

West Bengal University of Technology

Tender Form

Notice No : **BIO/FO/10-11/16**

Date of Issue : **03-03-2011**

Address:

**BF-142, Sector-I,
Salt Lake City,
Kolkata-700064**

Tele-Fax No:

(033) 2334-1034

Phone No.:

(033) 2321-1345

Tender Paper for Supplying Bio-Lab equipments

Ref: Tender Notice No. BIO/FO/10-11/16 dated: 03/03/2011

a) Name & Address of the Firm :

b) Telephone No:

c) Mobile No.:

d) Fax No:

2. Name of the items for which the Firm is interested:

3. Name of the Proprietors/partners/directors etc:

4. Trade License No (With Photocopy):

5. VAT License No:

6. Service Tax Registration No (With Photocopy):

7. Additional Information if the party wants to include:

8. Copies of Testimonials/credentials/certificates regarding services/experience etc:

Signature with Stamp

Please give sealed quotation for the following products

Specification for Bio Photometer

Should be programmed for the methods for ssDNA,dsDNA,RNA,Oligo,Protein,OD 600 and Lowry, Bradford and BCA,incorporation rate of fluorescent dyes i.e Cy3, Cy5.

Measuring wavelength 230,260,280,340,405,490,550,595,650nm

Spectral band width: 5nm at 230-340nm,

Wavelength systemic error: ± 1 nm at 230-280nm

Photometric measuring range:0 to 3 A

Photometric random error: ± 0.002 A

Photometric systematic error: $\pm 1\%$

Should be capable to run without computer and take measurement within 2 seconds

Should have automatic calculation facility of sample dilution

Should have up to 10 standards for colorimetric processes

Should have xenon light source with extremely long service life

Must be capable of storage atleast 100 results and all corresponding data, all calibrations

Results memory : For 100 results; absorption and ratio values, sample number, dilution date and time

Interface: RS 232 C , serial for printer or PC

Should be capable of using cuvettes (2mm,10mm path length, for $>50\mu\text{l}$ sample volume)

and microlitercell (0.2mm,1mm pathlength, for $0.7\mu\text{l}$ - $5\mu\text{l}$ sample volume)

Should be possible to recover the sample completely.

Should be accompanied with thermal printer, atleast 40 characters/line

Should have option for verifying photometric and wavelength accuracy (NIST traceable)

Please quote DNase and RNase and protein-free disposable cuvette,2mm,10mm path length.

Specifications of (Semi Automatic CLI Analyzer)

1. Mfg. by Monobind USA.
2. Assay principle based on Enhanced Pulse CLIA Technology.
3. Detection unit consisting of low noise PMT (Photo Multiplier Tube)
4. Pre-programmed VAST (ONE KIT 24 PARAMETERS) enabled test menu.
5. Pre-programmed EASYCAL software.
6. Option for exclusive two point re-calibration mode.
7. No crosstalk due to exclusive "Ti-reaction cells".
8. Inbuilt Computer with integrated Keyboard and display unit.
9. Fast and Easy interpretation of result.
10. Standardized for Multi-parametric Operation.
11. Inbuilt Thermal Printer with 20 characters/line.
12. Complete Inbuilt Data Management Package.

Specification For ELISA- Reader

- Wavelength range 400–750 nm
- Photometric range 0.0–3.5 OD
- Linearity $\leq 1.0\%$ from 0.0–2.0 OD; $\leq 2.0\%$ from 0.0–3.0 OD
- Accuracy $\pm 1.0\%$ or 0.010 from 0.000–3.000 OD at 490 nm
- Precision 1.0% or 0.005 OD from 0.0–2.0 OD; 1.5% from 2.0–3.0 OD
- Resolution 0.001 OD
- Filter wheel capacity 8
- Plate shaking 3 speeds: low, mid, high; duration: 0–999 sec
- Read time 6 sec at single wavelength, 10 sec at dual wavelengths
- Data output Onboard graphical thermal printer and USB2 interface with PC or Mac data stations
- Data storage Calendar/clock function; 64 assay protocols
- Flexible configurations with ability to read flat-, U-, or V-bottom micro plates or 8- or 12-well strip plates
- Automatic calibration before each reading
- Variable-speed plate-shaking capability
- Easy-access 8-position filter wheel with 4 standard filters
- USB2 port for external computer control (with Micro plate Manager software, PC) and suitable PC
- Data and protocol presentation on LCD display
- Onboard data storage of protocols, standard curves, and graphs
- Self-diagnostic capabilities to detect lamp burnout at startup
- Motorized door for plate loading

Optional

Software specification:

High-Throughput Analysis and Reporting

- Running of 12 separate assays on the same plate
- Optional automatic printing upon completion of measurement
- Multiple-plate processing with automated data export

- Custom reporting function that provides one-button screening for predefined assays, such as for TSE Comprehensive Curve-Fit Analyses
- Linear, quadratic, cubic, or logistic (4-parameter) fit types
- Linear or logarithmic automatic axis scaling
- External standard curves for multiple plates
- Curve-fit graph overlay for comparison

Performance verification parameters include:

- Accuracy
- Precision
- Linearity
- Spectral blocking

Complex Kinetic Analyses

- Choice of number of calculation points for Vmax
- Simple velocity calculation
- Negative or positive slope calculation
- Absorbance limit selection
- Kinetic correlation coefficient display and calculation for fit (r value)
- Real-time data acquisition display and ability to zoom in on a well
- Automatic scaling and real-time monitoring

Specifications of Ultrasonic Cleaner

1. Durable leak proof ABS/PBT housing and cover with 304 stainless steel tanks
2. Maximum heater temp. is 70deg.C.
3. Industrial B.L.T type ultrasonic transducer (Bolt clamped Langevin Type Transducer) generates high-frequency sound waves that provide maximum cleaning power. System are increased the frequency to improve cleaning ability.
4. Digital LED display using splash-proof keypads: timer (1 to 99min), temperature monitor.
5. High frequency 40 kHz sound waves provide greater cleaning power and increased reliability.
6. Multiple frequencies on 3 stages for both gentle cleaning and intensive cleaning
7. Including 304 stainless steel wire basket & cover.

Specifications for Trinocular phase contrast Inverted Microscope

Inverted tissue culture microscope with trinocular head for brightfield and phase contrast applications Quintuple Nosepiece,paired high-point extra wide field eyepiece EW10X(F.N.22),ELWD condenser N.A. 0.3,LWD plan infinity objectives 4X/0.1m W.D. 18mm.,40X/0.6 WD 2.6mm(Cover glass 1.2mm) and LWD plan infinity phase objectives PH10X/0.25,W.D. 10Mm,PH20X/0.4,W.D.5.1mm & Attachable Mechanical stage X-Y, plain stage 160x250mm, coaxial coarse and fine adjustment,6V30W halogen lamp(2nos),blue,green and frosted glass filters,45mm dia, Terasaki holder,38 dia petri dish holder, 54 dia slide glass holder, & dust cover.Along with consisting of light weight compact imaging sensor with in-built widefield optical microscope adapter with an in-built USB connectivity and image transferring software fitted on trinocular and image analysis software with branded computer suitable for above application.

Microscope should be with Fluorescent attachment and the computer needed to operate the software of the above system must have to supply in free of cost.

Specifications for Laminar Flow Cabinet

The system is Operated on 220-230V/50 Hz

The Cabinet is ergonomically designed easy to clean 304 grade Stainless steel side walls and worktop. Complete stainless steel interior is aesthetically pleasing.

Laminar Flow Cabinets are also equipped with ULPA filters (typical efficiency of 99.999% at 0.3 μ) that offer a significantly higher efficiency

Digital display with audio-visual alarm.

Standard cabinet control system consists of separate switches / indicator lights for blower, lights and UV light (UV-light switch is interlocked with the light and blower switch for enhanced safety) Plus a pressure gauge for airflow monitoring.

One piece formed stainless steel work surface with a curved front edge for maximum operator's safety

The cabinet should comply some International Certification like EN 12469, IEST-RP-CC002.2, Worldwide for cabinet performance, ISO 14644.1 Class 3, worldwide, AS 1386 Class 1.5 Australia for Air Quality, EN-1822 (H14), Europe, IEST-RP-CC001.3 Worldwide for filtration , IEC 61010-1 worldwide, UL 61010-1 USA for electrical safety.

Laminar Air Flow Velocity : Average of 0.45 m/s at initial set point

External surfaces are painted by antimicrobial coating to eliminate 99.9% of surface bacteria within 24 hrs of exposure

Noise Level : Typically < 57 dBA

Pre-filter : Disposable and non-washable polyester fibres with 85% arrestance /EU3 rated

Built-in white, electronically ballasted 5000 k lightening with Light intensity : > 1800 lux.

Work surface construction : 1.2 mm/0.05" /18 gauge stainless steel grade 304

Internal Dimension : 1185 x 625 x 575 mm [W x D x H]

Side window construction : Colourless and transparent UV-absorbing 5 mm / 0.2"

The system should have at least two nos. electrical sockets, one no. 3 Ft. UV lamp, UV protected front cover suitable support stand with caster wheels for easy movement & Universal service fitting (one no.)

Specifications of the Horizontal Autoclave

1. Password protection.
2. Temperature & pressure activated door lock for safety.
3. Water Level Detector, lid interlock, overheats & pressure protection and extra pressure safety valve.
4. The exhaust drain (steam) is mixed with cold tap water for drain protection.
5. Automatic time count after reaching at the set pressure.

General conditions:

1. The tenderers are required to deposit the tender forms along with relevant papers(mentioned in the form) in two sealed covers mentioning financial bid and technical bid separately.
2. The university reserves the right to accept or reject any tender without showing any reason.
3. Tender for supply of the goods mentioned in the notice may be submitted in full or in part.
4. The last date of receiving of tender paper in the office of the finance officer is 17th March 2011 before noon. The paper will be opened on the same day at 2.00 pm.
5. Incomplete tender shall be summarily rejected.
6. Subcontracting in any form will not be entitled by the university.
7. All legal disputes shall be subject to jurisdiction of Calcutta High Court.