



BIDS AND AWARDS COMMITTEE FOR GOODS, SUPPLIES, AND SERVICES

October 4, 2018

BID BULLETIN NO. 2 Modifications in the Schedule of Requirements and Technical Specifications

This Bid Bulletin is issued to modify or amend items in the Bidding Documents for the
“Supply and Delivery of Laboratory Equipment for BulSU Analytical Testing Laboratory”
with Reference No. G-2018-22, and shall form an integral part thereof, to wit:

I. Schedule of Requirements

No.	FROM	TO
1	ANALYTICAL BALANCE Specifications: Weighing Capacity: 220g Display: Colored Touchscreen Levelling: Manual Repeatability: 0.1 mg Linearity: 0.3 mg Typical Stabilization time: 2 s Pan Size: 90 mm Weighing Chamber Height: 209 mm Weight (approx.): 4.5 kg Dimension: (W x D x H): 216 x 360 x 320 mm 1year warranty of parts and service	ANALYTICAL BALANCE Specifications: Weighing Capacity: 220g Display: Colored Touchscreen Levelling: Manual Repeatability: 0.1 mg Linearity: 0.3 mg Typical Stabilization time: 2 s Pan Size: 90 mm Weighing Chamber Height: 209 mm Weight (approx.): 4.5 kg Dimension: (W x D x H): 216 x 360 x 320 mm <u>Calibration Test Weight – 200g (E2 class)</u> <u>External Calibration</u> 1year warranty of parts and service
2	PH Meter (Bench Top) with Buffer Solution (4.0, 7.0 and 10) and Calibration Certificate Specifications: pH measurements Range: 2.0 to + 20.0/ 2.00 to + 20.00/ 2.000 to + 19.999 Readability: 0.1/ 0.01/ 0.001 Accuracy: ± 0.1 Accuracy: ± 0.1 mV measurements	PH Meter (Bench Top) with Buffer Solution (4.0, 7.0 and 10) and Calibration Certificate Specifications: pH measurements Range: 2.0 to + 20.0/ 2.00 to + 20.00/ 2.000 to + 19.999 Readability: 0.1/ 0.01/ 0.001 Accuracy: ± 0.1 Accuracy: ± 0.1 mV measurements

	<p>Range: 1200.0 to + 1200.0/ 2000 to + 2000 Readability: 0.1 / 1 Accuracy: $\pm 0.3 / \pm 1$ Accuracy: ± 1 digit Channels: 1</p> <p>Connector Type: 2.5 mm phone jack for 10k Design and Quality Display Type: LCD Display Size: 75 x 60 Dimensions: (W x H x D mm) :190 x 90 x 240</p> <p>1year warranty of parts and service</p>	<p>Range: 1200.0 to + 1200.0/ 2000 to + 2000 Readability: 0.1 / 1 Accuracy: $\pm 0.3 / \pm 1$ Accuracy: ± 1 digit Channels: 1</p> <p>Connector Type: 2.5 mm phone jack <u>or BNC Connector or DIN Connector</u> for 10k Design and Quality Display Type: LCD Display Size: 75 x 60 Dimensions: (W x H x D mm) :190 x 90 x 240</p> <p>1year warranty of parts and service</p>
3	<p>Orbital Shaker</p> <p>Specifications:</p> <p>Type of Movement: Orbital Shaker diameter (mm): 10 Permissible shaking weight (Inc. attachment) (kg):7.5 Motor Rating Input (W): 45 Motor Rating output (W): 10 Permissible ON time (%): 100 Speed min (adjustable) (rpm): 50 Speed Range (rpm): 0-500 Speed display : LED Line Timer: YES Timer Display: LED Line Time Setting range (min): 5-50 Operating mode: timer and continuous operation Shaking table lock: no Dimensions (W x H x D) (mm): 360 x 98 x 420 Weight (kg) : 8.5 Permissible ambient temperature °C 50-50 Permissible relative humidity (%): 80 Analogy output: yes Voltage (V): 220-240 / 100-120 Frequency (Hz): 50 / 60 Power input (W): 45</p> <p>1year warranty of parts and service</p>	<p>Orbital Shaker</p> <p>Specifications:</p> <p>Type of Movement: Orbital Shaker diameter (mm): 10 Permissible shaking weight (Inc. attachment) (kg):7.5 Motor Rating Input (W): 45 Motor Rating output (W): 10 Permissible ON time (%): 100 Speed min (adjustable) (rpm): 50 Speed Range (rpm): 0-500 Speed display : LED Line Timer: YES Timer Display: LED Line Time Setting range (min): 5-50 Operating mode: timer and continuous operation Shaking table lock: no Dimensions (W x H x D) (mm): 360 x 98 x 420 Weight (kg) : 8.5 Permissible ambient temperature °C 50-50 Permissible relative humidity (%): 80 Analogy output: yes Voltage (V): 220-240 / 100-120 Frequency (Hz): 50 / 60 Power input (W): 45 <u>With Accessories</u></p> <p>1year warranty of parts and service</p>

4	Ultrasonic Cleaner Includes the ffg. Parts: SS Mesh Basket and Cover Specifications: Temperature Range: 20 to 69 °C (68 to 156°F) Timer Range: 1-99 minutes Operating Frequency: 35 KHz Electrical: 117V, 60Hz Capacity: 13.8 L (3.6gal.) Tank Dimension: 33L x 30W x 15D cm (13 x 1113/16 x 529/32") 1year warranty of parts and service	Ultrasonic Cleaner Includes the ffg. Parts: SS Mesh Basket and Cover Specifications: Temperature Range: 20 to 69 °C (68 to 156°F) Timer Range: 1-99 minutes Operating Frequency: 35 KHz Electrical: 117V, 60Hz <u>with AVR</u> Capacity: 13.8 L (3.6gal.) Tank Dimension: 33L x 30W x 15D cm (13 x 1113/16 x 529/32") 1year warranty of parts and service
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II. Technical Specifications

No.	FROM	TO
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4	<p>Ultrasonic Cleaner</p> <p>Includes the ffg. Parts: SS Mesh Basket and Cover</p> <p>Specifications:</p> <p>Temperature Range: 20 to 69 °C (68 to 156°F)</p> <p>Timer Range: 1-99 minutes</p> <p>Operating Frequency: 35 Khz</p> <p>Electrical: 117V, 60Hz</p> <p>Capacity: 13.8 L (3.6gal.)</p> <p>Tank Dimension: 33L x 30W x 15D cm (13 x 1113/16 x 529/32")</p> <p>1year warranty of parts and service</p>	<p>Ultrasonic Cleaner</p> <p>Includes the ffg. Parts: SS Mesh Basket and Cover</p> <p>Specifications:</p> <p>Temperature Range: 20 to 69 °C (68 to 156°F)</p> <p>Timer Range: 1-99 minutes</p> <p>Operating Frequency: 35 Khz</p> <p>Electrical: 117V, 60Hz <u>with AVR</u></p> <p>Capacity: 13.8 L (3.6gal.)</p> <p>Tank Dimension: 33L x 30W x 15D cm (13 x 1113/16 x 529/32")</p> <p>1year warranty of parts and service</p>
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This Supplemental/ Bid Bulletin no. 2 is issued this 4th day of October, 2018 for guidance and information of all concerned.

flg: fms
DR. ROMEO DC. INASORIA
 Chairperson, Bids and Awards Committee
 Goods, Supplies, and Services