

Dr. Sikha Dutta
Professor & Head
DEPARTMENT OF BOTANY



The University of Burdwan
Burdwan 713104
West Bengal, India
Phone : (0342)2656549 (EPBX) Extn. 418
(0342)2656427 Direct
(0342) 2659493 (R)
Fax : 91-0342-2656427
Gram : BURDSITY
e.mail.hod@bot.buruniv.ac.in

Date: 26.12.2019

Tender Notice

Tender Title:

Sealed quotations are invited from the interested vendors for the following items needed for a Science & Technology and Biotechnology Dept. Govt. of West Bengal sponsored research project (PI: Prof. Sikha Dutta), Department of Botany, BU.

Tender No: **ST/P/S&T//SD-1/Bot/BU/19**

Tender Date: 26.12.2019

Last date of Tender Submission: **10.01.2020**

Items:

1. INVERTED TISSUE CULTURE OPTICAL MICROSCOPE (1 No.)

General specifications:

a. Make and Model: DEWINTER-VICTORY-NFL/ OPTIKA-IM-3FL4.

Technical Specifications:

1. Optical System : IOS Infinity Optical Colour Corrected System.
2. Koehler Illumination : 5WLED with Colour Temperature 6500k with spherical collector lens, continuous regulation of the illumination. Input voltage : 100V~240V having Automatic infrared induction for power on-off. Power off upon user leaving 10 minutes, and power on upon user approaching.
3. Mechanical Stage : Metal body Scratch resistance, Stage Size : X 210 x Y 241mm, Round Glass Size Ø110mm, Attached Mechanical Stage for holding haemocytometer (glass slide), terasaki, petri disc and 96 holes plates. Moving Range : XY 128 x 80mm.
4. Observation Head : Sidentopf Trinocular Head inclined at 45°. Interpupillary distance: 48-76mm Light distribution (both): 100: 0(100% for eyepiece). **Special features for Camera Attachment** : Both light ports for digital camera and SLR photography, available for observing with digital camera and SLR photography at the same time.
5. Nosepiece : Quintuple (5 Position) Revolving Objective Holder (Nosepiece).
6. LWD Condenser : 4-hole rotating disc phase contrast condenser with Phase Annular Spot 10x, 20x & 40x Phase Objectives. N.A.0.4, Variable W.D.45-85mm can be up-down adjusting working distance through moveable system supported on rack and pinion.
7. LWD Infinity Plan Objectives : Long Plan 4x N.A. 0.11 W.D.12.1mm or similar.
Long Plan PH P 10x N.A. 0.25 W.D. 8.3 mm or similar.

Long Plan PH P 20x N.A. 0.40 W.D. 7.2 mm or similar.
Long Plan PH P 40x N.A. 0.60 W.D. 3.4 mm or similar.

8. Culture Dish Holder : Ø54 & Ø65
9. Eyepieces : Wide Field 10x FOV 22mm (Focusable)—Pair Centering Telescope eyepiece.
10. Filters : Blue & Green Interference Contrast.
11. Weight : 13.5 kgs. (Approx.)
12. Accessories : Dust Cover, Power Cord, Fitting Tools etc.
13. Upgradation (Optional) :

- A. 2 Group or 4 Group Fluorescence Filters Attachment with 5W LED Fluorescence or 100W Mercury Fluorescence Illumination. Epi-fluorescent illumination, multi-functional semi-reflector 100W Mercury bulb (Osram) with 100W DC Mercury lamp house and Mercury Burner unit for 100W DC mercury lamp. Turret type Fluorescence Filter Housing with Four Filter Blocks ; **Excitation filter for B/G/UV/V Fluorescence Filters**

Blue Excitation Filter, BP460~490, DM500, BA520
Green Excitation Filter, BP510~550, DM570, BA590
Ultraviolet Excitation Filter, BP330~385, DM400, BA420
Violet Excitation Filter, BP400~410, DM455, BA455

- B. Long Plan PH P 4x Phase Objectives.
- C. HDMI MICROSCOPE CAMERA WITH DIGICAM ON LINE IMAGE PREVIEW, MEASUREMENT AS WELL AS ANALYSIS AND CAPTURE SOFTWARE

Features:

1. 5.5 Mega Pixel DGI 530 HDMI Camera image on HDMI mode.
2. USB output optional, can connect with PC and use software.
3. 60fps at 1080P, fast framerate, Also support HDR.
4. Support SD Memory card, Max 32 GB.

Specifications:

Camera Sensor : ½.86 inch Full HD CMOS
Resolution : 2592*1944(8 Bit)
Pixel Size : 2.8 x 2.8µm
Output : HDMI, USB, SD Card
Framerate : 60fps at 1080P & 15fps at 2592x1944 for PC.
Memory card Support : TF card (Max 32 GB)
Snap Format : JPG
Video Format : AVI
Exposure : Auto/Manual
White Balance : Auto/Manual
Cross Line : Horizontal 4 lines, Vertical 4 lines
Freeze/Unfreeze : Available
Cross Line Move/Color : Available
High Dynamic Range : Support
Digital Noise Reduction : Support
Camera Mount : C or CS Mount
Power Supply : DC 12V
Light Frequency : 50HZ or 60HZ
Working Temperature : 0-50 Degree

14. The quotation should include recent installation report from well known research laboratories/Institutions.
15. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
16. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

2. B.O.D Incubator cum Shaker (1 No.)

General specifications:

a. Only branded indigenous make is acceptable

1. Technical Specifications:

Size-20"X20"X 26", Inner volume-10 Cuft, Shaking Plate- 20" X 20", Capacity-9ltr
B.O.D

• Indicator, speed controller, RPM meter, etc in a convenient place for easy operation.

Construction Double walled ,

Inner chamber 304 quality stainless steel,

Outside Mild Steel sheet,

Insulation (Nonhygroscopic) Thick layer of fibre glass wool,

Door Crystal clear plexi glass with latch fitting,

Outer Door Double walled insulated body having lock and key along with magnetic strip gasket to seal against any sort of atmospheric infiltration.,

Electrically work 220/230 V. single ph. A.C.

Temperature 5°C to 60°C,

Temp.Controller Solid State Digital Temperature Indicator Cum Controller,

Sensor PT-100 ,

Compressor A Hermetically sealed "KIRLOSKAR" make CFC free, Accuracy $\pm 1^\circ\text{C}$.,

Tray (Nonshaking) One push pull made of S.S. control panel Consisting of switches, indicating lamps ,

Construction 220/230V, single phase, A.C. mains. ,

Variable Sped 50-250 RPM wth Stepless Controller,

Lotus Clamp Optional 100 to 1000ml,

RPM Meter +2/3 digit fluctuations,

Digital Timer 0-999min

Display Digital RPM Meter.

2. The quotation should include recent installation report from well known research laboratories/Institutions.
3. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
4. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

General Terms & Conditions:

1. All prices should be quoted in INR only.

2. Prices are to be quoted inclusive of VAT and delivery charges, if any. Incomplete items will be rejected.

3. Sealed Envelope containing quotation should be super scribed as "Quotation for Tender No" for Science & Technology and Biotechnology Dept. Govt. of West Bengal sponsored research project, Prof. Sikha Dutta Dept. of Botany, B. U."

4. Tender No. should be mentioned on the envelope positively.

5. Warranty One year additional / extended warranty for 2nd year, beyond the 1st year's warranty.

6. Payments terms: Payment will be made after successful installation of the instruments.
7. Delivery schedule: After receipt of the work order the materials should be delivered within one month & if any defect of the supplied items is found, it should be replaced immediately from vendor's side.

Submission of Quotations:

Quotations may be submitted to: Prof. Sikha Dutta, Dept. of Botany, Golapbag, The University of Burdwan, Burdwan, Pin: 713104, WB **on or before 10.01.2020 between 11.00 A.M. and 5.00 P.M.**