## TECHNICAL SPECIFICATION FOR LOW TEMPERATURE BATH WITH MAGNETIC STIRRER (Quantity – 2 nos)

## General:

- Rapid cooling of liquids to low temperatures
- Ease of operation
- Compact design, small footprint to be used inside of 5 ft fume hood
- Safer and consistent than dry ice
- Leak/over current braker, independent overheat protector, self-diagnosis, refrigerator protection timer, overload relay protection circuit and float switch for safety
- In-build magnetic stirrer for the efficient stirring.

## Instrument:

Working temperature range : −80 °C to room temperature

Temperature accuracy : ±1 °C

Temperature control & setting : PID temperature controller with membrane

keypad

Temperature indication : Digital display

Bath material and volume : Stainless steel and 3.5 L

Maximum container size : Bath should hold 300 mL flask

Refrigerator : continuous operation

Operating time : System should run continuously 7 days at -78 °C

Magnetic stirrer : 450W

Rotation speed : 100-800 rpm

- All standard accessories for complete operation and maintenance of the equipment shall be supplied by the vendor.
- The instrument should be provided with 12 months warranty and Annual Maintenance contract (AMC) for two additional years.
- Working demonstration of the equipment shall be arranged by the supplier at installed site, without any additional cost.
- The supplier should have supplied similar instruments to IITs, IISc, IISERs or Government (State/Central) Organizations. List of organization with contact details should be provided.