## **Specification**

- Model: vertical, compact, slim
- · Capacity more than 550 litres
- · Display: Digital LED for set temp, chamber temp.
- · Noise level- Max 60db
- · Compressor: double compressor for effective cooling.
- · Operating input voltage: 220-230V AC, 50Hz.
- · Operating temperature -55 to -86°C at ambient temperature.
- · Fully programmable microprocessor controlled.
- Display panel showing simultaneously: A) cabinet temp., B) temperature set points, C) Ambient temp.
- Preferably vacuum insulation panel or panel with polyurethane foam for better temperature stability.
- Interior made up of low temperature resistant high-grade steel / stainless steel and exterior painted steel.
- Four sided sealing in external and internal door to ensure minimal temperature loss and ice deposition on the interior door.
- Safety key lock with door to prevent unauthorized access to control panel and display should have 72 hr battery backup.
- Quality certificates like ISO, CE or equivalent should be provided along with quote.
- Audible and visible alarms for temperature, power failure, system failure, battery low etc.
- Freezer must use CFC-FREE, HCFC-FREE nonflammable refrigerants, and refrigeration
- Freezer must have at least 4 to 6 compartments with individual inner door.
- Compressor should be warranted for 5 years.
- System should be able to pull down the temperature from ambient temperature to -85°C (degree Centigrade) in 4-5 hrs.
- Freezer must have battery back-up for the display in case power outage and 4 PIN security lock to prevent unauthorized tampering.
- A pair of mid arm cryogloves (large), 3 drawer racks (140X420X180 mm) and 20 cryo-boxes (1.0 and 1.8 ml, PC autoclavable) should be provided.
- Freezer should be supplied with suitable voltage stabilizer compatible to run the freezer
- Vacuum release port should be inbuilt for easy opening of the door.
- System should have reduced energy consumption with high efficiency fan
- Power consumption should be  $\leq 12 \text{ KWH} / \text{day}$ .
- Country of origin certificate should be enclosed alongwith tender document
- One suitable air conditioner and servo stabilizer should be supplied for better performance of the Freezer