

# Republic of the Philippines GENERAL SANTOS CITY WATER DISTRICT

E. Fernandez St., Brgy. Lagao, General Santos City Telephone No. (083) 552-3824/ Telefax No. (083) 553-4960 E-mail Address: gscwaterdistrict@yahoo.com www.gensanwater.gov.ph

## PROJECT TITLE:

# PURCHASE OF ASSORTED LABORATORY EQUIPMENT AND INSTRUMENTS

# 1. SCOPE OF CONTRACT

The scope shall cover the supply, delivery, installation and testing of Laboratory Equipment, Glassware, Reagents, Instruments, Office Equipment and Supplies to **General Santos City Water Laboratory and Research Center** located at MSU Compound, Brgy. Tambler, General Santos City.

# 2. TECHNICAL SPECIFICATIONS

# List of Equipments:

ANALYTICAL BALANCE	Weighing capacity: 120 g
ANALYTICAL BALANCE	
	Readability: 0.1 mg
	Tare range (subtractive): -120 g
	<ul> <li>Repeatability: &lt; ±0.1 mg</li> </ul>
	<ul><li>Linearity: &lt; ±0.2 mg</li></ul>
	Response Time: < 0.2 s
	<ul> <li>Operating Temperature Range: ±10 °C to +30 °C</li> </ul>
	<ul> <li>Allowable ambient operating temperature: ±5 °C to +40 °C</li> </ul>
	<ul> <li>Pan Size (inner diameter): 80 mm</li> </ul>
	<ul> <li>Weighing chamber height: 232 mm</li> </ul>
AUTOCLAVE	Pressure Overload Protection
	Overheat Protection
	<ul> <li>Door Safety Mechanisms</li> </ul>
	Security Hook
	Chamber Size: 50L and 75L
	Max Temperature 150°C
	<ul> <li>Working Temp Range 105-134°C</li> </ul>
	<ul> <li>LED Displays inner temperature, time and error codes</li> </ul>
BACTICINERATOR	Six minutes of activation
	<ul> <li>Optimum sterilizing temperature: 815 °C (1500 °F)</li> </ul>
	Weighted cast aluminum stand
	• Electrical: 220V, 50/60Hz



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BIOLOGICAL SAFETY CABINET	Class II A2
SIGLOGIONE ON ETT ONDINET	Negative pressure plenum surrounds contaminated positive pressure plenum; no fabric bags are used.  Dual, long-life ULPA filters for supply and exhaust (per
	IEST-RP-CC001.3) with 99.999% efficiency for particle
	size between 0.1 to 0.3 microns.
	<ul> <li>Angled supply filter matches cabinet profile to achieve best down flow uniformity.</li> </ul>
	<ul> <li>Quick start mode, to turn the blower and lights on/off, by moving the sash window to correct position.</li> </ul>
	• Frameless sash that is easier to clean.
	<ul> <li>Ergonomically angled front</li> <li>Actual work access height is 45 mm (1.8") higher than tested sash opening.</li> </ul>
	<ul> <li>Raised airflow grille maintains safety by preventing blockage.</li> </ul>
	<ul> <li>Enhanced side-capture zones optimize containment.</li> <li>Work area is 0.9 meter (3") cabinet is equivalent to work area offered on larger 1.2 meter (4") conventional cabinet.</li> </ul>
COLONY COUNTER	Glare-free Darkfield illumination for sharp contrast
	Light spreads uniformly on the counting plate for easily distinguishing colonies
	<ul> <li>Adjustable culture dish holder for accommodating small culture dishes</li> </ul>
	Adjustable rod for easy focusing
	<ul> <li>Lens rotates for easy loading of culture dishes</li> </ul>
	<ul> <li>Built-in tilt leg for height/angle adjustment</li> </ul>
	<ul> <li>Optional 1.5X auxiliary magnifying lens for up to 3X magnification</li> </ul>
DIGITAL TOP LOADING BALANCE	Weighing Capacity: 6kg     Seels Types Bresision
	<ul><li>Scale Type: Precision</li><li>Resolution: 0.1 g</li></ul>
	Weigh pan Diameter: 150mm
	Net Weight: 0.75kg
	Maximum Operating Temperature: +35 °C
	Minimum Operating Temperature: +5 °C
HOT AIR OVEN STERILIZER	Capacity: 115L
	• Temperature Range: +5 to +300 °C
	Controller with LCD Display
	• 645 mm x 834 mm x 702 mm



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	<ul> <li>Electromechanical control of the exhaust air flap</li> <li>2 chrome-plated racks</li> <li>Stackable</li> <li>Class 2 integrated independent adjustable temperature safety device (DIN 12880) with visual alarm</li> <li>Ergonomic handle design</li> <li>USB port for recording data</li> </ul>
HOTPLATE WITH MAGNETIC STIRRER	<ul> <li>Stirring Capacity: 2L</li> <li>Stirring Speed: 60-1500 RPM</li> <li>Electronic Solid State Controller</li> <li>Ceramic coated stainless steel top plate</li> <li>Plate Dimension: 180 180 mm</li> <li>Overall Dimension: 205 x 260 x 110 mm</li> <li>Power consumption: Max 500 watt 3.0 amp</li> <li>Electric Supply: 110V, 60 Hz or 220V, 50/60 Hz</li> </ul>
INCUBATOR	<ul> <li>Temperature range: +5 °C above ambient temperature to +100 °C</li> <li>240-260L Capacity</li> <li>Natural convection</li> <li>Controller with LCD Display</li> <li>Electromechanical control of the exhaust air flap</li> <li>Inner door made of tempered safety glass</li> <li>2 chrome-plated racks</li> <li>Stackable</li> <li>Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm</li> <li>Ergonomic handle design</li> <li>USB port for recording data</li> </ul>
WATER BATH	<ul> <li>With stainless steel casing</li> <li>Volume: 45L</li> <li>Liquid Level Min.: 177 mm</li> <li>Liquid Level Max.: 200 mm</li> <li>Setting temperature range: +10 - 95°C and boiling range</li> <li>With integrated digital timer</li> <li>Interior Dimensions W x H x D in mm: w(A) x h(C) x d(B): 590 x 220 x 350 mm</li> <li>Voltage 230 V, 50/60 Hz</li> <li>Electrical Load approx. 2800 W *(during heating)</li> <li>Temperature sensor: 1 Pt100 sensor class A in 4-wire-circuit</li> </ul>



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- Timer integrated digital timer from 1 min. to 99,59 hours for: ON continuous operation WAIT (delayed on for continuous and limited timed operation (HOLD)
- Heating Baths: corrosion-proof large-area heating on three sides
- Ambient temperature +5 °C to + 40 °C
- Humidity rh max. 80%, non-condensing

## 3. SPECIAL PROVISION

- a. The supplier shall provide warranty period and shall commence from the date of final acceptance and installation of the unit.
- b. The supplier shall provide for the needed AVR for the Biological Safety Cabinet.
- c. The unit shall be supplied, delivered, installed and tested to the designated area of the laboratory within the period of thirty (30) calendar days from receipt of Purchase Order (PO).

TECHNICAL WORKING GROUP FOR LABORATORY EQUIPMENT AND INSTRUMENTS

MA. RITA B. BARRIESES, RMT

TWG - Member

TWG-Head

Recommending Approval:

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