

PANJAB UNIVERSITY

DEPARTMENT OF BOTANY CHANDIGARH - 160 014

Prof. Harsh Nayyar Principal Investigator

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UNDER REGISTERED POST

Ref. 303-208/HN/Bot April 1, 2019

Dear Sir.

Please quote your lowest rates in DUPLICATE, for the item (s) given below as per the specifications. Your quotation should reach the undersigned on **or before 18.4.2019**.

Quotation is required from reputed companies who have successfully constructed Plant Growth Chambers / Tissue Culture Labs /High Tech Containment Facility/similar facilities .

- Plant Growth Chamber having size of 800 Cu.ft. divided in two zone 480Cu.ft. and 320Cu.ft.
- Temperature Range (In 480Cu.ft.): 4°C to 50°C±2°C.
- Relative Humidity :Upto60% to 85% ± 5%.
- Light: Luminous Flux ranging from 350 to 400μE/M per sq.m2/Sec.
- 60mm Puff insulated structure with 60mm thick flooring covered with 1.2mm Aluminium chequered Sheet
- Cam lock arrangement for leak proof cabinet (Technical details must be provided).
- Chamber Should be constructed on a concrete plate form of 15' x 15' size and 1' height further provide with a Rain Shed made of Galvanised tubular structure and Bare Galvalume Sheet as cladding materials (details must be given)
- Cooling system having 20000 BTU Cooling capacity @ 4°C room & 40°C amb. Using three phase commercial refrigeration system with HP/LP cut off and SS evaporating units and allied accessories with CFC Free refrigerant should be provided (Technical Details of refrigeration system must be provided)
- Luminous Flux ranging from 350 to 400μE/M per sq.m2/Sec area
 With Ceiling suspended Adjustable Light Bank and 2 Nos. of Tissue Culture Growth Rack fitted with Photosyntheticallay Active Radiation Lamps (T8 SMD type LED Lamp in combination with Grow Lamps) having 2'6" Shelf to shelf distance (Total 2 Illuminating Shelves) complete Stainless Steel (304 grade) farme.
- Ultra Sonic Vapour Humidifier (RHupto 85%) Ultrasonic Frequncy: 1700±40 KHz, Ceramic Disc size:
 Φ 20mm. Titanium Coated. Mist Generation > 900 ml/Hr.Stainless Steel enclosure with automatic water feeding arrangements and fiber filter.
- Dehumidifier for lowering of Humidity level with microprocessor controls.
- Microprocessor Photosynthesis control Panelfor TEMPERATURE, HUMIDITY (Day & Night Separate) and LIGHT duly fixed in Buffer Room Area (Technical Details must be provided)
- Stainless Steel (304 garde) Benching arrangement (Height 16") covering maximum Floor area capable to withstand a load of 500 Kgs 2 Nos.
- Modulated Damper Arrangement with Filter for Fresh Air / Co₂ Controlling operated electronically as per required program
- High quality ISI approved fittings with copper multi strand twisted FR Grade cable and rigid Stds of safety with proper M.C.B. (Make L&T/Havells) with Standard LED Light Illumination in Both chamber duly fitted in IP65 enclosures.

Warranty: **Warranty should be minimum of two years.** against i) all spare parts ii) electronic & electrical instruments iii) manufacturing defects.

Tenderer must provide a trouble free after sales service within 24-48 Hrs. after the intimation of complaint. Tenderer must be ISO 9001:2015 certified and CE certified. Documentary proof must be attached with the tender.

Tenderer must provide a Solvency Certificate not less than 20 Lakhs from any Nationalized Bank.

User reserves the rights to reject or accept any/all tender without assigning any reason thereof.

The detailed specification needs to be given for each section in Technical Bid with complete elaboration of technical requirements with all commercial terms and conditions failing which tender will be rejected.

Tender are liable to be rejected if they are not inline with the technical specifications of the Tender Notice.

The rates quoted should be FOR Botany Department, P. U., Chandigarh. SPECIAL DISCOUNT for educational institutions/University teaching department may be mentioned. The technical, financial bids and EMD be enclosed in separate sealed envelopes duly marked and placed together in a duly sealed envelope giving our reference and due date of quotation. The EMD 2% of the total cost of the equipment and DD/ Traveler cheque should be made in the name of The Registrar, Panjab University, Chandigarh. The Quotations should reach to Prof. Harsh Nayyar, Principal Investigator, Department of Botany, Panjab University, Chandigarh-160 014 by due date.

Thanking you,

Yours sincerely,

(Harsh Nayyar) Principal Investigator