



GF -2020-10-00402

PPMP #: 10-2-823-2021-8-0-1



Republic of the Philippines  
**VISAYAS STATE UNIVERSITY**  
 Visca, Baybay City, Leyte

## PURCHASE REQUEST

PR #: GF -2020-10-00402 /11012

Date: 10-15-2020

Category: Laboratory Equipment

Dept./Office: DPBG

Section/End-User: Rommel M. Garrido

Project Title/Code: Completion of Lecture Hall and  
 Classroom Rehabilitation of Breeding Nursery Seed  
 Storage Facility and Tissue Culture Laboratory of the  
 Department of Plant Breeding and Genetics

Funding Source: General Fund - CO

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	Autoclavable Pipetter of Single Channel, 0.2-2 ul, good-quality, brand new	pc	2	19,500.00	ROMMEL M. GARRIDO JR.	39,000.00
2	Autoclavable Pipetter of Single Channel, 1-10 ul, good-quality, brand new	pc	2	19,500.00		39,000.00
3	Autoclavable Pipetter of Single Channel, 10-100 ul, good quality, brand new	pc	2	16,900.00		33,800.00
4	Autoclavable Pipetter of Single Channel, 100-1000 ul, good quality, brand new	pc	2	16,900.00		33,800.00
5	Autoclavable Pipetter of Single Channel, 2-20 ul, good-quality, brand new	pc	2	16,900.00		33,800.00
6	Autoclavable Pipetter of Single Channel, 20-200 ul, good quality, brand new	pc	2	16,900.00		33,800.00
7	Cryogenic tube with screw and cap	pack	1	22,550.00		22,550.00

**Specification:**

volume 5 mL, with external thread, self-standing, RNase and DNase free, sterile, 1000 EA per pack

8	Culture cabinets	set	5	20,000.00		100,000.00
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**Specification:**

4 layers

load per layer: 50-100 kg

dimension: 2m length x 0.5m width x 2m height

metal frame

glass shelf

complete with lightning accessories (fluorescent tubes)

good quality						
9	<b>DeepFreezing Freezer/ Ultra-Low-Temperature Freezer</b>	unit	1	1,150,000.00		1,150,000.00
<b>Specification:</b>  Cooling: Direct colling  Defrost mode Manually  Colling agent FCKW/HFCKW-free  Noise level dB(A)50  Colling performance (°C) -86  Recovery time min ? 10  Control Microprocessor  Display 7" Touch screen LCD  Mains connection (V/Hz) 230/50  Compressor capacity (W) 1000  Electric load (A) 5.5  Volume (Liter) 300 - 400  Net /Gross weight (approx.) (kg) 225/275  Useful dimensions (W x D x H) (mm) 440x696x1266  General dimensions (W x D x H) (mm) 785x1041x1947  Packing dimensions (W x D x H) (mm) 868x1140x2082  Container load (20'/40') 10/20  With warranty  Alarm System: <ul style="list-style-type: none"> <li>• High/Low temperature alarm Overheat</li> <li>• colling compressor Power breakdown High/Low voltage</li> <li>• Sensor failure Accu weak High ambient temperature Door alarm</li> <li>• Stands Wall openings, Trays /Inner door, USB interface, RS 485 interface</li> </ul>						
10	<b>Dehumidifier for Extra Large Rooms and Basements</b>	pc	1	19,300.00		19,300.00
<b>Specification:</b>						

Includes: Washable Filter, Built-in Handles and Wheels, Drain Hose Outlet

Weight: at most 40 lbs

Rated Current: 4.7 Amps

Moisture Removal: 70 pints per day

Air CFM Range (cubic feet per minute): 165 (Normal) to 188 (Turbo)

Removable Water Tank Capacity: at least 1.6 gallons / 6 liters

Certifications: UL & Energy Star rated

Features: Touch Control Panel; Auto Restart, Shut Off, Defrost; Turbo Mode; Continuous Dehumidifying; 24-hour Timer; Custom Humidity Level from 35% to 85%

Spaces between 2500 and 4000 square feet, with room temp from 41°F to 95°F

Power: 220/240V

11	<b>Distilling Apparatus</b>	set	1	430,000.00		430,000.00
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**Specification:**

With fully insulated stainless steel condenser and heater units

Heater unit:

- flask support platform
- viewing window
- at least 1000W heater with stepless variable control
- rack and pinion heater elevation mechanism with a push-turn control knob
- white receiving flask background facilitates viewing of fractions during the test
- available with right-or-left-hand heater unit for convenient pairing
- includes graduate support block and flask support boards

Condenser unit:

- condenser bath temperatures of up to 140°F (60°C)
- equipped with 300W copper immersion condenser
- heater with stepless electronic control
- Power source: 220- 240V 50/60Hz

With at least 1 year Warranty

12	<b>Electric Compound Binocular Microscope</b>	pc	1	70,000.00		70,000.00
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**Specification:**

Objective Lenses: DIN standard Achromat 4x, 10x, 40xR, 100xR oil immersion objectives are parfocalled, parcentered, color coded and mounted in reverse facing quadruple



Eyepieces: Widefield 10x eyepieces, FN18. Interpupillary adjustment 55-75mm. Eyepiece can be fitted with a 20mm diameter reticle.

Total Magnification: 40x, 100x, 400x, 1000x.

Specimen Stage: Large 125mm x 115mm stage, with built-in mechanical stage. Mechanical stage provides X-Y movement of 55mm x 75mm.

Focusing: Rack & pinion coarse focus with tension adjustment, separate fine focus. Coarse focus knob control moves the stage up or down 20mm. Fine focus moves 0.2mm per

Condenser: Abbe NA 1.25 condenser with iris diaphragm and filter holder for 32mm filter.

Illumination: 1W LED illumination with on/off switch with intensity control. Corded microscope is voltage sensing 100~240V.

Size & Weight: 13" high, 10" deep, 8.5" wide, 6 lbs.

Warranty: 5-year warranty, excluding LED bulb.

Includes: Dust cover and blue filter.

13	<b>General Purpose Water Bath</b>	pc	1	137,000.00		137,000.00
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**Specification:**

Amperage: 6.0-7.0/2.8-3.4 (120V/230V)

Chamber Material: Steenless steel

Display: Monochrome LCD

Includes: clear polycarbonate gable cover and rubber duck

Capacity : >10L

Heating Capacity: at least 800W

Material: Epoxy powder-coated steel

Temperature Presets: 4

Temperature Stability:  $\pm 0.10^{\circ}\text{C}$

Temperature Uniformity:  $\pm 0.20^{\circ}\text{C}$

Temperature Range: Ambient to  $100^{\circ}\text{C}$

With 1 year warranty

14	<b>Gravity Convection Oven</b>	pc	1	180,000.00		180,000.00
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**Specification:**

Chamber Material: Aluminum

Display: Analog

Dimensions (D x W x H) Interior: 11.5 x 16 x 16.2 in. (29 x 41 x 41cm)

Dimensions (L x W x H) Exterior: 13.5 x 18.5 x 22.5 in. (34 x 47 x 57cm)

Temperature Range: Ambient +5° to 210°C

Temperature Control: Bimetallic thermostat

Power source: 220- 240V 50/60Hz

Certifications/Compliance: UL/cUL listed

15	Liquid Nitrogen Transfer Vessel	pc	1	78,500.00		78,500.00
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**Specification:**

type: LN2 Transfer Vessel, capacity: 5L, Lightweight aluminum dewars assure low-static evaporation rates

16	Microcentrifuge with refrigeration	pc	1	800,000.00		800,000.00
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**Specification:**

Accel/Decel Profiles: acceleration up to 21,000 x g in 12 seconds

Noise Level: <50dba

Run Time: 1 to 99min (1min increments); HOLD

Temperature Range: -9° to +40°C

RCF: 21,100 x g

ated: Yes

top Centrifuge

5/2mL

to 14,999 rpm

compliant, Certified Biosafety; IEC 61010-1, IEC 61010-2, IEC 61010-020

Fuse

Memor

Gradient

Temperatu

or	pc	1	17,500.00		17,500.00
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Chamber Material: Aluminum

Display: Analog

Dimensions (D x W x H) Interior: 11.5 x 16 x 16.2 in. (29 x 41 x 41cm)

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**Specification:**

Accel/Decel Profiles: acceleration up to 21,000 x g in 12 seconds

Noise Level: <50dbA

Run Time:1 to 99min (1min increments); HOLD

Temperature Range:-9° to +40°C

Max. RCF: 21,100 x g

Refrigerated: Yes

Type: Benchtop Centrifuge

Capacity:24 x 1.5/2mL

Max. Speed: 14,000 to 14,999 rpm

CSA certified, CE IVD compliant, Certified Biosafety; IEC 61010-1, IEC 61010-2, IEC 61010-020

with extended warranty

17	<b>Microscope Eyepiece Reticle or Ocular Micrometer</b>	pc	1	17,500.00		17,500.00
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**Specification:**

Diameter, 24mm, 0.01 mm Division and Stage Micrometer set for calibration with 0.01 mm division

18	<b>Non-electric Pressure Steam Sterilizer</b>	pc	1	55,000.00		55,000.00
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**Specification:**

Material: Stainless Steel

Heat source: any effective heat source other than electricity sterilizers

Mechanism: dry steam

Capacity: at least 24 liter capacity

Inclusion: inner container with rack

One year warranty

UL approved

19	<b>Thermal Cycler 96-well</b>	pc	1	759,000.00		759,000.00
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**Specification:**

Sample capacity: 96 x 0.2 ml tubes, 0.2 ml tube strips, or 1 x 96-well plate

Maximum ramp rate, °C/sec: 4

Average ramp rate, °C/sec: 2.5

Temperature range: 4–100°C

Temperature accuracy:  $\pm 0.25^{\circ}\text{C}$  (35°C to 99.9°C)

Temperature uniformity:  $<0.5^{\circ}\text{C}$  (20 sec after reaching 95 °C)

Temperature differential range: 1–25°C

Input power: 220–240 VAC, 50–60 Hz; 700 W maximum

Display: 5.7" VGA color touch screen

Port: 1 USB A

Fuses: Two 10A, 250 V, 20mm

Memory: 500 typical programs; unlimited with USB flash drive expansion

Gradient range: 30–100°C

Temperature control modes: calculated and block



PCR License: Yes

Programing Options: Step-Based graphical

Reporting: Exportable run log, system log

Instant Incubation: Yes

With inclusions of: 96-well thermal cycler, power cord, T100 tube support ring, AVR (2kVA), UPS (2kVA), iTaq™ Universal SYBR Green Supermix, 200 x 20 ul rxns, 2ml (2x1 ml), 0.2 ml PCR Tubes with flat caps, high profile, clear, pkg of 1000

20	<b>Vertical Laminar Flow Workstation</b>	set	1	350,000.00		350,000.00
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**Specification:**

HEPA filtration with filter backpressure gauge: internal baffling plates and anodized aluminum diffuser panel ensure uniform air speed across the filter face

Tilt-up dissipative PVC sash

Fluorescent and UV lighting

Stainless steel work surface

Power source: 220- 240V 50/60Hz

with installation services

21	<b>Vortex mixer</b>	pc	1	140,000.00	ROMMEL M. GARRIDO JR.	140,000.00
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**Specification:**

Speed - 200 to 3200 rpm

Operating modes - Touch or continuous

Orbit- 3mm

Operating Temp. Range- +4 to +45°C

with at least 1 year warranty

22	<b>Wide Mini-Sub Cell Horizontal Electrophoresis System</b>	pc	1	270,000.00		270,000.00
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**Specification:**

Base footprint (LxWxH): 25.5x17.8x6.8cm

Base buffer volume: 650-900ml

Base Gel size: 15x7cm



Tray sizes: 15x10 cm

Base: Molded clear plastic

Gel Casting gates: Aluminum

Safety Lids: Molded clear Plastic

Electrode wire guard: Molded polycarbonate

Banana Plugs: Gold-plated brass, 4.4cm length

Electrode: Platinum, 0.25mm diameter

Electrical cables: Dual, 20AWG, tinned copper wire cable, Flame-retardant polyurethane insulation jacket

Electrical leads: Nickel-silver

Gel Tray: UV- transparent acrylic plastic (UVTP)

Combs: Molded plastic and machined acrylic

Gel casting device: polycarbonate 0.64 cm silicon foam

Input power: Nominal= 220–240 VAC, 50–60 Hz; 700 W maximum; Actual = 90-132 or 198-264 VAC, 50-60-Hz

Fuses: 2.5 A, 250VAC, 5mmx20mm. Type T

Input power cord: 3-wired; grounded

Output (programmable)

Voltage: 10V to 300V, fully adjustable in 1 V steps

Voltage accuracy:  $\pm 2\%$  of reading or 3 volts, whichever is more

Current: 4mA to 400mA, fully adjusted in 1 mA steps

Current accuracy:  $\pm 2\%$  of reading or 3mA, which ever is more

Power(maximum): 75W

Terminals: 4-pair recessed banana jack, floating parallel

Timer Control: 001-999 minutes, fully adjustable

Ripple:  $<1\%$  @300 V and 70W

Line Regulation:  $<1\%$  @300 V and 70W, 90-132 or 198-264 VAC

Load Regulation:  $<1\%$  @300 V for 50% change in output load

Drift: <1% @ after 15mins warm up at 300V and 70W

Noise: 55dBA at 1 meter

Readout stability: Volts=  $\pm$  V; Curent:  $\pm$ 1Ma

Auto power up after power failure: User selectable, setup values maintained

Safety compliance: EN-61010

EMI: Conforms to CE standard for emissions and immunity Class A, testes only at 230 V

Display function: 3-digit LED display, voltage, current or time

Function Modes: Constant voltage, constant current, timer, pause, user selectable

Automatic power up after power failure

Envi: Operating Tem (40°C); Humidity (0-95%, in the absence of condensation)





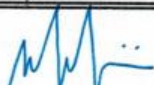

Dimensions (W x D x H): 25 x 21 x 8.5 cm

Weight: 1.1kg, unit is stackable

Inclusions: Lid with Cables, 15cm x 10cm (WxL) UV transparent tray, Leveling bubble, 15-well comb, fixed height, 1.5 mm thickness, 20-well comb, fixed height, 1.5 mm thickness, Gel caster, PowerPacTM Basic Power Supply

	<b>TOTAL</b>						<b>4,792,050.00</b>
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Purpose: Completion of Lecture Hall and Classroom Rehabilitation of Breeding Nursery Seed Storage Facility and Tissue Culture Lab

Checked by:  <b>JACOB GLENN F. JANSALIN</b> TWG - Laboratory Equipment		Funds Available:  <b>MYRNA S. PANCITO</b> HEAD, BUDGET OFFICE 	
Signature:	Requested by:  <b>ROMMEL M. GARRIDO</b>	Noted by:  <b>ROMMEL M. GARRIDO</b>	Approved by:  <b>EDGARDO E. TULIN</b>
Printed Name:	<b>ROMMEL M. GARRIDO</b>	<b>ROMMEL M. GARRIDO</b>	<b>EDGARDO E. TULIN</b>
Designation:	END USER	UNIT HEAD, PROJECT LEADER	PRESIDENT, VSU