



DEPARTMENT OF BIOTECHNOLOGY
Indian Institute of Technology, Madras, Chennai, 600 036.
Telephone No.22574126, 22574101, FAX No.22574102

Dr,D.Karunagaran

DUE DT: 15/06/2018

Professor and Head

DT: 25/05/2018

DUE DT: 15/06/2018

Ref: BT/NITS/2018/014/SPL

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 Biosafety cabinet Class II Type A2 4ft

1. The Bio safety cabinet should be Type A2 in which 70% Air should be re- circulated and 30% of the air should be exhausted
2. **The Bio Safety Cabinet must include two DC motors.** High power consuming AC motors should not be used
3. The motor must automatically adjust the airflow speed without the use of a damper to ensure continuous safe working conditions, even without maintenance adjustments.
4. In order to preserve safety to the user and the environment, the exhaust blower on the cabinet must continue operating when the supply blower stops working. If the exhaust blower should fail; the supply filter will also be turned off.
5. In order to ensure consistent and reliable down flow velocity across the supply HEPA filter over the life of the cabinet, the cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter, rather than in just one point across the down flow.
6. The microprocessor must display the inflow and down flow air velocities in real-time on an LED display to ensure the user knows whether or not the cabinet is working under safe operating conditions.
7. The Biosafety Cabinet should have microprocessor controller and same must be located on a slanted front panel so it is easy to see and reach from a seated working position in front of the cabinet.
8. The interior of the front window must be accessible for cleaning without requiring the user remove or support the window.
9. The biological safety cabinet must be capable of achieving current state-of-the-art in energy efficiency. A biological safety cabinet with lights on and fan at operating speed should consume less than 200 watts for a nominal four foot width and have a reduced energy mode for non-operational maintenance on containment in the work area.

10. In order to provide maximum effectiveness, efficiency and safety to laboratory Personnel, UV light must be programmable to allow for specific exposure times from 0 to 24 hours. The automatic shut off feature on the UV light saves money on replacement of the bulbs.
11. The Cabinet should have provision to fit taps for Vacuum, Water and Non Combustible Gas. Taps should be quoted as optional items
12. Globally Certified Biological Safety Cabinet. EN12469 (European Standard), NSF/ANSI 49 (American Standard) and YY0569 (Chinese Standard).
13. The Bio safety cabinet should incorporate HEPA filter of the class H 14 EN 1822 or better and having minimum efficiency of 99.995% at 0.3 μm particle size
14. Approximate Dimension (mm) Exterior 1500 H x 1300 W x 800 D; Interior 800 H x 1200 W x 500 D
15. The Bidders should provide details of Standard Warranty available
16. The cabinet Should be provided with Microprocessor controller and large LED display for inflow and Down flow air velocity and hours of operation, Audible and visual Alarms for HEPA filter failure, blower failure, airflow speed failure, Incorrect window position.
17. The cabinet should be provided with fixed / adjustable Height Stand, UV Light and one set of detachable arms rest and one / two electrical outlet.
18. The Bio safety cabinet should have dual side wall with negatively pressurized interstitial space. Bio Safety Cabinet with single glass side walls should not be quoted.

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