

Technical Specifications

Item	Specification	Statement of Compliance
	<p>General terms for all lots</p> <p>For Equipment:</p> <p>1) The equipment must come from a credible manufacturer with support through a distributor in the country; and</p> <p>2) The equipment must be brand new and unused.</p>	<p>[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, 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.]</p>

Item	Specification	Statement of Compliance
<p>LOT 1:</p>		
<p>SCUBA COMPRESSOR</p>		
<p>ABC: Php 700,000.00</p>		
<p>Delivery period: Up to Sixty (60) calendar days</p>		
<p>Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City</p>		
<p>ITEM 1: SCUBA COMPRESSOR</p>		
<p>Delivery period: Up to Sixty (60) calendar days</p>		
<p>Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City</p>		
	<p>1. SCUBA COMPRESSOR (1 unit)</p> <ul style="list-style-type: none"> • At least 8.3 CFM • Number of Filling Hoses: 2 filling hoses at least 1.2 m/3.9 ft length • 9 HP Honda Gasoline-powered • Liters / Minute: at least 235L • Maxi Filter System • Coated Steel Frame • Maximum Service Pressure: Final Safety Valve Service Pressure at least 232 bar / 3,364 psi • Dimensions (LxWxH): at least 1000 x 460 x 700 mm • Weight: at least 105 kg or 231 lb <p>INCLUSIONS:</p>	

	<p>a. Warranty for repair and preventive maintenance for up to three (3) years</p>	
	<p>Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.</p>	
<p>LOT 2:</p> <p>DSLR CAMERA WITH ACCESSORIES / SATELLITE PHONE</p> <p>ABC: Php 465,000.00</p> <p>Delivery period: Up to Sixty (60) calendar days Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City</p>		
<p>ITEM 1: DSLR Camera with underwater camera housing and complementary accessories for underwater use</p> <p>Delivery period: Up to Sixty (60) calendar days Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City</p>		
	<p>1. DSLR Camera with underwater camera housing and complementary accessories for underwater use (1 unit)</p>	
	<p>1.1 - DSLR camera and waterproof housing package</p>	
	<ul style="list-style-type: none"> 20.9 megapixel digital single-lens reflex camera in DX image sensor format 	
	<ul style="list-style-type: none"> Lightweight but durable and weather sealed built and has tilting display monitor 	
	<ul style="list-style-type: none"> Sensor size: 23.5 mm x 15.6 mm; ISO sensitivity range: 100 - 51,200 (expandable); up to 8 fps continuous shooting speed 	
	<ul style="list-style-type: none"> Capable of 4K UHD video recording at 30 fps 	
	<ul style="list-style-type: none"> Shutter speed: up to 1/8000 to 30 sec; Flash sync speed: up to 1/250 sec 	
	<ul style="list-style-type: none"> Has power aperture and sound control, with built-in Bluetooth and Wi-Fi connectivity; control via smartphone is supported 	
	<ul style="list-style-type: none"> Has long battery life; eye-level viewfinder (18 - 18.5 mm eye point) 	
	<p>INCLUSIONS:</p>	
	<p>a. Camera bag</p>	
	<p>b. Camera strap</p>	
	<p>c. Spare rechargeable Lithium-ion battery, and charger</p>	
	<p>d. At least 1 Year Warranty for Parts & Services</p>	
	<p>1.2 - Underwater camera housing and strobe</p>	
	<ul style="list-style-type: none"> Compatible durable waterproof housing with dry lock (DL) port system 	
	<ul style="list-style-type: none"> Vacuum system ready; Usability of up to 60-m/200-ft depth 	
	<ul style="list-style-type: none"> Includes compatible dry lock (DL) Lens Port to ensure waterproof system 	

OTHER INCLUSIONS:	
a. Spare O-rings for DL port system and lens port	
b. Ball mount	
c. Right hand quick release extension	
d. Silicone lubricant	
e. At least 1 Year Warranty for Parts & Services	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.	
ITEM 2: DSLR Camera with macro lens, set of filters and reflectors, including copy stand and other complementary accessories	
Delivery period: Up to Sixty (60) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	
2. DSLR Camera with macro lens, set of filters and reflectors, including copy stand and other complementary accessories (1 unit)	
<ul style="list-style-type: none"> Versatile digital single-lens reflex camera 18-55 mm lens kit in DX image sensor format 	
<ul style="list-style-type: none"> 24.2 megapixel CMOS Image Sensor; ISO sensitivity: 100 - 25,600; up to 5 fps continuous shooting speed; Allows fast focus for moving objects 	
<ul style="list-style-type: none"> Sensor size: 23.5 mm x 15.6 mm; Shutter speed: up to 1/4000 to 30 sec; Flash sync speed: up to 1/200 sec 	
<ul style="list-style-type: none"> Has built-in microphone for full HD video recording up to 60 fps; Has eye-level viewfinder (18 - 18.5 mm eye point) 	
<ul style="list-style-type: none"> With Bluetooth and Wi-Fi connectivity; control via smartphone is supported 	
<ul style="list-style-type: none"> Includes a compatible macro lens (90 mm to 105 mm focal range; F2.8 max aperture) 	
<ul style="list-style-type: none"> Includes studio photography setup with carry bag <ul style="list-style-type: none"> High quality studio twin LED light panels with heavy duty stand; Camera lens filter kit; and Collapsible light reflectors 	
INCLUSIONS:	
a. Camera bag	
b. Camera strap	
c. Spare rechargeable Lithium-ion battery	
d. Battery charger and adapter	
e. Memory card (32 GB)	
f. At least 1 Year Warranty for Parts & Services	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.	
ITEM 3: Point and Shoot underwater cameras and complementary accessories (Field Sensor System with GPS)	
Delivery period: Up to Sixty (60) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	

<p>3. Point and Shoot underwater cameras and complementary accessories (Field Sensor System with GPS) (4 units)</p>	
<p>Underwater camera housing and strobe</p>	
<ul style="list-style-type: none"> Newer point and shoot camera for underwater use up to 15-meter/50-feet depth; with more advanced features and faster startup 	
<ul style="list-style-type: none"> Has 4X optical zoom lens (25 - 100 mm) and 4K video resolution; Has wide aperture lens sealed to resist fogging and/or condensation 	
<ul style="list-style-type: none"> Has 12MP BSI CMOS sensor to allow for higher sensitivity (ISO 100 - 12800) and TruePic VIII processor for continuous shooting rate at 20-fps 	
<ul style="list-style-type: none"> Durable built: Freezeproof, shock-proof (7 feet), crush-proof (100 kgf), and dust-proof 	
<ul style="list-style-type: none"> Has variable photography modes (at least 5 underwater modes, picture modes, and scene modes) for flexible photography needs; Has 3 underwater white balance modes for better underwater imaging 	
<ul style="list-style-type: none"> Allows GPS, Wi-Fi, micro-USB, and micro-HDMI connectivity; Has environment recording features to monitor temperature, pressure (manometer), and direction (compass) 	
<p>OTHER INCLUSIONS:</p>	
<p>a. Compatible waterproof housing for diving up to 45 meters underwater</p>	
<p>b. Rechargeable Lithium-Ion Battery</p>	
<p>c. Hand strap</p>	
<p>d. Micro-USB cable and adapter</p>	
<p>e. Charger</p>	
<p>f. At least 1 Year Warranty for Parts & Services</p>	
<p>Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.</p>	
<p>ITEM 4: Satellite Phone</p>	
<p>Delivery period: Up to Sixty (60) calendar days</p>	
<p>Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City</p>	
<p>4. Satellite Phone (1 unit)</p>	
<ul style="list-style-type: none"> Handheld type satellite phone in industrial grade design to withstand extreme weather conditions 	
<ul style="list-style-type: none"> Dust-proof, jet water-proof, and shock-proof 	
<ul style="list-style-type: none"> Has an integrated wind-resistant microphone and weather-resistant keypad 	
<ul style="list-style-type: none"> Long-lasting battery life: 4 - 9 hours of talk time, 30 - 80 hours stand-by 	
<ul style="list-style-type: none"> GPS-enabled SMS and email messaging, including Google 	

	maps services	
	<ul style="list-style-type: none"> 24/7 emergency assistance, with single touch SOS accessibility 	
	<ul style="list-style-type: none"> Display with backlight for nighttime viewing 	
	INCLUSIONS:	
	a. With spare Lithium ion battery	
	b. Battery charger	
	c. Protective hard case	
	d. Other complementary accessories as appropriate	
	e. At least 1 Year Warranty for Parts & Services	
	Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.	
LOT 3:		
LIQUID NITROGEN TANK		
ABC: Php 200,000.00		
Delivery period: Up to Sixty (60) calendar days		
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City		
ITEM 1: Liquid Nitrogen Tank (50L Capacity)		
Delivery period: Up to Sixty (60) calendar days		
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City		
	1. Liquid Nitrogen Tank (50L Capacity) (1 unit)	
	<ul style="list-style-type: none"> Used for cryopreservation of biological samples in liquid nitrogen (-196 to -210 °C) 	
	<ul style="list-style-type: none"> Can store up to 50 L liquid nitrogen 	
	<ul style="list-style-type: none"> Sealed vacuum space between inner and outer shells 	
	<ul style="list-style-type: none"> Static hold time up to 120 days 	
	INCLUSIONS:	
	a. 1 set single channel micropipettors (0.5 - 10 uL, 10 - 100 uL, 100 - 1000 uL)	
	b. 2 units bottle top dispenser (1 - 10 mL and 5 - 50 mL volume capacity)	
	c. At least 1 Year Warranty for Parts & Services	
	Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.	
LOT 4:		
LABORATORY REFRIGERATOR/COLD CABINET / LABORATORY DEEP OR UPRIGHT FREEZER / ULTRALOW STORAGE FREEZER / LABORATORY DRYING OVEN / MICROCENTRIFUGE TUBE / GEL DOCUMENTATION SYSTEM		
ABC: Php 2,500,000.00		
Delivery period: Up to Ninety (90) calendar days		
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City		
ITEM 1: Laboratory Refrigerator/Cold Cabinet		

Delivery period: Up to Ninety (90) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	
1. Laboratory Refrigerator/Cold Cabinet (1 unit)	
<ul style="list-style-type: none"> Refrigerator used for storage of laboratory reagents and biological products 	
<ul style="list-style-type: none"> Temperature range: 2 to 8 °C 	
<ul style="list-style-type: none"> With digital display of internal temperature 	
<ul style="list-style-type: none"> Audible and visual alarm for high and low temperature, power failure, sensor failure, door ajar 	
<ul style="list-style-type: none"> Auto-defrost 	
<ul style="list-style-type: none"> CFC-free refrigerant 	
<ul style="list-style-type: none"> Glass door 	
<ul style="list-style-type: none"> Volume capacity: 1000 L or higher (with at least 10 shelves) 	
<ul style="list-style-type: none"> Voltage: 220 – 240 V; 50 - 60 Hz 	
<ul style="list-style-type: none"> With the following accessories: LED lamp, shelves, door keys, USB port 	
INCLUSIONS:	
a. Automatic voltage regulator (AVR)	
b. Uninterruptible Power Supply (UPS; at least 1.0 kVa capacity)	
c. Warranty for repair and preventive maintenance for up to three (3) years	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews.	
ITEM 2: Laboratory Deep or Upright Freezer	
Delivery period: Up to Ninety (90) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	
2. Laboratory Deep or Upright Freezer (1 unit)	
<ul style="list-style-type: none"> Freezer used for cryopreservation of biological samples 	
<ul style="list-style-type: none"> Temperature range: -15 to -40 °C (accuracy of 0.1 °C) 	
<ul style="list-style-type: none"> With digital display for internal temperature 	
<ul style="list-style-type: none"> Volume Capacity: 350 L or higher (with at least 4 shelves) 	
<ul style="list-style-type: none"> With audio and visual alarms for: high/low temperature, sensor failure 	
<ul style="list-style-type: none"> Contains microprocessor controller to ensure consistent cabinet temperature 	
<ul style="list-style-type: none"> CFC-free refrigerant 	
<ul style="list-style-type: none"> Voltage: 220 – 240 V 	
INCLUSIONS:	
a. Automatic voltage regulator (AVR)	
b. Uninterruptible Power Supply (UPS; at least 3.0 kVA capacity)	
c. Warranty for repair and preventive maintenance for up to three (3) years	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews	
ITEM 3: Ultralow Storage Freezer	
Delivery period: Up to Ninety (90) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	
3. Ultralow Storage Freezer (1 unit)	
<ul style="list-style-type: none"> Freezer for prolonged storage of temperature-sensitive 	

	biological material	
	<ul style="list-style-type: none"> • Temperature range: -40 to -86 °C (accuracy of 0.1 °C) 	
	<ul style="list-style-type: none"> • With digital display for internal temperature 	
	<ul style="list-style-type: none"> • Volume capacity: 400 L or higher (with at least 3 shelves) 	
	<ul style="list-style-type: none"> • With 2 inner doors 	
	<ul style="list-style-type: none"> • With audio and visual alarms for: high/low temperature, sensor error, power failure, door ajar, abnormal ambient temperature, low battery, abnormal voltage 	
	<ul style="list-style-type: none"> • Contains microprocessor controller to ensure consistent cabinet temperature 	
	<ul style="list-style-type: none"> • Voltage: 220 – 240 V; with reduced power consumption 	
	INCLUSIONS:	
	a. Automatic voltage regulator (AVR)	
	b. Uninterruptible Power Supply (UPS; at least 5 kVA capacity)	
	c. Bottletop Dispenser (2-10 mL),	
	d. Gel electrophoresis system with power supply	
	<p>Gel Electrophoresis System: Buffer volume capacity: at least 500 mL Sample Capacity: at least 100 samples With at least 3 casting trays</p> <p>Power Supply: Output Voltage range: 2 - 300 V Timer: 1 - 999 min; capable of continuous time Input Voltage: 120 - 230 V</p>	
	e. Warranty for repair and preventive maintenance for up to three (3) years	
	Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews	
ITEM 4: Laboratory Drying Oven		
Delivery period: Up to Ninety (90) calendar days		
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City		
	4. Laboratory Drying Oven (1 unit)	
	<ul style="list-style-type: none"> • Used for drying of laboratory items after autoclaving 	
	<ul style="list-style-type: none"> • With 1 stainless steel grid 	
	<ul style="list-style-type: none"> • Interior made of stainless steel 	
	<ul style="list-style-type: none"> • Volume capacity: 50 L or higher 	
	<ul style="list-style-type: none"> • Shelf capacity: 20 kg or higher 	
	<ul style="list-style-type: none"> • Temperature range: ambient up to 300 °C 	
	<ul style="list-style-type: none"> • With timer 	
	<ul style="list-style-type: none"> • Voltage: 220 – 240 V 	
	INCLUSIONS:	
	a. Warranty for repair and preventive maintenance for one (1) year	
	Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews	
ITEM 5: Microcentrifuge with adapter for 8-strip tubes		
Delivery period: Up to Ninety (90) calendar days		
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City		

5. Microcentrifuge with adapter for 8-strip tubes (1 unit)	
<ul style="list-style-type: none"> ● Used to quick spin microtubes ● Maximum speed: 6000 rpm or higher ● Replaceable rotor for 1.5/2.0 ml tubes and 0.2 mL strip tubes ● With rubber base for stability ● Lightweight; up to 2 kg net weight ● Voltage: 220 – 240 V 	
INCLUSIONS	
a. Warranty for repair and preventive maintenance for one (1) year	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews	
ITEM 6: Gel Documentation System	
Delivery period: Up to Ninety (90) calendar days	
Delivery and Installation: CRREST Laboratory, CSM, UP Mindanao, Mintal, Tugbok District, Davao City	
6. Gel Documentation System (1 unit)	
<ul style="list-style-type: none"> ● Used for DNA and protein gel imaging ● With software for gel image analyses (e.g., band quantification, calculation of molecular weight, image enhancement) ● Optics: 3 megapixels or higher ● With automated features (e.g., auto-exposure, auto-focus, auto-lighting) ● Allows fluorescence with the nucleotide stain, GelRed ● Removable plate for gel extraction ● Uses white light, blue light, and UV light ● Data access through USB ● Voltage: 220 – 240 V 	
INCLUSIONS:	
a. Automatic voltage regulator (AVR)	
b. Uninterruptible Power Supply (UPS; at least 1.0 kVA capacity)	
c. Monitor for visualization	
e. Consumables for agarose gel electrophoresis with at least 100g Agarose Gel (Low EEO) with at least 1 vial nucleotide stain (nonmutagenic; heat-tolerant)	
e. Warranty for repair and preventive maintenance for up to three (3) years	
Note: Please include a brochure of equipment/item, with its make/model/unit number and specifications. If possible, include performance metrics/reviews	