

## **ITEM NO-2**

### **Technical Specifications for Liquid Nitrogen Vapor Storage System**

- Liquid Nitrogen Storage System should be in 100% vapor phase at -190°C, with no contact of liquid nitrogen inside the storage chamber.
- Liquid Nitrogen Storage system should be a jacketed model.
- Capacity of Liquid Nitrogen should be 30 liters in the envelop outside the chamber.
- System should have Minimal interior temperature gradient from bottom of the chamber to below the lid.
- System should have temperature sensor (02 Nos.) inside the Storage Chamber.
- System should have 2ml Vial Storage Capacity of 9100 Vials (approx.)
- Liquid Nitrogen Storage System should be mounted on castors for easy mobility.
- Automatic monitoring and display of temperature below the LID.
- Automatic monitoring and display of Liquid Nitrogen level.
- Automatic filling and control of liquid nitrogen level.
- Alarms for deviations from the set values of levels and temperatures.
- Programme lock to prevent unauthorized intervention.
- Samples can be retrieved in case if they fall into the wel of the chamber
- System should have increased interior visibility
- System should have Data Storage and Retrieval of Temperature, Level and Other system activities data.

### **Technical Specifications for Liquid Nitrogen Supply Tank**

- System should have Liquid Level Indicator
- System should have Liquid Fill Valve, Vent Valve and Pressure Building Valve.
- System should be mounted on castors for easy mobility.
- System should have two Safety Valves, one should be set at 22 psi and another should be set at 60 psi.
- System should have Pressure Guage.
- System should have Stainless Steel Body.
- System should be supplied with a 4' transfer hose for liquid withdrawal.