W, 60Hz, 1Ph 				
	<ul style="list-style-type: none"> ◀Dimensions, Product: 5"W x 6.3"D x 6.7"H (130 x 160 x 170 mm) 				
	<ul style="list-style-type: none"> ◀Weight, Product: 10 Lbs (5 kg) 				
	<ul style="list-style-type: none"> ◀Dimensions, Shipping: 14"W x 12"D x 8"H (360 x 305 x 205 mm) • Weight, Shipping: 11 Lbs (5 kg) 				

	◀Ships From: 08817 Edison, NJ				
	◀Package Type: Box				
156	Ammonium Nitrate	kl	5	5,500.00	27,500.00
	■AR grade; at least 98% purity				
	■Molecular Wt. 80.043 grams per mol.				
	■1kg/pack				
157	Polyethylene Bags, 4 x 4 x 8"	pcs	200	4.00	800.00
158	Potato Dextrose Agar (PDA), 500 grams	btl	1	4,500.00	4,500.00
159	Copper Sulphate, 500 grams/pack	pack	1	500.00	500.00
160	Nutrient Agar, 500g	btl	1	5,455.00	5,455.00
161	Agar-Agar	kls	4	2,800.00	11,200.00
162	Ethyl Alcohol (95%), Cotainer Size: Water Can	canister	5	3,000.00	15,000.00
163	Plant Preservative Mixture (PPM), for plant tissue culture	btls	2	5,000.00	10,000.00
164	Analytical Balance	unit	1	40,000.00	40,000.00
	■capacity-200 grams;				
	■accuracy-0.001g				
	■readability 0.001g				
	■digital				
	■with certificate of calibration				
	Rebidding				
165	Stainless Steel Modular Veterinary Dog/Cat Cage	unit	1	63,000.00	63,000.00
	<i>Feat Type: Pet Cages, Carriers & Houses</i>				
	<i>Item Type: Soft-Sided Carriers</i>				
	<i>Closure Type: Button</i>				
	<i>Material: Metal, 304 stainless steel</i>				
	<i>Pattern: ANIMAL</i>				
	<i>Style: CLASSICS</i>				
	<i>Cage, Carrier & House Type: Cages</i>				
	<i>Application: Dogs</i>				
	<i>Product Name: Stainless Steel Dog Cage (Modular)</i>				
	<i>Overall Size: 1220x1570x700mm(LxHxD)</i>				
	<i>Weight: 110KG</i>				
	<i>Cage Size: 610x715x700mm(LxHxD)</i>				
	<i>Cage Qty: 4 Cages</i>				
	<i>Wheel: 4 Caster Wheels</i>				
	<i>Lock: Automatic</i>				
	<i>Package: Plywood Case</i>				
	<i>Customization: Acceptable</i>				
	<i>Model Number: TYXD-DB09S</i>				
	<i>Combination (each single cage can be combined together with stainless steel connectors) (CVM)</i>				
		TOTAL ABC (this project):			10,065,664.00

Bids received in excess of the ABC for each item shall be automatically rejected at bid opening.

2. The *Visayas State University – Main Campus* now invites bids for the above Procurement Project. Delivery of the Goods is required by *ninety (90) calendar days upon receipt of Notice to Proceed (NTP)*. Bidders should have completed, within *two (2) years* from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

4. Prospective Bidders may obtain further information from *Visayas State University* and inspect the Bidding Documents at the address given below during *Mondays - Fridays (8:00 AM-5:00 PM)*.
5. A complete set of Bidding Documents may be acquired by interested Bidders on *20 May – 09 June 2021 until 8:30 AM* from the given address and website(s) 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 *Twenty-Five Thousand Pesos (PhP 25,000.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.
6. The *Visayas State University – Main Campus* will hold a Pre-Bid Conference on *May 27, 2021; 9:00 AM* at the *Cooperative Building, VSU Market, Visca, Baybay City, Leyte* and/or through video conferencing or webcasting via *Google Meet*, which shall be open to prospective bidders.

Bidders are advised to contact the BAC Secretariat before the scheduled Pre-Bid Conference for the Google Meet link.

7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below, (ii) online or electronic submission as indicated below, or (iii) both on or before *09 June 2021 until 8:30 AM*. Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on *09 June 2021; 9:00 AM* at the *Cooperative Building, VSU Market, Visca, Baybay City, Leyte* and/or via *Google Meet*. Bids will be opened in the presence of the bidders’ representatives who choose to attend the activity.

Bidders are advised to contact the BAC Secretariat before the scheduled Bid Opening for the Google Meet link.

10. For bidders who opt to submit their bids electronically, a hardcopy (original) of the bid must be sent to the BAC through couriers. A proof (e.g. courier receipt, etc.) that a hardcopy of the bid is on transit must be presented upon submission of the electronic bid.
11. The *Visayas State University* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

Ms. Jessamine C. Ecleo (BAC Secretariat)
Office of the Head for Procurement,
VSU-Main, Visca, Baybay City, Leyte
Mobile: 053 565 0600 local 1093 or 0998 555 0106
Email: jessamine.ecleo@vsu.edu.ph

or

Mr. Toni Marc L. Dargantes (BAC Secretariat)
Office of the VP for Planning, Resource Generation & Auxiliary Services
VSU-Main, Visca, Baybay City, Leyte
Mobile: 053 565 0600 local 1004 or 0977 7186594
Email: tmdargantes@vsu.edu.ph

13. You may visit the following websites:

For downloading of Bidding Documents: <https://www.vsu.edu.ph/philgeps-opportunities>

May 19, 2021

DILBERTO O. FERRAREN
Chairperson, VSU BAC

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Visayas State University*, wishes to receive Bids for the *Supply and Delivery of Laboratory Equipment and Supplies*, with identification number *GOODS-21-25*.

The Procurement Project (referred to herein as “Project”) is composed of *165 items*, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *2021* in the amount of *Ten Million Sixty-Five Thousand Six Hundred Sixty-Four Pesos (PhP 10,065,664.00)*.

2.2. The source of funding is: NGA, the General Appropriations Act (GAA), Special Appropriations, and Trust Fund.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex “I” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

- 5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:

Bidders should comply with the following requirements:

- i. Completed at least two (2) similar contracts, the aggregate amount of which should be equivalent to at least *fifty percent (50%)* of the ABC for this Project; and
 - ii. The largest of these similar contracts must be equivalent to at least half of the percentage of the ABC as required above.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that: **Subcontracting is not allowed.**

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within **two (2 years)** prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;

- iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in e.
- b. For Goods offered from abroad:
- i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications)**.

13. Bid and Payment Currencies

13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

13.2. Payment of the contract price shall be made in: Philippine Pesos.

14. Bid Security

14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

14.2. The Bid and bid security shall be valid until *October 9, 2021*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

16. Deadline for Submission of Bids

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

17. Opening and Preliminary Examination of Bids

- 17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

- 17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows: One Project having several items, which shall be awarded as separate contracts per item.

- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

- 21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause																																																										
5.3	For this purpose, contracts similar to the Project shall be: a. <i>Laboratory Equipment</i> b. completed within two (2) years prior to the deadline for the submission and receipt of bids.																																																									
7.1	Subcontracting is not allowed.																																																									
12	The price of the Goods shall be quoted <i>DDP VSU Main, Visca, Baybay City, Leyte</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.																																																									
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts: a. The amount of not less than <i>Two Hundred One Thousand Three Hundred Thirteen and 28/100 Pesos (PhP 201,313.28) or two percent (2%) of ABC</i> , if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than <i>Five Hundred Three Thousand Two Hundred Eighty-Three and 20/100 Pesos (PhP 503,283.20) or five percent (5%) of ABC</i> if bid security is in Surety Bond.																																																									
19.3	<table><tr><th>Item No.</th><th>Item Description and Specifications</th><th>Total ABC</th></tr><tr><td>1</td><td>Temperature Data Logger</td><td>4,500.00</td></tr><tr><td>2</td><td>Stirring Rod</td><td>450.00</td></tr><tr><td>3</td><td>Erlenmeyer Flask</td><td>11,600.00</td></tr><tr><td>4</td><td>Petri dish</td><td>2,400.00</td></tr><tr><td>5</td><td>Styrofoam Box Z1</td><td>1,800.00</td></tr><tr><td>6</td><td>Pipette Tip Holder Box 28 Vents</td><td>4,000.00</td></tr><tr><td>7</td><td>Pipette Tips 5ml</td><td>2,800.00</td></tr><tr><td>8</td><td>Contact cleaner</td><td>3,500.00</td></tr><tr><td>9</td><td>Methanol</td><td>2,500.00</td></tr><tr><td>10</td><td>Alcohol, Ethyl, 70% solution, 1 gallon</td><td>8,400.00</td></tr><tr><td>11</td><td>Reagent Bottles</td><td>1,000.00</td></tr><tr><td>12</td><td>Lactophenol Cotton Blue Solution</td><td>2,500.00</td></tr><tr><td>13</td><td>Polyethylene Glycol (PEG) 6000,</td><td>700.00</td></tr><tr><td>14</td><td>Safranin O Solution</td><td>1,800.00</td></tr><tr><td>15</td><td>IAA (Indole-3-Acetic Acid),</td><td>4,500.00</td></tr><tr><td>16</td><td>Sodium bromide, NaBr</td><td>1,500.00</td></tr><tr><td>17</td><td>Magnesium chloride, MgCl2</td><td>3,000.00</td></tr><tr><td>18</td><td>Petroleum Ether, AR</td><td>3,500.00</td></tr></table>	Item No.	Item Description and Specifications	Total ABC	1	Temperature Data Logger	4,500.00	2	Stirring Rod	450.00	3	Erlenmeyer Flask	11,600.00	4	Petri dish	2,400.00	5	Styrofoam Box Z1	1,800.00	6	Pipette Tip Holder Box 28 Vents	4,000.00	7	Pipette Tips 5ml	2,800.00	8	Contact cleaner	3,500.00	9	Methanol	2,500.00	10	Alcohol, Ethyl, 70% solution, 1 gallon	8,400.00	11	Reagent Bottles	1,000.00	12	Lactophenol Cotton Blue Solution	2,500.00	13	Polyethylene Glycol (PEG) 6000,	700.00	14	Safranin O Solution	1,800.00	15	IAA (Indole-3-Acetic Acid),	4,500.00	16	Sodium bromide, NaBr	1,500.00	17	Magnesium chloride, MgCl2	3,000.00	18	Petroleum Ether, AR	3,500.00
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19	pH Meter	2,500.00
20	Burette Brush	300.00
21	Filter Paper, 12.5 cm. Ashless #42, 100pcs. per box	7,200.00
22	1 kb Plus DNA Ladder	7,700.00
23	Agarose LE	5,680.00
24	CTAB	3,000.00
25	Custom oligo primers	11,000.00
26	Delicate Task Wipes	1,440.00
27	LB Agar	3,700.00
28	Filter Paper	12,000.00
29	EDTA	6,900.00
30	PCR loading dye	9,600.00
31	LB Broth	1,150.00
32	Gloves, Nitrile, Large	5,000.00
33	Gloves, Nitrile, Medium	4,000.00
34	Dropping Bottle	2,700.00
35	Brush Suitable for 10mL Graduated Cylinder	600.00
36	Brush Suitable for 50mL Graduated Cylinders	600.00
37	Brush Suitable for 100mL Graduated Cylinders	600.00
38	Apron	10,500.00
39	Alcohol Burner	340.00
40	Wash Bottle, 250mL cap.	2,200.00
41	Water Quality Test Meter	6,000.00
42	Burette with Rubber Tube, stopper and dropper	7,600.00
43	Burette with Glass Stopcock	8,000.00
44	Temperature-Humidity Data Logger	8,000.00
45	Dissolved Oxygen Meter	11,000.00
46	Laboratory Burette Stand	3,000.00
47	Analytical Balance	29,240.00
48	Burette clamp	4,530.00
49	Micro pipette, with stand, P10 (0.5-10ul)	8,060.00
50	Micro pipette, with stand, P1000 (200-1000ul)	8,060.00
51	Micro pipette, with stand, P100 (10-100ul)	8,060.00
52	Micro pipette, with stand, P200 (20-200ul)	8,060.00
53	Micro pipette, with stand, P2 (0.2-2ul)	8,060.00
54	Watch Glass	1,500.00
55	Graduated Pitcher	2,000.00
56	Pipette Dropper with Rubber Head	800.00
57	Reagent Bottle.	900.00
58	Beaker	3,600.00
59	Beaker, Glass	5,320.00
60	Graduated Cylinder	1,200.00

61	Graduated Cylinder	3,000.00
62	Brush for cleaning 250mL Erlenmeyer Flask	750.00
63	Brush Suitable for cleaning 500mL Erlenmeyer Flask	750.00
64	Burette with PTFE Stopcock	7,600.00
65	Multi-Functional LCD Digital Multimeter Auto Range DMM with Temperature Detector DC AC Voltage	50,000.00
66	Potassium Chloride	9,000.00
67	Activated Acid-washed Charcoal	15,000.00
68	Ethanol	3,000.00
69	Sodium EDTA dihydrate,	21,600.00
70	Calcium Chloride Dihydrate	6,000.00
71	Naphthaleneacetic Acid, 5g per bottle	17,000.00
72	Potassium Nitrate	87,000.00
73	Phytigel, Sigma	280,000.00
74	Analytical Balance, at least 220g capacity	53,000.00
75	Laminar Flow Hood	200,000.00
76	PCR Thermal Cycler	250,000.00
77	Orbital shaker	53,000.00
78	Dispensing pump for culture media	60,000.00
79	Pressure cooker for laboratory use	52,000.00
80	pH meter	54,000.00
81	Autoclave High Steam Sterilizer	200,000.00
82	Microbead Sterilizer	52,000.00
83	Digital microscope with camera	52,000.00
84	Distilling Apparatus	150,000.00
85	Boric Acid, Analytical Reagent	2,800.00
86	Dimethyl sulfoxide, Analytical reagent	7,500.00
87	Calcium Nitrate standard for AAS, Analytical reagent	3,100.00
88	Sodium Hydroxide, Technical grade, 1kg/bottle	2,400.00
89	Cadmium Nitrate Standard for the AAS	4,000.00
90	ammonium meta vanadate, AR>	3,500.00
91	Storage Solution for ROSS electrode	5,600.00
92	ROSS reference electrode filling solution (3M KCl)	7,300.00
93	Barium acetate AR	1,800.00
94	potassium antimony tartrate (III) hydrate, AR	3,000.00
95	Ethanol	5,400.00
96	Potassium dihydrogen phosphate, AR	1,000.00
97	Triethanolamine, AR	9,000.00
98	Alcohol, Denatured	1,771.00
99	Test Tube	1,260.00
100	Test Tube	1,200.00
101	Microscope Slides and cover slips	4,070.00
102	Vacutainer EDTA Tubes	3,300.00

	103	Sodium Hydroxide, AR 500G	9,600.00	
	104	Hydrochloric Acid	600.00	
	105	Drager Aspirator Bulb	400.00	
	106	Stirring Rod	200.00	
	107	Glass Jar 12oz	5,760.00	
	108	Glass Jar 8oz	4,680.00	
	109	L-Glutamine	7,000.00	
	110	Myo-inositol	4,800.00	
	111	Acetone	1,600.00	
	112	Agar (E-406)	2,400.00	
	113	Scalpel Handle	560.00	
	114	Scalpel Blade	2,240.00	
	115	Distilled Water, 6 liters per bottle	900.00	
	116	Phenolphthalein Powder Indicator	12,000.00	
	117	Potassium Hydroxide	4,200.00	
	118	Potassium Hydrogen Phthalate (KHP)	12,000.00	
	119	Sulfuric Acid	7,000.00	
	120	Isopropyl alcohol	7,000.00	
	121	Ethanol (Ethyl alcohol)	9,000.00	
	122	Toluene	7,300.00	
	123	Hair Net	1,800.00	
	124	Volumetric Flask 10ml	2,400.00	
	125	Volumetric Flask	1,080.00	
	126	Volumetric Flask 100ml	1,500.00	
	127	Top Loading Weighing Scale, capacity-6kg; accuracy-0.01g	35,000.00	
	128	96 well plates, polypropylene	18,500.00	
	129	Atomic Absorption Spectrophotometer	1,854,108.00	
	130	hotplate with magnetic stirrer	300,000.00	
	131	Nutrient Agar, 500g per bottle	6,000.00	
	132	Alcohol, Ethyl, 95% (Tech)	230.00	
	133	Ammonium Acetate, AR	3,600.00	
	134	Potassium Chloride, AR, 1000g per bottle	2,500.00	
	135	Tri-power Stereo Microscope	100,000.00	
	136	Table Type vacuum packaging machine	33,900.00	
	137	Laboratory Refrigerator with 10.6 cubic foot/300 L capacity	140,000.00	
	138	Electric Compound Binocular Microscope (4)	220,000.00	
	139	Semi-automatic rotary microtome	500,000.00	
	140	Micro bead sterilizer with 1000g glass beads	96,000.00	
	141	Portable electric balance/weighing scale with AC adapter and storage cover	30,000.00	
	142	Rechargeable precision top loading balance	30,000.00	

143	40x-2000x LED Biological Trinocular Compound Microscope with 5MP Camera and Macbook Pro Laptop	300,000.00
144	Upright Fluorite Objectives Fluorescence Microscope including a microscope camera, a c-mount camera	600,000.00
145	Basic Bench pH meters with replaceable electrode and buffer	60,000.00
146	Hotplate stirrer including magnetic bar and retriever kit	70,000.00
147	(1) TCM400 Inverted Biological Microscope with Fluorescence Kit	1,095,000.00
148	Laminar Flow Hood	250,000.00
149	ELISA READER	580,000.00
150	MICRO CENTRIFUGE , (Ventilated)	45,000.00
151	Micropipette set	150,000.00
152	Mini CENTRIFUGE	40,000.00
153	PCR Machine	1,100,000.00
154	THERMALBLOCK	45,000.00
155	VORTEX MIXER	40,000.00
156	Ammonium Nitrate	27,500.00
	☐AR grade; at least 98% purity	
	☐Molecular Wt. 80.043 grams per mol.	
	☐1kg/pack	
157	Polyethylene Bags, 4 x 4 x 8"	800.00
158	Potato Dextrose Agar (PDA), 500 grams	4,500.00
159	Copper Sulphate, 500 grams/pack	500.00
160	Nutrient Agar, 500g	5,455.00
161	Agar-Agar	11,200.00
162	Ethyl Alcohol (95%), Container Size: Water Can	15,000.00
163	Plant Preservative Mixture (PPM), for plant tissue culture	10,000.00
164	Analytical Balance	40,000.00
	☐capacity-200 grams;	
	☐accuracy-0.001g	
	☐readability 0.001g	
	☐digital	
	☐with certificate of calibration	
	Rebidding	
165	Stainless Steel Modular Veterinary Dog/Cat Cage	63,000.00
	Feat Type: Pet Cages, Carriers & Houses	
	Item Type: Soft-Sided Carriers	
	Closure Type: Button	
	Material: Metal, 304 stainless steel	
	Pattern: ANIMAL	
	Style: CLASSICS	
	Cage, Carrier & House Type: Cages	
	Application: Dogs	
	Product Name: Stainless Steel Dog Cage (Modular)	

		Overall Size: 1220x1570x700mm(LxHxD)	
		Weight: 110KG	
		Cage Size: 610x715x700mm(LxHxD)	
		Cage Qty: 4 Cages	
		Wheel: 4 Caster Wheels	
		Lock: Automatic	
		Package: Plywood Case	
		Customization: Acceptable	
		Model Number: TYXD-DB09S	
		Combination (each single cage can be combined together with stainless steel connectors) (CVM)	
			10,065,664.00
	20.2	In case the PhilGEPS Platinum Certificate of Registration is not available during bid submission, it shall be submitted as a post-qualification requirement, in accordance with Section 34.2 of the 2016 Revised IRR of R.A. 9184.	
21.2	Not Applicable.		

Section IV. General Conditions of Contract

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

2. Advance Payment and Terms of Payment

2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC**, **Section IV (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1	<p>Delivery and Documents –</p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p>The delivery terms applicable to this Contract are delivered <i>VSU Main Campus, Visca, Baybay City, Leyte</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is:</p> <p style="text-align: center;"><i>Ms. Alicia M. Flores</i> <i>Head, Supply and Property Management Office,</i> <i>VSU-Main, Visca, Baybay City, Leyte</i> <i>Contact #: 053 565 0600 local 1082 / 0917 6341 430</i></p> <p>Incidental Services –</p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:</p> <ol style="list-style-type: none"> a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the supplied Goods; c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and e. training of the Procuring Entity’s personnel, at the Supplier’s plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
	<p>The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p>

	<p>Spare Parts –</p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <ul style="list-style-type: none"> a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and b. in the event of termination of production of the spare parts: <ul style="list-style-type: none"> i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested. <p>The spare parts and other components required are listed in Section VI (Schedule of Requirements) and the cost thereof is included in the contract price.</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of 3 years.</p> <p>Spare parts or components shall be supplied as promptly as possible, but in any case, within 1 month of placing the order.</p>
	<p>Packaging –</p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier</p>

	<p>Contract Description</p> <p>Final Destination</p> <p>Gross weight</p> <p>Any special lifting instructions</p> <p>Any special handling instructions</p> <p>Any relevant HAZCHEM classifications</p>
	<p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p>Transportation –</p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>
	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p>Intellectual Property Rights –</p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>

2.2	Payment shall be done in staggered basis. Items that were already delivered can be paid subject to inspection and acceptance.
4	The inspections and tests that will be conducted will be specified by the appropriate technical team of VSU Main to confirm conformity to the contract specifications at no extra cost to VSU.

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item No.	Item Description and Specifications	Delivered, Weeks/Months
1	Temperature Data Logger	All Items Should Be Delivered Within 90 Calendar Days From Receipt Of Notice To Proceed And Purchase Order
2	Stirring Rod	
3	Erlenmeyer Flask	
4	Petri dish	
5	Styrofoam Box Z1	
6	Pipette Tip Holder Box 28 Vents	
7	Pipette Tips 5ml	
8	Contact cleaner	
9	Methanol	
10	Alcohol, Ethyl, 70% solution, 1 gallon	
11	Reagent Bottles	
12	Lactophenol Cotton Blue Solution	
13	Polyethylene Glycol (PEG) 6000,	
14	Safranin O Solution	
15	IAA (Indole-3-Acetic Acid),	
16	Sodium bromide, NaBr	
17	Magnesium chloride, MgCl ₂	
18	Petroleum Ether, AR	
19	pH Meter	
20	Burette Brush	
21	Filter Paper, 12.5 cm. Ashless #42, 100pcs. per box	
22	1 kb Plus DNA Ladder	
23	Agarose LE	
24	CTAB	
25	Custom oligo primers	
26	Delicate Task Wipes	
27	LB Agar	
28	Filter Paper	
29	EDTA	
30	PCR loading dye	
31	LB Broth	
32	Gloves, Nitrile, Large	
33	Gloves, Nitrile, Medium	
34	Dropping Bottle	
35	Brush Suitable for 10mL Graduated Cylinder	
36	Brush Suitable for 50mL Graduated Cylinders	

37	Brush Suitable for 100mL Graduated Cylinders
38	Apron
39	Alcohol Burner
40	Wash Bottle, 250mL cap.
41	Water Quality Test Meter
42	Burette with Rubber Tube, stopper and dropper
43	Burette with Glass Stopcock
44	Temperature-Humidity Data Logger
45	Dissolved Oxygen Meter
46	Laboratory Burette Stand
47	Analytical Balance
48	Burette clamp
49	Micro pipette, with stand, P10 (0.5-10ul)
50	Micro pipette, with stand, P1000 (200-1000ul)
51	Micro pipette, with stand, P100 (10-100ul)
52	Micro pipette, with stand, P200 (20-200ul)
53	Micro pipette, with stand, P2 (0.2-2ul)
54	Watch Glass
55	Graduated Pitcher
56	Pipette Dropper with Rubber Head
57	Reagent Bottle.
58	Beaker
59	Beaker, Glass
60	Graduated Cylinder
61	Graduated Cylinder
62	Brush for cleaning 250mL Erlenmeyer Flask
63	Brush Suitable for cleaning 500mL Erlenmeyer Flask
64	Burette with PTFE Stopcock
65	Multi-Functional LCD Digital Multimeter Auto Range DMM with Temperature Detector DC AC Voltage
66	Potassium Chloride
67	Activated Acid-washed Charcoal
68	Ethanol
69	Sodium EDTA dihydrate,
70	Calcium Chloride Dihydrate
71	Naphthaleneacetic Acid, 5g per bottle
72	Potassium Nitrate
73	Phytigel, Sigma
74	Analytical Balance, at least 220g capacity
75	Laminar Flow Hood
76	PCR Thermal Cycler
77	Orbital shaker
78	Dispensing pump for culture media

79	Pressure cooker for laboratory use
80	pH meter
81	Autoclave High Steam Sterilizer
82	Microbead Sterilizer
83	Digital microscope with camera
84	Distilling Apparatus
85	Boric Acid, Analytical Reagent
86	Dimethyl sulfoxide, Analytical reagent
87	Calcium Nitrate standard for AAS, Analytical reagent
88	Sodium Hydroxide, Technical grade, 1kg/bottle
89	Cadmium Nitrate Standard for the AAS
90	ammonium meta vanadate, AR>
91	Storage Solution for ROSS electrode
92	ROSS reference electrode filling solution (3M KCl)
93	Barium acetate AR
94	potassium antimony tartrate (III) hydrate, AR
95	Ethanol
96	Potassium dihydrogen phosphate, AR
97	Triethanolamine, AR
98	Alcohol, Denatured
99	Test Tube
100	Test Tube
101	Microscope Slides and cover slips
102	Vacutainer EDTA Tubes
103	Sodium Hydroxide, AR 500G
104	Hydrochloric Acid
105	Drager Aspirator Bulb
106	Stirring Rod
107	Glass Jar 12oz
108	Glass Jar 8oz
109	L-Glutamine
110	Myo-inositol
111	Acetone
112	Agar (E-406)
113	Scalpel Handle
114	Scalpel Blade
115	Distilled Water, 6 liters per bottle
116	Phenolphthalein Powder Indicator
117	Potassium Hydroxide
118	Potassium Hydrogen Phthalate (KHP)
119	Sulfuric Acid
120	Isopropyl alcohol

121	Ethanol (Ethyl alcohol)
122	Toluene
123	Hair Net
124	Volumetric Flask 10ml
125	Volumetric Flask
126	Volumetric Flask 100ml
127	Top Loading Weighing Scale, capacity-6kg; accuracy-0.01g
128	96 well plates, polypropylene
129	Atomic Absorption Spectrophotometer
130	hotplate with magnetic stirrer
131	Nutrient Agar, 500g per bottle
132	Alcohol, Ethyl, 95% (Tech)
133	Ammonium Acetate, AR
134	Potassium Chloride, AR, 1000g per bottle
135	Tri-power Stereo Microscope
136	Table Type vacuum packaging machine
137	Laboratory Refrigerator with 10.6 cubic foot/300 L capacity
138	Electric Compound Binocular Microscope (4)
139	Semi-automatic rotary microtome
140	Micro bead sterilizer with 1000g glass beads
141	Portable electric balance/weighing scale with AC adapter and storage cover
142	Rechargeable precision top loading balance
143	40x-2000x LED Biological Trinocular Compound Microscope with 5MP Camera and Macbook Pro Laptop
144	Upright Fluorite Objectives Fluorescence Microscope including a microscope camera, a c-mount camera
145	Basic Bench pH meters with replaceable electrode and buffer
146	Hotplate stirrer including magnetic bar and retriever kit
147	(1) TCM400 Inverted Biological Microscope with Fluorescence Kit
148	Laminar Flow Hood
149	ELISA READER
150	MICRO CENTRIFUGE , (Ventilated)
151	Micropipette set
152	Mini CENTRIFUGE
153	PCR Machine
154	THERMALBLOCK
155	VORTEX MIXER
156	Ammonium Nitrate
	■AR grade; at least 98% purity
	■Molecular Wt. 80.043 grams per mol.
	■1kg/pack
157	Polyethylene Bags, 4 x 4 x 8"

158	Potato Dextrose Agar (PDA), 500 grams	
159	Copper Sulphate, 500 grams/pack	
160	Nutrient Agar, 500g	
161	Agar-Agar	
162	Ethyl Alcohol (95%), Cotainer Size: Water Can	
163	Plant Preservative Mixture (PPM), for plant tissue culture	
164	Analytical Balance	
	☑capacity-200 grams;	
	☑accuracy-0.001g	
	☑readability 0.001g	
	☑digital	
	☑with certificate of calibration	
	Rebidding	
165	Stainless Steel Modular Veterinary Dog/Cat Cage	
	<i>Feat Type: Pet Cages, Carriers & Houses</i>	
	<i>Item Type: Soft-Sided Carriers</i>	
	<i>Closure Type: Button</i>	
	<i>Material: Metal, 304 stainless steel</i>	
	<i>Pattern: ANIMAL</i>	
	<i>Style: CLASSICS</i>	
	<i>Cage, Carrier & House Type: Cages</i>	
	<i>Application: Dogs</i>	
	<i>Product Name: Stainless Steel Dog Cage (Modular)</i>	
	<i>Overall Size: 1220x1570x700mm(LxHxD)</i>	
	<i>Weight: 110KG</i>	
	<i>Cage Size: 610x715x700mm(LxHxD)</i>	
	<i>Cage Qty: 4 Cages</i>	
	<i>Wheel: 4 Caster Wheels</i>	
	<i>Lock: Automatic</i>	
	<i>Package: Plywood Case</i>	
	<i>Customization: Acceptable</i>	
	<i>Model Number: TYXD-DB09S</i>	
	<i>Combination (each single cage can be combined together with stainless steel connectors) (CVM)</i>	

Section VII. Technical Specifications

Technical Specifications

Item No.	Item Description and Specifications	STATEMENT OF COMPLIANCE
1	Temperature Data Logger	<p><i>[Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., 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 Bidder's 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 applicable laws and issuances.]</i></p>
	☑High accuracy temperature logger	
	☑Logger can be connected to the PC	
	☑via USB for data import and export to excel or pdf.	
	☑Temperature & Humidity Monitoring	
	☑Measures material moisture	
2	Stirring Rod	
	☑Standard Size	
	☑Good Quality	
	☑with rubber policeman	
3	Erlenmeyer Flask	
	☑Material: Glass/Borosilicate Glass	
	☑Capacity: 250mL	
	☑Good Quality	
4	Petri dish	
	☑comprise a lid and base	
	☑high clarity glass	
	☑borosilicate glass	
	☑size:	
	◀Cover int. dia mm : 95	
	◀Base ext. dia mm: 94	
	◀Size: 100 x 20	
5	Styrofoam Box Z1	
	☑8.5 x 8.5 x 6.75 inches	
6	Pipette Tip Holder Box 28 Vents	
	☑For use with 5ml pipette tips	
7	Pipette Tips 5ml	
	☑100 pcs of 5-ml pipette tips per pack	
	☑7-slot universal Pipette Carousel Stand	
8	Contact cleaner	
	☑Anti-rust	
	☑Wet-type Lubricant	
	☑Spray-type	
	☑Penetrating-type	
	☑360ml/can	
9	Methanol	
	☑AR grade	
10	Alcohol, Ethyl, 70% solution, 1 gallon	
11	Reagent Bottles	
	☑Autoclavable	
	☑amber bottle with ground glass cover	
	☑250 mL capacity	

	Material: Borosilicate Glass	
12	Lactophenol Cotton Blue Solution	
	☐250ml per bottle	
13	Polyethylene Glycol (PEG) 6000,	
	☐250g per bottle	
14	Safranin O Solution	
	☐250ml per bottle	
15	IAA (Indole-3-Acetic Acid),	
	☐500g per bottle, AR	
16	Sodium bromide, NaBr	
	☐250g/bottle, AR	
	Chemical property- Sodium bromide is a colorless cubic crystal or white granular powder. It is odorless, and has slightly bitter and briny taste but high toxicity. It is easily soluble in water (at 100 °C, the solubility in 100ml water solubility is 121g), but slightly soluble in alcohol.	
	☐Specifications:	
	◀Appearance: White, Crystalline Solid	
	◀Assay: ≥99%	
	◀Chloride: ≤1.0%	
	◀Loss on Drying: ≤0.5%	
	◀Sulfate: ≤0.05%	
	◀pH value: 6.5~8.5 (5% @ 72 °F)	
17	Magnesium chloride, MgCl₂	
	☐1kg per bottle	
	☐colorless crystalline solid	
	☐Properties:	
	◀Quality Level: 300	
	◀Grade: anhydrous	
	◀Assay: ≥98%	
	◀Form: powder	
	◀Impurities: ≤0.5% Insolubles	
	◀bp: 1412 °C/1 atm (lit.)	
	◀mp: 714 °C (lit.)	
	◀Density: 2.32 g/mL at 25 °C (lit.)	
18	Petroleum Ether, AR	
19	pH Meter	
	☐0.1 pH resolution	
	☐water-resistant/proof	
	pen type	
20	Burette Brush	
	☐big size for 50 mL burette	
21	Filter Paper, 12.5 cm. Ashless #42, 100pcs. per box	

22	1 kb Plus DNA Ladder
	☐1ml per bottle
23	Agarose LE
	☐100g per bottle
24	CTAB
	☐500g per bottle, AR
25	Custom oligo primers
	☐HPLC-CE purified
26	Delicate Task Wipes
	☐4.4 x 8.4 inches (11 x 21 cm)
	☐280 sheets/box
	☐lint-free
27	LB Agar
	☐500g per bottle
28	Filter Paper
	☐Filter Paper No.1
	☐Qualitative Circles 125mm (12.5cm)
	☐Qty/box: 100 pieces per box
	☐Porosity: Medium
	☐Flow Rate: Medium
29	EDTA
	☐500g per bottle
	☐A.R
	☐monobasic
30	PCR loading dye
	☐10x, 1 ampule
31	LB Broth
	☐100g/bottle
32	Gloves, Nitrile, Large
	☐Glove Type: Chemical Resistant Disposable Gloves
	☐Glove Material: Nitrile
	☐Powder-Free
	☐1 box of 100 or 50 pairs
	☐Food Safe
	☐Size: large
33	Gloves, Nitrile, Medium
	☐Glove Type: Chemical Resistant Disposable Gloves
	☐Glove Material: Nitrile
	☐Powder-Free
	☐1 box of 100 or 50 pairs
	☐Food Safe
	☐Size: Medium

34	Dropping Bottle	
	☐Dropping Bottle, Bulb and Pipette	
	☐With Glass Stopper	
	☐Capacity: 125mL	
	☐Dimension: 5mm diameter and 150mm height	
	☐Material: Borosilicate Glass	
35	Brush Suitable for 10mL Graduated Cylinder	
	☐Bristle Material: Black Nylon	
	☐Suitable for 10mL Graduated Cylinder	
36	Brush Suitable for 50mL Graduated Cylinders	
	☐Bristle Material: Black Nylon	
	☐Suitable for 50mL Graduated Cylinder	
37	Brush Suitable for 100mL Graduated Cylinders	
	☐Bristle Material: Black Nylon	
	☐Suitable for 100mL Graduated Cylinder	
38	Apron	
	☐Heavy Duty Industrial Chemical Laboratory Apron	
	☐Material: Neoprene	
	☐Color : Black	
	☐Chemical Resistant (Suitable protection against wide range of chemicals)	
	☐Light weight	
	☐Sizes : at least 35" X 43"	
39	Alcohol Burner	
	☐Burner Lamp	
	☐Clear Glass Lab	
	☐150mL	
40	Wash Bottle, 250mL cap.	
	☐Material: Plastic (good quality)	
41	Water Quality Test Meter	
	☐2 in 1 kit, with calibration packets and user's manual	
	◀1 TDS meter	
	◀1 pH meter	
	☐Hand-held and portable, pen-sized	
	☐Color: yellow (pH) + blue (TDS)	
	☐Material: plastic + metal	
	☐Size: length at 15-20cm	
	☐Accurate reading	
	☐Good quality	
	☐Durable	
42	Burette with Rubber Tube, stopper and dropper	
	☐Burette with Rubber Tube, stopper and dropper	
	☐Material: Glass/Borosilicate Glass	

	☑Capacity: 50mL	
	☑For Base	
43	Burette with Glass Stopcock	
	☑Burette with Glass Stopcock	
	☑Material: Glass/Borosilicate Glass	
	☑Capacity: 50mL	
	☑For Acid	
44	Temperature-Humidity Data Logger	
	☑Portable and hand-held	
	☑16000 data recording capacity.	
	☑Adjustable record interval: 10s~24hour	
	☑Multi-function LCD	
	☑Internal NTC temperature thermal sensor with optional external sensor	
	☑Data export in PDF/EXCEL via data management software	
	☑Selectable °F/°C temperature unit	
	☑Size: approx. 84 (L) x 44(W) x 20 (H) mm	
	☑Good quality	
	☑Durable	
45	Dissolved Oxygen Meter	
	☑Pen-type, portable, easy to carry and durable	
	☑LCD display for simultaneous display of dissolved oxygen and temperature.	
	☑Highly sensitive probe for fast response and accurate measurement	
	☑Unit switching function, Celsius and Fahrenheit	
	☑Removable probe design, easy to change measurement, equipped with three spare probe covers for intimate protection.	
	☑The pen body design is compact, lightweight, easy to carry and easy to measure.	
	☑Measurement Range: 0.00-20.00mg/L	
	☑Basic Measurement Error: 0.4 mg/L	
	☑Dissolved Oxygen Temperature Compensation: 0-40 degrees Celsius	
	☑Power Supply: 4 LR44 1.5V button batteries	
	☑Color: Blue And Gray	
	☑Dissolved Oxygen Meter: at least 140x40x40mm	
	☑Pen: at least 160x13x13mm	
	☑Lead Length: at least 2930mm	
	☑Probe Length: at least 3090mm	
	☑Full Length: at least 3230mm	
	☑Weight: approximately 253g	
	☑Package Included:	
	◀ 1 x Host	
	◀ 3 x Probe Covers	

	◀1 x USB Data Cable
	◀1 x Portable Cloth Bag
	◀1 x Color Box
	◀1 x Factory Certificate
	◀1 x Instruction Manual
	◀1 x Dissolved Oxygen Filling Solution
	◀10 x Reagent A
	◀10 x Reagent B
46	Laboratory Burette Stand
	☑Standard laboratory burette stand
	☑Good quality White PE Burette Stand
	☑Heavy duty white polyethylene burette stand comes with a polyethylene coated metal rod which screws into the base.
	☑Whichever is available, with the hole in the center (center weighted) or at the short edge (edge weighted) as long as the 3 burette stands are the same (ex. if center weighted, then all 3 should be center weighted).
47	Analytical Balance
	☑max capacity 120 g
	☑readability 0.1mg
	☑linearity +/- 0.2 mg
	☑pan size 80 mm dia
	☑Motor-driven built-in calibration weight
	☑PSC: touch-key with built-in or external weight calibration mode
48	Burette clamp
	☑Good Quality Double Burette Clamp
	☑Can Hold 50mL Burette
49	Micro pipette, with stand, P10 (0.5-10ul)
50	Micro pipette, with stand, P1000 (200-1000ul)
51	Micro pipette, with stand, P100 (10-100ul)
52	Micro pipette, with stand, P200 (20-200ul)
53	Micro pipette, with stand, P2 (0.2-2ul)
54	Watch Glass
	☑Material: Glass/Borosilicate Glass
	☑Autoclavable: Yes
	☑Outer diameter: 75 mm (7.5cm),
	☑fits 250 mL beakers,
	☑12pcs/pack,
	☑good quality
55	Graduated Pitcher
	☑material used: Polypropylene
	☑capacity: 2L
	☑Design: Pitcher-type (with handle)

56	Pipette Dropper with Rubber Head
	☐Pipette Dropper with Rubber Head
	☐Capacity: 10mL
	☐Material: Glass/Borosilicate Glass
	☐12PCS/PACK
57	Reagent Bottle.
	☐With Stopper/Screw Cap
	☐Material: Glass/Borosilicate Glass
	☐Color: Clear/Transparent Flask
	☐Capacity: 2000mL
	☐Graduation: 1800mL
58	Beaker
	☐250ml Low Form Beaker
	☐Borosilicate Glass
	☐Transparent Beaker
	☐Thickened With Spout
59	Beaker, Glass
	☐150ml Low Form Beaker
	☐Borosilicate Glass
	☐Transparent Beaker
	☐Thickened With Spout
60	Graduated Cylinder
	☐Material: Glass/Borosilicate Glass
	☐Capacity: 250mL
	☐Good Quality
61	Graduated Cylinder
	☐Material: Glass/Borosilicate Glass
	☐Capacity: 1000mL (2L)
	☐Good Quality
62	Brush for cleaning 250mL Erlenmeyer Flask
	☐Bristle Color: White Bristle
	☐Brush+Handle Length: 12"
	☐Brush Diameter: 1 3/8"
	☐Brush Length: 3 1/2"
	☐Suitable for cleaning 250mL Erlenmeyer Flask
63	Brush Suitable for cleaning 500mL Erlenmeyer Flask
	☐Bristle Color: White Bristle
	☐Brush+Handle Length: 14"
	☐Brush Diameter: 1 1/2"
	☐Brush Length: 4"
	☐Suitable for cleaning 500mL Erlenmeyer Flask
64	Burette with PTFE Stopcock

	☑Burette with PTFE Stopcock	
	☑Material: Glass/Borosilicate Glass	
	☑Capacity: 50mL	
65	Multi-Functional LCD Digital Multimeter Auto Range DMM with Temperature Detector DC AC Voltage	
	☑Large LCD display of 41mm character height	
	☑Measure DC/AC voltage/current, diode, resistance, capacitance, temperature and continuity test.	
	☑Max. display value: 6000.	
	☑Can test the temperature with unit of °C / °F.	
	☑Includes relative value testing, duty cycle test, data hold, MAX/MIN value hold and auto power off function.	
	☑With overload protection on all ranges.	
	☑Low battery indication and warning alarm function.	
	☑Equipped with a back bracket for supporting multimeter, and also can collect test probe.	
	☑Protected by rubber for drop protection.	
	☑Great for troubleshooting automotive and household electrical problems.	
66	Potassium Chloride	
	☑Chemical must be plant tissue culture tested for at least 20 years	
	☑ISO complaint	
	☑ACS REAG	
	☑PH EUR	
	☑meets USP Standards	
	☑Bioreagent suitable for cell culture	
67	Activated Acid-washed Charcoal	
	☑Chemical must be plant tissue culture tested for at least 20 years	
	☑ISO complaint	
	☑ACS REAG	
	☑PH EUR	
	☑meets USP Standards	
	☑Bioreagent suitable for cell culture	
	☑2.5kg per pack	
68	Ethanol	
	☑USP 95% (food grade), 2.5 L	
69	Sodium EDTA dihydrate,	
	☑Chemical must be plant tissue culture tested for at least 20 years	
	☑ISO compliant	
	☑ACS REAG	
	☑PH EUR	
	☑meets USP Standards	
	☑Bioreagent suitable for cell culture	
	☑250g per bottle	

70	Calcium Chloride Dihydrate
	☑Branding the chemical to be purchase is following the protocol set for the project's protocol and standards
	☑Chemical must be plant tissue culture tested for at least 20 years
	☑ISO compliant
	☑ACS REAG
	☑PH EUR
	☑meets USP Standards
	☑Bioreagent suitable for cell culture
	☑500g per bottle
71	Naphthaleneacetic Acid, 5g per bottle
	☑Branding the chemical to be purchase is following the protocol set for the project's protocol and standards
	☑Chemical must be plant tissue culture tested for at least 20 years
	☑ISO complaint
	☑ACS REAG
	☑PH EUR
	☑meets USP Standards
	☑Bioreagent suitable for cell culture
72	Potassium Nitrate
	☑AR grade
	☑Formula: KNO ₃
	☑Molar wt: 101.1032 g/mo
	☑1kg/pack
73	Phytigel, Sigma
	Branding the chemical to be purchase is following the protocol set for the project's protocol and standards
	☑Chemical must be plant tissue culture tested for at least 20 years
	☑ISO complaint
	☑ACS REAG
	☑PH EUR
	☑meets USP standards
	☑Bio reagents suitable for cell culture
74	Analytical Balance, at least 220g capacity
	☑4 decimal places
	☑Automatic Internal Calibration, LCD back-lit display
	☑Capacity: at least 220g
	☑Readability: 0.1 mg
	☑Repeatability (std dev): 0.1 mg
	☑Linearity (+/-): 0.2 mg
	☑Pan size (mm/inch): 90 Ø/3.5Ø
	☑Response time: 3 sec
	☑Calibration: Perfect Self Auto Calibration (temperature /

	time /power on)	
	☑Display: Bright LCD Display with LED backlight	
	☑Unit of measure: gram, Milligram	
	☑Tare Range: Full	
	☑Operating Temperature: 10°C to 40°C	
	☑Dimension (WDXH) mm : 342.5X212x341	
	☑Power Supply: AC Adapter 100V- 240V +/- 20% 50-60Hz	
	☑Net weight with Packing: 8 kgs	
75	Laminar Flow Hood	
	☑Horizontal	
	☑with HEPA Filters	
	☑UV Germicidal Light	
76	PCR Thermal Cycler	
77	Orbital shaker	
	☑Bench top shaker (Medium size)	
	☑Shaking System : Orbital	
	☑Shaking Plate Size (WxD mm) 480x380	
	☑Shaking Rate (RPM) 20 to 300	
	☑Shaking Width (mm) 25	
78	Dispensing pump for culture media	
	☑Single Pump	
	☑Continuous	
	☑Multi-dose	
	☑(predetermined volume, with a pause between each dose)	
	☑Digital control screen	
	☑Rotating button for easy navigation and program settings	
	☑Compact: only 16 cm wide	
	☑Up to 1% precision	
	☑Dispenses liquid from 50 µL to 99 µL	
	☑Step-by-step instructions on screen	
	☑Calibration possible with chosen volume	
	☑High quality Watson Marlow™ pump heads	
	☑Heavy duty polycarbonate top shell and durable stainless steel	
79	Pressure cooker for laboratory use	
	☑Heavy Duty, 41.5 quarts	
	☑Professional quality, extra heavy duty cast aluminum construction throughout for fast & even heating	
	☑Stay-cool bakelite top handle	
	☑Geared steam gauge	
	☑Equipped with 2 automatic venting features which provide an extra margin of safety (the safety control valve	
	☑ overpressure plug)	

	<ul style="list-style-type: none"> Pressure regulator weight with settings of 5, 10 and 15 psi 	
	<ul style="list-style-type: none"> Smooth, easy to clean satin finish 	
	<ul style="list-style-type: none"> Double thickness edges for additional protection on points of heaviest wear 	
80	pH meter	
	<ul style="list-style-type: none"> Digital 	
	<ul style="list-style-type: none"> with pH electrode 	
	<ul style="list-style-type: none"> with pH 4, 7 and 10 (1L each) pH standard 	
	<ul style="list-style-type: none"> Size: Measuring range:0 ~ 14.00pH Accuracy:±0.012pH 	
	<ul style="list-style-type: none"> Note: 	
	<ul style="list-style-type: none"> Conventional pH measurement used in the experiment room 	
	<ul style="list-style-type: none"> accord with the most simple to use. 	
	<ul style="list-style-type: none"> Category: Bench Type PH meter 	
81	Autoclave High Steam Sterilizer	
	<ul style="list-style-type: none"> (High Pressure Steam Sterilizer) , Automatic, Vertical Autoclave 	
	<ul style="list-style-type: none"> Portable, Top-loading Autoclave 	
	<ul style="list-style-type: none"> Space-saving design with lid opening upward. 	
	<ul style="list-style-type: none"> Dual-sensing lid interlock prevents lid opening when chamber is pressurized or when temperature exceeds 97°C. 	
	<ul style="list-style-type: none"> One-touch lever to easily open and close chamber lid 	
	<ul style="list-style-type: none"> Door-closure sensor provides a prompt and the cycle will not start unless the door is closed properly. 	
	<ul style="list-style-type: none"> In-process display shows status and progress of sterilization cycle 	
	<ul style="list-style-type: none"> Agar sterilization mode for sterilizing agar and then automatically maintaining it at liquid temperature 	
	<ul style="list-style-type: none"> Sterilization timer is activated only when load temperature reaches set temperature 	
	<ul style="list-style-type: none"> Temperature Range: 105°C to 135°C 	
	<ul style="list-style-type: none"> Agar warming range: After sterilization, agar can be maintained from 45°C to 60°C (programmable) for up to 24 hours to prevent coagulation. 	
	<ul style="list-style-type: none"> Sterilization Timer: 1 to 300 minutes 	
	<ul style="list-style-type: none"> Cooling Fan: Switch to turn fan on or off 	
	<ul style="list-style-type: none"> Safety Features: Circuit breaker with GFCI, low-water power cut-off, over-temp power cutoff, over-pressure power cut-off, safety valve, sensor for improper lid closing 	
	<ul style="list-style-type: none"> Power Requirements: 220V, 50/60 Hz, single phase 	
	<ul style="list-style-type: none"> Power Consumption: 3.9 Kw Shipping Weight: 255 lb (116 kg) 	
82	Microbead Sterilizer	
	<ul style="list-style-type: none"> Plain metal cover, glass-cup and glassbeads (150g), 	
	<ul style="list-style-type: none"> 220 or 240 V, 90 W 	
	<ul style="list-style-type: none"> Glassbead container: Stainless steel 	
	<ul style="list-style-type: none"> Glassbeads (filling portion) : 150g 	

	☐Inside dimensions: 3x4cm
	☐Casing dimensions (HxWxD): 14.4x12.5x14cm
83	Digital microscope with camera
	☐Compound Biological Trinocular Digital Microscopes
	☐with Camera and Software (2.0MP)
84	Distilling Apparatus
	☐Note: Distilling apparatus in cart is beyond the budget allocated.
	☐Housing made of stainless steel
	☐Pilot switch light
	☐with thermostat
	☐Distillation capacity L/H; 4
	☐Water consumption L/Min : 1
	☐Equipment measures HxWX Depth (mm): 435x370x220
	☐Heaters: 3000W
	☐Electricity : 230V-50/60 Hz 13A
	☐Equipment wt: 8
85	Boric Acid, Analytical Reagent
86	Dimethyl sulfoxide, Analytical reagent
87	Calcium Nitrate standard for AAS, Analytical reagent
88	Sodium Hydroxide, Technical grade, 1kg/bottle
89	Cadmium Nitrate Standard for the AAS
90	ammonium meta vanadate, AR>
91	Storage Solution for ROSS electrode
	☐Orion application solution
	☐Orion Cat No. 810001.
	☐One bottle is 475mL.
92	ROSS reference electrode filling solution (3M KCl)
	☐Orion cat. No. 810007
	☐One pack is composed of 5 bottles
	☐(60 ml. capacity)
93	Barium acetate AR
94	potassium antimony tartrate (III) hydrate, AR
95	Ethanol
	☐AR, at least 95%v/v, 4L per bottle
96	Potassium dihydrogen phosphate, AR
97	Triethanolamine, AR
98	Alcohol, Denatured
99	Test Tube
	☐with Screw Cap
	☐Glass
	☐Graduated, 50mL
100	Test Tube

	☐with Screw Cap	
	☐Glass	
	☐Graduated, 20mL	
101	Microscope Slides and cover slips	
	☐Pre-Cleaned Blank slides with 100 22 x 22 mm square Cover Slip	
102	Vacutainer EDTA Tubes	
	☐blood collection tubes, 2 ml	
	☐Stainless Steel	
	☐Single Prong	
	☐5 inches	
	☐10 pieces/pack	
103	Sodium Hydroxide, AR 500G	
	☐500 g/bottle, AR, Pellets	
104	Hydrochloric Acid	
	☐AR grade	
	☐2.5 liter/btl.	
	☐36.5-38%	
	☐impurities <1ppm free chlorine	
105	Drager Aspirator Bulb	
106	Stirring Rod	
	☐big size, => 10 inches long, fire polished ends with no policeman	
107	Glass Jar 12oz	
	☐Clear	
	☐12oz	
	☐M-7101	
	☐with cap	
	☐24pcs/box	
108	Glass Jar 8oz	
	☐Clear	
	☐8oz	
	☐M-7177	
	☐with cap	
	☐24pcs/box	
109	L-Glutamine	
	☐AR, 100g per bottle	
110	Myo-inositol	
	☐AR, 100g per bottle	
111	Acetone	
	☐AR, 1gallon	
112	Agar (E-406)	
	☐Pronadisa	
	☐500g	

	☑For plant tissue culture	
113	Scalpel Handle	
	☑#4, Stainless steel	
114	Scalpel Blade	
	☑Stainless steel	
	☑100 blades/box	
115	Distilled Water, 6 liters per bottle	
116	Phenolphthalein Powder Indicator	
	☑Analytical Grade	
	☑500 grams per bottle	
117	Potassium Hydroxide	
	☑Flakes	
	☑Analytical Grade	
	☑1kg per bottle	
118	Potassium Hydrogen Phthalate (KHP)	
	☑Powder	
	☑500g per bottle	
	☑Analytical Grade	
119	Sulfuric Acid	
	☑Analytical Grade (98%)	
	☑2.5 Liters per bottle	
	☑specific gravity 1.84	
120	Isopropyl alcohol	
	☑2 liters per bottle	
	☑Anhydrous,	
	☑99.5%,	
121	Ethanol (Ethyl alcohol)	
	☑95%,	
	☑4 Liters per bottle	
	☑Analytical Grade	
122	Toluene	
	☑2.5 Liters per bottle	
	☑Analytical Grade	
	☑99.5%,	
123	Hair Net	
	☑High Quality	
	☑Latex Free, Breathable, Lint-free; Lightweight, Soft and Breathable Material for user comfort	
	☑Color Blue	
	☑Stretchable	
124	Volumetric Flask 10ml	
	☑10 mL (± 0.02 mL)	

	☐Class A	
	☐Borosilicate Glass with Glass Standard Taper Stopper	
	☐calibrated	
125	Volumetric Flask	
	☐50mL, (± 1 mL)	
	☐Borosilicate glass with glass standard taper stopper,	
	☐Class A	
	☐Calibrated	
126	Volumetric Flask 100ml	
	☐100 mL (± 0.01 mL)	
	☐Borosilicate glass with glass standard taper stopper,	
	☐Class A	
	☐Calibrated	
127	Top Loading Weighing Scale, capacity-6kg; accuracy-0.01g	
	☐Usage/Application: Laboratory	
	☐Capacity: 6 kg	
	☐accuracy: 0.01g	
	☐Display: Digital	
128	96 well plates, polypropylene	
	☐96 Well Microplate	
	☐well working volume 50-300 μ L	
	☐clear polypropylene wells round bottommaximum volume 355 μ L	
	☐DNAse/RNAse free	
	☐Non-pyrogenic by LAL method to <0.06 EU/mL	
	☐at least 100 EA per pack	
129	Atomic Absorption Spectrophotometer	
	☐double beam spectrophotometer for fast sequential flame multi-element absorption and emission.	
	☐Instrument is capable of measuring at least four elements in the fast sequential mode. in single sample.	
	☐All elements determined sample by sample in fast sequential AAS, and all samples determined element by element by conventional AAS	
	☐Provides dramatic reduction in sample analysis time from reduced sample delay	
	☐Lamp support: four fixed lamp positions with fast automatic lamp selection to enable fast sequential multi-element determination sample by sample	
	☐All lamps operated simultaneously in Fast Sequential mode	
	☐Auto pre-warming of next lamp in sequence.	
	☐Fitted with high speed, high intensity deuterium background corrector covering wavelength range 185-425 nm. with automated self-calibrating Czerny-Turner monochromator and automated slit selection .	

	<ul style="list-style-type: none"> Gas control: Hammer programmable gas control/PC controlled gas flows with automatic setting of gas flows for each element
	<ul style="list-style-type: none"> Flame safety system: Separate ignite and flame-off buttons. Safety interlocks monitor burner type, liquid trap, pressure relief bung, flame shield, flame operation, mains power, oxidant safety reservoir and deuterium lamp cover.
	<ul style="list-style-type: none"> supplied with 6 pcs. hollow cathode lamps (single element) (K, Ca, Mg, Na, Cu, Zn)
	<ul style="list-style-type: none"> Electrical requirements: Single phase AC supply with three-wire system terminated at an appropriate receptacle. 220 or 240 VAC $\pm 10\%$ 50/60 Hz. Rated current 15 A.
	<ul style="list-style-type: none"> The power supply should be on a separate mains circuit protected by delayed action fuses and/or circuit breakers.
	<ul style="list-style-type: none"> Spray chamber: Fluorinated high density polyethylene suitable for both organic & inorganic solutions
	<ul style="list-style-type: none"> Typical performance: Absorbance >0.9 with precision of <0.5%RSD from ten 5 second integrations for 5 mg/L Cu standard.
	<ul style="list-style-type: none"> With 6 pcs. hollow cathode lamps, branded computer, windows 10 OS, 19" monitor and desk jet printer
	<ul style="list-style-type: none"> Laptop
	<ul style="list-style-type: none"> On-site installation with Exhaust system and ductworks
	<ul style="list-style-type: none"> Includes training of end-users at site
	<ul style="list-style-type: none"> at least one year warranty on parts and service under normal use of the instrument
	<ul style="list-style-type: none"> Supplied with software
130	hotplate with magnetic stirrer
	<ul style="list-style-type: none"> voltage requirements 210V-240V
	<ul style="list-style-type: none"> digital temperature and speed display
	<ul style="list-style-type: none"> external temperature control
	<ul style="list-style-type: none"> closed loop with 2" magnetic stirrer
	<ul style="list-style-type: none"> and thermometer holder
131	Nutrient Agar, 500g per bottle
132	Alcohol, Ethyl, 95% (Tech)
133	Ammonium Acetate, AR
134	Potassium Chloride, AR, 1000g per bottle
135	Tri-power Stereo Microscope
	<ul style="list-style-type: none"> 45° advance viewing head which can rotate 360°
	<ul style="list-style-type: none"> locked on 15x wide-field eye piece with diopter adjustment on one ocular tube
	<ul style="list-style-type: none"> magnification of paired objectives: 30x parfocal, 45x parcentered, and 60x achromatic
	<ul style="list-style-type: none"> led lighting
	<ul style="list-style-type: none"> rack and pinion focusing with slip clutch and tension adjustment
	<ul style="list-style-type: none"> adjustable pole mounted cycle
	<ul style="list-style-type: none"> includes a 95mm black and white reversible stage plate
	<ul style="list-style-type: none"> rugged all metal construction

	☐corded	
	☐power source: 220-240 V 50/60Hz	
	☐with warranty	
136	Table Type vacuum packaging machine	
	☐voltage: 220V/50-60Hz	
	☐power: 0.75W	
	☐heat-sealing power: .6 Kw	
	☐lowest absolute pressure of vacuum case: 1.33 kpa	
	☐volume of vacuum case: 380 x 380 x 80 mm	
	☐heat sealing strip length and width: 260 x 8 mm	
	☐number of heat sealing strips: 1 or 2 pcs	
	☐exhaustment of vacuum pump: 10m3/h	
	☐material of vacuum case and null: stainless steel	
	☐dimension: 470 x 330 x 300 mm (l x w x h)	
	☐weight: 45 kgs	
137	Laboratory Refrigerator with 10.6 cubic foot/300 L capacity	
	☐Temperature range: +2°C to +8°C	
	☐Inner cabinet: white epoxy painted	
	☐Inner shelves: epoxy plastic coated steel rod	
	☐CFC Free Eco-friendly refrigerant R 134a	
	☐CFC Free, environment friendly Cyclopentene foaming PUF insulation	
	☐No frost, fan-assisted cooling circulation system	
	☐Ultra fast pull down, auto defrost with self-evaporating drip tray	
	☐Rear-to-front hot air anti-condensation	
	☐Digital temperature controller	
	☐Double glazed glass doors	
	☐Full length illumination	
	☐Fitted with castors, front two with brakes	
	☐Low noise, green technology and energy saving	
	☐Self closing hinge doors	
	☐Lock as standard	
	☐Input 220/240V, 50 Hz with power cord & plug	
	☐Automatic voltage stabilizer with time delay restart	
	☐gross volume: ≥ 300 L	
138	Electric Compound Binocular Microscope (4)	
	☐Objective Lenses: DIN standard Achromat 4x, 10x, 40xR, 100xR oil immersion objectives are parfocalled, parcentered, color coded and mounted in reverse facing quadruple;	
	☐Eyepieces: Wide field 10x eyepieces, FN18. Interpupillary adjustment 55-75mm. Eyepiece can be fitted with a 20mm diameter reticle	
	☐Total Magnification: 40x, 100x, 400x, 1000x	

	<ul style="list-style-type: none"> ■ Specimen Stage: Large 125mm x 115mm stage, with built-in mechanical stage. Mechanical stage provides X-Y movement of 55mm x 75mm
	<ul style="list-style-type: none"> ■ Focusing: Rack and pinion coarse focus with tension adjustment, separate fine focus. Coarse focus knob control moves the stage up or down 20mm. Fine focus moves 0.2mm per
	<ul style="list-style-type: none"> ■ Condenser: Abbe NA 1.25 condenser with iris diaphragm and filter holder for 32mm filter
	<ul style="list-style-type: none"> ■ Illumination: 1W LED illumination with on/off switch with intensity control. Corded microscope is voltage sensing 100~240V
	<ul style="list-style-type: none"> ■ Warranty: 5-year warranty, excluding LED bulb
	<ul style="list-style-type: none"> ■ Includes: Dust cover and blue filter
139	Semi-automatic rotary microtome
	<ul style="list-style-type: none"> ■ For paraffin-embedded tissue sectioning
	<ul style="list-style-type: none"> ■ Section thickness total range in (μ): 0.5 - 100
	<ul style="list-style-type: none"> ■ Trimming total range in (μ): 1 - 600
	<ul style="list-style-type: none"> ■ Specimen feed in (mm): 27-29
	<ul style="list-style-type: none"> ■ Vertical stroke in (mm) for sectioning og mega-cassettes: 71-73
	<ul style="list-style-type: none"> ■ User interface: 6"-8" capacitive touchscreen display
	<ul style="list-style-type: none"> ■ Operating modes: Rotational or Rocking (selectable)
	<ul style="list-style-type: none"> ■ Specimen retraction total range (μ): Selectable between 5 – 250, Default value: 40μ
	<ul style="list-style-type: none"> ■ Motorized coarse feed (μm/sec): 300 - 1800
	<ul style="list-style-type: none"> ■ Blade Holder Type: Two in One for high and low profile blades
	<ul style="list-style-type: none"> ■ Max. specimen size (mm): 50x60x40 (w x h x d)
	<ul style="list-style-type: none"> ■ Specimen orientation: $\pm 8^\circ$ horizontal and vertical, Rotational capability: 360°
	<ul style="list-style-type: none"> ■ Power requirements: 100-240 VAC / 50-60Hz
	<ul style="list-style-type: none"> ■ Dimensions in (mm): 460-470 (width) x 540-545 (depth with tray) x 295-300 (height)
140	Micro bead sterilizer with 1000g glass beads
	<ul style="list-style-type: none"> ■ Capacity: 300g/11oz.
	<ul style="list-style-type: none"> ■ Chamber diameter: 1.6 in/ 40mm
	<ul style="list-style-type: none"> ■ Height: 15.5 cm/6.1 in
	<ul style="list-style-type: none"> ■ Length: 14.5 cm/5.5 in
	<ul style="list-style-type: none"> ■ Temperature range: 100 to 300 °C
	<ul style="list-style-type: none"> ■ Power source: 220-240V 50/60hz
141	Portable electric balance/weighing scale with AC adapter and storage cover
	<ul style="list-style-type: none"> ■ Capacity: 8200 g
	<ul style="list-style-type: none"> ■ readability: 1g
	<ul style="list-style-type: none"> ■ linearity: + 1g
	<ul style="list-style-type: none"> ■ pan shape: square
	<ul style="list-style-type: none"> ■ level bubble adjustment feet

	☑wide LCD display with backlight	
	☑multiple weighing mode	
	☑power source: AC (220 - 240 V 50/60Hz) and DC (AA-Battery)	
142	Rechargeable precision top loading balance	
	☑Capacity: 10 kg	
	☑readability: 0.1 g	
	☑linearity: +/- 0.3g	
	☑repeatability: 0.3g	
	☑weighing units: gram, kilogram, pound, carat, Newton	
	☑display: LCD	
	☑Built-in application: check weighing, parts counting, percent setup, unstable conditions, peak hold	
	☑interface: RS-232 port	
	☑Operating temperature range: 15 to 30 degrees C	
	☑Compliance: CE	
	☑Power: rechargeable battery with 240V AC adapter	
	☑weight: 2.8 -3 kg	
	☑weighing pan: 195 x 195 mm (W x D)	
	☑overall dimension: 97 x 206 x 333 mm (H x W x D)	
143	40x-2000x LED Biological Trinocular Compound Microscope with 5MP Camera and Macbook Pro Laptop	
	☑Head: trinocular, 45 degree inclined, 360 degree swiveling	
	☑Nosepiece: revolving quadruple	
	☑Objective: Achromatic, DIN 4X, 10X, 40X(Spring), 100X(Spring, Oil)	
	☑Eyepiece: WF10X and 20X	
	☑Stage: 3D double layer, size 5.5 x 5 in (14 x 12.7 cm), X-Y stroke: 3x2 in (7.6 x 5.3 cm)	
	☑Focusing: coaxial coarse and fine	
	☑Condenser: Abbe, NA=1.25, with iris diaphragm	
	☑Illumination: LED	
	☑Power Supply: 100-240VAC, 0.35A adapter to DC6V, 2A	
	☑Achromatic optical system with precise optical glass elements	
	☑Adjustable ocular diopter on left ocular tube	
	☑High resolution images over a wide field of view	
	☑Heavy-duty metal framework	
	☑5MP USB camera with Windows/Mac software	
	☑GS and CE approval	
	☑Excellent five (5) year warranty	
	☑Camera specifications	
	◀Sensor: Aptina MT9P001 (color)	
	◀Sensor Type: CMOS	
	◀Sensor Size: 5.7x4.3mm (1/2.5" class)	

	◀Pixel Size: 2.2 micrometers	
	◀Resolution: 5.1MP	
	◀Frame Rate: 55fps @ 640x480, 18fps @ 1280x960, 6.8fps @ 2592x1944	
	◀Sensitivity: .53V/Lux-sec	
	◀Connectivity: USB 2.0	
	◀Compatibility: Windows (32/64 bit) XP/Vista/7/8/10, Mac OSX, Linux	
	◀Mounting Sizes: 23mm, 30mm, 30.5mm, and C-mount	
	▣Packing List:	
	◀Trinocular Microscope Body	
	◀Four Achromatic DIN Objectives, 4X, 10X, 40X(S), 100X(S, Oil)	
	◀One Pair of WF10X Eyepieces	
	◀One Pair of WF20X Eyepieces	
	◀Bottle of Immersion Oil	
	◀Dust Cover	
	◀AC Adapter	
	◀User's Manual Download	
	◀One 5.0MP Color Digital Camera - MU500B	
	◀One 0.5X C-mount Relay Lens	
	◀One 6' (1.8m) USB Cable	
	◀Two Eyepiece Adapters, 30.0mm 30.5mm	
	◀Two Rubber Seal Rings	
	◀One CD with Software, Driver and User's Instructions	
	▣Macbook Pro Laptop Specifications	
	◀13-inch Retina display with True Tone	
	◀Apple M1 chip with 8-core CPU, 8-core GPU, and 16-core Neural Engine	
	◀8GB unified memory	
	◀256GB SSD storage	
	◀Magic Keyboard	
	◀Touch Bar and Touch ID	
	◀Force Touch trackpad	
	◀Two Thunderbolt / USB 4 ports	
144	Upright Flourite Objectives Flourescence Microscope including a microscope camera, a c-mount camera	
	▣Head: Trinocular	
	▣Objectives: Plan Achromat or UPlanFL 4x, 10x, 40x, 100x oil	
	▣Eyepieces: 10x Eyepieces	
	▣Nosepiece: 6 position	
	▣Stage: Graduated mechanical XY stage	
	▣Fluorescence: 4 Position Fluorescence Attachment, 100 Watt Mercury Lampouse & Power Supply	

	<p>■Fluorescence Dichroic Filter Cubes: FITC – U-MNB. Blue light shines on slide, green light in eyepieces, TRITC – Orange. Green light shines on slide, orange light in eyepieces, Four-Place rotary filter cube turret, Includes blank light blockers on the empty spaces to protect against harmful UV entering the viewing head.</p>	
	<p>■Transmitted Halogen Lighting: High power 100W halogen illumination , Built-In Transmitted Light Filters: neutral density ND6, neutral density ND25, LBD (Daylight compensation), Condenser U-AC2: 1.1 numerical aperture</p>	
	<p>■Frame has Autovolt Voltage Input: 220 – 240 VAC auto volt, 50 – 60 HZ.</p>	
	<p>■Travel focus lock stop</p>	
	<p>■Photography: Top camera port. 3-Position prism slider. 100 percent to eyepieces, 100 percent to camera, or split to eyepieces and camera</p>	
	<p>■One year warranty</p>	
	<p>■Microscope Camera specification</p>	
	<p>◀Image Sensor: 1 in. color CMOS</p>	
	<p>◀Resolution (max.): 4104 (W) x 2174 (H) pixels</p>	
	<p>◀Pixel Size: 3.45 x 3.45 μm</p>	
	<p>◀Binning: 2 x 2</p>	
	<p>◀A/D Converter: 10 bits</p>	
	<p>◀Exposure Times: 27 μs–15 s</p>	
	<p>◀Data Transfer: USB 3.1 Gen1</p>	
	<p>◀PC Control: Windows 10 Pro (64 bit)</p>	
	<p>◀Compatible with the desktop computer</p>	
	<p>■Camera Adapter Specification</p>	
	<p>◀must be compatible with the fluorescence microscope</p>	
	<p>◀must be compatible with the microscope camera</p>	
	<p>■Desk top computer specification</p>	
	<p>◀must be compatible with the microscope camera</p>	
	<p>◀with license Windows 10 Pro (64 bit)</p>	
	<p>◀brand new</p>	
	<p>◀Processor: Intel Core i5 9400F or higher</p>	
	<p>◀Motherboard: Intel H310 Chipset, Anti-Sulfur Resistors Design, Gaming LAN with Bandwidth Management</p>	
	<p>◀Memory: 16GB (2x8) DDR4 or higher</p>	
	<p>◀SSD: 500GB M.2,</p>	
	<p>◀Optical Drive: DVD-RW</p>	
	<p>◀Casing: W/ 700W PSU,</p>	
	<p>◀Monitor: 23" IPS FHD,</p>	
	<p>◀Keyboard and mouse combo</p>	
	<p>◀500W IC controlled AVR</p>	
	<p>◀Stereo speakers</p>	
145	<p>Basic Bench pH meters with replaceable electrode and buffer</p>	

	☑Accuracy temperature: $\pm 0.3^{\circ}\text{C}$	
	☑Accuracy pH: ± 0.1	
	☑Electrical requirements: AC/DC 9 V adapter (220 VAC, 60 Hz)	
	☑Resolution (mV): 0.1 mV (± 199.9 mV); 1 mV beyond ± 200 mV	
	☑Temp probe calibration: offset in 0.1°C increments; offset range $\pm 5^{\circ}\text{C}$	
	☑Range pH: 0 to 14	
	☑Accuracy mV: ± 0.2 mV (± 199.9 mV), ± 2 mV beyond ± 200 mV	
	☑Calibration points: 1 to 5 points with automatic buffer recognition (ABR)	
	☑Include 13-620-AE6 3-in-1 single junction gel pH/ATC electrode	
	☑Memory: 100 datasets	
	☑Resolution temperature: 0.1°C	
	☑Temperature compensation: automatic or manual (0 to 100°C)	
	☑Temperature range metric: 0.0 to 100.0°C	
	☑Range mV: ± 1999 mV	
	☑Resolution pH: 0.01	
	☑Power source: 220 - 240 50/60 Hz	
	☑Warranty: 2-year meter warranty; 6-month electrode warranty	
146	Hotplate stirrer including magnetic bar and retriever kit	
	☑Heating temperature range: 50°C - 500°C	
	☑Heating rate heating plate: 5K/min	
	☑Heat output: 1000W	
	☑Heat control: LED	
	☑Motor rating output: 1.5W	
	☑Stirring bar length max: 80 mm	
	☑Speed range: 100 rpm - 1500 rpm	
	☑Speed control : sacel 0 - 6	
	☑Fixed safety circuit: 550°C	
	☑Set-up plate dimensions: 180 x 180 mm	
	☑Set-up plate material: ceramic	
	☑Power output: 1020W	
	☑Power source: 220 - 240 V 50/60 Hz	
	☑Depth: 330 - 335 mm	
	☑Height 105 - 110 mm	
147	(1) TCM400 Inverted Biological Microscope with Flourescence Kit	
	(2)TC 10 Temperature Control System for Recording Chamber (heat only)	
	☑one channel DC 12V /2.5 A	
	☑two thermometers	

	<ul style="list-style-type: none"> ■Including: One H-OBJ Microscope Object Mantle Heater.
	<ul style="list-style-type: none"> ■Connects directly to HOT-1
	<ul style="list-style-type: none"> ■For connection to npi temperature controllers the adapter cable HOBJ-DIN is required and One H-OBJ-DIN cable for H-OBJ
	<ul style="list-style-type: none"> ■HCS or HEATINGPAD for connecting to npi controller (TC4-CABLE).
	(3)RMS60X-PFOD - 60X Plan Fluorite Oil Immersion Objective with Iris, 1.25-0.65 NA, 0.12 mm WD
	(4)acA1300-30gm (monochrome)
	(5)PCIe-8236 Frame Grabber
148	Laminar Flow Hood
	<ul style="list-style-type: none"> ■Horizontal Flow
	<ul style="list-style-type: none"> ■Heavy plastic laminate work surface
	<ul style="list-style-type: none"> ■enamel finish standard color
	<ul style="list-style-type: none"> ■white flourescent type self contained lighting
	<ul style="list-style-type: none"> ■Dimensions: 43" wide, 22" deep, 34" high
149	ELISA READER
	<ul style="list-style-type: none"> ■(Filter wheel-type) (Bio-rad iMark)
	<ul style="list-style-type: none"> ■Wavelength range: nm400-750 or wider
	<ul style="list-style-type: none"> ■Compatible plate/strips: flat, U, or V-bottom microplates or 8- or 12- well strip plates.
	<ul style="list-style-type: none"> ■Number of filters accommodated: at least 8
	<ul style="list-style-type: none"> ■includes 415, 450, 490, 595, 655 and 750 nm filters.
150	MICRO CENTRIFUGE , (Ventilated)
	<ul style="list-style-type: none"> ■Capacity : 24 x1.5/2mL
	<ul style="list-style-type: none"> ■Max. Speed : 13,300rpm
	<ul style="list-style-type: none"> ■Max. RCF : 17,000 x g
	<ul style="list-style-type: none"> ■Noise Level: 56dbA
	<ul style="list-style-type: none"> ■Temperature Range : Ambient temperature
	<ul style="list-style-type: none"> ■Certifications/Compliance : CSA, CE, IVD
	<ul style="list-style-type: none"> ■Type : Benchtop Centrifuge
	<ul style="list-style-type: none"> ■Includes: 24 x 1.5/2.0mL rotor, 32 x 0.2mL rotor with Click Seal, Biocontainment lid
	<ul style="list-style-type: none"> ■Description: Micro CL17 Centrifuge Ventilated
	<ul style="list-style-type: none"> ■Electrical Requirements: 110/240V 50/60Hz
	<ul style="list-style-type: none"> ■Run Time: 1 to 99min (1min increments); hold
	<ul style="list-style-type: none"> ■Standards : IEC 61010-1, IEC 61010-2-020
	<ul style="list-style-type: none"> ■Dimensions (HWD): 8.9 x 9.6 x 13.8in. (22.5 x 24.3 x35.2cm)
	<ul style="list-style-type: none"> ■Net Weight : 23.1lb. (1.41kg)
151	Micropipette set
	<ul style="list-style-type: none"> ■Fully autoclavable Pipettes with Carousel Stand with volume capacity:0.2-2ul, 1-10ul, 2-20ul, 10- 100ul,20-200ul,100-1000ul
	<ul style="list-style-type: none"> ■Fully Autoclavable at 121 °C for 20 minutes

	<ul style="list-style-type: none"> ☑ Triple-Speed Turbo (one rotation of triple dial is equal to 3.5 rotations of the ordinary push- button dial) and with lock lever
	<ul style="list-style-type: none"> ☑ Mushroom-shaped button and color coded
	<ul style="list-style-type: none"> ☑ Digital indicator
	<ul style="list-style-type: none"> ☑ Inclusions: 200µl, Standard Tip, Graduated, Natural, PP Rack, Sterilized; 1000µl, Standard Tip, Graduated, Natural, System Rack(PP), Sterilized; 20µl, Filter Tip, System Rack(PP), Sterilized, 96 tips/rack, 10 rack/unit
	<ul style="list-style-type: none"> ☑ Inclusions: 200µl, Standard Tip, Graduated, Natural, PP Rack, Sterilized; 1000µl, Standard Tip, Graduated, Natural, System Rack(PP), Sterilized; 20µl, Filter Tip, System Rack(PP), Sterilized, 96 tips/rack, 10 rack/unit
152	Mini CENTRIFUGE
	<ul style="list-style-type: none"> ☑ Description:
	<ul style="list-style-type: none"> ◀ Quiet & Compact
	<ul style="list-style-type: none"> ◀ Spins multiple micro sample tube sizes
	<ul style="list-style-type: none"> ◀ Ideal for Quick Spin-Downs
	<ul style="list-style-type: none"> ◀ Fast Starting & Stopping
	<ul style="list-style-type: none"> ☑ Specifications:
	<ul style="list-style-type: none"> ◀ RPM: 6,600 rpm
	<ul style="list-style-type: none"> ◀ RCF: 2,200 xg
	<ul style="list-style-type: none"> ◀ Microtube Rotor: 2 x 8-strips or 16 x 0.2mL tubes
	<ul style="list-style-type: none"> ◀ Dimensions (WxDxH): +4°C to 50°C
	<ul style="list-style-type: none"> ◀ Electrical: 100V to 230VAC, 50/60 HZ, 0.1 A
	<ul style="list-style-type: none"> ◀ Warranty: 1 year
153	PCR Machine
	<ul style="list-style-type: none"> ☑ Excitation source: Quartz-tungsten halogen lamp
	<ul style="list-style-type: none"> ☑ Excitation range: 350 to 750 nm
	<ul style="list-style-type: none"> ☑ Detector: Photomultiplier tube (PMT)
	<ul style="list-style-type: none"> ☑ Detection range: 350 to 830 nm
	<ul style="list-style-type: none"> ☑ Filters: FAMTM/SYBR® Green I (492nm-516nm), HEXTM/JOETM/VICTM (535nm-555nm), ROXTM/Texas Red® (585nm-610nm), Cy5TM (635nm-665nm) and Cy3 (545-568)
	<ul style="list-style-type: none"> ☑ Thermal system: Peltier-based, 96-well block thermal cycling system; temperature range 25-99°C
	<ul style="list-style-type: none"> ☑ Sample format: Standard 96-well plates, 8-strip tubes, 200 µl tubes, optimized for 25µl reactions
	<ul style="list-style-type: none"> ☑ Linear dynamic range: 10 orders of magnitude, standard curve method
	<ul style="list-style-type: none"> ☑ Temperature uniformity: +/- 0.25 °C at 72 °C; ramp rate: up to 2.5 °C/second
	<ul style="list-style-type: none"> ☑ Amplification rate: standard 40 cycle 2-step QPCR reaction completed in 90 minutes.
	<ul style="list-style-type: none"> ☑ Discrimination: distinguish samples with 5,000 and 10,000 template copies with a 99.7% confidence level
154	THERMALBLOCK
	<ul style="list-style-type: none"> ☑ Max. temperature control range: 110 °C

	☑Min. temperature control range: -10 °C
	☑☑Temperature accuracy: Max. ± 0.5 °C at 20 – 45 °C ¹
	☑Temperature settings: -10 °C/110 °C (110 °C when using the (Smart Blocks 12 mm or cryo)
	☑Timer: 15 s to 99:30 h, continuous
	☑Heating rate: Max. 9 °C/min (when using the Smart Block PCR 384) ¹
	☑Cooling rate Max.: 5.0 °C/min between 110 °C and RT ¹
	☑Interfaces: USB interface
	☑Power supply: 220 – 240 V, 50 – 60 Hz
	☑Max. power consumption: 200 W
	☑Dimensions (W × D × H): 20.6 × 30.4 × 13.6 cm
	☑Weight w/o accessories: 4.3 kg
	☑Temperature range Min: 30 °C below RT, max: 110 °C (110 °C when Using the Smart Blocks 12 mm or cryo)
155	VORTEX MIXER
	☑Description:
	◀Vortex mixer with powerful motor comes equipped with standard cup head
	◀200-3200 rpm speed range
	◀Economical and effective vortexes for general lab processes
	◀Features::Q-Drive Dynamic Balance System, Touch or Continuous Operation
	◀Two–Year Manufacturer Warranty
	☑Specifications:
	◀Electrical Specifications: 120V, 1.5A, 172.5W, 60Hz, 1Ph
	◀Dimensions, Product: 5"W x 6.3"D x 6.7"H (130 x 160 x 170 mm)
	◀Weight, Product: 10 Lbs (5 kg)
	◀Dimensions, Shipping: 14"W x 12"D x 8"H (360 x 305 x 205 mm) • Weight, Shipping: 11 Lbs (5 kg)
	◀Ships From: 08817 Edison, NJ
	◀Package Type: Box
156	Ammonium Nitrate
	☑AR grade; at least 98% purity
	☑Molecular Wt. 80.043 grams per mol.
	☑1kg/pack
157	Polyethylene Bags, 4 x 4 x 8"
158	Potato Dextrose Agar (PDA), 500 grams
159	Copper Sulphate, 500 grams/pack
160	Nutrient Agar, 500g
161	Agar-Agar
162	Ethyl Alcohol (95%), Cotainer Size: Water Can
163	Plant Preservative Mixture (PPM), for plant tissue culture

164	Analytical Balance	
	▣capacity-200 grams;	
	▣accuracy-0.001g	
	▣readability 0.001g	
	▣digital	
	▣with certificate of calibration	
	Rebidding	
165	Stainless Steel Modular Veterinary Dog/Cat Cage	
	<i>Feat Type: Pet Cages, Carriers & Houses</i>	
	<i>Item Type: Soft-Sided Carriers</i>	
	<i>Closure Type: Button</i>	
	<i>Material: Metal, 304 stainless steel</i>	
	<i>Pattern: ANIMAL</i>	
	<i>Style: CLASSICS</i>	
	<i>Cage, Carrier & House Type: Cages</i>	
	<i>Application: Dogs</i>	
	<i>Product Name: Stainless Steel Dog Cage (Modular)</i>	
	<i>Overall Size: 1220x1570x700mm(LxHxD)</i>	
	<i>Weight: 110KG</i>	
	<i>Cage Size: 610x715x700mm(LxHxD)</i>	
	<i>Cage Qty: 4 Cages</i>	
	<i>Wheel: 4 Caster Wheels</i>	
	<i>Lock: Automatic</i>	
	<i>Package: Plywood Case</i>	
	<i>Customization: Acceptable</i>	
	<i>Model Number: TYXD-DB09S</i>	
	<i>Combination (each single cage can be combined together with stainless steel connectors) (CVM)</i>	

Section VIII. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

- ☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
or
- ☐ (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document,
and
- ☐ (c) Mayor’s or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and
- ☐ (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Note: If the bidder submits item (a), bidder may not submit requirements (b), (c) & (d).

Technical Documents

- ☐ (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- ☐ (g) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid in the amount of *at least 50% of the ABC or at least Five Million Thirty-Two Thousand Eight Hundred Thirty-Two Pesos (PhP 5,032,832.00)*;
or
Statement of at least two (2) similar completed contracts, the aggregate amount of which should be equivalent to *at least 50% of the ABC or at least Five Million Thirty-Two Thousand Eight Hundred Thirty-Two Pesos (PhP 5,032,832.00)* and the largest of these similar contracts must be equivalent to at least half of the said aggregate amount or *at least Two Million Five Hundred Sixteen Thousand Four Hundred Sixteen Pesos (PhP 2,516,416.00)*; **and**
- ☐ (h) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**
- ☐ (i) Conformity with the Technical Specifications; **and**
- ☐ (j) Production/delivery schedule; **and**
- ☐ (k) Manpower requirements; **and**
- ☐ (l) After-sales/parts, if applicable; **and**
- ☐ (m) Original duly signed Omnibus Sworn Statement (OSS);

and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- ☐ (n) The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**
- ☐ (o) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) – at least equal to ABC (**PhP 10,065,664.00**);
or
A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation (at least 10% of ABC or **PhP 1,006,566.40**).

II. FINANCIAL COMPONENT ENVELOPE

- ☐ (a) Original of duly signed and accomplished Financial Bid Form; **and**
- ☐ (b) Original of duly signed and accomplished Price Schedule(s).

Guidelines on the Preparation of Electronic Bid (e-Bid)
(for bidders who prefer electronic bid submission)

1. Scan all documents and save as Portable Document Format (PDF) files.
2. Properly label each document for prompt identification. Filename of documents, whichever are applicable to the bidder, should be as follows:

Document	Filename (in PDF form)
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. Statement of On-Going Government & Private Contracts	Statement of On-Going Contracts
6. Statement of Bidder's Single Largest Completed Contract	SLCC
7. Statement of at least two (2) similar completed contracts	Statement of Completed Contracts
8. Bid Security	Bid Security
9. Technical Specifications	Technical Specifications
10. SCHEDULE of Requirements/Production and delivery schedule	Schedule of Requirements
11. Manpower Requirements	Manpower Requirements
12. After Sales service/parts	After Sales
13. Omnibus Sworn Statement	Omnibus Sworn Statement
14. Audited Financial Statements	Audited Financial Statements
15. Net Financial Contracting Capacity	NFCC
16. Committed Line of Credit	CLC
17. Bid Form	Bid Form
18. Price Schedule	Price Schedule

3. Create two (2) folders that are password-protected. The first folder should contain all requirements under Technical Component checklist as presented under Section VIII. The second folder should contain all requirements under Financial Component checklist.
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 jessamine.ecleo@vsu.edu.ph before the deadline (June 9, 2021; 8:30 AM).



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