



KERALA AGRICULTURAL UNIVERSITY

College of Climate Change and Environmental Science,

Vellanikkara, Thrissur Dist. Pin:680656

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No.CCCES/1242/2024-A2 (4)

Dtd.25.02.2025

TENDER NOTICE

Sealed tenders are invited from competent firms for the supply and installation of "**Lab equipment's** " at College of Climate Change and Environmental Science with specifications as detailed below. The tender will be accepted up to 2 PM on 07.03.2025. The tenders received after the stipulated time will not be considered at any circumstances. The received tenders will be opened at 2.30 PM on the same day.

1	Soil hydrometer with hydrometer jar:	Quantity
	<p>Construction: Stainless steel tank; enamel finish exterior.</p> <p>Jar Support: Stainless steel grid.</p> <p>Temperature Range: Ambient - 60°C</p> <p>Sensitivity: $\hat{A}\pm 0.2\hat{A}^{\circ}\text{C}$ at $20\hat{A}^{\circ}\text{C}$ ($68\hat{A}^{\circ}\text{F}$).</p> <p>Circulating System: Drive pump with motor.</p> <p>Heating System: Immersion type; 700-watt heater in stainless steel mixing chamber.</p> <p>Plumbing: Overflow; Drain; Inflow and outflow for cooling system.</p> <p>Inside Dimensions: 950x 200 x400 mm</p> <p>Outside Dimensions: 1,200 x 300 x 500 mm</p>	1
2	Electrical resistance meter	1
	<p>FEATURES</p> <ul style="list-style-type: none">▪ High brightness, ultra-clear four-color VFD display, multiple parameters are displayed at the same time.▪ Comparator output: The sorting result can be output through the optional Handler interface and RS232C.▪ Adjustable sound and display: Users can set the GD/NG sound and adjust the display brightness according to their needs.▪ Shockproof sheath.▪ Built-in RS232C serial interface.	

	<ul style="list-style-type: none"> ▪ Fool-style menuless operation interface. ▪ Optional Handler interface. ▪ Optional RS485 interface. ▪ Optional 500V, 500mA pre-charging interface <p>Parameters Leakage current & insulation resistance</p> <p>Output Voltage NC 1V~1000VDC</p> <p>Accuracy <10G: 3% ≥10G: 5% ≥100 G: 10%</p> <p>Measurement Range 10k-1TΩ(104~1012 Ω)</p> <p>Display Max 9999</p> <p>Range Automatic & Manual</p> <p>Speed 55 times/s, 15 times/s, 3 times/s</p> <p>Adjustment short-circuit reset full range</p> <p>Result Display show, current, resistance, peak value, sorting results</p> <p>Charging Timer 999.9s</p> <p>Charging Current 200mA max</p> <p>Comparator 30 sets record,, GD/NG beep: GD,NG, OFF setting</p> <p>Interface RS-232C, Handler interface</p> <p>Power Supply Voltage:198VAC~240VAC Fre : 50Hz Power :max 30VA</p> <p>Dimension & Weight 264*107*350mm / 5KG</p> <p>Accessories ATL507: Test fixture ; ATL801:RS232 cable</p> <p>Other Functions VFD 4 color display, Keyboard lock, data hold function</p>	
3	Core sampler	1
	<p>Available Sizes</p> <ul style="list-style-type: none"> • Diameters: <ul style="list-style-type: none"> ○ 1 ½ inch ○ 2 inches ○ 2 ½ inches ○ 3 inches • Lengths: <ul style="list-style-type: none"> ○ 2-inch diameter: 2 to 12 inches ○ Other diameters: 6 inches and 12 inches 	

	<p>Models</p> <ol style="list-style-type: none"> 1. Stainless Model: <ul style="list-style-type: none"> ○ Body Cup: 300 series stainless steel ○ Core Tip: Hardened 400 series stainless steel ○ Threaded Cap: 300 series stainless steel 2. Standard Model: <ul style="list-style-type: none"> ○ Body Cup: Carbon steel ○ Core Tip: Heat-treated carbon steel ○ Threaded Cap: Carbon steel <p>Included Components</p> <ul style="list-style-type: none"> • Retaining cylinder • Two plastic caps • Slide hammer 							
4	Soil auger	1						
	<p>Material: Constructed from durable carbon steel for robust performance and long-lasting use.</p> <p>Core Diameter: 3 inches (7.62 cm), suitable for efficient soil sampling in various conditions.</p> <p>Fragment Capacity: Capable of handling soil fragments up to 1.25 inches in size.</p> <p>Design: Engineered for versatility, making it ideal for a wide range of soil sampling and analysis tasks.</p> <p>Application: Perfect for agricultural, environmental, and geotechnical fieldwork applications.</p> <p>Durability: Designed to withstand challenging soil conditions while maintaining reliability during field operations.</p>							
5	Weighing balance	1						
	<table border="0"> <tr> <td>Temperature Range (°C)</td> <td>15 to 25</td> </tr> <tr> <td>Display</td> <td>LCD with back light</td> </tr> <tr> <td>Power Supply</td> <td>AC 220V / 50-60 Hz</td> </tr> </table>	Temperature Range (°C)	15 to 25	Display	LCD with back light	Power Supply	AC 220V / 50-60 Hz	
Temperature Range (°C)	15 to 25							
Display	LCD with back light							
Power Supply	AC 220V / 50-60 Hz							

Dimension (Height)	355 mm
Dimension (Length)	360 mm
Dimension (Width)	260 mm
Weight	3.5 kg
Max. (Capacity)	220 g
Readability (D)	0.001 g (1 mg)
Repeatability (+/-)	0.001 g
Min. (Capacity)	1 mg
Verification Scale Intervals (e)	1 mg
Calibration	Automatic External
Class	Class 1
Response Time	3 - 4 Sec
Pan Size (mm)	90 mm Ø
Tare Range	Full
Sensitivity Drift (+/-)	2 ppm/°C
Density Measurement	Function Available
Weighing Chamber	240 x 190 x 265 mm

	Unit g, mg, ct, oz	
6	Pressure plate apparatus	1
	<p>The pressure plate apparatus should be capable of determination of pF curve 2 to 4.2 (0.1 to 15 bar) of suction. The apparatus must include the following components. i. 15 bar pressure plate extractor with provision to accommodate 3 or more pressure plates inside the extractor at a time. ii. 5 bar pressure plate extractor with provision to accommodate 3 or more pressure plates inside the extractor at a time. iii. 1 bar, 3 bar, 5 bar and 15 bar pressure plates, one each iv. Combined manifold system for running both extractors, including 0-20 bar from tank to manifold, connecting hoses of enough length (not less than 60 inches), PM Hingh, Regulator, Air compressor (230 volt). v. Complete with all essential installation kit and spare parts. vi. Soil sampling rings (48 numbers). 2. The manufacturer must certify the pressure plate apparatus to be free from defects in materials and workmanship under normal use and service for at least 3 years. 3. The manufacturer or its authorized dealers should have adequate infrastructure for service and repair of the instrument. A service guarantee certificate to this extent should be furnished. 4. Quote along with user manual and all accessories required for the successful installation, demonstration and running of the unit. 5. The apparatus is to be installed at Soil Physics Laboratory, ICAR-CRIDA premises, its satisfactory performance is to be demonstrated and personnel are to be trained on use of the apparatus. 6. User list with at least 3 users in India of the offered model or similar model must be furnished. 7. Technical documentation of the offered model should be enclosed. 8. The offered product and its technical documentation must be available on the Manufacturer's/ its Authorized dealer's website.</p>	
7	Munsell colour chart	1
	<p>Book :2024 edition</p> <p>To classify soil colors based on:</p> <ul style="list-style-type: none"> • Organic matter content. • Soil moisture. • Oxidation state of minerals. <p>The soil chart provides a series of standardized color samples organized by hue, value, and chroma for easy field reference.</p>	

Cost of Tender Forms: - 0.2% of the quoted amount rounded to the nearest multiple of 100, subject to a minimum of Rs.400/- and maximum of Rs. 1500 + GST 18%

Last date of receipt of tender : 07.03.2025 @ 02.00PM

Date and time of opening tender : 07.03.2025 @ 02.30PM

Terms and Conditions: -

1. Tender should be submitted in the prescribed forms which can be downloaded from the website www.kau.edu/tenders. The cost of the tender forms will not be refunded under any circumstances.
2. The sealed cover containing the tender should be superscribed supply and installation of "**Lab equipment's** " (along with the notification number) and addressed to the Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU.
3. Tender should be accompanied by EMD of Rs.2000/- and Tender fee @ 0.2% +GST 18% of quoted amount by way of three crossed Demand Drafts separately (1. Tender fee 2.GST on tender fee 3.EMD) drawn in favour of The Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU payable at the State Bank of India, KAU branch, Vellanikkara,.
4. Late and incomplete tenders and tenders without EMD, tender fee and agreement will not be accepted. Firms which are exempted from payment of EMD should furnish copy of the current valid certificate from the Store Purchase Department, Government of Kerala.
5. The tender should be accompanied by an agreement in Kerala Stamp Paper worth Rs. 200/- (Rupees Two Hundred only) and format can be downloaded from the above website. The successful tenderer should execute an agreement in Kerala Stamp Paper worth Rs. 200/- (Rupees Two Hundred only) and should furnish a security deposit of 5% of the cost of the items quoted in the form of demand draft term deposit/ bank guarantee/demand draft drawn in favour of the Dean, College of Climate Change and Environmental Science, Vellanikkara, KAU at State Bank of India, KAU branch, Vellanikkara. The format of the agreement can be downloaded from the above website.
6. The price must be inclusive of all taxes and transportation charges and other charges, if any.
7. The cost of the item, tax and other charges should be stated separately
8. The exact specification, details of make, model, name of manufacturer, warranty details etc., of the item must be clearly specified.
9. If any Bandh/strike/ any unexpected holidays occur on the date of opening of tender, the tender will be opened at the same time on the next working day. The decision of the undersigned in accepting the tenders shall be final and binding.
10. Withdrawal of tenders after its acceptance of failure to supply the equipment or not according to the specification will entail cancellation of the tender.
11. The supply order will be issued on the acceptance of the tender and the invoice should be addressed to the Dean, College of Climate Change and Environmental Science, Vellanikkara. The payment will be effected only after satisfactory supply of the item.

12. The successful tenderer should supply and install the item to College of Climate Change and Environmental Science, Vellanikkara, KAU. within one week from the date of the receipt of the supply order.
13. The Dean, College of Climate Change and Environmental Science, Vellanikkara, reserves the right to remove the name of the defaulted suppliers from the list of suppliers permanently or for a specific period.
14. The Dean, College of Climate Change and Environmental Science, Vellanikkara, has the right to accept or reject any or all of the offers without assigning any reason.
15. All the rules and regulations applicable to Government quotations will be applicable to this also.

Signed by

To,

1. Website
2. Notice board

DEAN