Specifications for Freeze Dryer(Lypholizer)

Final ice condenser temperature more than -50°C Refrigerant should be CFC free.

- 3. Vacuum Degree (Pa) should reach around <10
- 4. Condenser volume at least 5litres.
- 5. Cold trap should be of stainless steel and corrosion resistant
- 6. Ice condenser capacity at least 3 Kg per 24 hours or more
- 7. Three shelves with vial loading system and sealing the vials under vacuum.(Vial sealing device under vacuum should be supplied to seal the vial under vacuum)
- 8. Tray should have diameter of at least 200 mm.
- 9. Three normal shelves non heated for freeze drying in beakers and petri plates.
- 10. Freeze drying area should be at least 0.09 meter square.
- 11. Sample loading capacity should be around 900ml in a single batch.
- 12. Acrylic drying chamber to view inside the process.
- 13. There should be a product temperature sensor to know the temperature of the product during freezing and drying.
- 14. Acrylic chamber should have 8 rubber valves to attach the rubber valves or filter bottles.
- 15. USB interface should be there.
- 16. Vacuum pump with the suction capacity of at least 2L/S or more
- 17. The controls should be microprocessor based.
- 18. Total working hours of freeze working should be there on the display screen to check the total working hours to have an idea of oil change.
- 19. Facility to display the error messages in case of any malfunction.
- 20. There should be a screen to display the complete process of the freeze drying along with the graphical representation of the freeze drying.
- 21. The system should be CE and FDA approved.
- 22. ISO 9001 should be there.
- 23. The noise level of the machine should be less than 60 db.
- 24. The system should contain an external suitable / compatible vacuum pump along with connection hose to run the machine.
- 25. System should be supplied with 10 L of vaccum oil to have a stock of oil for around two years of working.
- 26. The machine should have eutectic point testing feature to check sublimation point.
- 27. The system should be supplied with compatible servo stabilizer.
- 28. System should come with standard two years of warranty.
- 29. System should be supplied with 8 flasks to attach with the system for freeze drying.

Dr. Jupinder Kaur Department of Microbiology Alcrobiologist P.A.U., Ludhiana

College of Basic Scs. & Humanities PAU, Ludhiana

Subject: Purchase of one Lypholizer.

Sr. No	Item	Quantity	Amount	
1	Lypholizer	One	12,50,000/-	

Earnest Money:- Rs. 40,000/-

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For any information/clarification please contact with the official as under:-

Dr. Jupinder Kaur Asstt. Professor and CO-PI Deptt. of Microbiology Mobile No. 9592503631

Additional Terms & Conditions:-

- 1. The equipment should have chamber with minimum 3 shelves for vial & Sealing of vials under vacuum including all types of spare parts.
- 2. The tender should be submitted online.
- 3. The material should be from reputed firm.
- 4. Supplier must provide exclusive support and service to the repair or service the system on demand.
- 5. Minimum one year standard warranty should be included.
- 6. All the technical specifications should meet.
- 7. Rates should be F.O.R. PAU Campus, Ludhiana.
- 8. Rates should be qupoted in figures as well as in words.
- 9. Must be FDA/CE certified.
- 10. All specifications should be available on the official website.
- 11. Must attach PAN Card, GST Certificate, OEM Authorization certificate
- 12. The incomplete and conditional tenders will be rejected straightway.
- 13. Supplier will be responsible for proper working of the equipment after the supply and if equipment is not found to be desired satisfaction, the same will be lifted by the supplier on his own expenses.
- 14. Payment will be released only after satisfactory installment and functioning of equipment.
- 15. Delivery should be made in 7 days.
- 16. It may please certified that your firm has not been debarred/black listed by any Govt. department/Semi Govt. Department/Institutiuon/University I all over India.
- 17. Quotation should be valid for 90 days.
- 18. All disputes subject to Ludhiana Juridiction.

Dr. Jupinder Kaur Asstt. Professor and CO-PI Deptt. of Microbiology

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