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NOTICE OF  
BID BULLETIN  
MODIFICATION ON ITEM DESCRIPTION

**TO :** TO ALL PROSPECTIVE BIDDERS  
**FROM :** THE BAC Chairperson  
**SUBJECT :** Modification of Item Description in all the attached/associated documents in the Invitation to Bid (ITB), Abstract of Quotation and Technical Specifications  
**DATE :** February 18, 2020  
**ADDENDUM NO. :** 2020-01

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Please be informed that this Bid Bulletin is issued to inform all prospective bidders for the Modification of Item Description in all the attached/associated documents in the Invitation to Bid (ITB), Abstract of Quotation and Technical Specifications. Please take notice about this change: Solicitation No. RSU-2020-004.

Be advised that this addendum is issued to modify or amend the Item Description in all the attached/associated documents in the Invitation to Bid (ITB), Abstract of Quotation and Technical Specifications. This shall form an integral part of the Bid Documents.

Please refer to the attached Bid Bulletin.

For guidance and information of all concerned.

Yours,

A handwritten signature in blue ink, appearing to read "Mario A. Fetalver, Jr.", written over a horizontal line.

Prof. MARIO A. FETALVER, Jr., Ph. D.  
BAC Chairperson



## PROCUREMENT OF LABORATORY EQUIPMENT

**SOLICITATION Number:** RSU-2020-004

**ABC:** PhP2,000,000.00

**QTY:** 6

**FROM**

**TO**

### PROCUREMENT OF LABORATORY EQUIPMENT

**ABC:** PhP2,000,000.00

### PROCUREMENT OF LABORATORY EQUIPMENT

**ABC:** PhP2,000,000.00

Unit	Item Description	QTY
unit	<p><u>TOP (Universal Testing Machine to test the NPK, organic matter, salinity and pH)</u>            Technical Parameters:            Measurement range and resolution:0.001 ~ 9999            Stability: less than 0.003 within three minutes' drift            Linear error:less than 0.003            Repeatability error:less than 0.005            sensitivity:red light <math>\geq 4.5 \times 10^{-5}</math>;                              blue light <math>\geq 3.17 \times 10^{-3}</math>;                              <u>green light <math>\geq 2.35 \times 10^{-3}</math>;</u>                              <u>orange light <math>\geq 2.13 \times 10^{-3}</math>.</u>            Wavelength range:red light: <math>680 \pm 2</math> nm;                                              blue light : <math>420 \pm 2</math>nm                                              <u>green light : <math>510 \pm 2</math>nm</u>                                              <u>orange light : <math>590 \pm 2</math>nm.</u>            The technical parameters of PH value (pH) measurement:            A. test range: 1 ~ 14 B. error: <math>\pm 0.1</math>            Power supply of the tester: A. AC: 180V ~ 240V, 50Hz; B. DC: 12V, 5W (car)            NPK combined extraction: takes 3 minutes to complete the leaching of soil nitrogen, phosphorus and potassium at the same time.            Test speed:measure a soil sample (N, P, K) <math>\leq</math> 30 minutes, and measure 5 soil samples <math>\leq</math> 50 minutes            Shock resistance:qualified</p>	1
unit	<p>Trinocular Digital Biological Microscope            Compound Microscope            4/10/40/100; WF 10x18; LED with ODC 152            Microscope camera; 5MP CMOS1/2.5", Color</p>	2
unit	<p>UV - VIS Spectrophotometer (Double Beam)            Wavelength range : 190 to 1,100 nm            Spectral bandwidth : 1 nm (190 to 1,100 nm)            Wavelength display : 0.1nm increments            Wavelength setting : 0.1nm increments            Wavelength accuracy : <math>\pm 0.1</math> nm at D2 peak 656.1 nm,                                              <math>\pm 0.3</math> nm for entire range            Wavelength repeatability : <math>\pm 0.1</math> nm            Wavelength slew rate : About 14,500 nm/min            Wavelength scanning speed : 3,000 to 2 nm/min (29,000 nm/min when survey scanning)            Lamp interchange wavelength : Automatic interchange linked to wavelength; The interchange wavelength can be set freely in The range of 295 to 364 nm (0.1 increments).            Stray light : Less than 0.02% at 220 nm (NaI); Less than 0.02% at 340 nm (NaNO<sub>2</sub>); Less than .5% at 198 nm (KCl)            Photometric system : Double beam optics            Photometric mode: Single-wavelength measurement; 1. Photometric modes: T% or Abs            2. Quantitation using K-factor method 3. Data table storage and recall functions Multiple-wavelength measurement            Photometric range: 1. Photometric modes: T% or ABS 2. Measurements at up to eight designated wavelengths (set in 0.1 mm increments)            : Absorbance: -4 to 4 Abs            Transmittance: 0% to 400%</p>	1

Unit	Item Description	QTY
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	<p>Photometric accuracy : <math>\pm 0.002</math> Abs at 0.5 Abs; <math>\pm 0.004</math> Abs at 1.0 Abs; <math>\pm 0.006</math> Abs at 2.0 Abs (measured using NIST930D/NIST1930 or equivalent)            Photometric repeatability : Less than <math>\pm 0.0002</math> Abs at 0.5 Abs; Less than <math>\pm 0.0002</math> Abs at 1 Abs; Less than <math>\pm 0.001</math> Abs at 2 Abs</p> <p>Multi-component quantitation mode : 1. Up to eight components quantified at once; 2. A mixture, as well as pure components, can be used as a standard; 3. Data on standards samples can be stored, in addition to measurement wavelengths; 4. Quantitation of recalled spectrum data.            Baseline stability : Less than 0.0003 Abs/Hr (700 nm, one hour after light source turned ON)            Baseline flatness : Less than <math>\pm 0.0006</math> Abs (1,100 to 190 nm one hour after light source turned ON)            Noise Level : Less than 0.00005 Abs (700 nm)            Light source : 20-W halogen lamp and deuterium lamp Built-in light source auto position adjustment            Monochromator : LO-RAY-LIGH grade blazed holographic grating in Czerny-Turner Mounting            Detector : Silicon photodiode            Sample compartment : Internal dimensions: 110 (W) x 250 (D) x 115 (H) Distance between light beams : 100 mm            Environmental requirements : Temperature: 15°C to 35°C Humidity: 30% - 80% (without condensation; 70% max. at 30°C or higher)            Dimensions : 450 W x 501D x 244 H; 16.6 kg            PC compatibility: Provided with UVProbe software. External control via USB.            Accessories: Quartz cuvette; complete PC system and printer and AVR compatible with the system</p>			<p>Photometric accuracy : <math>\pm 0.002</math> Abs at 0.5 Abs; <math>\pm 0.004</math> Abs at 1.0 Abs; <math>\pm 0.006</math> Abs at 2.0 Abs (measured using NIST930D/NIST1930 or equivalent)            Photometric repeatability : Less than <math>\pm 0.0002</math> Abs at 0.5 Abs; Less than <math>\pm 0.0002</math> Abs at 1 Abs; Less than <math>\pm 0.001</math> Abs at 2 Abs</p> <p>Multi-component quantitation mode : 1. Up to eight components quantified at once; 2. A mixture, as well as pure components, can be used as a standard; 3. Data on standards samples can be stored, in addition to measurement wavelengths; 4. Quantitation of recalled spectrum data.            Baseline stability : Less than 0.0003 Abs/Hr (700 nm, one hour after light source turned ON)            Baseline flatness : Less than <math>\pm 0.0006</math> Abs (1,100 to 190 nm one hour after light source turned ON)            Noise Level : Less than 0.00005 Abs (700 nm)            Light source : 20-W halogen lamp and deuterium lamp Built-in light source auto position adjustment            Monochromator : LO-RAY-LIGH grade blazed holographic grating in Czerny-Turner Mounting            Detector : Silicon photodiode            Sample compartment : Internal dimensions: 110 (W) x 250 (D) x 115 (H) Distance between light beams : 100 mm            Environmental requirements : Temperature: 15°C to 35°C Humidity: 30% - 80% (without condensation; 70% max. at 30°C or higher)            Dimensions : 450 W x 501D x 244 H; 16.6 kg            PC compatibility: Provided with UVProbe software. External control via USB.            Accessories: Quartz cuvette; complete PC system and printer and AVR compatible with the system</p>			
unit	<p>Vertical Autoclaves for Life Sciences            160 L chamber            Liquid sterilization with various cooling options            Chamber Dimensions: 380 x 690            Chamber Volume: 85L            External Dimensions: WxHxD (mm) 730 x 1000 x 540            With a safety devise and independent flexible PT100 temperature sensors to prevent over-boiling of liquids and explosions of bottles</p>	1	unit	<p>Vertical Autoclaves for Life Sciences            160 L chamber            Liquid sterilization with various cooling options            Chamber Dimensions: 380 x 690            Chamber Volume: 85L            External Dimensions: WxHxD (mm) 730 x 1000 x 540            With a safety devise and independent flexible PT100 temperature sensors to prevent over-boiling of liquids and explosions of bottles</p>	1		
set	<p>Veterinary Wristcan Ultrasound Scanner Machine Handscan for Farm Animals            Dust-proof and water-proof; Small size, light weight, handheld; Rubber protector around scanner; Rechargeable battery; Both battery and AC powered            Probe: 3.5MHz Mecahnical sector probe            Detect Depth (mm): <math>\geq 140</math>; <math>\leq 4</math> (Depth <math>\leq 130</math>)            Resolution - Lateral: <math>\leq 5(80 &lt; \text{Depth} \leq 130)</math>; Axial <math>\leq 2(\text{Depth} \leq 80)</math>            Blind zone (mm): <math>\leq 8</math>;            Geometric position precision: Horizontal <math>\leq 20</math>; Vertical <math>\leq 10</math>            Image gray scale: 256            Scan Depth (mm): 120~190,8 leavels adjustable            Includes neck belts</p>	1	set	<p>Veterinary Wristcan Ultrasound Scanner Machine Handscan for Farm Animals            Dust-proof and water-proof; Small size, light weight, handheld; Rubber protector around scanner; Rechargeable battery; Both battery and AC powered            Probe: 3.5MHz Mecahnical sector probe            Detect Depth (mm): <math>\geq 140</math>; <math>\leq 4</math> (Depth <math>\leq 130</math>)            Resolution - Lateral: <math>\leq 5(80 &lt; \text{Depth} \leq 130)</math>; Axial <math>\leq 2(\text{Depth} \leq 80)</math>            Blind zone (mm): <math>\leq 8</math>;            Geometric position precision: Horizontal <math>\leq 20</math>; Vertical <math>\leq 10</math>            Image gray scale: 256            Scan Depth (mm): 120~190,8 leavels adjustable            Includes neck belts</p>	1		
<b>TOTAL</b>		<b>QTY</b>	<b>6</b>	<b>TOTAL</b>		<b>QTY</b>	<b>6</b>