



**DEPARTMENT OF BIOTECHNOLOGY**  
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Dr. D. KARUNAGARAN

Professor and Head

Date: 11.06.2015

**Ref: BT/GSAT/2015/009/SPL**

**Dt. 11.06.15**

**Due Dt.25.06.15**

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- CLASS II, TYPE A2 BIO SAFETY CABINET**

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. The cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter,
5. 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.
6. The front window must be a 10” sash opening and be made of laminated safety glass.
7. The front of the cabinet must be angled 10° to help minimize glare on the window
8. The cabinet noise level must be less than 63 dB (A)
9. The Biosafety Cabinet should have microprocessor controller
10. The interior of the front window must be accessible for cleaning
11. The cabinet must automatically reduce fan/blower motor speed to 30% when the front window sash is in closed position
12. Programmable UV light
13. The Cabinet should have provision to fit taps for Vacuum, Water and Non Combustible Gas.
14. The Bio safety cabinet should be NSF certified with listing on NSF website.
15. 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.
16. Approximate interior dimension (WxDxH) in mm: 1200x500x800
17. Ventilation System Exhaust and Inflow air volume approx. 300-350 CFM
18. Heat Emissions at 25°C should be approx. 0.2 KW or lesser.
19. The cabinet should be provided with fixed / adjustable Height Stand, UV Light and one set of detachable arms rest and one / two electrical outlet.
20. The Drain Pan of the BSC should be made of Stainless Steel. The drain pan should not be painted or power coated.
21. 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.

Note: Technical compliance statement is mandatory without which quotes will not be considered.

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**Head of the Department**