## **TECHNICAL SPECIFICATIONS FOR CLIMATE CHAMBER**

- 1. Temperature Range: 10°C to 60°C
- 2. Temperature sensitivity: +/-1°C
- 3. Relative Humidity Range: 40% to 95%; should be attainable at every point of the specified temperature range
- 4. Relative Humidity Sensitivity: +/- 2 %
- 5. Internal Capacity: 200 liters
- 6. No. of adjustable shelves: 3 (15 kg supporting capacity for each)
- 7. Limiting Outer Width: up to 800 mm
- 8. Internal body type: Double walled
- 9. Internal body material: at least SS 304 grade
- 10. External body material: Powder coated CRCA
- 11. Insulation material: CFC free polyurethane foam (PUF)
- 12. Heating arrangement: SS tubular heaters
- 13. Refrigerant: CFC free / Ozone friendly
- 14. Humidification: Droplet free water vapor generation arrangement
- 15. Dehumidification: Refrigerant based.
- 16. Air Circulation: Forced air circulation in internal chamber to enable uniformity of temperature and Relative Humidity
- 17. Illumination: 8W Fluorescent lamp
- 18. Power requirement: Single phase, 220-240 V, 50 Hz.
- 19. Sensor: Capacitance type sensor for temperature and humidity
- 20. Controller: Microprocessor controller with LCD display of set and actual conditions and battery backup
- 21. Data logging:
  - i. Recording of Temp. & Relative Humidity for 24 hr duration
  - ii. Histogram display of recorded data through controller.
  - iii. Port interfacing with printer
  - iv. Recording of power failure and resumption date and time
- 22. Safety systems:
  - i. Low water level alarm and power cut off
  - ii. Overload cut off relay for compressor
  - iii. Alarm in case of door open
  - iv. High temperature safety cut off & alarms for high/low set parameters

Dr.S.Bishnoi

Dr.D.R.Sahoo

Dr.A.Ganguli Prof.B.Bhattacharjee

## **REVISED TERMS AND CONDITIONS**

- 1. Vendors are requested to provide a list of customers using the equipment
- 2. Equipment should be supplied within 6 weeks from the date of purchase order
- 3. Payment as per Govt. of India norms
- 4. Freight charges and VAT will be admissible as per actual
- 5. 12 months warranty cover against manufacturing and operational defects from the date of installation of the equipment
- The bids may be submitted latest by 5:00 pm on 16.08.2013 to: Shashank Bishnoi Department of Civil Engineering Indian Institute of Technology Hauz Khas New Delhi – 110016

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