

**SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY EQUIPMENT
FOR RESEARCH CENTER**

ABC: ₱ 8,700,000.00

Item 1- 8 Set High Capacity Analytical Balance with Standard Set of Weights **95,000.00** **760,000.00**

Capacity : at least 220 g
 Resolution : 0.1 mg
 Pan diameter : approx. 80 mm
 Repeatability : 0.1 mg
 Linearity : ± 0.3 mg
 Response time : ≤ 4 sec
 Span drift : +/- 3ppm /°C
 Power supply : 110-230 VAc, 50/60Hz; output 24V 500mA 13VA

With compatible AVR

With calibration certificate

With standard set of weights

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 2- 3 Units Soxhlet Extraction Set Up **90,000.00** **270,000.00**

With three main sections: percolator, thimble, siphon mechanism

Complete glass ware set up for 500mL & 250mL Capacity

The set includes:

- a heating mantle with stirrer
- borosilicate glass boiling flask
- compatible borosilicate glass Soxhlet extractor
- 300mm borosilicate glass condenser with glass connectors
- sturdy powder-coated metal support stand with aluminium clamp and stability brackets
- two 120 cm lengths of rubber tubing with screw connectors

For the heating mantle with stirrer

Material : Polyurethane coated aluminum exterior and a high quality knitted mantle with glass fiber underlay

Operating temperature : up to 400°C

Relative humidity : up to 80%

Stirring speed : 50 to 750 rpm

Control : two separate knobs for heating and stirring functions

Item 3 - 5 units Stainless Steel Counter Laboratory Bench **210,000.00** **1,050,000.00**

Rack Dimension : 4ft x 12ft x 6ft

: 9 Cabinet

: 2 swing door per cabinet

: with adjustable shelves

: 14 drawers

: 2 legroom

: 2 laboratory stool, stainless steel frame with fiber glass top seat

Item 4 – 3 Units Laboratory Grinder/Blender with Timer 30,000.00 90,000.00

Capacity : at least 1.5 Liter
 Switch Settings: Two Speed, 60 Second Mechanical Timer
 Base : Epoxy Coated Motor Housing
 Container : Stainless steel with handle and two-piece vinyl and styrene lid.
 Overall Height : approx. 40 cm
 Motor : Standard
 Weight : approx. 12 lbs.
 Timer : two-speed blenders (1-minute automatic shutoff)
 Speed Control : push button for 18,000 and 22,000 rpm
 Operating speed: 18,000 to 22,000 rpm
 Power : 230 V 50/60 Hz
 With compatible AVR
 Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 5 - 3 units Distillation Set Up with Heating Mantle 80,000.00 240,000.00

500mL, 250 mL Distillation Distilling Apparatus Set with Hardware & Mantle

Glassware, Hardware and Heating Mantle included.
 11 pcs - Distillation Apparatus with 24/40 Joint.
 1 pc - 500 ml Borosilicate Glass Round Bottom Distillation Flask with Side Arm.
 Top Joint Size - 24/40. Cap Included for this Joint.
 Side Arm Joint Size - 24/40.
 1 pc - Borosilicate Glass Graham Condenser with 24/40 Joint.
 Jacket Length - 300 mm / 12 inch. Overall Length - 400mm / 16 inch.
 Joint Size - 24/40.
 1 pc - 250 ml Erlenmeyer Flask, Borosilicate Glass
 1 pc - Glass Stopper, 24/40 Joint, Borosilicate Glass
 1 pc - Keck Clamp # 24
 1 pc - 6" x 9" Support Stand with 24 Inch Rod
 1 pc - Swivel Utility Clamp
 1 pc - Extension Clamp
 1 pc - Clamp Holder
 1 pc - 5" Hammer-tone Finish Support Ring
 1 pc - Electric Heating Mantle

With compatible AVR
 Standard one-year warranty on parts and two years warranty on services for electric heating mantle including preventive maintenance

Item 6 – 1 unit Water Purifier for Molecular Biology 400,000.00

Capable of producing : Type 1 and Type 3 Water
 Production flow Rate : 8 L/h (Type 1 Water)
 : 16 L/h (Type 3 Water)
 Dimensions (H x W x D) : Approx. 700 x 400 x 480 mm
 Power supply : 230 V +/- 10%; 50-60 Hz
 Main unit data connection : Ethernet (RJ45)
 With installation
 With compatible AVR
 With calibration certificate

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 7- 1-unit Class II A2 Biological Safety Cabinet 300,000.00

Features:

Internal Size (W*D*H)	Approx.1100*600*700 mm
Tested Opening	Safety Height ≤ 200 mm
Inflow Velocity	0.53±0.025 m/s
Max Opening	400mm
Downflow Velocity	0.33±0.025 m/s
HEPA Filter	Two, 99.999% efficient at 0.3 um. Filter life indicator.
Front Window	Motorized. Two-layer laminated toughened glass ≥ 5mm. Anti UV.
Noise	EN12469 ≤ 58 dB / NSF49 ≤ 61 Db 18W* 1
UV Lamp	UV timer, UV life indicator, emission of 253.7 nanometers for most efficient decontamination.
Fluorescent Lamp	21W*2
Illumination	≥1000Lux
Consumption	1060W
Waterproof Sockets	Two, total load of two sockets: 500W
Display	LCD display: exhaust filter and downflow filter pressure, filter and UV lamp working time, inflow and downflow velocity, filter life, humidity and temperature, system working time etc.
Control System	Microprocessor
Airflow System	70% air recirculation, 30% air exhaust
Visual and audio alarm	Filter replacement, window over height, abnormal air flow velocity.
Material	Work Zone: 304 stainless steel Main Body: Cold-rolled steel with anti-bacteria powder coating.
Work Surface Height	750mm
Power Supply	110/220V±10%, 60/50Hz
Standard Accessory	Fluorescent lamp, UV lamp*2, Base stand, Remote control, Foot switch, Drain valve, Waterproof sockets*2, Water and gas tap
Certification	Must meet NSF/ANSI 49 for a Class II, Type A2 biosafety cabinet

Inclusions:

- With DC fan and LED light
- With negative pressure and double layers chamber
- With ULPA filter
- With ECO mode and power off memory function

With compatible AVR
With calibration certificate

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 8- 1-unit Double Person Horizontal Laminar Flow Cabinet 200,000.00

Mirror: Stainless steel, Corrosion resistant
Filter: low consumption, high efficiency
Front door: microcomputer control and weight-balance

Technical Parameters :

Wind speed (m/s)	0.25~0.45
Illumination (LX)	≥300lx
Noise	≤62dB
Power (KW)	0.5
Inner size (HxWxD)	Approx. 500x1250x430 mm
Overall size (HxWxD)	Approx. 1610x1450x580 mm

With compatible AVR
With calibration certificate
Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 9 - 1 set Photo Microscope complete with computer 255,000.00

Specification

- Infinity Optical System
- Siedentop-type Trinocular Tube
- Right Hand Stage holder with two specimen holders
- Provision for Bright field/Dark field & Phase contrast observations
- Eye piece: wide field (FOV greater than 22),10X with Dioptre adjustment facility on both objectives
- Objectives (plan achromat or higher, Suitable for Bright field/Dark field, Phase contrast observations - 4x/5x, 10x, 20x, 40x, 100x (oil immersion)
- Suitable phase contrast turret Condenser & Centring Telescope
- Illumination: High intensity halogen/LED, Suitable for Bright field/Dark field & phase contrast observations with all the required filters & other necessities for the above applications
- Stage micrometer for measurement & calibration
- Image documentation: With Built in Camera
- High sensitivity/high resolution dedicated digital camera (15 Mega Pixel or more with 30 FPS or more) with firewire connectivity
- Image analysis: Software for analysing (Measuring image stitching, object counting, time laps etc) and documenting the captured images
- Suitable desktop computer with the following additional specifications (Core i5 or equivalent processor, 4GB RAM, high end 2 GB Video Card, at least 125 SSD and 1TB HDD, 27" LED Monitor, DVD Writer) for analyzing /archiving the images
- UPS – reputed brand with 30mts backup
- Microscope, Digital Camera and image analysis Software should be from same

- manufacture for better synchronization & compatibility

With compatible AVR

With calibration certificate

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 10 - 4 units Autoclave 100L 275,000.00 1,100,000.00

Capacity	100L
Chamber size(mm)	φ385*915
Chamber Material	SUS304
Max Pressure	About 0.3MPa
Rated Working Pressure	About 0.22MPa
Max Temperature	150°C
Working Temp Range	105~134°C
Temp. Display Accuracy	±0.1°C
Timing Range	0-999 min
Dynamic Pulse Exhaust Time	0~9 times
Water Requirement	Distilled water or demineralized water
Standard Accessories	Stainless steel basket*2pcs
Consumption	4KW
Power Supply	AC 110/220V ± 10%, 50/60Hz
External Size(W*D*H) mm	Approx. 645*610*1200

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 11 - 2 units Cell Incubator 100,000.00 200,000.00

Voltage: 220V/50Hz

Temp Range (°C):

Incubator : RT+5 ~ 80°C

Drying Oven : 80 ~ 250°C

Temp Motion (°C) : A ± 0.5°C B ± 1.0°C

Temp Resolution Ration (°C) : 0.1°C

Environment temp. : 5-35°C

Power as Drying Oven (W) : 2300

Power as Incubator (W) : 600

Inner Chamber Size (mm) : approx. 500 x 450 x 550

Exterior Size (mm) : approx. 640 x 630 x 930

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 12 - 2 units **Sterilizing Oven** **200,000.00** **400,000.00**

Description

Can be used in drying, sterilizing, baking, evaporating, heat-treating, annealing and testing.

- Uniform temperature up to 232°C
- Durable, scratch-resistant finish and double-wall construction
- Welded steel interior chambers feature two adjustable and one fixed chrome-plated shelves
- All heating elements are sheathed and interconnecting wiring is simple
- Indicator light and thermostat for trouble-free maintenance

Specifications

Material	Steel
Ports	3 exhaust ports
Temperature (Metric)	232°C
Includes	Laboratory thermometer, cord with grounded plug
Plug Type	NEMA 5-15P
Chamber Material	Steel
No. of Shelves	2
Temperature Stability	3°C
Insulation	Fiberglass
Type	Lab Drying/Sterilizing Oven

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 13 - 1-unit **Freeze Dryer** **450,000.00**

Compact and movable upright type freeze dryer

Functions for automatic operating start and automatic setting temperature for stop to prevent the vacuum pump

Powerful freezing performance to start drying: 15min ~ 30min

Temperature measuring sensor: platinum PT 100 Ω (Class A 0.15 grade)

Cold Trap Temp : up to -90°C

Capacity (total) : 12L ~ 15L

Trap Size : Φ 315 x L380

Dimension (mm) : W850 x D796 x H987

Power : 220V

Microprocessor Controller

: Auto/Manual start-up controller

: Display cold trap

: Temperature

: vacuum pressure (2000mTorr ~ 0mTorr)

: printer set

: Auto Defrost

: auto vacuum release to prevent a back flow of contaminated oil or gas

: Automatic vacuum pump start & Stop controller system

One touch type automatic operation of freezing & vacuum function

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 14 - 1-unit Thermal Cycler PCR 500,000.00

Temperature

Range : -5 to 105 °C

Accuracy : ± 0.3 °C of target temperature

Uniformity : ± 0.4 °C from well-to-well within 30 sec target temperature

Homogeneity: 0.4°C within 30 sec upon reaching target temperature

Ramping speed: up to 3 °C/sec

Power : 20 V, 50-60 Hz, max of 850 W

: two 6.3 A, 250V, 5 x 20 mm Fuse

Input/ Output: One 25-pin 8-bit parallel interface printer port

: One 9-pin RS-232 serial port for printer or remote use

: One 20 x 4 LCD alphanumeric display

Dimension (in): at least 12 x 12 x 12

Independent Dual 48-well block (to run two programs simultaneously)

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 15 - 4 sets Micropipette set 110,000.00 440,000.00

Specification per set

- 1-3 µl
- 5-10 µl
- 10-100 µl
- 0-200 µl
- 100-1000 µl

Item 16 - 2-units Horizontal Gel Electrophoresis System 75,000.00 150,000.00
(2 sizes, mini and midi)

- Durable rubber casting gates
- Two-piece comb design (1.5 mm thick combs), with gel trays,
- Small benchtop footprint

Midi

Unit Dimensions : 12.5W x 22L x 9H cm (3¹/₂ x 8¹/₄ x 3¹/₂")

Max. Sample Capacity : 100 Samples

Buffer Volume : 300 mL

Mini

The power supply has 3 voltage choices, connects to the gel tank so no wire leads are needed, and the running tank is compact and does not require a large amount of buffer

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 17 - 3 units Wire Loop Sterilizer 40,000.00 120,000.00

Display : LED
Temperature range [°C] : 300~830
Central zone max temperature [°C] : 825±50
The heating zone adjustable angle : 0-40°
Max. outer diameter of sterilized items [mm] : up to 15
The total length of heating area [mm] : up to 140
Heating tube : Ceramic
Dimensions [LxWxH] (mm) : 180x120x186
Power : 220 V, 50/60 Hz, 190 W
Shell : ABS
Working temperature [°C] : -10~40
Working humidity [% RH] : <80
Storage temperature [°C] : -40~60
Storage humidity [% RH] : 10~90

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 18 – 1 unit Laboratory Stomacher 150,000.00

Technical Specifications

Casing : All stainless steel
Door : Plain 270° retractable door
Screen : Multifunction digital screen
Volume : 200 - 3500 ml
Speed : 1.5, 3, 4.5, 6 strokes/sec (adjustable)
Blending Strength : up to 28 kg thrust
Timer : 1 sec. - 1h or open running
Power : 220 V

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 19 - 1 unit Refrigerated Centrifuge 350,000.00

Temperature range : -10°C to +40°C
Max Speed (RCF x g) : 21,130 x g (15,000 rpm) at 4 °C
Capacity : 36 microcentrifuge tubes
Time : 1-999 min
Cooling range : -9 °C to 40 °C
Speed setting increment : 10 rpm

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 20 – 1 unit Controlled Temperature Shaker Incubator 215,000.00

Technical Specifications:

- Capacity : up to 110L
- Dimension : about 500 x 400 x 400 mm
- Heater : 350 W
- Flask placer : 1000ml (6 pcs)
500ml (12 pcs)
250ml (16 pcs)
100ml (24 pcs)
- Working temperature : Ambient temp +5°C to 75°C
- Temperature uniformity : ± 2°C at 37 °C
- Temperature stability : ± 0.1°C at 37 °C
- Temperature control : PID
- Sensor : PT-100
- Resolution : 0.1°C
- Lamp : 3 W
- Timer : LED digital set and display
99 hours 59 minutes
- Accessory : 2 stainless steel shelves
1 stainless steel platform
rubber sheet for shaker

With compatible AVR
Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 21 - 4 units Top Loading Balance 20,000.00 80,000.00

- Maximum Capacity : 3,200 g
- Readability : at least 0.01 g
- Repeatability : about 0.01 g
- Settling time : about 1.5 seconds
- Weighing pan dimensions (mm) : about 200 x 170
- Linearity : ± 0.02 g
- Display : about 7" color Graphic
: TFT Touchscreen
- Interferences : LAN; USB Device; USB Host
- Power : 240 V, 50/60 Hz
- Material : Die-Cast Aluminum
- Display Certifications/Compliance

Item 22 - 5 units Distilling Apparatus 20,000.00 100,000.00
(Laboratory water distillation 20L)

- Output : 20 L /hr
- Control panel indicators : indicators for heating and lack of water
- Water level indicator : residual water level window
- Power : 220 V; 13.5 kW
- With compatible AVR
- Standard one-year warranty on parts and two years warranty on services

including preventive maintenance and calibration every six months

Item 23 - 1-unit Liquid Nitrogen Tank 60,000.00
Capacity : 30 L
Material : Compact and lightweight
 : easy to transport
 : excellent heat insulation effect
Outer tank : Aluminum
Inner tank : Stainless Steel (SUS304)
Outer tank bottom: Rubber

Item 24 - 4 units Benchtop pH meter 55,000.00 220,000.00
pH range : 0.00 to 14.00 pH
resolution : 0.01 pH
Accuracy : ± 0.01 pH
calibration points : 1 to 5 points with automatic buffer recognition (ABR)
mV range : ± 1999 mV
resolution : 0.1 mV (± 199.9 mV), 1 mV beyond ± 200 mV
Accuracy : ± 0.2 mV (± 199.9 mV), ± 2 mV beyond ± 200 mV
Offset adjustment : Up to ± 150 mV
Temperature range : 0.0 to 100.0 °C
resolution : 0.1 °C
Accuracy : ± 0.3 °C

ATC Temperature Calibration: Offset in 0.1 °C increments; Offset range: ± 5 °C

Temperature Compensation : Automatic or manual (0 to 100 °C)

Memory : 100 data sets

Power requirement : AC/DC 9 V adapter (110/220 VAC, 50-60 Hz)

Warranty and Services : 3 years on meter

With compatible AVR

Standard one-year warranty on parts and two years warranty on services including preventive maintenance and calibration every six months

Item 25 - 1 unit Ultra low temperature freezer 300,000.00

Style : upright

Temperature range : -10°C to -86°C

Precision : 0.1 °C

Capacity : 8.5 – 13 cu. Ft

Foaming insulation : About 155 with VIP board

Power requirements : 220 V; 50/60 Hz, 100-1500W

Door Inner : 2-3

Outer : 1

CO2 Standby power supplier (in case for power failure)

VIP Insulation

Stainless steel interior

Display : Digital Temp

: Keyboard lock

Audible and visual alarm system : High/low temp, low battery, open door

Safety inside door lock : Filter blocking alarm, system failure alarm
 Refrigeration System : Dual-stage compressors parallel connection
 : 2-4 hours to reach -86°C
 : mixture completely environmentally friendly refrigerant
 Certificate : CE Certificate/ISO9001/ISO14001/ISO13485
 Accessories : Chat recorder, CO2 back up, storage racks, boxes

With compatible AVR
 Standard one-year warranty on parts and two years warranty on services
 including preventive maintenance and calibration every six months

Item 26 - 1 unit	Fume hood	300,000.00
	Internal Capacity	0.8-1.0 cubic meter
	Work surface height	900 mm
	Maximum opening	550 mm
	Air Velocity	0.3-0.8 m/s
	System exhaust volume	570 m3/h
	Noise	< 68dB
	Exhaust duct	PVC
	Length	At least 15 m
	Diameter	at least 300mm
	Pipe strap	2 pcs
	LED Lamp	16W
	Blower:	Built-in PP centrifugal blower
	Front window	Motorized
		5mm toughened glass
		Anti-UV
	Power supply	220 V ± 10%
	Consumption	At most 500 W
	Material	Exterior 1.0 cold-rolled steel with anti-bacteria power coating
		Interior High grade melamine board with good acid and alkali resistant function
	Work table	Chemical resistant phenolic resin
	Accessory	Gas Tap
		Water tap; Water sink; Base stand, UV lamp*2, LED lamp, Socket, Active carbon filter, Foot switch

With compatible AVR
 Standard one-year warranty on parts and two years warranty on services
 including preventive maintenance and calibration every six months