



Republic of the Philippines  
**CAVITE STATE UNIVERSITY**  
**Don Severino de las Alas Campus**  
 Indang, Cavite  
 (046) 415-0010  
 cvsu.edu.ph

**NATIONAL COFFEE RESEARCH, DEVELOPMENT AND EXTENSION CENTER**

**SUPPLY, DELIVERY, AND INSTALLATION OF VARIOUS EQUIPMENT FOR THE NCRDEC  
 PRODUCT DEVELOPMENT FACILITY**

**ABC: Php 4,320,000.00**

<b>Item No.</b>	<b>Qty./ Unit</b>	<b>Item Description</b>	<b>Specifications</b>	<b>Function</b>	<b>Unit Price (Php)</b>	<b>Total Price (Php)</b>
1	1 unit	Vertical Roasting Machine with Microcontroller	<ul style="list-style-type: none"> <li>• 5-10 kg/ batch roasting capacity</li> <li>• 220V single phase, automatic,</li> <li>• vertical roasting type,</li> <li>• food-grade stainless steel material</li> <li>• Heat type: gas</li> </ul>	For batch/ bulk roasting of green coffee beans.	600,000.00	600,000.00
2	1 unit	Laboratory Roaster	<ul style="list-style-type: none"> <li>• 2 horizontal drum design</li> <li>• 80-100 grams capacity per drum</li> <li>• Heat type: electric</li> <li>• 220V, 50/60hz, 1.0KW</li> </ul>	For roasting of coffee samples for cupping and sensory analysis.	160,000.00	160,000.00
3	1 unit	Coffee grinder	<ul style="list-style-type: none"> <li>• Average grinding capacity: 1400 g/min</li> <li>• Voltage: 220V</li> <li>• Frequency: 50/60 Hz</li> <li>• Single-phase</li> <li>• Burr material: Stainless Steel</li> <li>• Heavy Duty</li> <li>• Commercial Scale</li> </ul>	For grinding of roasted coffee beans.	100,000.00	100,000.00
4	1 unit	Coffee Roast Color Analyzer	<ul style="list-style-type: none"> <li>• Analytical Methodology: Near Infrared (NIR)</li> <li>• Can measure a very light to a very dark degree of roast (whole beans and grind beans)</li> <li>• *Follow SCA Agtron scale: Gourmet (0-150); Commercial (0-100)</li> </ul>	For color analysis (light, medium, dark, very dark) of roasted coffee beans.	700,000.00	700,000.00

			<ul style="list-style-type: none"> <li>• Display: Digital LCD/ LED</li> <li>• Power supply: 220V</li> <li>• Frequency: 50/60 Hz</li> <li>• Heavy duty</li> <li>• At least 99% accuracy</li> <li>• Equipped with self-calibration tool</li> </ul> <p><i>Note: *Specialty Coffee Association (SCA) Agtron Scale is the standard measurement used to determine the roast color/ degree of coffee</i></p>			
5	1 unit	Electronic nose	<ul style="list-style-type: none"> <li>• Analysis Time: 10-60 seconds</li> <li>• Precision and Accuracy: Standard deviation (SD) of at least less than 2%</li> <li>• Sensitivity: Can analyze vapors in at least 10 seconds with sensitivity in parts-per-billion for many compounds</li> <li>• Operating temperature range: 0-45 degrees Celsius</li> <li>• Portable with rechargeable battery pack</li> <li>• Charger Power: 220V, 50/60 Hz</li> </ul>	Device for measuring the sensorial properties of the developed products (aroma).	800,000.00	800,000.00
6	1 unit	Electronic tongue	<ul style="list-style-type: none"> <li>• Can analyze liquid products or solids dissolved in a liquid</li> <li>• Fully automated sensor analysis procedure</li> <li>• Can detect taste profiles/ characteristics such as saltiness, sweetness, sourness, acidic bitterness, bitterness aftertaste</li> <li>• Analysis run: at least 3 minutes/ measurement</li> <li>• Power supply: 220V</li> </ul>	Device for measuring the taste profile of the product to be developed.	800,000.00	800,000.00

			<ul style="list-style-type: none"> <li>Operating conditions: 15 to 25°C ±3°C</li> </ul>			
7	1 unit	Coffee Aroma Kit	<ul style="list-style-type: none"> <li>Kit of 44 coffee aromas in glass vials</li> <li>44 aromas (11 categories): Herb &amp; Flower / Citrus &amp; others / Tropical Fruit / Stone Fruit / Berry-like / Cereal &amp; Nut / Caramel &amp; Chocolate / Spice / Vegetable / Savory / Defects</li> <li>With 44 aroma cards</li> </ul>	To be used for coffee cupping.	40,000.00	40,000.00
8	1 unit	Bath Pasteurizer	<ul style="list-style-type: none"> <li>Nominal output: 100 bottles (1L bottle) per hour</li> <li>Filling contents: 50 bottles (1L bottle)</li> <li>Basin size: 0.65m (length), 0.60m (width), and 0.34m (height)</li> <li>Power supply: 220V</li> </ul>	For the pasteurization of bottled products.	300,000.00	300,000.00
9	1 unit	Refrigerator	<ul style="list-style-type: none"> <li>20 cubic ft.</li> <li>Two-door, side-by-side</li> <li>Inverter technology</li> <li>No frost</li> <li>Power supply: 220V</li> </ul>	Needed to prolong the shelf life of raw materials (i.e. milk).	50,000.00	50,000.00
10	1 unit	Autoclave	<ul style="list-style-type: none"> <li>Vertical</li> <li>At least 20L capacity</li> <li>Power supply: 220V</li> <li>Temperature: 105-130 degrees Celsius</li> </ul>	For the sterilization of laboratory glasswares and glass containers.	70,000.00	70,000.00
11	1 unit	Tea Bag Packaging Machine	<ul style="list-style-type: none"> <li>Automatic, multi-function tea bag packaging with outer envelope, thread, and tag)</li> <li>Filling range: 3-15 mL</li> <li>Packing speed: at least 40-60 bags per minute</li> <li>Power supply: 220V, 50 Hz</li> <li>Dimension: at least 1.25m (length),</li> </ul>	For the packaging of the products developed.	700,000.00	700,000.00


			0.70m (width), and 1.80m (height)			
--	--	--	--------------------------------------	--	--	--


\* With presentation/ demo (on-site/ virtual) before acceptance, and user's training prior to final acceptance of the product. Must have at least one year of calibration and preventive maintenance services and at least a two-year warranty on parts and services

Prepared by:

  
**GERRY M. CASTILLO**  
End-User

Noted/Certified Correct:

  
**LANI S. RODIS**  
TWG Member, Medical, Dental, and Laboratory Equipment

  
**RENE B. BETONIO**  
TWG Chair, Medical, Dental, and Laboratory Equipment