

KERALA AGRICULTURAL UNIVERSITY
Cashew Research Station, Madakkathara – 680 651

CRM(Acc)/203/22

Dtd 21/02/2022

TENDER NOTICE

Sealed competitive tenders are invited for the supply of a Trinocular Research Microscope and Digital CMOS 5 MP Camera, Software with 0.35X Optically corrected C-Mount Adaptor & Laptop (specification attached)

Sl. No.	Name of the equipment	Specification	Tender cost
1.	Trinocular Compound Microscope with Digital camera and Laptop	Specification attached	(0.20%) of the quoted amount rounded the nearest multiple of Rs.100/- subjected to a minimum of Rs.400/- and maximum of Rs. 1500/- + GST @ 12%

Last date of receipt of tender - 03/03/2022 11.00 AM

Date and time of opening tender - 03/03/2022 02.30 PM

Tender forms can be downloaded from the KAU Website (www.kau.edu/tenders). On submitting the tender form, cost of the tender form and 12% GST as mentioned above may be drawn by 2 separate Demand Drafts in favour of Assistant Professor & Head i/c, Cashew Research Station, Madakkathara payable at SBI Ollukkara should be enclosed. The cost of tender form will not be refunded under any circumstances.

EMD @ 1% of the quoted amount should be enclosed as separate DD drawn at the same address along with an agreement executed in Kerala Stamp Paper worth Rs.200/- with the tender. **The name of the equipment for which the rate is quoted, notification number and date of opening of tender should be written on top of the envelope.** Sealed tenders addressed to the Assistant Professor & Head i/c, Cashew Research Station, Madakkathara should reach this office on or before 11.00 AM on 03/03/2022. Tenders will be opened at 2.30PM on 03/03/2022 in the presence of the tenderers or their authorized representatives, if any.

All the terms and conditions prescribed for Govt. tenders as amended from time to time are applicable in this case also. The undersigned has the right to accept or reject any or all tenders without assigning any reason thereof.

Further details can be had from the office of Cashew Research Station, Madakkathara, during the office hours between 10.00 A.M. and 5.00 P.M. in Ph. No 04872980339 and also through KAU website (www.kau.edu/tenders).

Terms and Conditions

1. Tender should be submitted in the prescribed forms which can be downloaded from the website www.kau.edu/tenders.
2. The sealed cover containing the tender should be superscribed "**Tender forms for the Microscope with Digital Camera & Laptop**" (along with the notification number) and addressed to the Assistant Professor & Head i/c, Cashew Research Station, Madakkathara.
3. Each tender should be accompanied by tender fee and an Earnest Money Deposit (EMD) @ 1% of the total rupee equivalent cost of the quoted items by way of three crossed Demand Drafts separately (1. Tender fee 2. GST on tender fee 3. EMD) drawn in favour of The Assistant Professor & Head i/c, Cashew Research Station, Madakkathara, payable at the State Bank of India, Ollukkara. 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.

4. 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.
5. The successful tender 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 drawn in favour of the Assistant Professor & Head i/c, Cashew Research Station, Madakkathara payable at the State Bank of India, Ollukkara when directed from this office. The format of the agreement can be downloaded from the above website.
6. The cost of the item, tax and other charges should be stated separately.
7. The exact specification, details of made, model, name of manufacturer, warranty details etc., of the item must be clearly specified.
8. If the quoted amount is greater than 2,50,000/- 2% TDS(exclusive of GST) will be deducted from the supplier.
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 or 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 Assistant Professor & Head i/c, Cashew Research Station, Madakkathara. The payment will be effected only after satisfactory supply of the item.
12. The successful tender should supply the item to Cashew Research Station, Madakkathara within 2 weeks from the date of the receipt of the supply order.
13. The Assistant Professor & Head i/c, Cashew Research Station, Madakkathara reserves the right to remove the name of the defaulted suppliers from the list of suppliers permanently or for a specific period.
14. The Assistant Professor & Head i/c, Cashew Research Station, Madakkathara 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 tenders will be applicable to this tender also.


ASSISTANT PROFESSOR & HEAD i/c

Assistant Professor & Head i/c
Cashew Research Station
Kerala Agricultural University
Madakkathara P. O., Thrissur-680 651

Copy to:

1. KAU website
2. ARS, Mannuhty
3. College of Agriculture, Vellanikkara
4. Estate Office, Vellanikkara
5. Panchayath Office, Madakkathara
6. Village Office Vellanikkara
7. Village Office, Madakkathara
8. Krishi Bhavan, Madakkathara
9. Krishi Bhavan, Ollukkara
10. Notice Board
11. Farm Office

TRINOCULAR RESEARCH MICROSCOPE & DIGITAL CMOS 5 MP CAMERA & SOFTWARE WITH 0.35X OPTICALLY CORRECTED C-MOUNT ADAPTER

1. Specification for Trinocular Microscope:

Optical System	: UIS2 (universal infinity-corrected) optical system
illumination System	: Built-in transmitted illumination system : Kohler illumination (fixed field diaphragm) : LED power consumption 2.4 W (nominal value), pre-centered
Focusing	: Stage height movement (coarse movement stroke: 15 mm) : Stroke per rotation for coarse adjustment knob: 36.8 mm, Focusing stopper : Torque adjustment for coarse adjustment knob : Fine focus knob (minimum adjustment gradations: 2.5 μ m)
Revolving Nosepiece	: Fixed quadruple nosepiece with inward tilt
Stage	: Wire movement mechanical fixed stage, (W \times D): 211 mm \times 154 mm : Travelling range (X \times Y): 76 mm \times 52 mm : Single specimen holder (optional: double specimen holder, sheet holder) : Specimen position scale : Stage XY movement stopper
Observation tube	: Trinocular (Anti fungal)
Eyepiece (anti-fungal)	: 10X Field Number (FN): 20
Tube Inclination	: 30 $^{\circ}$
Light path selector	: eyepiece/camera port = 100/0 or 0/100
Interpupillary Distance Adjusting Range	: 48 – 75mm
Condenser	: Abbe condenser NA 1.25 with oil immersion : Built-in aperture iris diaphragm
Observation Methods	: Bright field, Fluorescence & Dark field
Objectives	: 4X NA 0.1 W.D. 18.5 mm : 10X NA 0.25 W.D. 10.6 mm : 20X NA 0.4 W.D. 1.2 mm (Optional) : 40X NA 0.65 W.D. 0.6 mm : 100XO NA 1.25 W.D. 0.13 mm
Rated Voltage/Electric Current	: AC 100 - 240 V 50/60 Hz 0.4 A

2. Specification for Digital CMOS 5 (Five) Megapixel Camera & Image Analysis Software with 0.35X Optically Corrected C-Mount Adapter

- USB 2.0 interface measuring high speed data transmission
- Perfect colour reproduction capacity
- Advanced video & Image processing application
- Custom programmable
- Integrated metal alloy housing

Application Sensor size Image sensor Sensor type Pixel size Resolution Maximum	Bright field 1 / 2.5' 5.1MP Aptina CMOS sensor 2.2 x 2.2 micron 2592 x 1944		
FPS/Resolution	5 @ 2592 x 1944 18 @ 1280 x 960 60 @ 640 x 480		
Dynamic range Binning Spectral range White balance Image processing % Enhancement Power supply	66.5dB 1 x 1, 2x2, 4x4 380-650nm (with IR filter) ROI white balance / Manual temp – Tint Adjustment Image calibration, Measurement, Image control, Adjust & capture functions DC 5V over PC USB port		
Software Environment	Operating system	Microsoft Windows 10 (64 bit)	
	CPU	Equal to Intel dual core2 2.8GHz Or higher, RAM 4 Gb or more, USB port, USB2.0 High- speed port	
	Display	17" or larger	
Microscope Adapter	(a) 0.35x C-Mount Optically Corrected Adapter with Focus adjustment & Focus Lock (using Allen key) (b) Eyepiece Adapter for Camera usage through Eyepiece port		
Calibration Slide	Calibration slide with 1 Div: = 0.01mm for calibrating measurements in various units against different objective magnification of Microscope		
Measurement units	Meter, Centimetre, Millimetre, Micrometre, Nanometre, Pico metre, Inch, Mil & Angstrom		

LAPTOP PC FOR THE CAMERA ATTACHMENT

Specification:

Operating System (OS) : Windows 10 (64 Bit)
CPU : Core -2, i5, i7 > 4Gb RAM
Interphase : USB-2, USB port with high speed
LED Screen Size : 17"


Assistant Professor & Head Vc
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