



DEPARTMENT OF BIOTECHNOLOGY
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Ref: BT/VIGN/2018/028/SPL

Dt. 17.09.18

Due Dt. 08.10.18

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

TECHNICAL SPECIFICATIONS

1) Carbon dioxide incubator:

1. Capacity: 180 liters
2. Class 100 HEPA filtered chamber airflow
3. Temperature
 - Range: 5°C above ambient to 50°C with Control of $\pm 0.1^\circ\text{C}$
 - Uniformity: $\pm 0.3^\circ\text{C}$ @ 37°C
 - Tracking alarm: User-programmable with precision sensors
4. Dry heat sterilization cycle
 - Sensor: Precision thermistor
 - Cycle Temperature: 140°C
 - Cycle Length: 12 hours
5. Humidity
 - RH: Ambient to 95% @ 37°C
 - Humidity Pan: 3.0 liters
 - Display: In 1% increments
6. CO₂
 - Control: Better than $\pm 0.1\%$
 - CO₂ range: 0-20%
 - Inlet pressure: 15 PSIG
 - CO₂ Sensor: T/C
 - Readability & Setability: 0.1%
 - Tracking alarm: User-programmable, high/low
7. Shelves
 - Construction: Perforated stainless steel
 - Standard: 4
8. Construction
 - Interior: Type 304, stainless steel
 - Exterior: 18 gauge, cold-rolled steel, Powder coated
 - Outer door gasket: Four-sided, molded, magnetic
 - Inner door gasket: Removable, cleanable, silicone
9. Warranty: Two years.

2) **Biosafety cabinet:**

1. Cabinet: Class II, Type A2
2. Size: 4 ft Biological safety cabinet
3. Package should include: Stand, UV Light and one set of detachable arms rest and one / two electrical outlet
4. UV Light programmable from 30 minutes to 24 hours
5. DC motors to control fan speed and to maintain constant airflow.
6. The microprocessor display: Inflow and down flow air velocities in real-time on an LED display
7. Alarm signals when there is change in inflow/exhaust or down flow
8. Ventilation system
 - 70% Air should be re-circulated and 30% of the air should be exhausted
 - Exhaust/inflow air volume: 530 m³/h (330 CFM)
 - Heat emission at 25°C ambient: 0.15 kW
9. Filter specifications
 - Supply/exhaust air filter: HEPA H14 EN1822,99.995% at 0.3um particle size
10. Performance
 - Certification: NSF/ANSI 49, UI, CE
 - Sound pressure level: <63 dB(A)
 - Lighting power: > 65 fc
11. Access ports: 4 (2 on each side)
12. Service valves: Up to 4
13. Warranty: Two years.

NOTE:

Quotation to be submitted for two bid system and it must have a validity period of at least 60 days.