



VISAYAS
STATE UNIVERSITY

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Government of the Republic of the Philippines

Supply and Delivery of Laboratory Equipment and Supplies (VSU-BAC2-GOODS-25-20)

March 28, 2025, 9:00 AM

**White Room, Office of the Vice President for Research, Extension
and Innovation, Visca,
Baybay City, Leyte and via Zoom**

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Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Goods to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances for the particular Procurement Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

- d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.
- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference must be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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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)

GFI – 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

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids.
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded.
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and particularly relevant to the information in the Bid Data Sheet.

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

The *Visayas State University* through the *Trust Fund (TF)*, *Special Trust Fund (STF)* & *General Appropriations Act (GAA) 2025* intends to apply the sum of *Four Million Seven Hundred Thirty-Two Thousand Six Hundred Ninety Nine and Seventy Centavos (P4,732,699.70)* for each item to be bid out for the *Supply and Delivery of Laboratory Equipment and Supplies (VSU-BAC2-GOODS-25-20)*, being the ABC to payments under the contract for each item, to wit:

Item #	Description	Unit	Qty	Unit Price	Total Price
1	1.0 um Polystyrene microspheres (5 ml)	pc	1	35,000.00	35,000.00
2	100 mm glass petri dish	pcs	20	300.00	6,000.00
3	1413 μs Conductivity Calibration solution standard	btls	1	6,500.00	6,500.00
	Pint-size bottles				
	Pre-made 1413 μ s conductivity calibration solution				
	Compatible with Extech conductivity meters				
	At least 2027 expiration date				
4	22 mm x 22 mm cover slip (0.13- 0.16 mm thickness)	boxes	3	500.00	1,500.00
	Thickness: 0.13 - 0.16 mm				
	At least 72 pcs per box				
5	84 μs Conductivity Calibration solution standard	btl	1	6,500.00	6,500.00
	Pint-size bottles				
	Pre-made 84 μ s conductivity calibration solution				
	Compatible with Extech conductivity meters				
	At least 2027 expiration date				
6	95% Ethyl Alcohol, Technical Grade (Gallon)	gallon	4	800.00	3,200.00
7	Acetonitrile, HPLC grade, 2.5 L	btl	1	3,000.00	3,000.00



	CAS No.: 75-05-8				
	Purity: ≥99.93%				
	Grade: HPLC grade				
	Filtration: 0.2 µm filtered				
	Volume: 2.5 L per bottle				
8	Agar Agar	kilos	1	8,000.00	8,000.00
	culture medium for microbes				
9	Alcohol Thermometer 110 °C	pc	25	450.00	11,250.00
	Type: Traditional glass alcohol thermometer				
	Unit Scale: Degree Celsius (°C)				
	Temperature Range: Maximum 110°C				
	Length: Approximately 30 cm				
	Material: Traditional glass with alcohol filling				
	Mounting: Tube type				
10	Alcohol Thermometer 200 °C	pcs	15	500.00	7,500.00
	Unit Scale: Degree Celsius (°C)				
	Temperature Range: Maximum 200°C				
	Length: Approximately 30 cm				
	Material: Traditional glass with alcohol filling				
	Mounting: Tube type				
11	Alcohol, Denatured	gallo ns	10	600.00	6,000.00
12	Alcian Blue Powder 8GX (25G)	btl	1	7,500.00	7,500.00
13	Alizarin Red Powder	btl	1	1,500.00	1,500.00
	Type: Alizarin Red S				
	Grade: Practical grade				
	Weight: 25 g				



14	Autoclave Tape	pcs	1	1,000.00	1,000.00
	Turns black at 250°F				
	Width: ¾ inch				
	Length: Minimum of 60 yards				
15	Beaker, Glass, 1000mL	pc	5	1,000.00	5,000.00
	Material: Borosilicate glass				
	Capacity: 1000 mL				
	Type: Borosilicate glass container				
16	Beaker, Glass, 500mL	pc	5	1,000.00	5,000.00
	Material: Borosilicate glass				
	Capacity: 500 mL				
17	Beef Extract	btl	1	4,000.00	4,000.00
	Weight: 500 g				
	Application: For microbiological work				
18	Bench Oscilloscope	set	1	50,000.00	50,000.00
	Device Type: Bench Oscilloscope				
	Digital/Analogue: Digital				
	Bandwidth: 150 MHz				
	Number of Analogue Channels: 2				
	Oscilloscope Form: Digital Storage				
	Sample Rate: Bench				
	Interface: RS232, USB				
	Power Source: Mains				
	Display Type: TFT LCD				
	Screen Size: 7 inches				
	Vertical Sensitivity:				
	Minimum: 2 mV/div				



	Maximum: 10 V/div				
	Time Base:				
	Minimum: 2.5 ns/div				
	Maximum: 50 s/div				
	Record Length: 2M points				
	Vertical Resolution: 8-bit				
	Rise Time: 2.3 ns				
	Weight: 2.5 kg				
	Dimensions: 323.1 x 135.6 x 157 mm				
	Safety Category: CAT I 400V, CAT II 400V				
	Warranty: At least 2 years with service maintenance				
19	Benzene, 2.5 L AR Grade	btl	2	7,520.00	15,040.00
20	Biosafety Cabinet Class II A2	set	1	800,000.00	800,000.00
	Dimensions & Construction:				
	External Size (WDH): 1383 × 775 × 2220 mm				
	Internal Size (WDH): 1210 × 600 × 660 mm				
	Work Surface Height: 762 mm				
	Working Area Material: 304 stainless steel				
	Filtration & Airflow:				
	HEPA Filter: 99.995% efficiency (EN1822.1) at 0.12 µm, with filter life indicator				
	Airflow Volume:				
	Inflow: 462 m ³ /h (272 cfm)				
	Down Flow (65%): 863 m ³ /h (507 cfm)				
	Exhaust (35%): 462 m ³ /h (272 cfm)				



Lighting & Safety Features:				
Illumination: ≥ 1000 Lux (LED lamp)				
UV Lamp: Germicidal UV lamp, emission at 253.7 nm				
Vibration: < 0.005 mm RMS				
Power & Accessories:				
Power Supply: 230V, 50/60 Hz				
Included Accessories:				
LED lamp				
UV lamp				
Base stand				
Stainless steel (SS) water tap				
SS gas tap				
Drain valve				
Waterproof sockets				
Stainless Steel IV Bar				
Remote control				
Additional Requirements:				
Warranty: One (1) year on parts and services				
After-Sales Support: Certified engineers for maintenance and troubleshooting				
Onsite Training: Equipment operation, preventive maintenance, and troubleshooting by a service engineer or product specialist				
Delivery Timeline: 30-60 days upon receipt of Notice to Proceed (no extension)				



	Additional Items Included:				
	Two (2) ergonomics laboratory chairs				
	One (1) unit heavy-duty 5KVA Automatic Voltage Regulator (AVR)				
	Certifications: Equipment performance certification				
	Onsite Inspection: Room space assessment for installation and electrical requirements				
	Installation & Commissioning: Includes electrical outlets, circuits, AVR setup, and initial operation				
21	Class II, Type A2, Biosafety Cabinet	set	1	800,000.00	800,000.00
	General Specifications:				
	Product Type: Type A2 Biosafety Cabinet				
	Application: Research				
	Chamber Material: SmartCoat				
	Dimensions & Structure:				
	Interior Width: 120 cm				
	Exterior Width: 130 cm				
	Exterior Depth: 80 cm				
	Height: 156.8 cm				
	Sash Opening: 25 cm				
	Performance & Efficiency:				
	Noise Level: <63 dBA				
	Power Consumption:				
	Operating Set Point: 200 W				
	Reduced Flow Mode: 70 W				
	Exhaust Volume: 582 m ³ /h				



	Features & Accessories:				
	Receptacles: 2 single outlets				
	Includes:				
	Adjustable stand				
	UV light				
	Armrests				
	Additional Requirements:				
	Certifications/Compliance: NSF				
	Warranty: 1 year on parts and services				
	Inclusions:				
	1 Ergonomic laboratory chair				
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)				
	After-Sales Support: Provided by trained engineers				
	Training: Onsite training on equipment operation, preventive maintenance, and troubleshooting by a Service Engineer or Product Specialist				
22	Bottom Aquatic Kick Net	pc	1	23,000.00	23,000.00
	Purpose:				
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.				
	Frame:				
	Type: Stainless steel rectangular frame				
	Dimensions: 10" x 18"				
	Handle:				
	Type: Detachable aluminum handle				



	Length: 60"				
	Attachment: Stainless steel threaded attachment for secure connection				
	Net:				
	Depth: 10"				
	Material: Reinforced 500-micron Nitex® nylon net				
	Features:				
	Ensures durability and ease of use in aquatic environments				
	Effective for sampling benthic macroinvertebrates				
23	Bromcresol purple suitable for plant cell and tissue culture (5g)	btl	1	2,500.00	2,500.00
24	Buffer Solution pH 10, 500 mL	btl	1	2,500.00	2,500.00
	Expiration Date: At least 1 year upon delivery				
25	Buffer Solution pH 4, 500 mL	btl	3	2,500.00	7,500.00
	Expiration Date: At least 1 year upon delivery				
26	Buffer solution, pH 7, 1000 ml.	btl	3	1,200.00	3,600.00
	Expiration Date: At least 1 year upon delivery				
27	Buffer solution, pH 7, 1000 ml.	btl	1	1,500.00	1,500.00
	Expiration Date: At least 1 year upon delivery				
28	Buffered Peptone Water	btl	1	4,000.00	4,000.00
	Type: Pre-enrichment broth				
	Usage: Isolation and culturing of bacteria				
	Packaging: Supplied in 500g/bottle				
29	Canada Balsam, for microscopy, 100ml	btl	2	1,800.00	3,600.00
30	Carbon Tetrachloride	btl	3	5,500.00	16,500.00
	Grade: Analytical Reagent Grade				
	Volume: 2.5 L per bottle				



31	Cell Stain	set	5	8,000.00	40,000.00
	Purpose: Quick staining of cells during blood smear, bone marrow smear, and exfoliated cell smear				
	Staining Method: Based on a modification of the Romanowsky Stain method				
	Minimum Number of Solutions:				
	1. Fixative solution				
	2. Eosinophilic stain solution				
	3. Basophilic stain solution				
	Minimum Volume Per Solution: 500 mL				
32	Chloroform 2.5L	btl	3	4,000.00	12,000.00
	Grade: Analytical Reagent Grade				
	Volume: 2.5 L per bottle				
33	Chromatography Paper	roll	1	20,000.00	20,000.00
	Material: Cellulose chromatography paper				
	Purity: 3MM CHR				
	Dimensions: 23 cm (W) × 100 m (L)				
	Packaging: 1 roll				
34	Colander Stainless Steel	pcs	5	360.00	1,800.00
	Type: Colander/Strainer				
	Material: Heavy-duty stainless steel				
	Base: Stainless steel ring for elevation				
	Size: 22.5 cm x 16 cm x 12.3 cm				
35	Colchicine suitable for plant cell and tissue culture (1g)	btl	1	15,000.00	15,000.00
36	Copper Acetate, Monohydrate	btl	1	850.00	850.00
	Grade: Analytical Reagent (AR)				
	Weight: 500 grams				
37	Crucible with cover	pc	20	150.00	3,000.00



	Type: Porcelain Crucible with Lid (High Form)				
	Material: Porcelain				
	Capacity: 30 mL				
	Dimensions:				
	Height: 43 mm				
	Base Diameter: 24 mm				
	Top Diameter: 33 mm				
38	Current Meter	unit	1	30,000.00	30,000.00
	Performance:				
	Speed Accuracy: 0.3 cm/sec				
	Resolution: 0.03 cm/sec				
	Range: 0-300 cm/sec				
	Direction Accuracy: ± 2 degrees				
	Sensors & Measurements:				
	Compass: 3D RS-232 compass				
	Tilt Measurement: 3D				
	Physical Specifications:				
	Diameter: 3.25 inches				
	Length: 25 inches				
	Weight: 5 lbs (in air)				
	Additional Features:				
	Transport case				
	Internal software				
	Zinc anodes				
	User manual included				



39	Cyclohexene	btl	1	3,500.00	3,500.00
	Grade: Analytical Reagent (AR) Grade				
	Volume: 2.5 L per bottle				
40	Delicate task wipes	bxs	5	1,000.00	5,000.00
	Quantity: 280 sheets per box				
	Size: 4.4 x 8.4 inches				
	Ply: 1-Ply				
	Dry Medical Wipes				
	Usage: For wiping surfaces, parts, instruments, and lenses				
41	D-Frame Aquatic Dip Net	pc	1	20,000.00	20,000.00
	Purpose:				
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.				
	Mouth:				
	Dimensions: 305 x 254 mm (12 x 10 inches)				
	Bag:				
	Depth: 559 mm (22 inches)				
	Shroud:				
	Type: Bottom only				
	Net Ring:				
	Material: 10 mm (3/8 inch) diameter stainless steel				
	Attachment: Clipped to frame with pig clip net rings				
	Reinforcement:				
Internal rope reinforcement for added durability					



	Mesh:				
	Material: 500-micron Nitex mesh				
	Features:				
	Efficient and durable collection tool for benthic macroinvertebrates in various aquatic environments.				
42	Dial Oven-Safe Thermometer (Bimetal)	unit	1	2,500.00	2,500.00
	Reading Time: 1-2 minutes				
	Placement: Insert 2 - 2.5 inches deep in the thickest part of the food				
	Usage: Suitable for roasts, casseroles, and soups				
	Not Suitable For: Thin foods				
	Feature: Can remain in food while cooking				
	Calibration: Can be calibrated				
	Note: Heat conduction of the metal stem may cause false high readings				
43	Dichloromethane	btls	3	2,000.00	6,000.00
	Grade: Analytical Reagent (AR) Grade				
	Volume: 2.5 L per bottle				
44	Digital Manometer	unit	3	10,000.00	30,000.00
	Measurement Capabilities:				
	Measures air and gas pressure for ports P1, P2, and differential				
	Range: ± 60 inH ₂ O				
	Accuracy: $\pm 1.5\%$ full scale				
	Units Measured: inH ₂ O, bar, oz/in ² , psi, mbar, kPa, inHg, mmHg, kg/cm ² , ftH ₂ O, cmH ₂ O				
	Features:				



	Strong magnet on the back for hands-free operation				
	Calculates minimum, maximum, and average values				
	Large backlit LCD for easy viewing in low-light conditions				
	Hold button locks the current reading on display				
	Auto power-off feature conserves battery life				
	Warranty: 1 year				
45	Digital thermometer with thermocouple	pc	1	12,000.00	12,000.00
	Specifications:				
	Accuracy: $\pm 0.3\%$ of reading $+1^{\circ}\text{C}$				
	Compatible Probes: Accepts Type K and J thermocouple probes				
	Feature: Advanced, highly accurate thermometer				
46	Digital water flow Meter(Portable flow meter)	unit	1	52,000.00	52,000.00
	Performance:				
	Speed Range: 0.01 - 10.00 m/s				
	Flow Measurement Error: $\leq 1.5\%$				
	Environmental Conditions:				
	Temperature Range: -10°C to 50°C				
	Physical Specifications:				
	Host Size: 75 mm x 135 mm x 25 mm				
	Display: Liquid crystal display (LCD)				
	Backlight: LED backlight				
	Measurement Method:				



	Measuring rod positioning measurement				
	Warranty: 1 year with service maintenance				
47	Digital Weighing Scale	pcs	2	3,500.00	7,000.00
	General Description:				
	Ideal all-around scale for business needs, offering durability, power, and user-friendly features				
	Recommended for its quality and affordability				
	Features:				
	Display: Red LED with dual-display showing weight, unit price, and total amount				
	Functionality:				
	High-precision strain gauge technology				
	Rapid price amount computing				
	Tare, Zero, Add-up, Total display, and Clear total functions				
	Five different unit price memories				
	Automatic temperature compensation				
	Design:				
	Water-resistant framework				
	Pressure-limit protection				
	Overload and low voltage indication				
	Power Supply:				
	AC/DC charging with built-in rechargeable battery				
	Automatic energy-saving mode				
	FREE adapter included				
	Unit Capacity Options:				



	30 kg maximum capacity				
	Material & Durability:				
	Made with high-quality components for long-lasting use				
	Usage:				
	Suitable for various business applications requiring precise weighing and pricing				
48	Digital Weighing Scale, 50kg	set	2	5,000.00	10,000.00
	Specifications:				
	Maximum Capacity: 50 kg				
	Accuracy: 1g				
	Material: Metal				
49	Double Handled Frying pan "kawali"	pc	5	650.00	3,250.00
	Material: Aluminum cookware				
	Features: Heavy-duty				
	Dimensions:				
	Diameter: 25.5 cm ± 3 cm				
	Height: 4.9 cm ± 3 cm				
	Weight: 370 grams				
	Handles: Double handle design				
50	Echo/Depth Sounder	unit	2	23,000.00	46,000.00
	Display Unit: 7-segment LCD panel				
	Frequency: 200 kHz				
	Measuring Depth Range: 0.6 - 80 m				
	Power Supply: DC 9V (9V batteries)				
	Size: 1.7 x 7.8 inches (42 x 198 mm)				
	Weight: 10.6 oz (300 g)				



	Electromagnetic Life: Over 500 measurements				
51	Electronic Balance	pc	1	15,000.00	15,000.00
	Weighing Capacity: 3 kg				
	Scale Type: Bench				
	Resolution: 0.1 g				
	Parts Counting: Yes				
	Plug Type:				
	Type A: North American/Japanese 2-blade				
	Type C: European Plug				
	Type G: British 3-pin				
	Type I: Australian Plug				
	Weighpan Dimensions:				
	Length: 166 mm				
	Width: 128 mm				
	Net Weight: 0.9 kg				
	Operating Temperature:				
	Minimum: +10°C				
	Maximum: +40°C				
	Warranty: Atleast 2 years				
52	EMS (Ethyl methanesulfonate) for plant genetic studies (10g)	btl	1	8,500.00	8,500.00
53	Ethanol	btl	3	4,000.00	12,000.00
	Grade: AR (Analytical Reagent)				
	Concentration: At least 95% v/v				
	Volume: 4L				
54	Ethanol Absolute, 100% AR, 2.5 li.	btl	3	4,500.00	13,500.00
55	Filter Paper Ordinary	pcs	2	5,000.00	10,000.00



	Type: Ordinary				
	Size: 30 x 40 inches				
	Quantity: 100 sheets per pack				
56	Filter paper, #42	boxes	6	3,200.00	19,200.00
57	Fluorescent Microspheres	pc	2	20,000.00	40,000.00
	Color: Green				
	Volume: 1 mL				
	Excitation/Emission (Ex/Em): 460 nm / 500 nm				
58	Formaldehyde	btl	5	3,000.00	15,000.00
	Grade: Analytical Reagent (AR)				
	Volume: 2.5L per bottle				
59	Fountain Pen Ink, 350ml blue black	unit	1	1,099.00	1,099.00
	Color: Blue Black				
	Volume: 350 mL				
	Features: Fountain pen friendly, water-resistant				
60	Genomic DNA Extraction Kit	kit	1	25,000.00	25,000.00
	Function: Extracts genomic DNA from various samples (e.g., manure, blood, tissue)				
	Technology: Silica-gel membrane-based spin-column				
	Includes: All buffers, elution water, and microtubes				
61	Glass Measuring Cup	pcs	5	950.00	4,750.00
	Capacity: 500 mL				
	Material: Borosilicate Glass				
	Features:				
	Microwavable (safe for hot & cold liquids)				



	Transparent, durable, and lightweight				
	Clear scale design for precise measurement				
	Wide mouth design for easy pouring and extraction				
	Usage: Suitable for baking shops, home use, etc.				
62	Gloves, Nitrile, Large	box	3	1,500.00	4,500.00
	Type: Chemical-Resistant, Disposable				
	Material: Nitrile				
	Powder-Free: Yes				
	Packaging: 1 box (100 gloves or 50 pairs)				
	Food Safe: Yes				
	Size: Large				
63	Gloves, Nitrile, Medium	box	3	1,500.00	4,500.00
	Type: Chemical-Resistant, Disposable				
	Material: Nitrile				
	Powder-Free: Yes				
	Packaging: 1 box (100 gloves or 50 pairs)				
	Food Safe: Yes				
	Size: Medium				
64	Gloves, Nitrile, Small	box	1	1,500.00	1,500.00
	Size: Small				
	Box Quantity: 100 gloves (50 pairs)				
	Features:				
	Latex-free				
	Powderless				



	Micro grip				
65	Graduated Cylinder, Glass, 1000mL	pc	5	1,500.00	7,500.00
	Capacity: 1000 mL				
	Material: Borosilicate Glass				
	Quality: Good Quality				
66	Hess Stream Bottom Sampler, 1000um Mesh	unit	1	90,000.00	90,000.00
	Mesh Size: 1000 µm				
	Material:				
	Frame: Stainless steel cylinder				
	Mesh: Nylon Nitex® bolting cloth (for the forward window)				
	Application: Effectively samples gravel and cobble stream bottoms				
	Construction Features:				
	Two large windows for water flow				
	Strong handles for forcing the cylinder into stream bottoms				
	Adjustable penetration depth				
	Water Flow:				
	Inlet: Upstream window				
	Outlet: Downstream window				
	Collects samples in a net and bucket				
	Cylinder Dimensions:				
	Inside Diameter: 13 inches				
	Height: 16 inches				
	Sampling Area: 133 square inches				
67	Hexane	btl	2	3,000.00	6,000.00
	Grade: Analytical Reagent (AR)				



	Volume: 2.5L per bottle				
68	High Duty Blender	unit	2	7,000.00	14,000.00
	Power: 375-watt motor				
	Speed: 10-speed push button				
	Function:				
	Controlled/pulse blending (buttons 1-3)				
	Continuous blending (buttons 4-10)				
	Durability: Exclusive All-Metal Drive™ system				
	Blade: High-performance ice-crushing stainless steel blade				
	Capacity: 5-cup (1.25L) heat-resistant glass jar				
	Warranty: 1-Year Household Warranty				
	Dimensions: 26 x 18 x 32 cm				
69	Hydrochloric acid, HCl	btl	5	2,000.00	10,000.00
	Grade: Analytical Reagent (AR)				
	Concentration: Concentrated				
	Volume: 2.5L per bottle				
70	Immersion oil for microscopic analysis, Type A, 30mL	btl	3	2,100.00	6,300.00
71	Iodine crystals	btl	2	2,500.00	5,000.00
	Grade: Analytical Grade, Resublimed				
	Volume: 500g per bottle				
72	Lab Gown Long Sleeves L	pcs	9	500.00	4,500.00
	Type: Lab Coat				
	Color: White				
	Size: Large				
	Sleeves: Long				
73	Lab Gown Long Sleeves M	pcs	4	500.00	2,000.00



	Quality: High-quality				
	Color: White				
	Size: Medium				
	Sleeves: Long				
74	Laboratory film	roll	3	2,000.00	6,000.00
	Dimensions: 4 in. x 125 feet per roll				
	Features:				
	Flexible and self-sealing				
	Odorless and moisture-resistant				
	Thermoplastic, semi-transparent, and practically colorless				
75	Laboratory refrigerator 10.6 cubic	unit	1	145,000.00	145,000.00
	Volume: 358 L				
	Type: 5 shelves				
	Refrigeration Mode: Air-cooled				
	Defrosting Mode: Frost-free				
	Refrigerant: R290, 75 g				
	Noise Level: 55 dB(A)				
	Ambient Temperature Range: 10~32°C				
	Temperature Range: 5±3°C				
	Temperature Accuracy: 0.1°C				
	Evaporator: Copper tube and aluminum fin				
	Condenser: Copper tube and aluminum fin				
	Sensor: NTC Thermostat				
	Thermostat: Electronic				
	Door: Foamed cyclopentane				



Display: Digital tube display				
Interface: USB				
Power Supply:				
Voltage: 110~220V				
Frequency: 50~60Hz				
Power: 220W / 286VA				
Current: 1A				
Materials:				
Internal Material: Sprayed steel plate				
External Material: Sprayed steel plate				
Lagging: Foamed polyurethane cyclopentane				
Standard Accessories:				
High and low temperature alarm				
Power fault alarm				
Thermostat fault alarm				
Door ajar alarm				
LED lamp				
USB port				
Optional Accessories:				
Printer				
485 port				
Dimensions:				
Internal (W x D x H): 530 mm x 520 mm x 1325 mm				
External (W x D x H): 630 mm x 653 mm x 1886 mm				



	Package (W x D x H): 730 mm x 780 mm x 2038 mm				
	Weight:				
	Net Weight: 111 kg				
	Gross Weight: 131 kg				
	Warranty: 5 years with service maintenance				
76	Lactophenol Cotton Blue 500ml/bottle	btl	2	2,000.00	4,000.00
	Volume: 500 mL per bottle				
	Purpose: Stain solution for fungi				
77	Lactophenol Cotton Blue Solution	btl	1	2,500.00	2,500.00
	□250ml				
78	Lens Tissues	booklet			
	25 Sheets per Booklet, 5 Booklets	et	2	800.00	1,600.00
79	Litmus Paper (Blue)	Vial	5	600.00	3,000.00
	Function: Tests for acidity (turns red in acidic solutions, remains blue in alkaline solutions)				
	Strip Quantity: 100 strips per vial				
	Vial Dimensions: 0.75" (D) x 2.75" (H) [19mm (D) x 70mm (H)]				
	Strip Dimensions: 1.875" (L) x 0.25" (W) [48mm (L) x 6mm (W)]				
	Box Dimensions:				
	144-pack box: 10" x 10" x 2.75" [29.8 cm x 19 cm x 7 cm]				
	500-pack box: 21" x 14.75" x 3" [53.3 cm x 37.5 cm x 7.6 cm]				
	12-pack box: 3.25" x 2.375" x 3" [8.3 cm x 6 cm x 7.6 cm]				
	25-pack box: 5" x 3.5" x 3" [12.7 cm x 8.9 cm x 7.6 cm]				



	Weight: 0.02 lbs (9 g) per single vial				
	Packaging: Stored in a pocket-sized, lightweight vial				
	Shelf Life: Minimum of 3 years				
	Additional Options: Other sheet sizes available upon request				
80	Long Stem Fry Thermometer	pc	1	2,000.00	2,000.00
	Type: Stainless Steel Instant Read Dial				
	Length: 30 cm (11.8 inches)				
	Features:				
	Deep long rod with a metal clip to prevent falling				
	No battery required				
	Protective sleeve with a small clip for attachment to clothing				
	Compact, durable, and corrosion-resistant				
	Temperature Range: 0-300°C / 50-550°F				
	Casing Length: 12.5 cm				
	Material: Metal				
	Color: Silver				
81	M-7471 120ml Pimiento Glass Jar	box	5	450.00	2,250.00
	Code No.: M-7471				
	Capacity: 120 mL				
	Quantity: 24 pcs per box with seal				
	Seal: Plastic seal				
	Cap: Black and gold				
	Cap Size: 63 mm				
82	Magnesium Sulphate (MgSO₄.7H₂O) suitable for plant cell and tissue culture	btl	1	2,000.00	2,000.00



	Purity: Suitable for plant cell and tissue culture				
	Molecular Weight: 169.01 g/mol				
	Appearance: Colorless efflorescent crystals				
	Pack Size: 500 grams				
83	Malachite green oxalate	btl	2	2,500.00	5,000.00
	Grade: Reagent and Microscopy Grade				
	Pack Size: 25 grams per bottle				
84	Malachite green stain	btl	1	2,000.00	2,000.00
	Use: Counterstain for Ziehl-Neelsen and Kinyoun staining				
	Volume: 500 mL per bottle				
	Grade: Laboratory grade				
85	Malt Yeast Extract Agar	btl	1	1,578.00	1,578.00
	Applications:				
	Selective enumeration of yeasts and molds				
	Selective isolation of yeasts and molds				
	pH: 4.7 ± 0.2 at 25°C				
	Solubility: Without residue				
	Appearance: Fine powder				
	Pack Size: 100 grams				
86	Mechanical Flow/Current Meter	unit	1	45,000.00	45,000.00
	Materials:				
	Celcon rotor				
	Nickel-plated brass nose piece				
	Polycarbonate body				
	Stainless steel main rotor and idler gear shafts				



	Delrin idler gears				
	Delrin and nylon digit wheels				
	Dimensions:				
	Overall Length: 8-3/8"				
	Body Diameter: 1-9/16"				
	Depth Rating: Unlimited (free flooding)				
	Data Readout:				
	Six 10-digit counter wheels (reads from 000,000 to 999,999)				
	10 counts per rotor revolution (non-resetting)				
	Six-digit full-scale count: 999,999 counts ≈ 14.5 nautical miles (1,852 meters/nautical mile)				
	Mounting:				
	Universal bridle allows single-point connection for towing				
	Two-point connection possible within the net mouth				
	Response:				
	With standard 3" diameter rotor				
	Threshold Speed: Approximately 10 cm/sec (1/5 knot)				
	Warranty: atleast 1 year				
87	Mechanical Micro meter	set	5	5,000.00	25,000.00
	Material: Carbide				
	Product Dimensions: 5.4" (L) x 2.6" (W)				
	Measurement Range: 0 - 1 inch				



	Measurement Accuracy: ± 0.0001 inches				
88	Methanol	btl	4	1,500.00	6,000.00
	Volume: 2.5L per bottle				
	Grade: Analytical Reagent Grade				
89	Methylene Blue Powder	btl	2	5,800.00	11,600.00
	Chemical Name: Methylene Blue				
	Form: Powder				
	Grade: Laboratory Grade (Intermediate purity)				
	Weight: 25 g				
	Chemical Formula: $C_{16}H_{18}N_3SCl$				
	Molecular Weight: 319.85 g/mol				
	CAS Number: 61-73-4				
	Characteristic: Green, water-soluble powder				
	Storage Code: Green—General chemical storage				
	Usage: Suitable for educational laboratories; for qualitative analysis, not quantitative analysis.				
90	Micro pipettor with stand	unit	2	8,060.00	16,120.00
	P1000 (200-1000ul)				
91	Microcapillary tube	btl	5	300.00	1,500.00
	Purpose: Diagnostic use				
	Type: Blue capillary tube, heparinized				
	Packaging: 1 barrel per tube				
	Quantity: Contains 100 tubes per pack				
92	Microcentrifuge (Refrigerated)	set	1	534,470.70	534,470.70
	Type: Benchtop Centrifuge				
	Net Weight: 28 kg				



	Capacity: 24 x 1.5/2.0 mL tubes				
	Max. Speed: 14,800 rpm				
	Max. RCF: 21,100 x g				
	Noise Level: 50 dBA				
	Temperature Range: -9°C to +40°C				
	Run Time: 1 to 99 minutes (1-minute increments); HOLD function				
	Electrical Requirements: 230V, 50/60Hz				
	Dimensions (H x W x D): 12.9 x 11.6 x 17.5 in. (33.0 x 29.5 x 44.5 cm)				
	Included Accessories:				
	24 x 1.5/2.0 mL rotor with ClickSeal biocontainment lid				
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)				
	Certifications/Compliance: CSA, CE, IVD				
	Standards: IEC 61010-1, IEC 61010-2-020				
	Warranty: 2 years				
	After-Sales Support: Inclusive of after-sales support from trained engineers				
	Training: Onsite training by a Service Engineer or Product Specialist on equipment operation, preventive maintenance, and troubleshooting				
93	Microcentrifuge Tubes (0.6mL Capacity)	pack	1	1,500.00	1,500.00
	Capacity: 0.6 mL				
	Color: Clear				
	Features: Safe-lock				
	Pack Size: 1000 tubes				



	Autoclavable: Yes				
94	Microcentrifuge Tubes (1.5mL Capacity)	pack	1	2,000.00	2,000.00
	Capacity: 1.5 mL				
	Color: Clear				
	Type: Safe-Lock				
	Pack Size: 1000 tubes				
	Autoclavable: Yes				
95	Microcentrifuge Tubes (2.0mL Capacity)	pack	1	3,000.00	3,000.00
	Capacity: 2.0 mL				
	Color: Clear				
	Type: Safe-Lock				
	Pack Size: 1000 tubes				
	Autoclavable: Yes				
96	Microscope Slide Box	pcs	4	300.00	1,200.00
	Capacity: Holds up to 25 microscope slides				
	Dimensions: 9.4 cm × 8.2 cm × 3.2 cm				
	Weight: 56 g				
	Material: Plastic				
	Color: White				
97	Microscope Slides and cover slips	boxes	1	370.00	370.00
	Slides: Pre-cleaned blank slides (50 pcs/box)				
	Cover Slips: 22 x 22 mm square cover slips				
98	Nitric acid, HNO₃	btls	3	3,600.00	10,800.00
	Concentration: Concentrated				
	Grade: Analytical Reagent Grade				
	Volume: 2.5 liters per bottle				



99	Nitrogen Block Digester (Kjeldahl Digestion System)	unit	1	500,000.00	500,000.00
	Model: BD40 High-Temperature Digestion System				
	Features:				
	Controller: Color Touch Screen Controller (External)				
	Capacity: 40-position Heating Block				
	Efficient Design: Heat Deflector Shields for safety and uniform heating				
	Inclusions:				
	40 Refluxing Test Tubes				
	40 Cold Fingers				
	40-position Test Tube and Cooling Rack				
	Boiling Chips				
	Warranty: at least 2 years with installation and service maintenance				
100	N-octanol	btl	1	2,500.00	2,500.00
	Grade: Technical Grade				
	Purity: 99%				
	Volume: 5 liters				
101	Nutrient Broth	btl	2	3,000.00	6,000.00
	Weight: 500 grams				
102	Paraffin Wax	bag	1	4,000.00	4,000.00
	Form: Pellets (White)				
	Ignition Residue: $\leq 0.05\%$				
	Melting Point: 43-95°C				
	Solidification Point: 54-56°C				
	Package Size: 1 kg per bag				
103	Pasteur pipette	pc	100	20.00	2,000.00



	Overall Length: 230 mm				
	Tip Length: 108 mm				
	Body Length: 120 mm				
	Material: Clear Glass				
	Sterility: Non-sterile				
	Maximum Dispensing Volume: 2 mL				
	Graduations: None				
104	Pasture Pipette	pcs	120	5.00	600.00
	Material: Durable Glass				
	Capacity: 2 mL				
	Tip Type: Straight Tip				
105	Peptone	btl	1	2,800.00	2,800.00
	Weight: 500g				
	Usage: For bacteriological work				
106	Petroleum Ether	btl	1	2,880.00	2,880.00
	CAS No.: 8032-32-4				
	Grade: ACS				
	Appearance: Colorless				
	Boiling Point (BP): 35-60°C				
	Volume: 1.0 L per bottle				
107	Petroleum Ether, AR	btl	2	5,000.00	10,000.00
	Volume: 2.5 L per bottle				
108	pH 10 Buffer	btl	2	2,000.00	4,000.00
	Grade: Laboratory Grade				
	Size: 1L per bottle				
	Expiration Date: Atleast 1 year upon delivery				
109	pH Meter	unit	1	84,000.00	84,000.00



Type: Bench Top				
Data Points: 50				
Display Type: LCD				
Languages: English				
Logging Functions:				
Automatic Data Logging: Auto-Read measure mode				
Manual Data Logging: Continuous measure mode				
Temperature Range:				
Operating (Ambient):				
English: 41°F to 113°F				
Metric: 5°C to 45°C				
Measurement:				
English: 22.0°F to 221.0°F				
Metric: -5.0°C to 105.0°C				
Performance & Calibration:				
Stability: Smart Stability and Smart Averaging				
Resolution (Temperature): 0.1°C, 0.1°F				
Temperature Probe Calibration: 1-point temperature offset calibration				
Temperature Selection: Manual or automatic with ATC temperature probe				
Calibration Points: 1 to 3				
Calibration Parameters: pH, relative mV (RmV), and temperature				
Accuracy:				



	pH: ± 0.01 pH				
	mV: ± 0.2 mV or $\pm 0.05\%$ of reading (whichever is greater)				
	Temperature: $\pm 0.1^\circ\text{C}$				
	Power & Battery:				
	Battery Life: 2000 hours				
	Battery Type: 4 x AA (sold separately)				
	AC Adapter: Universal 50-60 Hz, 100-240 VAC power adapter (Cat. No. 1010003)				
	Physical Specifications:				
	Channels: 1				
	Weight:				
	Metric: 0.9 kg				
	English: 2 lb.				
	Warranty:				
	Meter Warranty: 3 years				
110	pH METER (benchtop)	set	1	95,000.00	95,000.00
	Meter Type: Benchtop				
	Display Type: LCD				
	Connections:				
	pH Input: BNC Connector				
	Temperature Input: 2.5mm				
	pH Measurement:				
	Range: -2 to 16 pH				
	Resolution: 0.01 - 0.1 pH				
	Accuracy: ± 0.01 pH				



	Buffer Recognition: NIST and USA Standards				
	Calibration: Up to 5 points				
	mV Measurement:				
	Range: -2000 to 2000 mV				
	Resolution: 0.1 or 1 mV				
	Accuracy: ± 0.2 mV or 0.05% (whichever is greater)				
	Temperature Measurement:				
	Range: 0 to 100°C				
	Compensation: Automatic or Manual				
	Power Supply:				
	Voltage: 100 to 240 VAC				
	Frequency: 50 or 60 Hz				
	Physical Dimensions:				
	Width: 17.4625 cm (6.875 in)				
	Height: 6.985 cm (2.75 in)				
	Additional Features:				
	Description: Benchtop meter with "All-In-One" pH capabilities				
	Warranty: 3 years				
111	pH/mV/ Temperature Electrode	unit	1	12,000.00	12,000.00
	Functionality: Measures pH, mV, and Temperature				
	Compatibility: Compatible with DO 700 9-in-1 Portable Dissolved Oxygen Meter				
	Measurement Ranges & Accuracy:				
	pH Measurement:				



	Range: -2.00 to 19.99 pH				
	Resolution: 0.01 pH				
	Accuracy: ± 0.02 pH				
	mV Measurement:				
	Range: -1999 to +1999 mV				
	Resolution: 1 mV				
	Accuracy: ± 0.15 mV				
	Temperature Measurement (for pH & mV):				
	Range: 32 to 212 °F (0 to 100 °C)				
	Resolution: 0.1 °C				
	Accuracy: ± 1 °F / ± 0.5 °C				
	Temperature Measurement (Other Uses):				
	Range: 32 to 122 °F (0 to 50 °C)				
	Resolution: 0.1 °C				
	Accuracy: ± 1 °F / ± 0.5 °C				
112	pH-indicator paper pH 1 - 14 Universal indicator	pack	4	500.00	2,000.00
	General Description:				
	Booklet Size: 4.5 cm x 6.5 cm				
	pH Range: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14				
	Indicator Type: Universal pH indicator paper				
	Measurement Method: Colorimetric (visual comparison with color scale)				
	Accuracy: ± 1 pH unit				
	Roll Length: 4.8 m with color scale				



	Features:				
	Non-bleeding design ensures clear and reliable color changes				
	Long-term storage protection against moisture, light, and ambient gases				
	Ready-to-use format with easy tear-off mechanism				
	Manufactured using high-quality filter paper impregnated with indicator solutions				
	Storage Conditions:				
	Temperature Range: 15 - 25°C				
	Shelf-Life: Minimum of 1 year.				
113	Physics Lab Ammeter	pc	5	1,000.00	5,000.00
	General Specifications:				
	Operating Voltage: 3A				
	Operating Temperature: Up to 50°C				
	Power Source: Compatible with both AC & DC				
	Measurement Accuracy: ±2				
	Weight: 800g				
	Features:				
	Designed for physics laboratory experiments				
	Provides precise current measurements				
	Sturdy construction for durability				
	Suitable for educational and research applications				
114	Pitcher (Borosilicate) with Cover , 1 L	pcs	2	1,000.00	2,000.00
	Specifications:				



	Material: Borosilicate Glass				
	Capacity: 1000ml (1L)				
	Style: Simple, elegant design				
	Features:				
	Heat-resistant, suitable for hot and cold beverages				
	Durable and lightweight				
	Includes a secure lid cover for spill prevention				
	Ideal for home, office, or laboratory use				
115	Plankton net	unit	1	17,500.00	17,500.00
	Specifications:				
	Plankton Net Assembly: 50 cm Diameter, 3/1 Size				
	Mouth Ring Diameter: 50 cm				
	Mesh Size: 500 µm				
	Net Height: 150 cm				
	Complete Assembly Components:				
	Net				
	Mouth Ring				
	Cod End Assembly (choice of cod end jar or bucket)				
	Three-Point Bridle				
	Optional Add-ons:				
	Flowmeter				
	Choker Band				
116	Polypropylene (PP) Bags	packs	10	90.00	900.00
	Specifications:				



	Material: Polypropylene (PP)				
	Thickness: 0.03 mm				
	Size: 4 x 8 inches				
	Quantity: 100 pcs per pack				
117	Polypropylene bags	pack	10	80.00	800.00
	Thickness: 0.03				
	Size: 4 x 6 inches				
	Quantity: 100 pcs/pack				
118	Polypropylene Bags 003	packs	10	130.00	1,300.00
	Thickness: 0.03				
	Size: 8 x 12 inches				
	Quantity: 100 pcs/pack				
119	Portable Eye Washer	pc	1	8,000.00	8,000.00
	Model: Double-Mouth Mobile Emergency Eye Washer				
	Material: High-quality ABS engineering plastic				
	Capacity: 53L				
	Size: 235 x 470 x 625mm				
120	Potassium Chloride, AR, 1000g	btl	1	4,500.00	4,500.00
121	Potassium dichromate, AR Grade	btl	5	2,500.00	12,500.00
	Packaging: 500 grams per poly bottle				
122	Potassium Dicromate tech	gms	1	7,942.00	7,942.00
123	Potato Dextrose Agar (500g)	btl	1	3,500.00	3,500.00
	Form: Powder				
	Packaging: 500 grams				
124	Prepared slides of parasites	Box	1	26,400.00	26,400.00
	Quantity: 50 pcs				
	Categories & Specimens:				



1. Flagellates and Ciliates				
<i>Trypanosoma cruzi</i> (causes Chagas disease), blood smear showing trypanosomes				
<i>Toxoplasma gondii</i> , trophozoite smear				
<i>Trichomonas vaginalis</i> , trophozoite smear				
<i>Giardia lamblia</i> , cyst				
<i>Giardia lamblia</i> , trophozoite				
<i>Leishmania donovani</i> , amastigote (causes kala-azar), smear				
<i>Leishmania donovani</i> , promastigotes, smear				
<i>Balantidium coli</i> , smear with cyst				
<i>Balantidium coli</i> , smear with trophozoite				
2. Nematodes (Roundworms)				
<i>Ascaris lumbricoides</i> ova (natural color)				
<i>Ascaris lumbricoides</i> egg, carmine stain				
<i>Ascaris lumbricoides</i> (female) t.s.				
<i>Ascaris lumbricoides</i> (male) t.s.				
<i>Ascaris lumbricoides</i> (female and male) t.s.				
Anterior end of <i>Ascaris lumbricoides</i> w.m.				
Back end of male <i>Ascaris lumbricoides</i> w.m.				
<i>Trichuris trichiura</i> ova from feces w.m.				
<i>Trichuris trichiura</i> (whipworm, female) w.m.				
<i>Trichuris trichiura</i> (whipworm, male) w.m.				
<i>Trichinella spiralis</i> , section of infected muscle with encysted larvae				



<i>Trichinella spiralis</i> , w.m. of muscle piece with encysted larvae, silver stained				
<i>Trichinella spiralis</i> , adult male & female from intestine, w.m.				
<i>Ancylostoma ova</i> w.m. (natural color)				
3. Cestodes (Flatworms)				
<i>Taenia solium ova</i> from feces w.m.				
<i>Taenia solium</i> , scolex w.m.				
<i>Taenia solium</i> , immature proglottid w.m.				
<i>Taenia solium</i> , mature proglottid w.m.				
<i>Taenia solium</i> , gravid proglottid w.m.				
<i>Taenia solium t.s.</i>				
4. Trematodes (Flukes - Digenea)				
<i>Schistosoma japonicum ova</i> from feces w.m.				
<i>Schistosoma japonicum miracidium</i> w.m.				
<i>Schistosoma japonicum cercaria</i> w.m.				
<i>Schistosoma japonicum</i> , adult female w.m.				
<i>Schistosoma japonicum</i> , adult male w.m.				
<i>Schistosoma japonicum</i> , adult male and female in copula w.m.				
<i>Dugesia japonica</i> (intestine injected) w.m.				
<i>Dugesia japonica</i> through pharynx t.s.				
<i>Dugesia japonica</i> (showing reproductive system) w.m.				
<i>Clonorchis sinensis ova</i> from feces w.m.				
<i>Clonorchis sinensis</i> (Chinese liver fluke), w.m. of adult				



	<i>Clonorchis sinensis t.s. through the body</i>				
	<i>Fasciolopsis buski ova w.m.</i>				
	<i>Fasciolopsis buski adult t.s.</i>				
	Mixed eggs of Trematode w.m.				
	5. Sporozoans				
	<i>Plasmodium falciparum (ring form), blood smear</i>				
	<i>Plasmodium vivax, blood smear</i>				
	<i>Entamoeba histolytica cyst smear</i>				
	6. Parasitic Arthropods				
	<i>Culex pipiens ova w.m.</i>				
	<i>Culex pipiens, mosquito larva w.m.</i>				
	<i>Culex pipiens, mosquito pupa w.m.</i>				
	<i>Culex pipiens, mosquito adult female w.m.</i>				
	<i>Culex pipiens, mosquito adult male w.m.</i>				
	<i>Pediculus humanus (louse), adult w.m.</i>				
	<i>Pediculus humanus (louse eggs attached to hair) w.m.</i>				
	<i>Ctenocephalides canis (dog flea), adult male w.m.</i>				
	<i>Ctenocephalides canis (dog flea), adult female w.m.</i>				
	Sandfly adult w.m.				
	<i>Ixodes sp. (hard tick), adult w.m.</i>				
	Gamasid mite adult w.m.				
125	Red Litmus Test Paper	Vial	5	600.00	3,000.00
	Purpose: Used to determine if a substance is a base.				



	Color Change: Turns blue when dipped in an alkaline solution (pH >7).				
	Strip Quantity: 100 strips per vial.				
	Vial Dimensions:				
	Diameter: 0.75" (19mm)				
	Height: 2.75" (70mm)				
	Strip Dimensions:				
	Length: 1.875" (48mm)				
	Width: 0.25" (6mm)				
	Box Dimensions:				
	144-pack box: 10" x 10" x 2.75" (29.8 cm x 19 cm x 7 cm)				
	500-pack box: 21" x 14.75" x 3" (53.3 cm x 37.5 cm x 7.6 cm)				
	12-pack box: 3.25" x 2.375" x 3" (8.3 cm x 6 cm x 7.6 cm)				
	25-pack box: 5" x 3.5" x 3" (12.7 cm x 8.9 cm x 7.6 cm)				
	Weight: 0.02 lbs (9 g) per single vial.				
	Storage: Pocket-sized, lightweight vial.				
	Shelf-Life: Minimum of 3 years.				
126	Rubber Tubing Latex	ft	1	4,000.00	4,000.00
	Material: Latex rubber				
	Outside Diameter: 10mm				
	Packaging: PK-50F				
	Length: 100 feet per roll				
	Shelflife: Atleast 1 year upon delivery				
127	Serological Glass Pipette, 25mL	pc	3	850.00	2,550.00
	Material: Borosilicate glass				



	Capacity: 25mL				
	Graduation: 0.2mL intervals				
	Autoclavable: Yes				
128	Sheather's sugar flotation solution	btls	2	2,000.00	4,000.00
	Purpose: Used for the fecal flotation method				
	Specific Gravity: 1.25 to 1.27				
	Grade: Laboratory grade				
	Packaging: 1 bottle contains 1L of solution				
129	Shower and eyewash	pcs	4	70,000.00	280,000.00
	Material: Stainless steel				
	Components:				
	ABS Bowl: 250mm diameter				
	ABS Shower Head: 250mm diameter				
	Chemical-Resistant PP Eyewash Nozzle:				
	Aerated to produce a soft, bubbly, gentle spray				
	Auto-open dust cap				
	Built-in stainless filter				
	Valves:				
	Stay-Open Ball Valves for both shower and eyewash				
	Shower Head Valve: Operated by a pull rod (pull down to open, push up to close)				
	Flow Rates:				
	Shower: 20 gallons per minute (gpm) at 30 psi (0.3 MPa)				
	Eyewash: 1.5 to 2.2 liters per minute (lpm)				



	Applicable Water Pressure:				
	Minimum: 29.0 psi (0.2 MPa)				
	Maximum: 87.0 psi (0.6 MPa)				
	Standard Compliance: Conforms to ISO 9001:2000				
130	Sling Psychrometer	unit	3	10,000.00	30,000.00
	Operating Humidity: 10-90%				
	Upper Temperature Rating: 122°F (50°C)				
	Power Source: Battery-powered				
	Batteries: 2 Lithium Metal batteries (included)				
	Style: Digital Psychrometer (DTH35)				
	Material: Other				
	Discontinued by Manufacturer: No				
	Warranty: Atleast 1 year				
131	Sodium Chloride, molbio grade, 500g/bot	btl	2	1,500.00	3,000.00
132	Sodium Hexametaphosphate, 500g	btl	5	800.00	4,000.00
133	Sodium Tetraborate (Borax)	btl	1	200.00	200.00
	Form: Powder				
	Grade: Technical grade				
	500 grams				
134	Sodium Thiosulfate, Na₂S₂O₃	btl	1	2,000.00	2,000.00
	Grade: Analytical grade				
	Packaging: 100g per bottle				
135	Stage Micrometer, Metal, 1mm/0.01mm	pc	3	5,000.00	15,000.00
	Specifications:				
	Material: Metal				
	Units: Metric (mm)				



	Scale: 1mm / 100 divisions (0.01mm per division)				
	Calibration: Calibrated and certified, traceable to NIST				
	Compatibility:				
	For use with reflected light microscopes, including:				
	MEC4 (CAT # 14620)				
	Versamet 4 (CAT # 15000-BD, 15000-BF)				
	EXAMET 5 (CAT # 14350, 14351)				
	Shipping Weight: 1 lb				
136	Sulfur Powder, Analytical Grade, 500g/btl	btl	1	1,000.00	1,000.00
	Grade: Analytical Reagent (AR)				
	Packaging: 500g per bottle				
137	Sulfuric Acid	btl	5	2,500.00	12,500.00
	Specifications:				
	Grade: Analytical Grade (98%)				
	Volume: 2.5 Liters				
	Specific Gravity: 1.84				
138	Surber Stream Bottom Sampler	pc	1	35,000.00	35,000.00
	Description:				
	Designed to collect benthic macroinvertebrates in shallow flowing rivers with moderate current and fine, loose sediments.				
	Portability and Ease of Use:				
	Portable and easy to use.				
	Large filtering area allows for easy hand insertion to remove collected specimens.				



	Frame Construction:				
	Two pivoting solid stainless-steel frames.				
	Lockable brace latches to hold frames at right angles to each other.				
	Frames made of corrosion-resistant stainless steel.				
	Net Specifications:				
	Material: Nitex® bolt cloth with taffeta wings for durability.				
	Diameter: 9 inches (where the net collar meets the net filter).				
	Length: 24 inches (from collar to filter, folds flat for storage).				
	Open Base Area: 12 x 12 inches (one square foot).				
	Mesh Size: 500 microns (500 µm Nitex).				
	Included Accessories:				
	Includes: 910-G22 (large) case.				
	Warranty: Atleast 1 year				
139	Test Tube, Glass, Graduated, 20mL	pc	100	100.00	10,000.00
	With Screw Cap				
140	Test Tube, Glass, Graduated, 50mL	pc	100	105.00	10,500.00
	With Screw Cap				
141	Tetrazolium chloride	btl	1	800.00	800.00
	Chemical Name: 2,3,5-Triphenyltetrazolium Chloride (TPTZ, TTZ, Tetrazolium Red)				
	Synonyms: TPTZ, TTZ, Tetrazolium Red, TTC Salt				
	CAS Number: 298-96-4				
	Grade: AR / GR Grade				



	Molecular Formula: C₁₉H₁₅ClN₄				
	Molecular Weight: 334.80 g/mol				
	Purity: 99%				
	Appearance: Buff Powder				
	Pack Size: 25 grams per pack				
	Application: Used as a dye in cell biological studies				
	Assay: ≥99.0%				
142	Thermometer	sets	5	3,000.00	15,000.00
	Quantity: 12 pieces of meat thermometers for grilling				
	Available Colors: Black, White, and Red				
	Size: Each thermometer measures about 9.2 inches in length				
	Accessories: Includes 12 probe tip protectors				
	Probe Design:				
	Long probe made of quality stainless steel				
	Probe length: Approximately 5 inches				
	Keeps hands at a safe distance from high temperatures, preventing burns or injuries				
	Waterproof Capability:				
	Strong waterproof ability				
	Suitable for measuring the temperature of liquids like water, milk, and even candles				
	Fully washable for easy cleaning and maintenance				
	Instant and Accurate Readings:				
	0.1°F increments with accuracy within ±1.8°F				



	Temperature range: -58°F to +572°F (-50°C to 300°C)				
	Ensures precise temperature readings for optimal cooking results				
	Versatile Applications:				
	Ideal for barbecuing, pan frying, meat preparation, soup making, deep frying, candy making, frosting, milk heating, and more				
	Wide temperature range helps control temperatures accurately for various culinary tasks				
143	Tirrill Bunsen Burner	pc	3	3,800.00	11,400.00
	Product Type: Tirrill Bunsen Burner				
	Application: Heating, Sterilization, and Combustion				
	Includes: Gas Control				
	Diameter: 13 mm				
	Height: 155 mm				
	Maximum Temperature: 1550°C				
	Features:				
	Adjustable air ports				
	Brass needle valve				
	Accepts 9 mm burner tubing				
144	TLC Plate, Silica Gel 60 F254	Box	1	20,000.00	20,000.00
	Description:				
	25 Glass plates (20 x 20 cm)				
	Analysis Note:				
	Specific Surface Area (BET, 5-Point Measurement): 480 - 540 m²/g				



Pore Volume (N₂-isotherm): 0.74 - 0.84 ml/g				
Particle Size (Laser Diffraction, Size Distribution): 9.7 - 11.7 μm				
Layer Thickness: 210 - 270 μm				
Deviation of Layer Thickness per Plate: ≤ 35 μm				
Chromatographic Testing:				
A) Color Test (hRf-values):				
Bleu Vif Organol (Lipophile): 11 - 25				
Ceres Black G (Lipophile): 34 - 48				
Ceres Violet BRN (Lipophile): 52 - 67				
Separation Number (Color Test, Lipophile): ≥ 10.5				
B) Steroid Test (hRf-values):				
Hydrocortisone: 25 - 37				
Reichstein S: 37 - 49				
Methyltestosterone: 42 - 54				
Typical Value Determined on a Conditioned Plate				
Eluents:				
A) Toluene (45% relative humidity)				
B) Ethyl Acetate/Toluene (95+5 v/v; 20% relative humidity)				
Properties:				
Material: Glass support with silica gel 60 matrix				
Quality Level: 100				
Binder: Organic Polymer				



	Fluorescent Indicator: Yes				
	Packaging: Pack of 25 plates				
	Technique: Thin Layer Chromatography (TLC) – Suitable				
	Layer Thickness: 250 µm				
	Plate Dimensions: 20 cm × 20 cm				
	Particle Size: 10 - 12 µm				
	Pore Size: 60 Å (Medium Pore Diameter)				
	Storage Temperature: 2 - 30°C				
145	TOP LOADING BALANCE	unit	1	92,000.00	92,000.00
	Weighing Capacity: 2,200g				
	Readability: 100mg				
	Repeatability: ±100mg				
	Linearity Deviation: ±300mg				
	Pan Size: 180 mm / 7"				
	Calibration: Internal and External (isoCal)				
	Dimensions: 3.75" H × 8.5" W × 14.1" D				
	Net Weight: 10.4 lbs				
	Type: Digital				
	Power Requirement: 110-220V				
	Warranty: Atleast 2 years				
146	Triple Beam Balance	pc	2	3,500.00	7,000.00
	Capacity: 2610g				
	Readability: 0.1g				
	Repeatability: 0.2g				
	Pan Size: 152mm ø				



147	Tuna Cravat Clip	pc	1	200.00	200.00
	Material: Stainless Steel				
	Tagline Length: 4-5 inches				
148	Vernier Caliper	pc	5	4,000.00	20,000.00
	Measurement Range: 0-200mm				
	Material: Stainless Steel				
	Accuracy: 0.01mm				
	Caliper Type: Digital Calipers				
149	Wright Stain	set	2	4,000.00	8,000.00
	Wright Stain: 500 mL				
	Buffer for Wright Stain: 500 mL				
				Total	4,732,699.70

Bids received more than the ABC for each item shall be automatically rejected at bid opening.

1. The *Visayas State University* 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) and Purchase Order*. 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).
2. 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.

3. 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 **March 18, 2025 – April 11, 2025 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. The amount of applicable fee will depend on the total ABC of items to be quoted as shown below:

Total ABC of Items to be Quoted (PhP)	Bid Docs Fee
1,000,000.00 and below	1,000.00
1,000,001.00 and above	5,000.00

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* will hold a Pre-Bid Conference on **28 March 2025; 9:00 AM** at the **White Room, Office of the Vice President for Research, Extension, and Innovation (OVPREI), VSU, Visca, Baybay City, Leyte** and through video conferencing *via Zoom*, 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 and before **11 April 2025 until 8:30 AM**. Late bids shall not be accepted.

8. For bidders who opt to submit their bids electronically, a hardcopy (original) of the bid must be sent to the BAC through preferred couriers. A proof (e.g. courier receipt/waybill, etc.) that a hardcopy of the bid is on transit must be presented upon submission of the electronic bid.

9. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.

10. Bid opening shall be on **11 April 2025 at 9:00 AM** at the **White Room, Office of the Vice President for Research, Extension, and Innovation (OVPREI), VSU, Visca, Baybay City, Leyte**. 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.

11. The *Visayas State University* reserves the right to reject any or 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:

Ganessa Rose G. Cuevas

Knowledge Management Unit

VSU-Main, Visca, Baybay City, Leyte

Mobile: 053 565 0600 local 1116 or 09120974865

Email: ganessa.gongora@vsu.edu.ph

13. You may visit the following websites for downloading of Bidding Documents:
<https://www.vsu.edu.ph/philgeps-opportunities>

March 17, 2025

SGD.

JAMES A. PATINDOL

Chairperson, VSU BAC II



Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contracts.

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 *VSU-BAC2-GOODS-25-20*.

The Procurement Project (referred to herein as “Project”) is composed of 22 *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 2025 in the amount of *Four Million Seven Hundred Thirty-Two Thousand Six Hundred Ninety Nine and Seventy Centavos (P4,732,699.70)*.

2.2. The source of funding is:

- a. General Fund - Capital Outlay (GF-CO), General Fund – Maintenance and Other Operating Expenses (GF-MOOE), Trust Fund (TF), Special Trust Fund (STF)

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 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 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 traceable 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 **August 7, 2025**. 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 their 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 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 (e-FPS) 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

Notes on the Bid Data Sheet

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing specific information in relation to corresponding clauses in the ITB and must be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements the provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.



Bid Data Sheet

ITB Clause	
5.3	For this purpose, contracts similar to the Project shall be: a. <i>Laboratory Equipment or Laboratory Supplies or Scientific 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 DDP VSU -Main Campus, Baybay City, Leyte 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>Forty Thousand Sixteen Pesos and Seventy Eight Centavos Only (₱40,016.78) 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>One Hundred Thousand Forty One Pesos and Ninety Five Centavos Only (₱100,041.95) or five percent (5%) of ABC</i> if bid security is in Surety Bond.
15	Bidders are requested to submit two (2) more copies of its bid (Copy 1 and Copy 2) in addition to the required original hardcopy. Each page of the documents in Copy 1 and Copy 2 must be authenticated. For filing purposes, the bidders are urged to use RED envelopes for its Technical and Financial Component envelopes, including the mother (outer) Envelope.
19.3	<i>See Section I. Invitation to Bid (Item 1) for the list of items and their corresponding total Approved Budget for the Contract (ABC) per item.</i>
20.3	Bidders are required to submit its updated Mayor's/Business Permit during post-qualification.
21.2	<i>Not Applicable.</i>

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information which may be needed shall be introduced only through the Special 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

- 5.1 To ensure 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.
- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of this 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

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements the provision of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.



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, Pangasugan, 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 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;"><u>Ms. Vivian V. Balbarino</u> <i>Head, Supply and Property Office</i> <i>VSU-Main, Visca, Baybay City, Leyte</i> Contact #: 053 565 0600 local 1082/ 09175518871 <u>sppmo@vsu.edu.ph</u></p> <p style="background-color: yellow;"><i>Additional Instruction: The Supplier should notify the Head of Supply and Property Management Office at least 1 week before the scheduled delivery.</i></p> <p>The delivery terms applicable to this Contract are delivered <i>VSU Main Campus, Pangasugan, 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 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>Incidental Services –</p> <p>The Supplier is required to provide all the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:</p> <p style="padding-left: 40px;">a.) performance or supervision of on-site assembly and/or start-up of the supplied Goods.</p>



- 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 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.

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.

Spare Parts –

The Supplier is required to provide all the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- 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:
 - 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.

The spare parts and other components required are listed in Section VI (Schedule of Requirements) and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to ensure ex-stock supply of consumable spare parts or components for the Goods for a period of 3 years.

Spare parts or components shall be supplied as promptly as possible, but in any case, within 1 month of placing the order.

Packaging –

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their 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' destination and the absence of heavy handling facilities at all points in transit.

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.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity
Name of the Supplier
Contract Description
Destination
Gross weight
Any special lifting instructions
Any special handling instructions
Any relevant HAZCHEM classifications

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.

Transportation –

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.

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.

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. If 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.

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



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

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 #	Description	Unit	Qty	
1	1.0 um Polystyrene microspheres (5 ml)	pc	1	
2	100 mm glass petri dish	pcs	20	
3	1413 μs Conductivity Calibration solution standard	btls	1	
	Pint-size bottles			
	Pre-made 1413 μ s conductivity calibration solution			
	Compatible with Extech conductivity meters			
	At least 2027 expiration date			
4	22 mm x 22 mm cover slip (0.13- 0.16 mm thickness)	boxes	3	
	Thickness: 0.13 - 0.16 mm			
	At least 72 pcs per box			
5	84 μs Conductivity Calibration solution standard	btl	1	
	Pint-size bottles			
	Pre-made 84 μ s conductivity calibration solution			
	Compatible with Extech conductivity meters			
	At least 2027 expiration date			
6	95% Ethyl Alcohol, Technical Grade (Gallon)	gallon	4	
7	Acetonitrile, HPLC grade, 2.5 L	btl	1	
	CAS No.: 75-05-8			
	Purity: \geq 99.93%			
	Grade: HPLC grade			
	Filtration: 0.2 μ m filtered			
	Volume: 2.5 L per bottle			

All items should be delivered to VSU Main Campus, Pangasugan, Baybay City, Leyte within 90 Calendar days from receipt of Notice to Proceed and Purchase Order

8	Agar Agar	kilos	1
	culture medium for microbes		
9	Alcohol Thermometer 110 °C	pc	25
	Type: Traditional glass alcohol thermometer		
	Unit Scale: Degree Celsius (°C)		
	Temperature Range: Maximum 110°C		
	Length: Approximately 30 cm		
	Material: Traditional glass with alcohol filling		
	Mounting: Tube type		
10	Alcohol Thermometer 200 °C	pcs	15
	Unit Scale: Degree Celsius (°C)		
	Temperature Range: Maximum 200°C		
	Length: Approximately 30 cm		
	Material: Traditional glass with alcohol filling		
Mounting: Tube type			
11	Alcohol, Denatured	gallon s	10
12	Alcian Blue Powder 8GX (25G)	btl	1
13	Alizarin Red Powder	btl	1
	Type: Alizarin Red S		
	Grade: Practical grade		
	Weight: 25 g		
14	Autoclave Tape	pcs	1
	Turns black at 250°F		
	Width: ¾ inch		
Length: Minimum of 60 yards			
15	Beaker, Glass, 1000mL	pc	5
	Material: Borosilicate glass		
	Capacity: 1000 mL		



	Type: Borosilicate glass container			
16	Beaker, Glass, 500mL	pc	5	
	Material: Borosilicate glass			
	Capacity: 500 mL			
17	Beef Extract	btl	1	
	Weight: 500 g			
	Application: For microbiological work			
18	Bench Oscilloscope	set	1	
	Device Type: Bench Oscilloscope			
	Digital/Analogue: Digital			
	Bandwidth: 150 MHz			
	Number of Analogue Channels: 2			
	Oscilloscope Form: Digital Storage			
	Sample Rate: Bench			
	Interface: RS232, USB			
	Power Source: Mains			
	Display Type: TFT LCD			
	Screen Size: 7 inches			
	Vertical Sensitivity:			
	Minimum: 2 mV/div			
	Maximum: 10 V/div			
	Time Base:			
Minimum: 2.5 ns/div				
Maximum: 50 s/div				
Record Length: 2M points				
Vertical Resolution: 8-bit				



	Rise Time: 2.3 ns			
	Weight: 2.5 kg			
	Dimensions: 323.1 x 135.6 x 157 mm			
	Safety Category: CAT I 400V, CAT II 400V			
	Warranty: At least 2 years with service maintenance			
19	Benzene, 2.5 L AR Grade	btl	2	
20	Biosafety Cabinet Class II A2	set	1	
	Dimensions & Construction:			
	External Size (WDH): 1383 × 775 × 2220 mm			
	Internal Size (WDH): 1210 × 600 × 660 mm			
	Work Surface Height: 762 mm			
	Working Area Material: 304 stainless steel			
	Filtration & Airflow:			
	HEPA Filter: 99.995% efficiency (EN1822.1) at 0.12 μm, with filter life indicator			
	Airflow Volume:			
	Inflow: 462 m ³ /h (272 cfm)			
	Down Flow (65%): 863 m ³ /h (507 cfm)			
	Exhaust (35%): 462 m ³ /h (272 cfm)			
	Lighting & Safety Features:			
	Illumination: ≥ 1000 Lux (LED lamp)			
	UV Lamp: Germicidal UV lamp, emission at 253.7 nm			
	Vibration: < 0.005 mm RMS			
	Power & Accessories:			
	Power Supply: 230V, 50/60 Hz			
	Included Accessories:			



	LED lamp			
	UV lamp			
	Base stand			
	Stainless steel (SS) water tap			
	SS gas tap			
	Drain valve			
	Waterproof sockets			
	Stainless Steel IV Bar			
	Remote control			
	Additional Requirements:			
	Warranty: One (1) year on parts and services			
	After-Sales Support: Certified engineers for maintenance and troubleshooting			
	Onsite Training: Equipment operation, preventive maintenance, and troubleshooting by a service engineer or product specialist			
	Delivery Timeline: 30-60 days upon receipt of Notice to Proceed (no extension)			
	Additional Items Included:			
	Two (2) ergonomics laboratory chairs			
	One (1) unit heavy-duty 5KVA Automatic Voltage Regulator (AVR)			
	Certifications: Equipment performance certification			
	Onsite Inspection: Room space assessment for installation and electrical requirements			
	Installation & Commissioning: Includes electrical outlets, circuits, AVR setup, and initial operation			
21	Class II, Type A2, Biosafety Cabinet	set		1
	General Specifications:			



Product Type: Type A2 Biosafety Cabinet			
Application: Research			
Chamber Material: SmartCoat			
Dimensions & Structure:			
Interior Width: 120 cm			
Exterior Width: 130 cm			
Exterior Depth: 80 cm			
Height: 156.8 cm			
Sash Opening: 25 cm			
Performance & Efficiency:			
Noise Level: <63 dBA			
Power Consumption:			
Operating Set Point: 200 W			
Reduced Flow Mode: 70 W			
Exhaust Volume: 582 m ³ /h			
Features & Accessories:			
Receptacles: 2 single outlets			
Includes:			
Adjustable stand			
UV light			
Armrests			
Additional Requirements:			
Certifications/Compliance: NSF			
Warranty: 1 year on parts and services			
Inclusions:			



	1 Ergonomic laboratory chair			
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)			
	After-Sales Support: Provided by trained engineers			
	Training: Onsite training on equipment operation, preventive maintenance, and troubleshooting by a Service Engineer or Product Specialist			
22	Bottom Aquatic Kick Net	pc	1	
	Purpose:			
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.			
	Frame:			
	Type: Stainless steel rectangular frame			
	Dimensions: 10" x 18"			
	Handle:			
	Type: Detachable aluminum handle			
	Length: 60"			
	Attachment: Stainless steel threaded attachment for secure connection			
	Net:			
	Depth: 10"			
	Material: Reinforced 500-micron Nitex® nylon net			
	Features:			
	Ensures durability and ease of use in aquatic environments			
	Effective for sampling benthic macroinvertebrates			
23	Bromcresol purple suitable for plant cell and tissue culture (5g)	btl	1	
24	Buffer Solution pH 10, 500 mL	btl	1	



	Expiration Date: At least 1 year upon delivery			
25	Buffer Solution pH 4, 500 mL	btl	3	
	Expiration Date: At least 1 year upon delivery			
26	Buffer solution, pH 7, 1000 ml.	btl	3	
	Expiration Date: At least 1 year upon delivery			
27	Buffer solution, pH 7, 1000 ml.	btl	1	
	Expiration Date: At least 1 year upon delivery			
28	Buffered Peptone Water	btl	1	
	Type: Pre-enrichment broth			
	Usage: Isolation and culturing of bacteria			
	Packaging: Supplied in 500g/bottle			
29	Canada Balsam, for microscopy, 100ml	btl	2	
30	Carbon Tetrachloride	btl	3	
	Grade: Analytical Reagent Grade			
	Volume: 2.5 L per bottle			
31	Cell Stain	set	5	
	Purpose: Quick staining of cells during blood smear, bone marrow smear, and exfoliated cell smear			
	Staining Method: Based on a modification of the Romanowsky Stain method			
	Minimum Number of Solutions:			
	1. Fixative solution			
	2. Eosinophilic stain solution			
	3. Basophilic stain solution			
	Minimum Volume Per Solution: 500 mL			
32	Chloroform 2.5L	btl	3	
	Grade: Analytical Reagent Grade			
	Volume: 2.5 L per bottle			
33	Chromatography Paper	roll	1	



	Material: Cellulose chromatography paper			
	Purity: 3MM CHR			
	Dimensions: 23 cm (W) × 100 m (L)			
	Packaging: 1 roll			
34	Colander Stainless Steel 22.5 cmx16cmx12.3 cm	pcs	5	
	Type: Colander/Strainer			
	Material: Heavy-duty stainless steel			
	Base: Stainless steel ring for elevation			
	Size: 22.5 cm x 16 cm x 12.3 cm			
35	Colchicine suitable for plant cell and tissue culture (1g)	btl	1	
36	Copper Acetate, Monohydrate	btl	1	
	Grade: Analytical Reagent (AR)			
	Weight: 500 grams			
37	Crucible with cover	pc	20	
	Type: Porcelain Crucible with Lid (High Form)			
	Material: Porcelain			
	Capacity: 30 mL			
	Dimensions:			
	Height: 43 mm			
	Base Diameter: 24 mm			
	Top Diameter: 33 mm			
38	Current Meter	unit	1	
	Performance:			
	Speed Accuracy: 0.3 cm/sec			
	Resolution: 0.03 cm/sec			
	Range: 0-300 cm/sec			



	Direction Accuracy: ±2 degrees			
	Sensors & Measurements:			
	Compass: 3D RS-232 compass			
	Tilt Measurement: 3D			
	Physical Specifications:			
	Diameter: 3.25 inches			
	Length: 25 inches			
	Weight: 5 lbs (in air)			
	Additional Features:			
	Transport case			
	Internal software			
	Zinc anodes			
	User manual included			
39	Cyclohexene	btl	1	
	Grade: Analytical Reagent (AR) Grade			
	Volume: 2.5 L per bottle			
40	Delicate task wipes	boxes	5	
	Quantity: 280 sheets per box			
	Size: 4.4 x 8.4 inches			
	Ply: 1-Ply			
	Dry Medical Wipes			
	Usage: For wiping surfaces, parts, instruments, and lenses			
41	D-Frame Aquatic Dip Net	pc	1	
	Purpose:			
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.			



	Mouth:			
	Dimensions: 305 x 254 mm (12 x 10 inches)			
	Bag:			
	Depth: 559 mm (22 inches)			
	Shroud:			
	Type: Bottom only			
	Net Ring:			
	Material: 10 mm (3/8 inch) diameter stainless steel			
	Attachment: Clipped to frame with pig clip net rings			
	Reinforcement:			
	Internal rope reinforcement for added durability			
	Mesh:			
	Material: 500-micron Nitex mesh			
	Features:			
	Efficient and durable collection tool for benthic macroinvertebrates in various aquatic environments.			
42	Dial Oven-Safe Thermometer (Bimetal)	unit	1	
	Reading Time: 1-2 minutes			
	Placement: Insert 2 - 2.5 inches deep in the thickest part of the food			
	Usage: Suitable for roasts, casseroles, and soups			
	Not Suitable For: Thin foods			
	Feature: Can remain in food while cooking			
	Calibration: Can be calibrated			
	Note: Heat conduction of the metal stem may cause false high readings			



43	Dichloromethane	btls	3
	Grade: Analytical Reagent (AR) Grade		
	Volume: 2.5 L per bottle		
44	Digital Manometer	unit	3
	Measurement Capabilities:		
	Measures air and gas pressure for ports P1, P2, and differential		
	Range: ±60 inH ₂ O		
	Accuracy: ±1.5% full scale		
	Units Measured: inH ₂ O, bar, oz/in ² , psi, mbar, kPa, inHg, mmHg, kg/cm ² , ftH ₂ O, cmH ₂ O		
	Features:		
	Strong magnet on the back for hands-free operation		
	Calculates minimum, maximum, and average values		
	Large backlit LCD for easy viewing in low-light conditions		
	Hold button locks the current reading on display		
	Auto power-off feature conserves battery life		
Warranty: 1 year			
45	Digital thermometer with thermocouple	pc	1
	Specifications:		
	Accuracy: ±0.3% of reading +1°C		
	Compatible Probes: Accepts Type K and J thermocouple probes		
Feature: Advanced, highly accurate thermometer			
46	Digital water flow Meter(Portable flow meter)	unit	1
	Performance:		
	Speed Range: 0.01 - 10.00 m/s		



	Flow Measurement Error: $\leq 1.5\%$			
	Environmental Conditions:			
	Temperature Range: -10°C to 50°C			
	Physical Specifications:			
	Host Size: 75 mm x 135 mm x 25 mm			
	Display: Liquid crystal display (LCD)			
	Backlight: LED backlight			
	Measurement Method:			
	Measuring rod positioning measurement			
	Warranty: 1 year with service maintenance			
47	Digital Weighing Scale	pcs	2	
	General Description:			
	Ideal all-around scale for business needs, offering durability, power, and user-friendly features			
	Recommended for its quality and affordability			
	Features:			
	Display: Red LED with dual-display showing weight, unit price, and total amount			
	Functionality:			
	High-precision strain gauge technology			
	Rapid price amount computing			
	Tare, Zero, Add-up, Total display, and Clear total functions			
	Five different unit price memories			
	Automatic temperature compensation			
	Design:			
	Water-resistant framework			



	Pressure-limit protection			
	Overload and low voltage indication			
	Power Supply:			
	AC/DC charging with built-in rechargeable battery			
	Automatic energy-saving mode			
	FREE adapter included			
	Unit Capacity Options:			
	30 kg maximum capacity			
	Material & Durability:			
	Made with high-quality components for long-lasting use			
	Usage:			
	Suitable for various business applications requiring precise weighing and pricing			
48	Digital Weighing Scale, 50kg	set	2	
	Specifications:			
	Maximum Capacity: 50 kg			
	Accuracy: 1g			
	Material: Metal			
49	Double Handled Frying pan "kawali"	pc	5	
	Material: Aluminum cookware			
	Features: Heavy-duty			
	Dimensions:			
	Diameter: 25.5 cm ± 3 cm			
	Height: 4.9 cm ± 3 cm			
	Weight: 370 grams			
	Handles: Double handle design			



50	Echo/Depth Sounder	unit	2
	Display Unit: 7-segment LCD panel		
	Frequency: 200 kHz		
	Measuring Depth Range: 0.6 - 80 m		
	Power Supply: DC 9V (9V batteries)		
	Size: 1.7 x 7.8 inches (42 x 198 mm)		
	Weight: 10.6 oz (300 g)		
	Electromagnetic Life: Over 500 measurements		
51	Electronic Balance	pc	1
	Weighing Capacity: 3 kg		
	Scale Type: Bench		
	Resolution: 0.1 g		
	Parts Counting: Yes		
	Plug Type:		
	Type A: North American/Japanese 2-blade		
	Type C: European Plug		
	Type G: British 3-pin		
	Type I: Australian Plug		
	Weighpan Dimensions:		
	Length: 166 mm		
	Width: 128 mm		
	Net Weight: 0.9 kg		
	Operating Temperature:		
Minimum: +10°C			
Maximum: +40°C			



	Warranty: Atleast 2 years			
52	EMS (Ethyl methanesulfonate) for plant genetic studies (10g)	btl	1	
53	Ethanol	btl	3	
	Grade: AR (Analytical Reagent)			
	Concentration: At least 95% v/v			
	Volume: 4L			
54	Ethanol Absolute, 100% AR, 2.5 li.	btl	3	
55	Filter Paper Ordinary	pcs	2	
	Type: Ordinary			
	Size: 30 x 40 inches			
	Quantity: 100 sheets per pack			
56	Filter paper, #42	boxes	6	
57	Fluorescent Microspheres	pc	2	
	Color: Green			
	Volume: 1 mL			
	Excitation/Emission (Ex/Em): 460 nm / 500 nm			
58	Formaldehyde	btl	5	
	Grade: Analytical Reagent (AR)			
	Volume: 2.5L per bottle			
59	Fountain Pen Ink, 350ml blue black	unit	1	
	Color: Blue Black			
	Volume: 350 mL			
	Features: Fountain pen friendly, water-resistant			
60	Genomic DNA Extraction Kit	kit	1	
	Function: Extracts genomic DNA from various samples (e.g., manure, blood, tissue)			
	Technology: Silica-gel membrane-based spin-column			



	Includes: All buffers, elution water, and microtubes			
61	Glass Measuring Cup	pcs	5	
	Capacity: 500 mL			
	Material: Borosilicate Glass			
	Features:			
	Microwavable (safe for hot & cold liquids)			
	Transparent, durable, and lightweight			
	Clear scale design for precise measurement			
	Wide mouth design for easy pouring and extraction			
	Usage: Suitable for baking shops, home use, etc.			
62	Gloves, Nitrile, Large	box	3	
	Type: Chemical-Resistant, Disposable			
	Material: Nitrile			
	Powder-Free: Yes			
	Packaging: 1 box (100 gloves or 50 pairs)			
	Food Safe: Yes			
	Size: Large			
63	Gloves, Nitrile, Medium	box	3	
	Type: Chemical-Resistant, Disposable			
	Material: Nitrile			
	Powder-Free: Yes			
	Packaging: 1 box (100 gloves or 50 pairs)			
	Food Safe: Yes			
	Size: Medium			
64	Gloves, Nitrile, Small	box	1	
	Size: Small			



	Box Quantity: 100 gloves (50 pairs)			
	Features:			
	Latex-free			
	Powderless			
	Micro grip			
65	Graduated Cylinder, Glass, 1000mL	pc	5	
	Capacity: 1000 mL			
	Material: Borosilicate Glass			
	Quality: Good Quality			
66	Hess Stream Bottom Sampler, 1000um Mesh	unit	1	
	Mesh Size: 1000 µm			
	Material:			
	Frame: Stainless steel cylinder			
	Mesh: Nylon Nitex® bolting cloth (for the forward window)			
	Application: Effectively samples gravel and cobble stream bottoms			
	Construction Features:			
	Two large windows for water flow			
	Strong handles for forcing the cylinder into stream bottoms			
	Adjustable penetration depth			
	Water Flow:			
	Inlet: Upstream window			
	Outlet: Downstream window			
	Collects samples in a net and bucket			
	Cylinder Dimensions:			



	Inside Diameter: 13 inches			
	Height: 16 inches			
	Sampling Area: 133 square inches			
67	Hexane	btl	2	
	Grade: Analytical Reagent (AR)			
	Volume: 2.5L per bottle			
68	High Duty Blender	unit	2	
	Power: 375-watt motor			
	Speed: 10-speed push button			
	Function:			
	Controlled/pulse blending (buttons 1-3)			
	Continuous blending (buttons 4-10)			
	Durability: Exclusive All-Metal Drive™ system			
	Blade: High-performance ice-crushing stainless steel blade			
	Capacity: 5-cup (1.25L) heat-resistant glass jar			
	Warranty: 1-Year Household Warranty			
	Dimensions: 26 x 18 x 32 cm			
69	Hydrochloric acid, HCl	btl	5	
	Grade: Analytical Reagent (AR)			
	Concentration: Concentrated			
	Volume: 2.5L per bottle			
70	Immersion oil for microscopic analysis, Type A, 30mL	btl	3	
71	Iodine crystals	btl	2	
	Grade: Analytical Grade, Resublimed			
	Volume: 500g per bottle			
72	Lab Gown Long Sleeves L	pcs	9	



	Type: Lab Coat			
	Color: White			
	Size: Large			
	Sleeves: Long			
73	Lab Gown Long Sleeves M	pcs	4	
	Quality: High-quality			
	Color: White			
	Size: Medium			
	Sleeves: Long			
74	Laboratory film	roll	3	
	Dimensions: 4 in. x 125 feet per roll			
	Features:			
	Flexible and self-sealing			
	Odorless and moisture-resistant			
	Thermoplastic, semi-transparent, and practically colorless			
75	Laboratory refrigerator 10.6 cubic	unit	1	
	Volume: 358 L			
	Type: 5 shelves			
	Refrigeration Mode: Air-cooled			
	Defrosting Mode: Frost-free			
	Refrigerant: R290, 75 g			
	Noise Level: 55 dB(A)			
	Ambient Temperature Range: 10~32°C			
	Temperature Range: 5±3°C			
	Temperature Accuracy: 0.1°C			
	Evaporator: Copper tube and aluminum fin			



Condenser: Copper tube and aluminum fin			
Sensor: NTC Thermostat			
Thermostat: Electronic			
Door: Foamed cyclopentane			
Display: Digital tube display			
Interface: USB			
Power Supply:			
Voltage: 110~220V			
Frequency: 50~60Hz			
Power: 220W / 286VA			
Current: 1A			
Materials:			
Internal Material: Sprayed steel plate			
External Material: Sprayed steel plate			
Lagging: Foamed polyurethane cyclopentane			
Standard Accessories:			
High and low temperature alarm			
Power fault alarm			
Thermostat fault alarm			
Door ajar alarm			
LED lamp			
USB port			
Optional Accessories:			
Printer			
485 port			



	Dimensions:			
	Internal (W x D x H): 530 mm x 520 mm x 1325 mm			
	External (W x D x H): 630 mm x 653 mm x 1886 mm			
	Package (W x D x H): 730 mm x 780 mm x 2038 mm			
	Weight:			
	Net Weight: 111 kg			
	Gross Weight: 131 kg			
	Warranty: 5 years with service maintenance			
76	Lactophenol Cotton Blue	btl	2	
	Volume: 500 mL per bottle			
	Purpose: Stain solution for fungi			
77	Lactophenol Cotton Blue Solution	btl	1	
	■250ml			
78	Lens Tissues 25 Sheets per Booklet, 5 Booklets	booklet	2	
79	Litmus Paper (Blue)	Vial	5	
	Function: Tests for acidity (turns red in acidic solutions, remains blue in alkaline solutions)			
	Strip Quantity: 100 strips per vial			
	Vial Dimensions: 0.75" (D) x 2.75" (H) [19mm (D) x 70mm (H)]			
	Strip Dimensions: 1.875" (L) x 0.25" (W) [48mm (L) x 6mm (W)]			
	Box Dimensions:			
	144-pack box: 10" x 10" x 2.75" [29.8 cm x 19 cm x 7 cm]			
	500-pack box: 21" x 14.75" x 3" [53.3 cm x 37.5 cm x 7.6 cm]			
	12-pack box: 3.25" x 2.375" x 3" [8.3 cm x 6 cm x 7.6 cm]			



	25-pack box: 5" x 3.5" x 3" [12.7 cm x 8.9 cm x 7.6 cm]		
	Weight: 0.02 lbs (9 g) per single vial		
	Packaging: Stored in a pocket-sized, lightweight vial		
	Shelf Life: Minimum of 3 years		
	Additional Options: Other sheet sizes available upon request		
80	Long Stem Fry Thermometer	pc	1
	Type: Stainless Steel Instant Read Dial		
	Length: 30 cm (11.8 inches)		
	Features:		
	Deep long rod with a metal clip to prevent falling		
	No battery required		
	Protective sleeve with a small clip for attachment to clothing		
	Compact, durable, and corrosion-resistant		
	Temperature Range: 0-300°C / 50-550°F		
	Casing Length: 12.5 cm		
	Material: Metal		
	Color: Silver		
81	M-7471 120ml Pimiento Glass Jar	box	5
	Code No.: M-7471		
	Capacity: 120 mL		
	Quantity: 24 pcs per box with seal		
	Seal: Plastic seal		
	Cap: Black and gold		
	Cap Size: 63 mm		



82	Magnesium Sulphate (MgSO₄.7H₂O) suitable for plant cell and tissue culture	btl	1
	Purity: Suitable for plant cell and tissue culture		
	Molecular Weight: 169.01 g/mol		
	Appearance: Colorless efflorescent crystals		
	Pack Size: 500 grams		
83	Malachite green oxalate	btl	2
	Grade: Reagent and Microscopy Grade		
	Pack Size: 25 grams per bottle		
84	Malachite green stain	btl	1
	Use: Counterstain for Ziehl-Neelsen and Kinyoun staining		
	Volume: 500 mL per bottle		
	Grade: Laboratory grade		
85	Malt Yeast Extract Agar	btl	1
	Applications:		
	Selective enumeration of yeasts and molds		
	Selective isolation of yeasts and molds		
	pH: 4.7 ± 0.2 at 25°C		
	Solubility: Without residue		
	Appearance: Fine powder		
	Pack Size: 100 grams		
86	Mechanical Flow/Current Meter	unit	1
	Materials:		
	Celcon rotor		
	Nickel-plated brass nose piece		
	Polycarbonate body		
	Stainless steel main rotor and idler gear shafts		



	Delrin idler gears			
	Delrin and nylon digit wheels			
	Dimensions:			
	Overall Length: 8-3/8"			
	Body Diameter: 1-9/16"			
	Depth Rating: Unlimited (free flooding)			
	Data Readout:			
	Six 10-digit counter wheels (reads from 000,000 to 999,999)			
	10 counts per rotor revolution (non-resetting)			
	Six-digit full-scale count: 999,999 counts \approx 14.5 nautical miles (1,852 meters/nautical mile)			
	Mounting:			
	Universal bridle allows single-point connection for towing			
	Two-point connection possible within the net mouth			
	Response:			
	With standard 3" diameter rotor			
	Threshold Speed: Approximately 10 cm/sec (1/5 knot)			
	Warranty: atleast 1 year			
87	Mechanical Micro meter	set	5	
	Material: Carbide			
	Product Dimensions: 5.4" (L) x 2.6" (W)			
	Measurement Range: 0 - 1 inch			
	Measurement Accuracy: \pm 0.0001 inches			
88	Methanol	btl	4	



	Volume: 2.5L per bottle			
	Grade: Analytical Reagent Grade			
89	Methylene Blue Powder	btl	2	
	Chemical Name: Methylene Blue			
	Form: Powder			
	Grade: Laboratory Grade (Intermediate purity)			
	Weight: 25 g			
	Chemical Formula: C ₁₆ H ₁₈ N ₃ SCI			
	Molecular Weight: 319.85 g/mol			
	CAS Number: 61-73-4			
	Characteristic: Green, water-soluble powder			
	Storage Code: Green—General chemical storage			
	Usage: Suitable for educational laboratories; for qualitative analysis, not quantitative analysis.			
90	Micro pipettor with stand	unit	2	
	P1000 (200-1000ul)			
91	Microcapillary tube	btl	5	
	Purpose: Diagnostic use			
	Type: Blue capillary tube, heparinized			
	Packaging: 1 barrel per tube			
	Quantity: Contains 100 tubes per pack			
92	Microcentrifuge (Refrigerated)	set	1	
	Type: Benchtop Centrifuge			
	Net Weight: 28 kg			
	Capacity: 24 x 1.5/2.0 mL tubes			
	Max. Speed: 14,800 rpm			



	Max. RCF: 21,100 x g			
	Noise Level: 50 dBA			
	Temperature Range: -9°C to +40°C			
	Run Time: 1 to 99 minutes (1-minute increments); HOLD function			
	Electrical Requirements: 230V, 50/60Hz			
	Dimensions (H x W x D): 12.9 x 11.6 x 17.5 in. (33.0 x 29.5 x 44.5 cm)			
	Included Accessories:			
	24 x 1.5/2.0 mL rotor with ClickSeal biocontainment lid			
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)			
	Certifications/Compliance: CSA, CE, IVD			
	Standards: IEC 61010-1, IEC 61010-2-020			
	Warranty: 2 years			
	After-Sales Support: Inclusive of after-sales support from trained engineers			
	Training: Onsite training by a Service Engineer or Product Specialist on equipment operation, preventive maintenance, and troubleshooting			
93	Microcentrifuge Tubes (0.6mL Capacity)	pack	1	
	Capacity: 0.6 mL			
	Color: Clear			
	Features: Safe-lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
94	Microcentrifuge Tubes (1.5mL Capacity)	pack	1	
	Capacity: 1.5 mL			
	Color: Clear			



	Type: Safe-Lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
95	Microcentrifuge Tubes (2.0mL Capacity)	pack	1	
	Capacity: 2.0 mL			
	Color: Clear			
	Type: Safe-Lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
96	Microscope Slide Box	pcs	4	
	Capacity: Holds up to 25 microscope slides			
	Dimensions: 9.4 cm × 8.2 cm × 3.2 cm			
	Weight: 56 g			
	Material: Plastic			
	Color: White			
97	Microscope Slides and cover slips	boxes	1	
	Slides: Pre-cleaned blank slides (50 pcs/box)			
	Cover Slips: 22 x 22 mm square cover slips			
98	Nitric acid, HNO₃	btls	3	
	Concentration: Concentrated			
	Grade: Analytical Reagent Grade			
	Volume: 2.5 liters per bottle			
99	Nitrogen Block Digester (Kjeldahl Digestion System)	unit	1	
	Model: BD40 High-Temperature Digestion System			
	Features:			
	Controller: Color Touch Screen Controller (External)			



	Capacity: 40-position Heating Block			
	Efficient Design: Heat Deflector Shields for safety and uniform heating			
	Inclusions:			
	40 Refluxing Test Tubes			
	40 Cold Fingers			
	40-position Test Tube and Cooling Rack			
	Boiling Chips			
	Warranty: atleast 2 years with installation and service maintenance			
100	N-octanol	btl	1	
	Grade: Technical Grade			
	Purity: 99%			
	Volume: 5 liters			
101	Nutrient Broth	btl	2	
	Weight: 500 grams			
102	Paraffin Wax	bag	1	
	Form: Pellets (White)			
	Ignition Residue: ≤0.05%			
	Melting Point: 43-95°C			
	Solidification Point: 54-56°C			
	Package Size: 1 kg per bag			
103	Pasteur pipette	pc	100	
	Overall Length: 230 mm			
	Tip Length: 108 mm			
	Body Length: 120 mm			
	Material: Clear Glass			
	Sterility: Non-sterile			



	Maximum Dispensing Volume: 2 mL			
	Graduations: None			
104	Pasture Pipette	pieces	120	
	Material: Durable Glass			
	Capacity: 2 mL			
	Tip Type: Straight Tip			
105	Peptone	btl	1	
	Weight: 500g			
	Usage: For bacteriological work			
106	Petroleum Ether	btl	1	
	CAS No.: 8032-32-4			
	Grade: ACS			
	Appearance: Colorless			
	Boiling Point (BP): 35-60°C			
	Volume: 1.0 L per bottle			
107	Petroleum Ether, AR	btl	2	
	Volume: 2.5 L per bottle			
108	pH 10 Buffer	btl	2	
	Grade: Laboratory Grade			
	Size: 1L per bottle			
	Expiration Date: Atleast 1 year upon delivery			
109	pH Meter	unit	1	
	Type: Bench Top			
	Data Points: 50			
	Display Type: LCD			
	Languages: English			
	Logging Functions:			



Automatic Data Logging: Auto-Read measure mode			
Manual Data Logging: Continuous measure mode			
Temperature Range:			
Operating (Ambient):			
English: 41°F to 113°F			
Metric: 5°C to 45°C			
Measurement:			
English: 22.0°F to 221.0°F			
Metric: -5.0°C to 105.0°C			
Performance & Calibration:			
Stability: Smart Stability and Smart Averaging			
Resolution (Temperature): 0.1°C, 0.1°F			
Temperature Probe Calibration: 1-point temperature offset calibration			
Temperature Selection: Manual or automatic with ATC temperature probe			
Calibration Points: 1 to 3			
Calibration Parameters: pH, relative mV (RmV), and temperature			
Accuracy:			
pH: ±0.01 pH			
mV: ±0.2 mV or ±0.05% of reading (whichever is greater)			
Temperature: ±0.1°C			
Power & Battery:			
Battery Life: 2000 hours			
Battery Type: 4 x AA (sold separately)			



	AC Adapter: Universal 50-60 Hz, 100-240 VAC power adapter (Cat. No. 1010003)		
	Physical Specifications:		
	Channels: 1		
	Weight:		
	Metric: 0.9 kg		
	English: 2 lb.		
	Warranty:		
	Meter Warranty: 3 years		
110	pH METER (benchtop)	set	1
	Meter Type: Benchtop		
	Display Type: LCD		
	Connections:		
	pH Input: BNC Connector		
	Temperature Input: 2.5mm		
	pH Measurement:		
	Range: -2 to 16 pH		
	Resolution: 0.01 - 0.1 pH		
	Accuracy: ± 0.01 pH		
	Buffer Recognition: NIST and USA Standards		
	Calibration: Up to 5 points		
	mV Measurement:		
	Range: -2000 to 2000 mV		
	Resolution: 0.1 or 1 mV		
	Accuracy: ± 0.2 mV or 0.05% (whichever is greater)		
	Temperature Measurement:		



	Range: 0 to 100°C			
	Compensation: Automatic or Manual			
	Power Supply:			
	Voltage: 100 to 240 VAC			
	Frequency: 50 or 60 Hz			
	Physical Dimensions:			
	Width: 17.4625 cm (6.875 in)			
	Height: 6.985 cm (2.75 in)			
	Additional Features:			
	Description: Benchtop meter with "All-In-One" pH capabilities			
	Warranty: 3 years			
111	pH/mV/ Temperature Electrode	unit	1	
	Functionality: Measures pH, mV, and Temperature			
	Compatibility: Compatible with DO 700 9-in-1 Portable Dissolved Oxygen Meter			
	Measurement Ranges & Accuracy:			
	pH Measurement:			
	Range: -2.00 to 19.99 pH			
	Resolution: 0.01 pH			
	Accuracy: ±0.02 pH			
	mV Measurement:			
	Range: -1999 to +1999 mV			
	Resolution: 1 mV			
	Accuracy: ±0.15 mV			
	Temperature Measurement (for pH & mV):			



	Range: 32 to 212 °F (0 to 100 °C)			
	Resolution: 0.1 °C			
	Accuracy: ±1 °F / ±0.5 °C			
	Temperature Measurement (Other Uses):			
	Range: 32 to 122 °F (0 to 50 °C)			
	Resolution: 0.1 °C			
	Accuracy: ±1 °F / ±0.5 °C			
112	pH-indicator paper pH 1 - 14 Universal indicator	pack		4
	General Description:			
	Booklet Size: 4.5 cm x 6.5 cm			
	pH Range: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14			
	Indicator Type: Universal pH indicator paper			
	Measurement Method: Colorimetric (visual comparison with color scale)			
	Accuracy: ±1 pH unit			
	Roll Length: 4.8 m with color scale			
	Features:			
	Non-bleeding design ensures clear and reliable color changes			
	Long-term storage protection against moisture, light, and ambient gases			
	Ready-to-use format with easy tear-off mechanism			
	Manufactured using high-quality filter paper impregnated with indicator solutions			
	Storage Conditions:			
	Temperature Range: 15 - 25°C			
	Shelf-Life: Minimum of 1 year.			



113	Physics Lab Ammeter	pc	5
	General Specifications:		
	Operating Voltage: 3A		
	Operating Temperature: Up to 50°C		
	Power Source: Compatible with both AC & DC		
	Measurement Accuracy: ±2		
	Weight: 800g		
	Features:		
	Designed for physics laboratory experiments		
	Provides precise current measurements		
	Sturdy construction for durability		
	Suitable for educational and research applications		
	114	Pitcher (Borosilicate) with Cover , 1 L	pcs
Specifications:			
Material: Borosilicate Glass			
Capacity: 1000ml (1L)			
Style: Simple, elegant design			
Features:			
Heat-resistant, suitable for hot and cold beverages			
Durable and lightweight			
Includes a secure lid cover for spill prevention			
Ideal for home, office, or laboratory use			
115	Plankton net	unit	1
	Specifications:		
	Plankton Net Assembly: 50 cm Diameter, 3/1 Size		



	Mouth Ring Diameter: 50 cm			
	Mesh Size: 500 µm			
	Net Height: 150 cm			
	Complete Assembly Components:			
	Net			
	Mouth Ring			
	Cod End Assembly (choice of cod end jar or bucket)			
	Three-Point Bridle			
	Optional Add-ons:			
	Flowmeter			
	Choker Band			
116	Polypropylene (PP) Bags	packs	10	
	Specifications:			
	Material: Polypropylene (PP)			
	Thickness: 0.03 mm			
	Size: 4 x 8 inches			
	Quantity: 100 pcs per pack			
117	Polypropylene bags	pack	10	
	Thickness: 0.03			
	Size: 4 x 6 inches			
	Quantity: 100 pcs/pack			
118	Polypropylene Bags 003	packs	10	
	Thickness: 0.03			
	Size: 8 x 12 inches			
	Quantity: 100 pcs/pack			
119	Portable Eye Washer	pc	1	



	Model: Double-Mouth Mobile Emergency Eye Washer		
	Material: High-quality ABS engineering plastic		
	Capacity: 53L		
	Size: 235 x 470 x 625mm		
120	Potassium Chloride, AR, 1000g	btl	1
121	Potassium dichromate, AR Grade	btl	5
	Packaging: 500 grams per poly bottle		
122	Potassium Dicromate tech	gms	1
123	Potato Dextrose Agar (500g)	btl	1
	Form: Powder		
	Packaging: 500 grams		
124	Prepared slides of parasites	Box	1
	Quantity: 50 pcs		
	Categories & Specimens:		
	1. Flagellates and Ciliates		
	<i>Trypanosoma cruzi</i> (causes Chagas disease), blood smear showing trypanosomes		
	<i>Toxoplasma gondii</i> , trophozoite smear		
	<i>Trichomonas vaginalis</i> , trophozoite smear		
	<i>Giardia lamblia</i> , cyst		
	<i>Giardia lamblia</i> , trophozoite		
	<i>Leishmania donovani</i> , amastigote (causes kala-azar), smear		
	<i>Leishmania donovani</i> , promastigotes, smear		
	<i>Balantidium coli</i> , smear with cyst		
	<i>Balantidium coli</i> , smear with trophozoite		
	2. Nematodes (Roundworms)		
	<i>Ascaris lumbricoides</i> ova (natural color)		



<i>Ascaris lumbricoides</i> egg, carmine stain			
<i>Ascaris lumbricoides</i> (female) t.s.			
<i>Ascaris lumbricoides</i> (male) t.s.			
<i>Ascaris lumbricoides</i> (female and male) t.s.			
Anterior end of <i>Ascaris lumbricoides</i> w.m.			
Back end of male <i>Ascaris lumbricoides</i> w.m.			
<i>Trichuris trichiura</i> ova from feces w.m.			
<i>Trichuris trichiura</i> (whipworm, female) w.m.			
<i>Trichuris trichiura</i> (whipworm, male) w.m.			
<i>Trichinella spiralis</i> , section of infected muscle with encysted larvae			
<i>Trichinella spiralis</i> , w.m. of muscle piece with encysted larvae, silver stained			
<i>Trichinella spiralis</i> , adult male & female from intestine, w.m.			
<i>Ancylostoma</i> ova w.m. (natural color)			
3. Cestodes (Flatworms)			
<i>Taenia solium</i> ova from feces w.m.			
<i>Taenia solium</i> , scolex w.m.			
<i>Taenia solium</i> , immature proglottid w.m.			
<i>Taenia solium</i> , mature proglottid w.m.			
<i>Taenia solium</i> , gravid proglottid w.m.			
<i>Taenia solium</i> t.s.			
4. Trematodes (Flukes - Digenea)			
<i>Schistosoma japonicum</i> ova from feces w.m.			
<i>Schistosoma japonicum</i> miracidium w.m.			
<i>Schistosoma japonicum</i> cercaria w.m.			



<i>Schistosoma japonicum</i> , adult female w.m.			
<i>Schistosoma japonicum</i> , adult male w.m.			
<i>Schistosoma japonicum</i> , adult male and female in copula w.m.			
<i>Dugesia japonica</i> (intestine injected) w.m.			
<i>Dugesia japonica</i> through pharynx t.s.			
<i>Dugesia japonica</i> (showing reproductive system) w.m.			
<i>Clonorchis sinensis</i> ova from feces w.m.			
<i>Clonorchis sinensis</i> (Chinese liver fluke), w.m. of adult			
<i>Clonorchis sinensis</i> t.s. through the body			
<i>Fasciolopsis buski</i> ova w.m.			
<i>Fasciolopsis buski</i> adult t.s.			
Mixed eggs of Trematode w.m.			
5. Sporozoans			
<i>Plasmodium falciparum</i> (ring form), blood smear			
<i>Plasmodium vivax</i> , blood smear			
<i>Entamoeba histolytica</i> cyst smear			
6. Parasitic Arthropods			
<i>Culex pipiens</i> ova w.m.			
<i>Culex pipiens</i> , mosquito larva w.m.			
<i>Culex pipiens</i> , mosquito pupa w.m.			
<i>Culex pipiens</i> , mosquito adult female w.m.			
<i>Culex pipiens</i> , mosquito adult male w.m.			
<i>Pediculus humanus</i> (louse), adult w.m.			



	<i>Pediculus humanus</i> (louse eggs attached to hair) w.m.			
	<i>Ctenocephalides canis</i> (dog flea), adult male w.m.			
	<i>Ctenocephalides canis</i> (dog flea), adult female w.m.			
	Sandfly adult w.m.			
	<i>Ixodes</i> sp. (hard tick), adult w.m.			
	Gamasid mite adult w.m.			
125	Red Litmus Test Paper	Vial	5	
	Purpose: Used to determine if a substance is a base.			
	Color Change: Turns blue when dipped in an alkaline solution (pH >7).			
	Strip Quantity: 100 strips per vial.			
	Vial Dimensions:			
	Diameter: 0.75" (19mm)			
	Height: 2.75" (70mm)			
	Strip Dimensions:			
	Length: 1.875" (48mm)			
	Width: 0.25" (6mm)			
	Box Dimensions:			
	144-pack box: 10" x 10" x 2.75" (29.8 cm x 19 cm x 7 cm)			
	500-pack box: 21" x 14.75" x 3" (53.3 cm x 37.5 cm x 7.6 cm)			
	12-pack box: 3.25" x 2.375" x 3" (8.3 cm x 6 cm x 7.6 cm)			
	25-pack box: 5" x 3.5" x 3" (12.7 cm x 8.9 cm x 7.6 cm)			
	Weight: 0.02 lbs (9 g) per single vial.			



	Storage: Pocket-sized, lightweight vial.			
	Shelf-Life: Minimum of 3 years.			
126	Rubber Tubing Latex	ft	1	
	Material: Latex rubber			
	Outside Diameter: 10mm			
	Packaging: PK-50F			
	Length: 100 feet per roll			
	Shelflife: Atleast 1 year upon delivery			
127	Serological Glass Pipette, 25mL	pc	3	
	Material: Borosilicate glass			
	Capacity: 25mL			
	Graduation: 0.2mL intervals			
	Autoclavable: Yes			
128	Sheather's sugar flotation solution	btls	2	
	Purpose: Used for the fecal flotation method			
	Specific Gravity: 1.25 to 1.27			
	Grade: Laboratory grade			
	Packaging: 1 bottle contains 1L of solution			
129	Shower and eyewash	pcs	4	
	Material: Stainless steel			
	Components:			
	ABS Bowl: 250mm diameter			
	ABS Shower Head: 250mm diameter			
	Chemical-Resistant PP Eyewash Nozzle:			
	Aerated to produce a soft, bubbly, gentle spray			
	Auto-open dust cap			
	Built-in stainless filter			



	Valves:		
	Stay-Open Ball Valves for both shower and eyewash		
	Shower Head Valve: Operated by a pull rod (pull down to open, push up to close)		
	Flow Rates:		
	Shower: 20 gallons per minute (gpm) at 30 psi (0.3 MPa)		
	Eyewash: 1.5 to 2.2 liters per minute (lpm)		
	Applicable Water Pressure:		
	Minimum: 29.0 psi (0.2 MPa)		
	Maximum: 87.0 psi (0.6 MPa)		
	Standard Compliance: Conforms to ISO 9001:2000		
130	Sling Psychrometer	unit	3
	Operating Humidity: 10-90%		
	Upper Temperature Rating: 122°F (50°C)		
	Power Source: Battery-powered		
	Batteries: 2 Lithium Metal batteries (included)		
	Style: Digital Psychrometer (DTH35)		
	Material: Other		
	Discontinued by Manufacturer: No		
	Warranty: Atleast 1 year		
131	Sodium Chloride, molbio grade, 500g/bot	btl	2
132	Sodium Hexametaphosphate, 500g	btl	5
133	Sodium Tetraborate (Borax)	btl	1
	Form: Powder		
	Grade: Technical grade		
	500 grams		
134	Sodium Thiosulfate, Na₂S₂O₃	btl	1



	Grade: Analytical grade			
	Packaging: 100g per bottle			
135	Stage Micrometer, Metal, 1mm/0.01mm	pc	3	
	Specifications:			
	Material: Metal			
	Units: Metric (mm)			
	Scale: 1mm / 100 divisions (0.01mm per division)			
	Calibration: Calibrated and certified, traceable to NIST			
	Compatibility:			
	For use with reflected light microscopes, including:			
	MEC4 (CAT # 14620)			
	Versamet 4 (CAT # 15000-BD, 15000-BF)			
	EXAMET 5 (CAT # 14350, 14351)			
	Shipping Weight: 1 lb			
136	Sulfur Powder, Analytical Grade, 500g/btl	btl	1	
	Grade: Analytical Reagent (AR)			
	Packaging: 500g per bottle			
137	Sulfuric Acid	btl	5	
	Specifications:			
	Grade: Analytical Grade (98%)			
	Volume: 2.5 Liters			
	Specific Gravity: 1.84			
138	Surber Stream Bottom Sampler	pc	1	
	Description:			
	Designed to collect benthic macroinvertebrates in shallow flowing rivers with moderate current and fine, loose sediments.			



	Portability and Ease of Use:			
	Portable and easy to use.			
	Large filtering area allows for easy hand insertion to remove collected specimens.			
	Frame Construction:			
	Two pivoting solid stainless-steel frames.			
	Lockable brace latches to hold frames at right angles to each other.			
	Frames made of corrosion-resistant stainless steel.			
	Net Specifications:			
	Material: Nitex® bolt cloth with taffeta wings for durability.			
	Diameter: 9 inches (where the net collar meets the net filter).			
	Length: 24 inches (from collar to filter, folds flat for storage).			
	Open Base Area: 12 x 12 inches (one square foot).			
	Mesh Size: 500 microns (500 µm Nitex).			
	Included Accessories:			
	Includes: 910-G22 (large) case.			
	Warranty: Atleast 1 year			
139	Test Tube, Glass, Graduated, 20mL	pc	100	
	With Screw Cap			
140	Test Tube, Glass, Graduated, 50mL	pc	100	
	With Screw Cap			
141	Tetrazolium chloride	btl	1	
	Chemical Name: 2,3,5-Triphenyltetrazolium Chloride (TPTZ, TTZ, Tetrazolium Red)			
	Synonyms: TPTZ, TTZ, Tetrazolium Red, TTC Salt			



	CAS Number: 298-96-4			
	Grade: AR / GR Grade			
	Molecular Formula: C ₁₉ H ₁₅ ClN ₄			
	Molecular Weight: 334.80 g/mol			
	Purity: 99%			
	Appearance: Buff Powder			
	Pack Size: 25 grams per pack			
	Application: Used as a dye in cell biological studies			
	Assay: ≥99.0%			
142	Thermometer	sets	5	
	Quantity: 12 pieces of meat thermometers for grilling			
	Available Colors: Black, White, and Red			
	Size: Each thermometer measures about 9.2 inches in length			
	Accessories: Includes 12 probe tip protectors			
	Probe Design:			
	Long probe made of quality stainless steel			
	Probe length: Approximately 5 inches			
	Keeps hands at a safe distance from high temperatures, preventing burns or injuries			
	Waterproof Capability:			
	Strong waterproof ability			
	Suitable for measuring the temperature of liquids like water, milk, and even candles			
	Fully washable for easy cleaning and maintenance			
	Instant and Accurate Readings:			



	0.1°F increments with accuracy within $\pm 1.8^\circ\text{F}$			
	Temperature range: -58°F to $+572^\circ\text{F}$ (-50°C to 300°C)			
	Ensures precise temperature readings for optimal cooking results			
	Versatile Applications:			
	Ideal for barbecuing, pan frying, meat preparation, soup making, deep frying, candy making, frosting, milk heating, and more			
	Wide temperature range helps control temperatures accurately for various culinary tasks			
143	Tirrill Bunsen Burner	pc	3	
	Product Type: Tirrill Bunsen Burner			
	Application: Heating, Sterilization, and Combustion			
	Includes: Gas Control			
	Diameter: 13 mm			
	Height: 155 mm			
	Maximum Temperature: 1550°C			
	Features:			
	Adjustable air ports			
	Brass needle valve			
	Accepts 9 mm burner tubing			
144	TLC Plate, Silica Gel 60 F254	Box	1	
	Description:			
	25 Glass plates (20 x 20 cm)			
	Analysis Note:			
	Specific Surface Area (BET, 5-Point Measurement): 480 - 540 m^2/g			
	Pore Volume (N_2-isotherm): 0.74 - 0.84 ml/g			



Particle Size (Laser Diffraction, Size Distribution): 9.7 - 11.7 μm			
Layer Thickness: 210 - 270 μm			
Deviation of Layer Thickness per Plate: $\leq 35 \mu\text{m}$			
Chromatographic Testing:			
A) Color Test (hRf-values):			
Bleu Vif Organol (Lipophile): 11 - 25			
Ceres Black G (Lipophile): 34 - 48			
Ceres Violet BRN (Lipophile): 52 - 67			
Separation Number (Color Test, Lipophile): ≥ 10.5			
B) Steroid Test (hRf-values):			
Hydrocortisone: 25 - 37			
Reichstein S: 37 - 49			
Methyltestosterone: 42 - 54			
Typical Value Determined on a Conditioned Plate			
Eluents:			
A) Toluene (45% relative humidity)			
B) Ethyl Acetate/Toluene (95+5 v/v; 20% relative humidity)			
Properties:			
Material: Glass support with silica gel 60 matrix			
Quality Level: 100			
Binder: Organic Polymer			
Fluorescent Indicator: Yes			
Packaging: Pack of 25 plates			



	Technique: Thin Layer Chromatography (TLC) – Suitable		
	Layer Thickness: 250 µm		
	Plate Dimensions: 20 cm × 20 cm		
	Particle Size: 10 - 12 µm		
	Pore Size: 60 Å (Medium Pore Diameter)		
	Storage Temperature: 2 - 30°C		
145	TOP LOADING BALANCE	unit	1
	Weighing Capacity: 2,200g		
	Readability: 100mg		
	Repeatability: ±100mg		
	Linearity Deviation: ±300mg		
	Pan Size: 180 mm / 7"		
	Calibration: Internal and External (isoCal)		
	Dimensions: 3.75" H × 8.5" W × 14.1" D		
	Net Weight: 10.4 lbs		
	Type: Digital		
	Power Requirement: 110-220V		
	Warranty: Atleast 2 years		
146	Triple Beam Balance	pc	2
	Capacity: 2610g		
	Readability: 0.1g		
	Repeatability: 0.2g		
	Pan Size: 152mm ø		
147	Tuna Cravat Clip	pc	1
	Material: Stainless Steel		
	Tagline Length: 4-5 inches		



148	Vernier Caliper	pc	5
	Measurement Range: 0-200mm		
	Material: Stainless Steel		
	Accuracy: 0.01mm		
	Caliper Type: Digital Calipers		
149	Wright Stain	set	2
	Wright Stain: 500 mL		
	Buffer for Wright Stain: 500 mL		

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to this particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words “*or at least equivalent.*” References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

In case of Renewal of Regular and Recurring Services, the Procuring Entity must indicate here the technical requirements for the service provider, which must include the set criteria in the conduct of its performance evaluation.

Technical Specifications

Item #	Description	Unit	Qty	
1	1.0 um Polystyrene microspheres (5 ml)	pc	1	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.
2	100 mm glass petri dish	pcs	20	
3	1413 µs Conductivity Calibration solution standard	btls	1	
	Pint-size bottles			
	Pre-made 1413 µs conductivity calibration solution			
	Compatible with Extech conductivity meters			
	At least 2027 expiration date			
4	22 mm x 22 mm cover slip (0.13-0.16 mm thickness)	boxes	3	
	Thickness: 0.13 - 0.16 mm			
	At least 72 pcs per box			
5	84 µs Conductivity Calibration solution standard	btl	1	
	Pint-size bottles			
	Pre-made 84 µs conductivity calibration solution			
	Compatible with Extech conductivity meters			
	At least 2027 expiration date			
6	95% Ethyl Alcohol, Technical Grade (Gallon)	gallon	4	
7	Acetonitrile, HPLC grade, 2.5 L	btl	1	
	CAS No.: 75-05-8			
	Purity: ≥99.93%			
	Grade: HPLC grade			
	Filtration: 0.2 µm filtered			
	Volume: 2.5 L per bottle			
8	Agar Agar	kilos	1	



	culture medium for microbes		
9	Alcohol Thermometer 110 °C	pc	25
	Type: Traditional glass alcohol thermometer		
	Unit Scale: Degree Celsius (°C)		
	Temperature Range: Maximum 110°C		
	Length: Approximately 30 cm		
	Material: Traditional glass with alcohol filling		
	Mounting: Tube type		
10	Alcohol Thermometer 200 °C	pcs	15
	Unit Scale: Degree Celsius (°C)		
	Temperature Range: Maximum 200°C		
	Length: Approximately 30 cm		
	Material: Traditional glass with alcohol filling		
	Mounting: Tube type		
11	Alcohol, Denatured	gallons	10
12	Alcian Blue Powder 8GX (25G)	btl	1
13	Alizarin Red Powder	btl	1
	Type: Alizarin Red S		
	Grade: Practical grade		
	Weight: 25 g		
14	Autoclave Tape	pcs	1
	Turns black at 250°F		
	Width: ¾ inch		
	Length: Minimum of 60 yards		
15	Beaker, Glass, 1000mL	pc	5
	Material: Borosilicate glass		



	Capacity: 1000 mL			
	Type: Borosilicate glass container			
16	Beaker, Glass, 500mL	pc	5	
	Material: Borosilicate glass			
	Capacity: 500 mL			
17	Beef Extract	btl	1	
	Weight: 500 g			
	Application: For microbiological work			
18	Bench Oscilloscope	set	1	
	Device Type: Bench Oscilloscope			
	Digital/Analogue: Digital			
	Bandwidth: 150 MHz			
	Number of Analogue Channels: 2			
	Oscilloscope Form: Digital Storage			
	Sample Rate: Bench			
	Interface: RS232, USB			
	Power Source: Mains			
	Display Type: TFT LCD			
	Screen Size: 7 inches			
	Vertical Sensitivity:			
	Minimum: 2 mV/div			
	Maximum: 10 V/div			
	Time Base:			
	Minimum: 2.5 ns/div			
	Maximum: 50 s/div			
	Record Length: 2M points			



	Vertical Resolution: 8-bit		
	Rise Time: 2.3 ns		
	Weight: 2.5 kg		
	Dimensions: 323.1 x 135.6 x 157 mm		
	Safety Category: CAT I 400V, CAT II 400V		
	Warranty: At least 2 years with service maintenance		
19	Benzene, 2.5 L AR Grade	btl	2
20	Biosafety Cabinet Class II A2	set	1
	Dimensions & Construction:		
	External Size (WDH): 1383 × 775 × 2220 mm		
	Internal Size (WDH): 1210 × 600 × 660 mm		
	Work Surface Height: 762 mm		
	Working Area Material: 304 stainless steel		
	Filtration & Airflow:		
	HEPA Filter: 99.995% efficiency (EN1822.1) at 0.12 μm, with filter life indicator		
	Airflow Volume:		
	Inflow: 462 m ³ /h (272 cfm)		
	Down Flow (65%): 863 m ³ /h (507 cfm)		
	Exhaust (35%): 462 m ³ /h (272 cfm)		
	Lighting & Safety Features:		
	Illumination: ≥ 1000 Lux (LED lamp)		
	UV Lamp: Germicidal UV lamp, emission at 253.7 nm		
	Vibration: < 0.005 mm RMS		



Power & Accessories:			
Power Supply: 230V, 50/60 Hz			
Included Accessories:			
LED lamp			
UV lamp			
Base stand			
Stainless steel (SS) water tap			
SS gas tap			
Drain valve			
Waterproof sockets			
Stainless Steel IV Bar			
Remote control			
Additional Requirements:			
Warranty: One (1) year on parts and services			
After-Sales Support: Certified engineers for maintenance and troubleshooting			
Onsite Training: Equipment operation, preventive maintenance, and troubleshooting by a service engineer or product specialist			
Delivery Timeline: 30-60 days upon receipt of Notice to Proceed (no extension)			
Additional Items Included:			
Two (2) ergonomics laboratory chairs			
One (1) unit heavy-duty 5KVA Automatic Voltage Regulator (AVR)			
Certifications: Equipment performance certification			



	Onsite Inspection: Room space assessment for installation and electrical requirements			
	Installation & Commissioning: Includes electrical outlets, circuits, AVR setup, and initial operation			
21	Class II, Type A2, Biosafety Cabinet set		1	
	General Specifications:			
	Product Type: Type A2 Biosafety Cabinet			
	Application: Research			
	Chamber Material: SmartCoat			
	Dimensions & Structure:			
	Interior Width: 120 cm			
	Exterior Width: 130 cm			
	Exterior Depth: 80 cm			
	Height: 156.8 cm			
	Sash Opening: 25 cm			
	Performance & Efficiency:			
	Noise Level: <63 dBA			
	Power Consumption:			
	Operating Set Point: 200 W			
	Reduced Flow Mode: 70 W			
	Exhaust Volume: 582 m ³ /h			
	Features & Accessories:			
	Receptacles: 2 single outlets			
	Includes:			
	Adjustable stand			
	UV light			



	Armrests			
	Additional Requirements:			
	Certifications/Compliance: NSF			
	Warranty: 1 year on parts and services			
	Inclusions:			
	1 Ergonomic laboratory chair			
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)			
	After-Sales Support: Provided by trained engineers			
	Training: Onsite training on equipment operation, preventive maintenance, and troubleshooting by a Service Engineer or Product Specialist			
22	Bottom Aquatic Kick Net	pc	1	
	Purpose:			
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.			
	Frame:			
	Type: Stainless steel rectangular frame			
	Dimensions: 10" x 18"			
	Handle:			
	Type: Detachable aluminum handle			
	Length: 60"			
	Attachment: Stainless steel threaded attachment for secure connection			
	Net:			
	Depth: 10"			



	Material: Reinforced 500-micron Nitex® nylon net			
	Features:			
	Ensures durability and ease of use in aquatic environments			
	Effective for sampling benthic macroinvertebrates			
23	Bromcresol purple suitable for plant cell and tissue culture (5g)	btl	1	
24	Buffer Solution pH 10, 500 mL	btl	1	
	Expiration Date: At least 1 year upon delivery			
25	Buffer Solution pH 4, 500 mL	btl	3	
	Expiration Date: At least 1 year upon delivery			
26	Buffer solution, pH 7, 1000 ml.	btl	3	
	Expiration Date: At least 1 year upon delivery			
27	Buffer solution, pH 7, 1000 ml.	btl	1	
	Expiration Date: At least 1 year upon delivery			
28	Buffered Peptone Water	btl	1	
	Type: Pre-enrichment broth			
	Usage: Isolation and culturing of bacteria			
	Packaging: Supplied in 500g/bottle			
29	Canada Balsam, for microscopy, 100ml	btl	2	
30	Carbon Tetrachloride	btl	3	
	Grade: Analytical Reagent Grade			
	Volume: 2.5 L per bottle			
31	Cell Stain	set	5	
	Purpose: Quick staining of cells during blood smear, bone marrow smear, and exfoliated cell smear			
	Staining Method: Based on a modification of the Romanowsky Stain method			



	Minimum Number of Solutions:			
	1. Fixative solution			
	2. Eosinophilic stain solution			
	3. Basophilic stain solution			
	Minimum Volume Per Solution: 500 mL			
32	Chloroform 2.5L	btl	3	
	Grade: Analytical Reagent Grade			
	Volume: 2.5 L per bottle			
33	Chromatography Paper	roll	1	
	Material: Cellulose chromatography paper			
	Purity: 3MM CHR			
	Dimensions: 23 cm (W) × 100 m (L)			
	Packaging: 1 roll			
34	Colander Stainless Steel 22.5 cmx16cmx12.3 cm	pcs	5	
	Type: Colander/Strainer			
	Material: Heavy-duty stainless steel			
	Base: Stainless steel ring for elevation			
	Size: 22.5 cm x 16 cm x 12.3 cm			
35	Colchicine suitable for plant cell and tissue culture (1g)	btl	1	
36	Copper Acetate, Monohydrate	btl	1	
	Grade: Analytical Reagent (AR)			
	Weight: 500 grams			
37	Crucible with cover	pc	20	
	Type: Porcelain Crucible with Lid (High Form)			
	Material: Porcelain			



	Capacity: 30 mL		
	Dimensions:		
	Height: 43 mm		
	Base Diameter: 24 mm		
	Top Diameter: 33 mm		
38	Current Meter	unit	1
	Performance:		
	Speed Accuracy: 0.3 cm/sec		
	Resolution: 0.03 cm/sec		
	Range: 0-300 cm/sec		
	Direction Accuracy: ±2 degrees		
	Sensors & Measurements:		
	Compass: 3D RS-232 compass		
	Tilt Measurement: 3D		
	Physical Specifications:		
	Diameter: 3.25 inches		
	Length: 25 inches		
	Weight: 5 lbs (in air)		
	Additional Features:		
	Transport case		
	Internal software		
	Zinc anodes		
	User manual included		
39	Cyclohexene	btl	1
	Grade: Analytical Reagent (AR) Grade		



	Volume: 2.5 L per bottle			
40	Delicate task wipes	boxes	5	
	Quantity: 280 sheets per box			
	Size: 4.4 x 8.4 inches			
	Ply: 1-Ply			
	Dry Medical Wipes			
	Usage: For wiping surfaces, parts, instruments, and lenses			
41	D-Frame Aquatic Dip Net	pc	1	
	Purpose:			
	Designed to collect benthic macroinvertebrates in shallow, flowing rivers with moderate current and fine, loose sediments.			
	Mouth:			
	Dimensions: 305 x 254 mm (12 x 10 inches)			
	Bag:			
	Depth: 559 mm (22 inches)			
	Shroud:			
	Type: Bottom only			
	Net Ring:			
	Material: 10 mm (3/8 inch) diameter stainless steel			
	Attachment: Clipped to frame with pig clip net rings			
	Reinforcement:			
	Internal rope reinforcement for added durability			
Mesh:				
Material: 500-micron Nitex mesh				



	Features:			
	Efficient and durable collection tool for benthic macroinvertebrates in various aquatic environments.			
42	Dial Oven-Safe Thermometer (Bimetal)	unit	1	
	Reading Time: 1-2 minutes			
	Placement: Insert 2 - 2.5 inches deep in the thickest part of the food			
	Usage: Suitable for roasts, casseroles, and soups			
	Not Suitable For: Thin foods			
	Feature: Can remain in food while cooking			
	Calibration: Can be calibrated			
	Note: Heat conduction of the metal stem may cause false high readings			
43	Dichloromethane	btls	3	
	Grade: Analytical Reagent (AR) Grade			
	Volume: 2.5 L per bottle			
44	Digital Manometer	unit	3	
	Measurement Capabilities:			
	Measures air and gas pressure for ports P1, P2, and differential			
	Range: ±60 inH ₂ O			
	Accuracy: ±1.5% full scale			
	Units Measured: inH ₂ O, bar, oz/in ² , psi, mbar, kPa, inHg, mmHg, kg/cm ² , ftH ₂ O, cmH ₂ O			
	Features:			
	Strong magnet on the back for hands-free operation			
	Calculates minimum, maximum, and average values			



	Large backlit LCD for easy viewing in low-light conditions			
	Hold button locks the current reading on display			
	Auto power-off feature conserves battery life			
	Warranty: 1 year			
45	Digital thermometer with thermocouple	pc	1	
	Specifications:			
	Accuracy: $\pm 0.3\%$ of reading $+1^{\circ}\text{C}$			
	Compatible Probes: Accepts Type K and J thermocouple probes			
	Feature: Advanced, highly accurate thermometer			
46	Digital water flow Meter(Portable flow meter)	unit	1	
	Performance:			
	Speed Range: 0.01 - 10.00 m/s			
	Flow Measurement Error: $\leq 1.5\%$			
	Environmental Conditions:			
	Temperature Range: -10°C to 50°C			
	Physical Specifications:			
	Host Size: 75 mm x 135 mm x 25 mm			
	Display: Liquid crystal display (LCD)			
	Backlight: LED backlight			
	Measurement Method:			
	Measuring rod positioning measurement			
	Warranty: 1 year with service maintenance			
47	Digital Weighing Scale	pcs	2	



General Description:			
Ideal all-around scale for business needs, offering durability, power, and user-friendly features			
Recommended for its quality and affordability			
Features:			
Display: Red LED with dual-display showing weight, unit price, and total amount			
Functionality:			
High-precision strain gauge technology			
Rapid price amount computing			
Tare, Zero, Add-up, Total display, and Clear total functions			
Five different unit price memories			
Automatic temperature compensation			
Design:			
Water-resistant framework			
Pressure-limit protection			
Overload and low voltage indication			
Power Supply:			
AC/DC charging with built-in rechargeable battery			
Automatic energy-saving mode			
FREE adapter included			
Unit Capacity Options:			
30 kg maximum capacity			
Material & Durability:			



	Made with high-quality components for long-lasting use			
	Usage:			
	Suitable for various business applications requiring precise weighing and pricing			
48	Digital Weighing Scale, 50kg	set	2	
	Specifications:			
	Maximum Capacity: 50 kg			
	Accuracy: 1g			
	Material: Metal			
49	Double Handled Frying pan "kawali"	pc	5	
	Material: Aluminum cookware			
	Features: Heavy-duty			
	Dimensions:			
	Diameter: 25.5 cm ± 3 cm			
	Height: 4.9 cm ± 3 cm			
	Weight: 370 grams			
	Handles: Double handle design			
50	Echo/Depth Sounder	unit	2	
	Display Unit: 7-segment LCD panel			
	Frequency: 200 kHz			
	Measuring Depth Range: 0.6 - 80 m			
	Power Supply: DC 9V (9V batteries)			
	Size: 1.7 x 7.8 inches (42 x 198 mm)			
	Weight: 10.6 oz (300 g)			
	Electromagnetic Life: Over 500 measurements			
51	Electronic Balance	pc	1	



	Weighing Capacity: 3 kg		
	Scale Type: Bench		
	Resolution: 0.1 g		
	Parts Counting: Yes		
	Plug Type:		
	Type A: North American/Japanese 2-blade		
	Type C: European Plug		
	Type G: British 3-pin		
	Type I: Australian Plug		
	Weighpan Dimensions:		
	Length: 166 mm		
	Width: 128 mm		
	Net Weight: 0.9 kg		
	Operating Temperature:		
	Minimum: +10°C		
	Maximum: +40°C		
	Warranty: Atleast 2 years		
52	EMS (Ethyl methanesulfonate) for plant genetic studies (10g)	btl	1
53	Ethanol	btl	3
	Grade: AR (Analytical Reagent)		
	Concentration: At least 95% v/v		
	Volume: 4L		
54	Ethanol Absolute, 100% AR, 2.5 li.	btl	3
55	Filter Paper Ordinary	pcs	2
	Type: Ordinary		
	Size: 30 x 40 inches		



	Quantity: 100 sheets per pack			
56	Filter paper, #42	boxes	6	
57	Fluorescent Microspheres	pc	2	
	Color: Green			
	Volume: 1 mL			
	Excitation/Emission (Ex/Em): 460 nm / 500 nm			
58	Formaldehyde	btl	5	
	Grade: Analytical Reagent (AR)			
	Volume: 2.5L per bottle			
59	Fountain Pen Ink, 350ml blue black	unit	1	
	Color: Blue Black			
	Volume: 350 mL			
	Features: Fountain pen friendly, water-resistant			
60	Genomic DNA Extraction Kit	kit	1	
	Function: Extracts genomic DNA from various samples (e.g., manure, blood, tissue)			
	Technology: Silica-gel membrane-based spin-column			
	Includes: All buffers, elution water, and microtubes			
61	Glass Measuring Cup	pcs	5	
	Capacity: 500 mL			
	Material: Borosilicate Glass			
	Features:			
	Microwavable (safe for hot & cold liquids)			
	Transparent, durable, and lightweight			
	Clear scale design for precise measurement			



	Wide mouth design for easy pouring and extraction			
	Usage: Suitable for baking shops, home use, etc.			
62	Gloves, Nitrile, Large	box	3	
	Type: Chemical-Resistant, Disposable			
	Material: Nitrile			
	Powder-Free: Yes			
	Packaging: 1 box (100 gloves or 50 pairs)			
	Food Safe: Yes			
	Size: Large			
63	Gloves, Nitrile, Medium	box	3	
	Type: Chemical-Resistant, Disposable			
	Material: Nitrile			
	Powder-Free: Yes			
	Packaging: 1 box (100 gloves or 50 pairs)			
	Food Safe: Yes			
	Size: Medium			
64	Gloves, Nitrile, Small	box	1	
	Size: Small			
	Box Quantity: 100 gloves (50 pairs)			
	Features:			
	Latex-free			
	Powderless			
	Micro grip			
65	Graduated Cylinder, Glass, 1000mL	pc	5	



	Capacity: 1000 mL			
	Material: Borosilicate Glass			
	Quality: Good Quality			
66	Hess Stream Bottom Sampler, 1000um Mesh	unit	1	
	Mesh Size: 1000 µm			
	Material:			
	Frame: Stainless steel cylinder			
	Mesh: Nylon Nitex® bolting cloth (for the forward window)			
	Application: Effectively samples gravel and cobble stream bottoms			
	Construction Features:			
	Two large windows for water flow			
	Strong handles for forcing the cylinder into stream bottoms			
	Adjustable penetration depth			
	Water Flow:			
	Inlet: Upstream window			
	Outlet: Downstream window			
	Collects samples in a net and bucket			
	Cylinder Dimensions:			
	Inside Diameter: 13 inches			
	Height: 16 inches			
	Sampling Area: 133 square inches			
67	Hexane	btl	2	
	Grade: Analytical Reagent (AR)			
	Volume: 2.5L per bottle			
68	High Duty Blender	unit	2	



	Power: 375-watt motor			
	Speed: 10-speed push button			
	Function:			
	Controlled/pulse blending (buttons 1-3)			
	Continuous blending (buttons 4-10)			
	Durability: Exclusive All-Metal Drive™ system			
	Blade: High-performance ice-crushing stainless steel blade			
	Capacity: 5-cup (1.25L) heat-resistant glass jar			
	Warranty: 1-Year Household Warranty			
	Dimensions: 26 x 18 x 32 cm			
69	Hydrochloric acid, HCl	btl	5	
	Grade: Analytical Reagent (AR)			
	Concentration: Concentrated			
	Volume: 2.5L per bottle			
70	Immersion oil for microscopic analysis, Type A, 30mL	btl	3	
71	Iodine crystals	btl	2	
	Grade: Analytical Grade, Resublimed			
	Volume: 500g per bottle			
72	Lab Gown Long Sleeves L	pcs	9	
	Type: Lab Coat			
	Color: White			
	Size: Large			
	Sleeves: Long			
73	Lab Gown Long Sleeves M	pcs	4	
	Quality: High-quality			



	Color: White			
	Size: Medium			
	Sleeves: Long			
74	Laboratory film	roll	3	
	Dimensions: 4 in. x 125 feet per roll			
	Features:			
	Flexible and self-sealing			
	Odorless and moisture-resistant			
	Thermoplastic, semi-transparent, and practically colorless			
75	Laboratory refrigerator 10.6 cubic	unit	1	
	Volume: 358 L			
	Type: 5 shelves			
	Refrigeration Mode: Air-cooled			
	Defrosting Mode: Frost-free			
	Refrigerant: R290, 75 g			
	Noise Level: 55 dB(A)			
	Ambient Temperature Range: 10~32°C			
	Temperature Range: 5±3°C			
	Temperature Accuracy: 0.1°C			
	Evaporator: Copper tube and aluminum fin			
	Condenser: Copper tube and aluminum fin			
	Sensor: NTC Thermostat			
	Thermostat: Electronic			
	Door: Foamed cyclopentane			
	Display: Digital tube display			



Interface: USB			
Power Supply:			
Voltage: 110~220V			
Frequency: 50~60Hz			
Power: 220W / 286VA			
Current: 1A			
Materials:			
Internal Material: Sprayed steel plate			
External Material: Sprayed steel plate			
Lagging: Foamed polyurethane cyclopentane			
Standard Accessories:			
High and low temperature alarm			
Power fault alarm			
Thermostat fault alarm			
Door ajar alarm			
LED lamp			
USB port			
Optional Accessories:			
Printer			
485 port			
Dimensions:			
Internal (W x D x H): 530 mm x 520 mm x 1325 mm			
External (W x D x H): 630 mm x 653 mm x 1886 mm			



	Package (W x D x H): 730 mm x 780 mm x 2038 mm		
	Weight:		
	Net Weight: 111 kg		
	Gross Weight: 131 kg		
	Warranty: 5 years with service maintenance		
76	Lactophenol Cotton Blue	btl	2
	Volume: 500 mL per bottle		
	Purpose: Stain solution for fungi		
77	Lactophenol Cotton Blue Solution	btl	1
	■250ml		
78	Lens Tissues 25 Sheets per Booklet, 5 Booklets	Booklet	2
79	Litmus Paper (Blue)	Vial	5
	Function: Tests for acidity (turns red in acidic solutions, remains blue in alkaline solutions)		
	Strip Quantity: 100 strips per vial		
	Vial Dimensions: 0.75" (D) x 2.75" (H) [19mm (D) x 70mm (H)]		
	Strip Dimensions: 1.875" (L) x 0.25" (W) [48mm (L) x 6mm (W)]		
	Box Dimensions:		
	144-pack box: 10" x 10" x 2.75" [29.8 cm x 19 cm x 7 cm]		
	500-pack box: 21" x 14.75" x 3" [53.3 cm x 37.5 cm x 7.6 cm]		
	12-pack box: 3.25" x 2.375" x 3" [8.3 cm x 6 cm x 7.6 cm]		
	25-pack box: 5" x 3.5" x 3" [12.7 cm x 8.9 cm x 7.6 cm]		
	Weight: 0.02 lbs (9 g) per single vial		



	Packaging: Stored in a pocket-sized, lightweight vial			
	Shelf Life: Minimum of 3 years			
	Additional Options: Other sheet sizes available upon request			
80	Long Stem Fry Thermometer	pc	1	
	Type: Stainless Steel Instant Read Dial			
	Length: 30 cm (11.8 inches)			
	Features:			
	Deep long rod with a metal clip to prevent falling			
	No battery required			
	Protective sleeve with a small clip for attachment to clothing			
	Compact, durable, and corrosion-resistant			
	Temperature Range: 0-300°C / 50-550°F			
	Casing Length: 12.5 cm			
	Material: Metal			
	Color: Silver			
81	M-7471 120ml Pimiento Glass Jar	box	5	
	Code No.: M-7471			
	Capacity: 120 mL			
	Quantity: 24 pcs per box with seal			
	Seal: Plastic seal			
	Cap: Black and gold			
	Cap Size: 63 mm			
82	Magnesium Sulphate (MgSO₄.7H₂O) suitable for plant cell and tissue culture	btl	1	



	Purity: Suitable for plant cell and tissue culture			
	Molecular Weight: 169.01 g/mol			
	Appearance: Colorless efflorescent crystals			
	Pack Size: 500 grams			
83	Malachite green oxalate	btl	2	
	Grade: Reagent and Microscopy Grade			
	Pack Size: 25 grams per bottle			
84	Malachite green stain	btl	1	
	Use: Counterstain for Ziehl-Neelsen and Kinyoun staining			
	Volume: 500 mL per bottle			
	Grade: Laboratory grade			
85	Malt Yeast Extract Agar	btl	1	
	Applications:			
	Selective enumeration of yeasts and molds			
	Selective isolation of yeasts and molds			
	pH: 4.7 ± 0.2 at 25°C			
	Solubility: Without residue			
	Appearance: Fine powder			
	Pack Size: 100 grams			
86	Mechanical Flow/Current Meter	unit	1	
	Materials:			
	Celcon rotor			
	Nickel-plated brass nose piece			
	Polycarbonate body			



	Stainless steel main rotor and idler gear shafts		
	Delrin idler gears		
	Delrin and nylon digit wheels		
	Dimensions:		
	Overall Length: 8-3/8"		
	Body Diameter: 1-9/16"		
	Depth Rating: Unlimited (free flooding)		
	Data Readout:		
	Six 10-digit counter wheels (reads from 000,000 to 999,999)		
	10 counts per rotor revolution (non-resetting)		
	Six-digit full-scale count: 999,999 counts \approx 14.5 nautical miles (1,852 meters/nautical mile)		
	Mounting:		
	Universal bridle allows single-point connection for towing		
	Two-point connection possible within the net mouth		
	Response:		
	With standard 3" diameter rotor		
	Threshold Speed: Approximately 10 cm/sec (1/5 knot)		
	Warranty: at least 1 year		
87	Mechanical Micro meter	set	5
	Material: Carbide		



	Product Dimensions: 5.4" (L) x 2.6" (W)		
	Measurement Range: 0 - 1 inch		
	Measurement Accuracy: ±0.0001 inches		
88	Methanol	btl	4
	Volume: 2.5L per bottle		
	Grade: Analytical Reagent Grade		
89	Methylene Blue Powder	btl	2
	Chemical Name: Methylene Blue		
	Form: Powder		
	Grade: Laboratory Grade (Intermediate purity)		
	Weight: 25 g		
	Chemical Formula: C ₁₆ H ₁₈ N ₃ SCl		
	Molecular Weight: 319.85 g/mol		
	CAS Number: 61-73-4		
	Characteristic: Green, water-soluble powder		
	Storage Code: Green—General chemical storage		
	Usage: Suitable for educational laboratories; for qualitative analysis, not quantitative analysis.		
90	Micro pipettor with stand	unit	2
	P1000 (200-1000ul)		
91	Microcapillary tube	btl	5
	Purpose: Diagnostic use		
	Type: Blue capillary tube, heparinized		
	Packaging: 1 barrel per tube		
	Quantity: Contains 100 tubes per pack		



92	Microcentrifuge (Refrigerated)	set	1
	Type: Benchtop Centrifuge		
	Net Weight: 28 kg		
	Capacity: 24 x 1.5/2.0 mL tubes		
	Max. Speed: 14,800 rpm		
	Max. RCF: 21,100 x g		
	Noise Level: 50 dBA		
	Temperature Range: -9°C to +40°C		
	Run Time: 1 to 99 minutes (1-minute increments); HOLD function		
	Electrical Requirements: 230V, 50/60Hz		
	Dimensions (H x W x D): 12.9 x 11.6 x 17.5 in. (33.0 x 29.5 x 44.5 cm)		
	Included Accessories:		
	24 x 1.5/2.0 mL rotor with ClickSeal biocontainment lid		
	1 Heavy-duty 5KVA Automatic Voltage Regulator (AVR)		
	Certifications/Compliance: CSA, CE, IVD		
Standards: IEC 61010-1, IEC 61010-2-020			
Warranty: 2 years			
After-Sales Support: Inclusive of after-sales support from trained engineers			
Training: Onsite training by a Service Engineer or Product Specialist on equipment operation, preventive maintenance, and troubleshooting			
93	Microcentrifuge Tubes (0.6mL Capacity)	pack	1
	Capacity: 0.6 mL		



	Color: Clear			
	Features: Safe-lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
94	Microcentrifuge Tubes (1.5mL Capacity)	pack	1	
	Capacity: 1.5 mL			
	Color: Clear			
	Type: Safe-Lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
95	Microcentrifuge Tubes (2.0mL Capacity)	pack	1	
	Capacity: 2.0 mL			
	Color: Clear			
	Type: Safe-Lock			
	Pack Size: 1000 tubes			
	Autoclavable: Yes			
96	Microscope Slide Box	pcs	4	
	Capacity: Holds up to 25 microscope slides			
	Dimensions: 9.4 cm × 8.2 cm × 3.2 cm			
	Weight: 56 g			
	Material: Plastic			
	Color: White			
97	Microscope Slides and cover slips	boxes	1	
	Slides: Pre-cleaned blank slides (50 pcs/box)			
	Cover Slips: 22 x 22 mm square cover slips			



98	Nitric acid, HNO₃	btls	3
	Concentration: Concentrated		
	Grade: Analytical Reagent Grade		
	Volume: 2.5 liters per bottle		
99	Nitrogen Block Digester (Kjeldahl Digestion System)	unit	1
	Model: BD40 High-Temperature Digestion System		
	Features:		
	Controller: Color Touch Screen Controller (External)		
	Capacity: 40-position Heating Block		
	Efficient Design: Heat Deflector Shields for safety and uniform heating		
	Inclusions:		
	40 Refluxing Test Tubes		
	40 Cold Fingers		
	40-position Test Tube and Cooling Rack		
Boiling Chips			
Warranty: at least 2 years with installation and service maintenance			
100	N-octanol	btl	1
	Grade: Technical Grade		
	Purity: 99%		
	Volume: 5 liters		
101	Nutrient Broth	btl	2
	Weight: 500 grams		
102	Paraffin Wax	bag	1
	Form: Pellets (White)		
	Ignition Residue: ≤0.05%		



	Melting Point: 43-95°C			
	Solidification Point: 54-56°C			
	Package Size: 1 kg per bag			
103	Pasteur pipette	pc	100	
	Overall Length: 230 mm			
	Tip Length: 108 mm			
	Body Length: 120 mm			
	Material: Clear Glass			
	Sterility: Non-sterile			
	Maximum Dispensing Volume: 2 mL			
	Graduations: None			
104	Pasture Pipette	pieces	120	
	Material: Durable Glass			
	Capacity: 2 mL			
	Tip Type: Straight Tip			
105	Peptone	btl	1	
	Weight: 500g			
	Usage: For bacteriological work			
106	Petroleum Ether	btl	1	
	CAS No.: 8032-32-4			
	Grade: ACS			
	Appearance: Colorless			
	Boiling Point (BP): 35-60°C			
	Volume: 1.0 L per bottle			
107	Petroleum Ether, AR	btl	2	
	Volume: 2.5 L per bottle			
108	pH 10 Buffer	btl	2	



	Grade: Laboratory Grade		
	Size: 1L per bottle		
	Expiration Date: Atleast 1 year upon delivery		
109	pH Meter	unit	1
	Type: Bench Top		
	Data Points: 50		
	Display Type: LCD		
	Languages: English		
	Logging Functions:		
	Automatic Data Logging: Auto-Read measure mode		
	Manual Data Logging: Continuous measure mode		
	Temperature Range:		
	Operating (Ambient):		
	English: 41°F to 113°F		
	Metric: 5°C to 45°C		
	Measurement:		
	English: 22.0°F to 221.0°F		
	Metric: -5.0°C to 105.0°C		
	Performance & Calibration:		
	Stability: Smart Stability and Smart Averaging		
	Resolution (Temperature): 0.1°C, 0.1°F		
	Temperature Probe Calibration: 1-point temperature offset calibration		
	Temperature Selection: Manual or automatic with ATC temperature probe		



	Calibration Points: 1 to 3		
	Calibration Parameters: pH, relative mV (RmV), and temperature		
	Accuracy:		
	pH: ±0.01 pH		
	mV: ±0.2 mV or ±0.05% of reading (whichever is greater)		
	Temperature: ±0.1°C		
	Power & Battery:		
	Battery Life: 2000 hours		
	Battery Type: 4 x AA (sold separately)		
	AC Adapter: Universal 50-60 Hz, 100-240 VAC power adapter (Cat. No. 1010003)		
	Physical Specifications:		
	Channels: 1		
	Weight:		
	Metric: 0.9 kg		
	English: 2 lb.		
	Warranty:		
	Meter Warranty: 3 years		
110	pH METER (benchtop)	set	1
	Meter Type: Benchtop		
	Display Type: LCD		
	Connections:		
	pH Input: BNC Connector		
	Temperature Input: 2.5mm		
	pH Measurement:		



	Range: -2 to 16 pH			
	Resolution: 0.01 - 0.1 pH			
	Accuracy: ±0.01 pH			
	Buffer Recognition: NIST and USA Standards			
	Calibration: Up to 5 points			
	mV Measurement:			
	Range: -2000 to 2000 mV			
	Resolution: 0.1 or 1 mV			
	Accuracy: ±0.2 mV or 0.05% (whichever is greater)			
	Temperature Measurement:			
	Range: 0 to 100°C			
	Compensation: Automatic or Manual			
	Power Supply:			
	Voltage: 100 to 240 VAC			
	Frequency: 50 or 60 Hz			
	Physical Dimensions:			
	Width: 17.4625 cm (6.875 in)			
	Height: 6.985 cm (2.75 in)			
	Additional Features:			
	Description: Benchtop meter with "All-In-One" pH capabilities			
	Warranty: 3 years			
111	pH/mV/ Temperature Electrode	unit	1	
	Functionality: Measures pH, mV, and Temperature			



	Compatibility: Compatible with DO 700 9-in-1 Portable Dissolved Oxygen Meter		
	Measurement Ranges & Accuracy:		
	pH Measurement:		
	Range: -2.00 to 19.99 pH		
	Resolution: 0.01 pH		
	Accuracy: ± 0.02 pH		
	mV Measurement:		
	Range: -1999 to +1999 mV		
	Resolution: 1 mV		
	Accuracy: ± 0.15 mV		
	Temperature Measurement (for pH & mV):		
	Range: 32 to 212 °F (0 to 100 °C)		
	Resolution: 0.1 °C		
	Accuracy: ± 1 °F / ± 0.5 °C		
	Temperature Measurement (Other Uses):		
	Range: 32 to 122 °F (0 to 50 °C)		
	Resolution: 0.1 °C		
	Accuracy: ± 1 °F / ± 0.5 °C		
112	pH-indicator paper pH 1 - 14 Universal indicator	pack	4
	General Description:		
	Booklet Size: 4.5 cm x 6.5 cm		
	pH Range: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12 - 14		
	Indicator Type: Universal pH indicator paper		



	Measurement Method: Colorimetric (visual comparison with color scale)		
	Accuracy: ± 1 pH unit		
	Roll Length: 4.8 m with color scale		
	Features:		
	Non-bleeding design ensures clear and reliable color changes		
	Long-term storage protection against moisture, light, and ambient gases		
	Ready-to-use format with easy tear-off mechanism		
	Manufactured using high-quality filter paper impregnated with indicator solutions		
	Storage Conditions:		
	Temperature Range: 15 - 25°C		
	Shelf-Life: Minimum of 1 year.		
113	Physics Lab Ammeter	pc	5
	General Specifications:		
	Operating Voltage: 3A		
	Operating Temperature: Up to 50°C		
	Power Source: Compatible with both AC & DC		
	Measurement Accuracy: ± 2		
	Weight: 800g		
	Features:		
	Designed for physics laboratory experiments		
	Provides precise current measurements		
	Sturdy construction for durability		



	Suitable for educational and research applications		
114	Pitcher (Borosilicate) with Cover , 1 L	pcs	2
	Specifications:		
	Material: Borosilicate Glass		
	Capacity: 1000ml (1L)		
	Style: Simple, elegant design		
	Features:		
	Heat-resistant, suitable for hot and cold beverages		
	Durable and lightweight		
	Includes a secure lid cover for spill prevention		
	Ideal for home, office, or laboratory use		
115	Plankton net	unit	1
	Specifications:		
	Plankton Net Assembly: 50 cm Diameter, 3/1 Size		
	Mouth Ring Diameter: 50 cm		
	Mesh Size: 500 µm		
	Net Height: 150 cm		
	Complete Assembly Components:		
	Net		
	Mouth Ring		
	Cod End Assembly (choice of cod end jar or bucket)		
	Three-Point Bridle		
	Optional Add-ons:		
	Flowmeter		



	Choker Band			
116	Polypropylene (PP) Bags	packs	10	
	Specifications:			
	Material: Polypropylene (PP)			
	Thickness: 0.03 mm			
	Size: 4 x 8 inches			
	Quantity: 100 pcs per pack			
117	Polypropylene bags	pack	10	
	Thickness: 0.03			
	Size: 4 x 6 inches			
	Quantity: 100 pcs/pack			
118	Polypropylene Bags 003	packs	10	
	Thickness: 0.03			
	Size: 8 x 12 inches			
	Quantity: 100 pcs/pack			
119	Portable Eye Washer	pc	1	
	Model: Double-Mouth Mobile Emergency Eye Washer			
	Material: High-quality ABS engineering plastic			
	Capacity: 53L			
	Size: 235 x 470 x 625mm			
120	Potassium Chloride, AR, 1000g	btl	1	
121	Potassium dichromate, AR Grade	btl	5	
	Packaging: 500 grams per poly bottle			
122	Potassium Dicromate tech	gms	1	
123	Potato Dextrose Agar (500g)	btl	1	
	Form: Powder			
	Packaging: 500 grams			
124	Prepared slides of parasites	Box	1	



Quantity: 50 pcs			
Categories & Specimens:			
1. Flagellates and Ciliates			
<i>Trypanosoma cruzi</i> (causes Chagas disease), blood smear showing trypanosomes			
<i>Toxoplasma gondii</i> , trophozoite smear			
<i>Trichomonas vaginalis</i> , trophozoite smear			
<i>Giardia lamblia</i> , cyst			
<i>Giardia lamblia</i> , trophozoite			
<i>Leishmania donovani</i> , amastigote (causes kala-azar), smear			
<i>Leishmania donovani</i> , promastigotes, smear			
<i>Balantidium coli</i> , smear with cyst			
<i>Balantidium coli</i> , smear with trophozoite			
2. Nematodes (Roundworms)			
<i>Ascaris lumbricoides</i> ova (natural color)			
<i>Ascaris lumbricoides</i> egg, carmine stain			
<i>Ascaris lumbricoides</i> (female) t.s.			
<i>Ascaris lumbricoides</i> (male) t.s.			
<i>Ascaris lumbricoides</i> (female and male) t.s.			
Anterior end of <i>Ascaris lumbricoides</i> w.m.			
Back end of male <i>Ascaris lumbricoides</i> w.m.			
<i>Trichuris trichiura</i> ova from feces w.m.			



<i>Trichuris trichiura</i> (whipworm, female) w.m.			
<i>Trichuris trichiura</i> (whipworm, male) w.m.			
<i>Trichinella spiralis</i> , section of infected muscle with encysted larvae			
<i>Trichinella spiralis</i> , w.m. of muscle piece with encysted larvae, silver stained			
<i>Trichinella spiralis</i> , adult male & female from intestine, w.m.			
<i>Ancylostoma ova</i> w.m. (natural color)			
3. Cestodes (Flatworms)			
<i>Taenia solium</i> ova from feces w.m.			
<i>Taenia solium</i> , scolex w.m.			
<i>Taenia solium</i> , immature proglottid w.m.			
<i>Taenia solium</i> , mature proglottid w.m.			
<i>Taenia solium</i> , gravid proglottid w.m.			
<i>Taenia solium</i> t.s.			
4. Trematodes (Flukes - Digenea)			
<i>Schistosoma japonicum</i> ova from feces w.m.			
<i>Schistosoma japonicum</i> miracidium w.m.			
<i>Schistosoma japonicum</i> cercaria w.m.			
<i>Schistosoma japonicum</i> , adult female w.m.			
<i>Schistosoma japonicum</i> , adult male w.m.			
<i>Schistosoma japonicum</i> , adult male and female in copula w.m.			
<i>Dugesia japonica</i> (intestine injected) w.m.			



<i>Dugesia japonica</i> through pharynx t.s.			
<i>Dugesia japonica</i> (showing reproductive system) w.m.			
<i>Clonorchis sinensis</i> ova from feces w.m.			
<i>Clonorchis sinensis</i> (Chinese liver fluke), w.m. of adult			
<i>Clonorchis sinensis</i> t.s. through the body			
<i>Fasciolopsis buski</i> ova w.m.			
<i>Fasciolopsis buski</i> adult t.s.			
Mixed eggs of Trematode w.m.			
5. Sporozoans			
<i>Plasmodium falciparum</i> (ring form), blood smear			
<i>Plasmodium vivax</i> , blood smear			
<i>Entamoeba histolytica</i> cyst smear			
6. Parasitic Arthropods			
<i>Culex pipiens</i> ova w.m.			
<i>Culex pipiens</i> , mosquito larva w.m.			
<i>Culex pipiens</i> , mosquito pupa w.m.			
<i>Culex pipiens</i> , mosquito adult female w.m.			
<i>Culex pipiens</i> , mosquito adult male w.m.			
<i>Pediculus humanus</i> (louse), adult w.m.			
<i>Pediculus humanus</i> (louse eggs attached to hair) w.m.			
<i>Ctenocephalides canis</i> (dog flea), adult male w.m.			



	<i>Ctenocephalides canis</i> (dog flea), adult female w.m.		
	Sandfly adult w.m.		
	<i>Ixodes</i> sp. (hard tick), adult w.m.		
	Gamasid mite adult w.m.		
125	Red Litmus Test Paper	Vial	5
	Purpose: Used to determine if a substance is a base.		
	Color Change: Turns blue when dipped in an alkaline solution (pH >7).		
	Strip Quantity: 100 strips per vial.		
	Vial Dimensions:		
	Diameter: 0.75" (19mm)		
	Height: 2.75" (70mm)		
	Strip Dimensions:		
	Length: 1.875" (48mm)		
	Width: 0.25" (6mm)		
	Box Dimensions:		
	144-pack box: 10" x 10" x 2.75" (29.8 cm x 19 cm x 7 cm)		
	500-pack box: 21" x 14.75" x 3" (53.3 cm x 37.5 cm x 7.6 cm)		
	12-pack box: 3.25" x 2.375" x 3" (8.3 cm x 6 cm x 7.6 cm)		
	25-pack box: 5" x 3.5" x 3" (12.7 cm x 8.9 cm x 7.6 cm)		
	Weight: 0.02 lbs (9 g) per single vial.		
	Storage: Pocket-sized, lightweight vial.		
	Shelf-Life: Minimum of 3 years.		
126	Rubber Tubing Latex	ft	1



	Material: Latex rubber			
	Outside Diameter: 10mm			
	Packaging: PK-50F			
	Length: 100 feet per roll			
	Shelflife: Atleast 1 year upon delivery			
127	Serological Glass Pipette, 25mL	pc	3	
	Material: Borosilicate glass			
	Capacity: 25mL			
	Graduation: 0.2mL intervals			
	Autoclavable: Yes			
128	Sheather's sugar flotation solution	btls	2	
	Purpose: Used for the fecal flotation method			
	Specific Gravity: 1.25 to 1.27			
	Grade: Laboratory grade			
	Packaging: 1 bottle contains 1L of solution			
129	Shower and eyewash	pcs	4	
	Material: Stainless steel			
	Components:			
	ABS Bowl: 250mm diameter			
	ABS Shower Head: 250mm diameter			
	Chemical-Resistant PP Eyewash Nozzle:			
	Aerated to produce a soft, bubbly, gentle spray			
	Auto-open dust cap			
	Built-in stainless filter			
	Valves:			



	Stay-Open Ball Valves for both shower and eyewash		
	Shower Head Valve: Operated by a pull rod (pull down to open, push up to close)		
	Flow Rates:		
	Shower: 20 gallons per minute (gpm) at 30 psi (0.3 MPa)		
	Eyewash: 1.5 to 2.2 liters per minute (lpm)		
	Applicable Water Pressure:		
	Minimum: 29.0 psi (0.2 MPa)		
	Maximum: 87.0 psi (0.6 MPa)		
	Standard Compliance: Conforms to ISO 9001:2000		
130	Sling Psychrometer	unit	3
	Operating Humidity: 10-90%		
	Upper Temperature Rating: 122°F (50°C)		
	Power Source: Battery-powered		
	Batteries: 2 Lithium Metal batteries (included)		
	Style: Digital Psychrometer (DTH35)		
	Material: Other		
	Discontinued by Manufacturer: No		
	Warranty: Atleast 1 year		
131	Sodium Chloride, molbio grade, 500g/bot	btl	2
132	Sodium Hexametaphosphate, 500g	btl	5
133	Sodium Tetraborate (Borax)	btl	1
	Form: Powder		
	Grade: Technical grade		



	500 grams			
134	Sodium Thiosulfate, Na₂S₂O₃	btl	1	
	Grade: Analytical grade			
	Packaging: 100g per bottle			
135	Stage Micrometer, Metal, 1mm/0.01mm	pc	3	
	Specifications:			
	Material: Metal			
	Units: Metric (mm)			
	Scale: 1mm / 100 divisions (0.01mm per division)			
	Calibration: Calibrated and certified, traceable to NIST			
	Compatibility:			
	For use with reflected light microscopes, including:			
	MEC4 (CAT # 14620)			
	Versamet 4 (CAT # 15000-BD, 15000-BF)			
	EXAMET 5 (CAT # 14350, 14351)			
	Shipping Weight: 1 lb			
136	Sulfur Powder, Analytical Grade, 500g/btl	btl	1	
	Grade: Analytical Reagent (AR)			
	Packaging: 500g per bottle			
137	Sulfuric Acid	btl	5	
	Specifications:			
	Grade: Analytical Grade (98%)			
	Volume: 2.5 Liters			
	Specific Gravity: 1.84			
138	Surber Stream Bottom Sampler	pc	1	



	Description:		
	Designed to collect benthic macroinvertebrates in shallow flowing rivers with moderate current and fine, loose sediments.		
	Portability and Ease of Use:		
	Portable and easy to use.		
	Large filtering area allows for easy hand insertion to remove collected specimens.		
	Frame Construction:		
	Two pivoting solid stainless-steel frames.		
	Lockable brace latches to hold frames at right angles to each other.		
	Frames made of corrosion-resistant stainless steel.		
	Net Specifications:		
	Material: Nitex® bolt cloth with taffeta wings for durability.		
	Diameter: 9 inches (where the net collar meets the net filter).		
	Length: 24 inches (from collar to filter, folds flat for storage).		
	Open Base Area: 12 x 12 inches (one square foot).		
	Mesh Size: 500 microns (500 μm Nitex).		
	Included Accessories:		
	Includes: 910-G22 (large) case.		
	Warranty: Atleast 1 year		
139	Test Tube, Glass, Graduated, 20mL pc	100	
	With Screw Cap		
140	Test Tube, Glass, Graduated, 50mL pc	100	



	With Screw Cap			
141	Tetrazolium chloride	btl	1	
	Chemical Name: 2,3,5-Triphenyltetrazolium Chloride (TPTZ, TTZ, Tetrazolium Red)			
	Synonyms: TPTZ, TTZ, Tetrazolium Red, TTC Salt			
	CAS Number: 298-96-4			
	Grade: AR / GR Grade			
	Molecular Formula: C ₁₉ H ₁₅ ClN ₄			
	Molecular Weight: 334.80 g/mol			
	Purity: 99%			
	Appearance: Buff Powder			
	Pack Size: 25 grams per pack			
	Application: Used as a dye in cell biological studies			
	Assay: ≥99.0%			
142	Thermometer	sets	5	
	Quantity: 12 pieces of meat thermometers for grilling			
	Available Colors: Black, White, and Red			
	Size: Each thermometer measures about 9.2 inches in length			
	Accessories: Includes 12 probe tip protectors			
	Probe Design:			
	Long probe made of quality stainless steel			
	Probe length: Approximately 5 inches			
	Keeps hands at a safe distance from high temperatures, preventing burns or injuries			



	Waterproof Capability:			
	Strong waterproof ability			
	Suitable for measuring the temperature of liquids like water, milk, and even candles			
	Fully washable for easy cleaning and maintenance			
	Instant and Accurate Readings:			
	0.1°F increments with accuracy within ±1.8°F			
	Temperature range: -58°F to +572°F (-50°C to 300°C)			
	Ensures precise temperature readings for optimal cooking results			
	Versatile Applications:			
	Ideal for barbecuing, pan frying, meat preparation, soup making, deep frying, candy making, frosting, milk heating, and more			
	Wide temperature range helps control temperatures accurately for various culinary tasks			
143	Tirrill Bunsen Burner	pc	3	
	Product Type: Tirrill Bunsen Burner			
	Application: Heating, Sterilization, and Combustion			
	Includes: Gas Control			
	Diameter: 13 mm			
	Height: 155 mm			
	Maximum Temperature: 1550°C			
	Features:			
	Adjustable air ports			
	Brass needle valve			



	Accepts 9 mm burner tubing			
144	TLC Plate, Silica Gel 60 F254	Box	1	
	Description:			
	25 Glass plates (20 x 20 cm)			
	Analysis Note:			
	Specific Surface Area (BET, 5-Point Measurement): 480 - 540 m ² /g			
	Pore Volume (N₂-isotherm): 0.74 - 0.84 ml/g			
	Particle Size (Laser Diffraction, Size Distribution): 9.7 - 11.7 μm			
	Layer Thickness: 210 - 270 μm			
	Deviation of Layer Thickness per Plate: ≤ 35 μm			
	Chromatographic Testing:			
	A) Color Test (hRf-values):			
	Bleu Vif Organol (Lipophile): 11 - 25			
	Ceres Black G (Lipophile): 34 - 48			
	Ceres Violet BRN (Lipophile): 52 - 67			
	Separation Number (Color Test, Lipophile): ≥ 10.5			
	B) Steroid Test (hRf-values):			
	Hydrocortisone: 25 - 37			
	Reichstein S: 37 - 49			
	Methyltestosterone: 42 - 54			
	Typical Value Determined on a Conditioned Plate			
Eluents:				
A) Toluene (45% relative humidity)				



	B) Ethyl Acetate/Toluene (95+5 v/v; 20% relative humidity)		
	Properties:		
	Material: Glass support with silica gel 60 matrix		
	Quality Level: 100		
	Binder: Organic Polymer		
	Fluorescent Indicator: Yes		
	Packaging: Pack of 25 plates		
	Technique: Thin Layer Chromatography (TLC) – Suitable		
	Layer Thickness: 250 μm		
	Plate Dimensions: 20 cm \times 20 cm		
	Particle Size: 10 - 12 μm		
	Pore Size: 60 Å (Medium Pore Diameter)		
	Storage Temperature: 2 - 30°C		
145	TOP LOADING BALANCE	unit	1
	Weighing Capacity: 2,200g		
	Readability: 100mg		
	Repeatability: $\pm 100\text{mg}$		
	Linearity Deviation: $\pm 300\text{mg}$		
	Pan Size: 180 mm / 7"		
	Calibration: Internal and External (isoCal)		
	Dimensions: 3.75" H \times 8.5" W \times 14.1" D		
	Net Weight: 10.4 lbs		
	Type: Digital		



	Power Requirement: 110-220V			
	Warranty: Atleast 2 years			
146	Triple Beam Balance	pc	2	
	Capacity: 2610g			
	Readability: 0.1g			
	Repeatability: 0.2g			
	Pan Size: 152mm ø			
147	Tuna Cravat Clip	pc	1	
	Material: Stainless Steel			
	Tagline Length: 4-5 inches			
148	Vernier Caliper	pc	5	
	Measurement Range: 0-200mm			
	Material: Stainless Steel			
	Accuracy: 0.01mm			
	Caliper Type: Digital Calipers			
149	Wright Stain	set	2	
	Wright Stain: 500 mL			
	Buffer for Wright Stain: 500 mL			

Section VIII. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) **in accordance with Section 8.5.2 of the IRR.**

Technical Documents

- (b) 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**
- (c) 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 Two Million Three Hundred Sixty Six Thousand Three Hundred Forty Nine Pesos and Eighty Five Centavos Only (₱2,366,349.85).*
or
- (d) 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 Two Million Three Hundred Sixty Six Thousand Three Hundred Forty Nine Pesos and Eighty Five Centavos Only (₱2,366,349.85);* and the largest of these similar contracts must be equivalent to at least half of the said aggregate amount or *One Million One Hundred Eighty Three Thousand One Hundred Seventy Four Pesos and Ninety Three Centavos Only (₱1,183,174.93); and*
- (e) 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**

- (f) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts; **and**
- (g) 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

- (h) 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**
- (h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) – at least equal to ABC (**₱4,732,699.70**).
or

A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation (at least 10% of ABC or **₱473,269.97**).

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

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

3. Create two (2) folders that are password-protected. The first folder should contain all requirements under the Technical Component checklist as presented under Section VIII. The second folder should contain all requirements under the 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. Ganessa Rose G. Cuevas at ganessa.gongora@vsu.edu.ph before the deadline (**April 11, 2025, 8:30AM**).

