



TECHNICAL SPECIFICATIONS
SOLICITATION Number RSU-2020-004
ABC: PhP2,000,000.00
QTY: 6

PROCUREMENT OF LABORATORY EQUIPMENT

ITEMS	SPECIFICATION	STATEMENT OF COMPLIANCE
unit	<p>TOP (Universal Testing Machine to test the NPK, organic matter, salinity and pH)</p> <p>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 $\geq 4.5 \times 10^{-5}$; blue light $\geq 3.17 \times 10^{-3}$; green light $\geq 2.35 \times 10^{-3}$; orange light $\geq 2.13 \times 10^{-3}$. Wavelength range:red light: 680 ± 2 nm; blue light : 420 ± 2nm green light : 510 ± 2nm orange light : 590 ± 2nm. The technical parameters of PH value (pH) measurement: A. test range: 1 ~ 14 B. error: ± 0.1 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) \leq 30 minutes, and measure 5 soil samples \leq 50 minutes Shock resistance:qualified</p>	



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>	
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 : ± 0.1 nm at D2 peak 656.1 nm, ± 0.3 nm for entire range Wavelength repeatability : ± 0.1 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 (NaNO₂); 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 nm increments) : Absorbance: -4 to 4 Abs Transmittance: 0% to 400% Photometric accuracy : ± 0.002 Abs at 0.5 Abs; ± 0.004 Abs at 1.0 Abs; ± 0.006 Abs at 2.0 Abs (measured using NIST930D/NIST1930 or equivalent) Photometric repeatability : Less than ± 0.0002 Abs at 0.5 Abs; Less than ± 0.0002 Abs at 1 Abs; Less than ± 0.001 Abs at 2 Abs 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 ± 0.0006 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</p>	



	<p>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 sotware. 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>	
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; Recharbeable battery; Both battery and AC powered Probe: 3.5MHz Mecahnical sector probe Detect Depth (mm): ≥ 140; ≤ 4 (Depth ≤ 130) Resolution - Lateral: $\leq 5(80 < \text{Depth} \leq 130)$; Axial $\leq 2(\text{Depth} \leq 80)$ Blind zone (mm): ≤ 8; Geometric position precision: Horizontal ≤ 20; Vertical ≤ 10 Image gray scale: 256 Scan Depth (mm): 120~190,8 leavels adjustable Includes neck belts</p>	