# BIDHAN CHANDRA KRISHI VISWAVIDYALAYA

## DIRECTORATE OF RESEARCH

Kalyani - 741235 \* Nadia \* West Bengal \* India

#### Dr. Goutam Mondal,

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Sealed Quotations are invited from competent and bonafide vendors/ parties/ distributors/ dealers/ agents/ manufacturers having registration of GST for supply of Instruments/equipment to University as per specifications and conditions appended below.

- i) Quoted rates: The prices of item/items should be in net per unit include all essential accessories and also all taxes and duties, FOR DESTINATION (up to delivery at the laboratory at Kalyani) basis and satisfactory installation and demonstration. Reduced rate of GST (5%) is applicable to the University. Requisite certificate will be issued by the university authority on demand.
- ii) Payment will be made after successful supply, installation and commissioning of the items.
- **iii)** Warranty- Warranty period minimum 2 (two) years or more from the date of installation & demonstration. Warranty period more than 2 years will be valued.
- iv) EMD: Vendors are required to pay the requisite amount of Rs.1,000/- (Rupees One thousand) only as EMD in demand draft for each item. The bidders are required to give individual quotation for the instruments separately and name of the item quoted must be inscribed on the sealed envelope. Without EMD, quotations will not be considered for technical or financial comparison. Draft must be in favour of "Bidhan Chandra Krishi Viswavidyalaya" payable at Kalyani (IFSC: SBIN0001082). EMD exemption certificate (if any) must be submitted with tender document.

#### v) Supporting documents:-

- **a**) Bid papers should accompany authorization certificate from original manufacturer, trade license, GST registration, PAN etc.
- **b**) Photocopy (self attested) of the original supporting document in favour of the specification- claim must have to be submitted.
- c) Price bid of the vendors will be compared only if technical specificity as appended is fulfilled.
- (vi) The Viswavidyalaya Authority reserves the right to accept or reject any tender without showing any reason.

### vii) Detail Specification:

| Item           | Detail Specification   |
|----------------|--|
| /Equipment     |  |
| <b>1.</b> 100x | 100x Objective lens for Nikon Trinocular Research Microscope (Model: Ci-       |
| Objective lens | L): CFI Plan Fluor DLL 100X HA N.A. 1.30, W.D. 0.2 mm, Ph3, Spring-            |
| for            | loaded, Stopper for the existing Trinocular Research Microscope, Nikon (Bright |
| Microscope     | field/Dark Field/Fluorescent) Microscope, Model- Ci-L.                         |

| Item          | Detail Specification  |
|---------------|---|
| /Equipment    |   |
| 2. Microscope | Microscope camera with image analyzing software: Camera sensor: 1/2.8"  |
| camera        | (5.38mm x 3.02mm) and full HD CMOS, Resolution: 2592 x 1944(8 Bit), Pixel   |
|               | size: 2.8 x 2.8 µm, Output: HDMI, USB, SD Card, Frame rate: 60fps at 1080P  |
|               | and 15fps at 2592 x 1944 for PC, Memory card support: TF card (Max 32   |
|               | GB), Snap format: JPG, Video format: AVI, Exposure: Auto and Manual, White  |
|               | balance: Auto and Manual, Cross line: Horizontal 4 lines, Vertical 4 lines,   |
|               | Freeze/Unfreeze: Availability, Cross line move/color : Availability, High   |
|               | dynamic range: Support, Digital noise reduction: Support, Camera mount: C or  |
|               | CS Mount Power supply: DC 12V, Light frequency: 50HZ/60HZ, Working  |
|               | temperature : 0-50°C, C-Mount reduction lens: 0.37x along with Camera   |
|               | compatible image analyzing software having following specification: provision   |
|               | to open 1 to 4 cameras at a time, Measurement on live zoom preview, Capture   |
|               | still and video format, Capture at time interval (Time lapse), Instant image  |
|               | capturing, Real time full screen image programmed interval captures, Video capture by time settings, Easy measurement calibration, Background correction, |
|               | Measurement scale in microns, inches and millimeters, length measurements,  |
|               | Ellipse, rectangle and irregular shape measurements, Perimeter, radius and  |
|               | circumference measurements, Angle measurements. EDF, Stitching and cell   |
|               | count facility, Magnifier (zoom) function, Distant image sharing, On-line files   |
|               | sending/receiving, Image amalgamation, Image adjustment effects, Data export,   |
|               | Report generating and print out, Interactive file format and Scale bar facility.  |
|               | The Camera and imaging software must be from same manufacturer for the best   |
|               | compatibility. The supplier must own the copyright of all software supplied   |
|               | along with system and Copyright Certificate from Govt. of India must be   |
|               | enclosed.   |
| 3.            | Image analyzing software for Nikon camera (DSFi3):NIS-Elements D-   |
| Microscope    | Documentation software, Measurement acquisition, Line intensity profile, AVI  |
| Camera        | Live-stream (Video Recording) capture, Live Image capture, Merging, Z series,   |
| Image         | Calibration, measurement, count, length, area, angle, circle and ellipse, Image   |
| analyzing     | Filtering, Image stitching (large Image), Multipoint, Optical configuration, back   |
| software      | ground correction, Report generation etc. This Imaging software must be   |
|               | compatible with for the existing Microscope camera DSFi3 of Trinocular  |
|               | Research Microscope, Nikon (Bright field/Dark Field/Fluorescent) Microscope,  |
|               | Model- Ci-L.  |

Filled in quotations should be submitted to Dr. Goutam Mondal, Principal Investigator, the Project on "Evaluation of Bioefficacy and Phytotoxicity of coded product, BAS58401F against important diseases of cucumber and tomato", Directorate of Research, BCKV, Kalyani-741235 on or before 21<sup>st</sup> February, 2020.

(GOUTAM MONDAL)