

MINUTES OF PRE BID MEETING

Tender for Supply, Delivery, Installation & Commissioning of Laboratory Equipment for Department of Export Agriculture, Faculty of Animal Science & Export Agriculture

Tender No : UWU/G/NCB/18/01

Date & Time : 30th May 2018 & 10.30 a.m.

Venue : Boardroom

The Following decisions were made at the Pre Bid Meeting

At the Pre Bids Meeting following clarification were made against the bidders' questions.

- a. Changes in specifications – Specifications of following items were changed at the Pre Bid Meeting(Refer annexure for new specification)

Item No	Description	Reference Annexure
02	Online UPS for PCR	Annexure 01
27	Hand-held portable pH meter	
28	Spice/Coffee moisture tester [Moisture Analyzer]	
29	pH meter (Portable)	

Chairman
Procurement Committee,
Uva Wellassa University

Technical Specifications

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF EQUIPMENT FOR FACULTY OF ANIMAL SCIENCE AND EXPORT AGRICULTURE UWU/G/NCB/18/01				
No	Item	Specifications	Qty	Bidders' Response
Laboratory and Teaching Equipments and Machinery for EAG labs				
1	Eye Washer and Shower	<p>Floor mounted emergency shower combination Self-draining shower head and eye wash with foot pedal</p> <ul style="list-style-type: none"> • Specification for shower <p>Shower head – ABC Stand pipe – Stainless steel (304 grade) Activation – Stainless steel pull rod operates a stay open stainless steel ball valves.</p> <ul style="list-style-type: none"> • Specification for Eye washer <p>Bowl – Stainless steel (304 grade) Eyewash head – Rubber cups Activation – Push flag operates a stay open stainless steel ball valves. Height – 2435 mm Letter of authority required from the manufacturer 2 Years warranty</p>	1	
2	Online UPS for PCR	<p>1hour back up time 230V 2 years warranty Letter of authority required from the manufacturer</p>	1	
3	Power supply unit for electrophoresis	<p>Output voltage / Inc. - 10 - 300 V / 1 V Output current / Inc. - 10 - 400 mA / 1 mA Output power - 60 W Output type - Constant voltage or constant current Control - Microprocessor controller Terminal pairs - 2 Pairs Timer - 999 (min) with alarm / Continuous Safety device - No-load detection; shrouded plugs and sockets Operation temperature - 4 to 40 °C Material - Polycarbonate housing and aluminum base plates Weight - Approx. 2.2 lb (1kg) Rated voltage - Universal, 100 - 240 V 2 Years warranty Letter of authority required from the manufacturer</p>	3	
4	Gel documentation unit	<p>Should be operate on 230 ±10V,50Hz Single phase power supply. Should have an high resolution of 5.0 Megapixel or better digital camera. The built-in camera should be a scientific grade digital cameral for capturing high resolution gel images. The camera should be able to pre-focused offer trouble free operation (no adjustment needed) Should have built in 312nm UV illuminator source for a safe operation and Blue LED light source should be available as a replacement. Multi-image file saving selection of BMP, TIFF, JPEG and PNG Camera lens should be Pre-focused The unit should include Built-in pullout UV trans illuminator for ease of use and gel cutting The unit should include Wireless Connection preferable through WiFi connection to PC/ Android Tablet. (wireless connection) 2 Years warranty Letter of authority required from the manufacturer</p>	1	

5	Fume hood	<p>Fume hood should be high chemical resistant Polypropylene and one piece welded structure Exterior dimensions (WxDxH) approximately 1800 x 800 x 2300 mm Work space dimensions (WxDxH) approximately 1600x600x1100 mm User-friendly digital control system including fan speed control, and displays for air pressure, signal light, operation time and alarms Easy filter replacement, including the active carbon filter Worktop should be built in ceramic work top Exterior – Welded white polypropylene structure with enhanced thermal characteristics Front Sash Opening-720 mm or higher Wind speed at 0.5+0.1 m/s, 100±FPM Standard compliance to EN-14175 / ASHRAE 110-1995 Should have fluorescent lamp with safety cover Noise level should be less than 52dB Should have power outlet, water European, American brand or Equality Letter of authority required from the manufacturer Including a pump and ducting for 3 storied building 3 Years comprehensive warranty</p>	1	
6	Ice flake maker	<p>Structure should be completely realized in stainless steel [AISI 304]. Inside, the structure it includes a bin, realized in atoxic plastic material, The bin is also insulated, to avoid the melting of the ice stored Feet: made in plastic material Door: in the front part of the appliance is located the door plastic made that closes the storage bin Kind of ice : flake Production : 90 (kg/24h) Bin capacity : 20 (kg) Cooling unit : bottom mounted, with the condensing unit compounded by 1 hermetic compressor and 1 finned condenser Refrigerant : R404a CFC-free Voltage : 220-230 V/ 50 Hz Noise level (dB(A)) : ≤ 50 Letter of authority required from the manufacturer 3 Years comprehensive warranty</p>	1	
7	Micro-Vial Homogenizer	<p>Software: Microcontroller: Arm Processor, Memory: 64 MB, Programming: Field Alterable Flash Interface: Touch Screen Interface Screen Size: 151.5 mm x 85.5 mm Controls: Programmable Settings for Speed, Adapter, Time, Matrix, Quantity, Cycle, Pause Time Custom Assays: 12 Programmable Assay Locations Pre-Defined Assays: 73 Recommended Programs Time Range: 1 to 120 Seconds in 1 second increments Speed Range: 4 to 10 m/sec in 0.5 m/ sec increments Cycles: 1 to 9 Cycles Adapter(s): Standard 24 x 2 mL Pause Time: 1 to 300 Second Pause Between Cycles Acceleration: < 2 seconds to maximum speed Deceleration: <2 seconds to stop Dimensions: Height: 490 mm Base: 472 mm x 385 mm (Elliptic Shape) Weight: 23 kg Power Requirement: 230 VAC/50 Hz, 3A Operating Air Temperature: 2 to 48 °C Relative Humidity: 30 to 55% Maximum Noise: <70 dB Letter of authority required from the manufacturer 3 Years warranty</p>	1	

8	Clicker Press	<ul style="list-style-type: none"> • Hand operated/Manual • Cutting Pressure: Up to 2-4 tons • Maximum Cutting Thickness: 10 mm • Cutting Board: Poly Propylene/Steel • Cutting Board Size: 10"-12" x 9"-10" • Bench top operation with easy handling • Handle Height: 30"-32" • Press Weight: 80-100 lbs • Height Adjustment: Infinite within its range • Ability to fit sample dies of Tensile and Tear tests • 3 Years comprehensive warranty 	1	
9	Compression set apparatus	<p>Consist of compression plates, steel spacers and clamping device</p> <p>Compression plates</p> <ul style="list-style-type: none"> • Parallel and flat • Highly polished • Stainless steel • Between the faces of plates rubber sample would be compressed • No compression plate should bend by more than 0.01 mm at the compression • Diameter of top and bottom steel plate is 115 mm • Thickness of top and bottom steel plate is 12.5 mm • Thickness of middle plates is 6.5 mm • Mild steel spacers to provide required compression <p>Spacer dimensions</p> <ul style="list-style-type: none"> • 9.4 mm (max) thickness and 9.3 mm (min) thickness for test piece type A • 4.8 mm (max) thickness and 4.7 mm (min) thickness for test piece type B <p>For hard rubbers</p> <p>Spacer dimensions</p> <ul style="list-style-type: none"> • 10.7 mm (max) thickness and 10.6 mm (min) thickness for test piece type A • 5.4 mm (max) thickness and 5.3 mm (min) thickness for test piece type B <p>For rubbers having very high hardness</p> <p>Spacer dimensions</p> <ul style="list-style-type: none"> • 11.3 mm (max) thickness and 11.2 mm (min) thickness for test piece type A • 5.70 mm (max) thickness and 5.65 mm (min) thickness for test piece type B <p>All these spacers are required</p> <ul style="list-style-type: none"> • Clamping device is required • When tested at elevated temperature the results would be accurate 99 % • 3 Years comprehensive warranty 	1	
Gear Type Models (Mechanical Demonstration Model)				
10	Spur	<p>All the items should have same specification as mentioned below.</p> <ul style="list-style-type: none"> • Size - not more than one feet height • manually operated with a handle (Hand crank) • material - plastic gears • Cover with transparent material 	1	
11	Helical		1	
12	Bevel (sprial)		1	
13	Bevel (stright)		1	
14	Planatery		1	
15	Pinion		1	
16	Internal Gear and Pinion Drive		1	
17	Worm Gear Drive		1	
18	Herringbone gear		1	
19	Hypoid gear		1	
Mechanical drive systems (working models)				
20	Chain Drive with Tensioner	<ul style="list-style-type: none"> • Size - not more than one feet height • manually operated with a handle (Hand crank) • material - plastic gears • Cover with transparent material 	1	
21	Manual Transmission Gearbox	<ul style="list-style-type: none"> • 3 Speed or more speed forward • Reverse • manually operated with a handle (Hand crank) • lever to change the gear 	1	

22	Belt drive	<ul style="list-style-type: none"> • Size - not more than one feet high • manually operated with a handle (Hand crank) • material - plastic gears • Cover with transparent material • 2 pulleys or more pulleys • belt - v belt or flat belt 	1	
Engine cut models for demonstration (working models)				
23	2 stroke Diesel Engine cut model Model	<p>All the items in No 3 have common specifications</p> <ul style="list-style-type: none"> • mounted on base • bench top • manually operated with a handle (Hand crank) • components need to be labeled • working model with moveable parts • height - not more than 20 inches • material - cast alloys and abs plastic • corrosion protection 	1	
24	4 Stroke Diesel Engine cut Model		1	
25	2 Stroke Gasoline Engine cut Model		1	
26	4 Stroke Gasoline Engine cut Model		1	
27	Hand-held portable pH meter	<p>pH Range :- 0.00 to 14.00 pH Resolution & Accuracy :- 0.01 pH & ± 0.01 pH Temperature Range :- 0 to 100.0 °C Resolution & Accuracy :- 0.1 °C & ± 0.5 °C mV Range :-1000 to + 1000 mV Resolution & Accuracy 1 mV & ± 1 mV Temperature Compensation :- Automatic / Manual (0 to 100 °C)No. of Calibration Points :- Up to 5 points (one, two, or three points with automatic recognition of five standard buffers (pH 4.01, 6.86, 7.01, 9.18, 10.01)) pH Buffer Options :- 1.68, 4.01, 7.00, 10.01, 12 .45 (USA) 1.68, 4.01, 6.86, 9.18, 12.45 (NIST) 4.10, 6.97 (Pb) Special Functions :- Auto Power-Off Hold & Self-diagnostic messages Power :- 4 'AAA' x 1.4V batteries Manufacturer authorization Letter warranty</p>	1	
28	Spice/Coffee moisture tester [Moisture Analyzer]	<ul style="list-style-type: none"> • Backlit graphic display, digit height 14 mm, digit height 14 mm <ul style="list-style-type: none"> o Display during the drying process: o Unit of the shown result, e.g. moisture [%] o Interim result in moisture-% o Drying process active, Active result display, Active heating profile o Active switch-off criteria, Stability display, Previous drying time o Current temperature, Drying process active, Display after the drying process, End result in moisture-%, Active result display o Infrared heater 400 W • Observation window above the sample, useful during initial setting • Balance contains memory for automatic sequence of 100 complete drying programs (92 drying programs with optimised drying characteristics for rapid sample warming and therefore shorter drying times, pre-installed at the factory), 100 users with related authorisations, 1000 drying processes performed and 1000 weighing results (alibi memory) • 100 sample plates included, Application handbook: Readout [d] g – 0.001g & weighing range [Max] g – 50g or Equivalent Reproducibility – 0.001g Moisture Range (0-100) & Temperature range (30-150°C) Heat increments 2°C/unit DAkks calibration certificate or Authorized calibration certificate Manufacturer authorization Letter 2 Years comprehensive warranty 	1	

29	pH meter (Portable)	<p>pH Range : -2.000 to 20.000 pH Resolution : 0.1 / 0.01 / 0.001 pH Accuracy : ± 0.002 pH + 1 LSD Cal. Points : Up to 6 preset or 5 custom Buffer Sets : USA, NIST, DIN, User 1, User 2, Custom ORP Range : ± 2000.0 mV Rel. mV Range : ± 2000.0 mV Resolution : 0.1 mV Accuracy : ± 0.2 mV Temperature Range (Meter) : 0.0 to 100.0 °C / 32.0 to 212.0 °F Resolution : 0.1 °C / 0.1 °F Accuracy : ± 0.3 °C / ± 0.5 °F Compensation : ATC / MTC Power requirements : By batteries and 9 V DC adapter, 1.3 A (100/240 VAC, SMPS) Manufacturer authorization Letter 2 Years comprehensive warranty</p>	3	
----	------------------------	---	---	--

