

UNIVERSITY OF CALCUTTA

Quotation Notice

March 11, 2019

Ref. No. CU/BT/Lab-24/18-19

Sealed quotations are hereby invited from reputed and experienced agencies with all related credentials for supplying **one Digital Autoclave** in our department as per following specifications.

The quotation should be typed and addressed to the under-signed Department of Biotechnology and Dr. B. C. Guha Centre for Genetic Engineering and Biotechnology ands should reach on or before 18th March 2019.

Specifications for Digital Autoclave

- 1. Microprocessor controlled vertical type autoclave mounted on casters; top loading design
- 2. Operating temperature range for sterilization $(110 \sim 135 \quad \Box C)$,
- 3. Programmed autoclaving
- 4. Polished stainless steel inside chamber with $45 \sim 55$ liter capacity
- 5. Two perforated/netted steel basket

6. Automatic air purging and venting system with self-contained facility suitable for laboratories with temperature control environment

- 7. Pressure display system analog type and working pressure range 15-20 psi
- 8. Programmable operation
- 9. Exhaust knob (open/close) for release of pressure
- 10. Digital temperature display
- 11. Buzzer at the end of programmed e.g. autoclaving/warming/heating cycle

12. Alarm with cut out system for (i) chamber overheat sensor, (ii) chamber housing overheat, (iii) chamber overpressure, (iv) overheat & overpressure and (v) low water as well as door open alarm

- 13. Operating: 220-240V, 50Hz
- 14. Certification: ISO or CE or equivalent
- 15. Technical features should be supported by original literature

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Sealed quotations are hereby invited from reputed and experienced agencies with all related credentials for supplying **one Vertical Laminar Air Flow** in our department as per following specifications.

The quotation should be typed and addressed to the under-signed Department of Biotechnology and Dr. B. C. Guha Centre for Genetic Engineering and Biotechnology ands should reach on or before 18th March 2019.

Specifications for Vertical Laminar Air Flow

99.99% Particle Removing Class 100 HEPA Filter
Microprocessor PID Controller
ISO 14644-1, ISO Class 5 standards compliance
Easy to replace Filter from the back panel
Built-in Lamps and Utilities; UV and Fluorescent lamp, air and gas cock, power consent
One Place Cabinet Stricture Air leak Proof; no required separate stand easy to move free from the loading
Filter Replacement Warning Signal by Pressure gauge & Controller display
UV Sterilization with on/off working timer
Vertical Air Flow Type

Dimension (inner)	: Approx. 1190x550x650 (WxDxHmm)
Dimension (outer)	: Approx. 1350x800x1880(WxDxHmm)
Air Volume (Approx.)	: 1350 m3 / h
Controller	: 9 stage velocity control, total using timer,
	UV/FL Lamp on/off
HEPA Filter	: Class 100, purity 0.3µm Particle Removal 99.99%
Prefilter	: 3~30µm Particle Removal
Air flow velocity	: 0.3~0.6 m/sec
Noise Level	: 56~60 dBA
Light	: UV 20W x 1EA, FL 20W x 1EA
Material	: Stainless Steel 304
Door	: Tempered Safety UV Protected Glass Sliding Door
Utility Device	: Air Cock, Gas Cock, 220V Consent
Electric Supply	: 220V, 50Hz

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Quotation Notice

March 11, 2019

Ref. No. CU/BT/Lab-22/18-19

Sealed quotations are hereby invited from reputed and experienced agencies with all related credentials for supplying <u>one Refrigerated Table Top Centrifuge</u> in our department as per following specifications.

The quotation should be typed and addressed to the under-signed Department of Biotechnology and Dr. B. C. Guha Centre for Genetic Engineering and Biotechnology ands should reach on or before 18th March 2019.

Specifications for Refrigerated Table Top Centrifuge

- * Microprocessor based Floang Frequency Drive system
- * Noise free Brushless Motor
- * Max RPM: 20,000 or More
- * Max G value: 31,800 g or More
- * Bright Liquid Crystal Display
- * 20 step Variable Acceleraon and Deceleraon steps
- * Temperature range from $-9^{\circ}C$ to $+40^{\circ}C$
- * Temperature control accuracy of $\pm 0.1^{\circ}C$
- * Facility for Pre cooling of rotor
- * Inbuilt Automatic Imbalance detector
- * Motor Overheat detector and cut off
- * Inbuilt Lid Lock Protection
- * Inbuilt Quick Spin facility
- * Stainless Steel Bowl
- * Emergency Lid Lock Release
- * CFC Free Refrigerant
- * High Conductance Aluminum Rotor with Lid for rapid & accurate temperature control
- * Swing out Rotor for 4x180 ml tubes (rpm/rcf 4,000/2718xg)
- * One rotor 1.5 mL X 24 nos. tubes

Instrument also capable for:

- Fixed angle rotor for 4x50ml Falcon Tubes
- Fixed angle rotor for 8x15ml round bottom tubes
- Swing Out Rotor for Microtiter Plates/DWP

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Quotation Notice

March 11, 2019

Ref. No. CU/BT/Lab-21/18-19

Sealed quotations are hereby invited from reputed and experienced agencies with all related credentials for supplying **one shaking water bath** in our department as per following specifications.

The quotation should be typed and addressed to the under-signed Department of Biotechnology and Dr. B. C. Guha Centre for Genetic Engineering and Biotechnology ands should reach on or before 18th March 2019.

Specifications for Shaking Water Bath

Quiet Shaking Mechanism		
PID Temperature Cor	ntrol	up to 99°C
Dimension Bath:		Approx. 300x300x240 mm (WxDxH)
Dimension Overall	:	Approx. 534x344x300 mm (WxDxH)
Bath Capacity :		20-22 Ltrs.
Temperature Range	:	Ambient + 5° C to 99° C
Heater :		1.4kW
Temp. Accuracy	:	± 0.1 °C
Temp. Uniformity	:	$\pm0.5~^{o}\mathrm{C}$
Controller	:	Digital PID Controller
Shaking Speed	:	20 to 250 Stroke/mint.
Shaking Stroke	:	Adjustable 15 to 30 mm
Display	:	LED 4 Digit Display
Timer	:	99hr 59min/continuous
Material Bath :		Stainless Steel 304
Rack	:	Stainless steel universal rack 50ml to 2000ml and tubes rack
Safety :		Over Temp., Cut off, Over Current &
		Leakage Breaker
Electric Supply :		220V, 50Hz
G 1	D 1	

Complete with Lid for Bath

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