

SPECIFICATION DETAILS

SUPPLY AND INSTALLATION OF EQUIPMENTS FOR ABC CENTRE” AGAINST RE-TENDER NOTICE c-hed/32/2025-4, DTD 04/03/2026

1. ICELINED REFRIGERATOR

- External Dimensions (W × D × H): Approximately 1320 × 805 × 970 mm
- Power Supply: Single phase, 220–240 V AC, 50 Hz
- Rated Current: 1.10 Ampere
- Effective Storage Capacity: Minimum 192 litres
- Maximum Storage Capacity: 192 litres
- Refrigerant: R-290, eco-friendly refrigerant
- Temperature Control: Electronic temperature controller
- Safe Storage Temperature Range: +2°C to +8°C
- Operating Ambient Temperature: +10°C to +43°C
- Energy Consumption: Maximum 1.50 kWh / 24 hours at 43°C ambient temperature
- The refrigerator shall be suitable for continuous operation under tropical climatic conditions.

2. MODULAR MEDICINE RACK

- With Drawers
- Five Shelves and three side half covering – Size – 180x90x40 cm (using 304g.)

3. WATER PRESSURE PUMP

Motor Type: Industrial-grade Induction Motor for extended duty cycles and reduced noise levels.

Winding Material: 100% High-conductivity Copper Winding (Aluminum or CCA windings are not acceptable). Rated Power: Minimum 1700W.

Electrical Compatibility: Designed for AC 220V–240V, Single Phase, 50/60 Hz frequency.

- Working Pressure: Rated at 12 MPa (120 Bar).
- Maximum Flow Rate: Must achieve a minimum discharge of 6.5 Liters per minute (L/min).
- Pressure Regulation: Must include an adjustable spray nozzle to vary pressure intensity based on application.
- Efficiency Features: Must include a Turbo Nozzle (rotary nozzle) for deep-cleaning applications.
- High-Pressure Hose: Minimum 5-meter length, constructed with Metal Braided /

- Metal Net reinforcement for high-pressure durability and abrasion resistance.
- Inlet/Outlet Connections: Heavy-duty, leak-proof quick-connect couplings.
- Protection Rating: Minimum IPX5 water resistance rating for electrical safety during operation.

4. WATER PURIFIER UV+UF 12L

The bidder shall supply, install, and commission a high-performance, 7-Stage Water Purification System utilizing Reverse Osmosis (RO), Ultra-Violet (UV), and Mineralization technologies. The system must be designed to provide alkaline-rich, microbiologically safe drinking water from various water sources (Borewell/Tanker/Municipal).

The purification stages must strictly follow the sequence below to ensure membrane longevity and water quality:

1. Pre-Sediment Filter: To remove suspended solids, dust, and silica.
 2. Pre-Activated Carbon: To remove chlorine, organic impurities, and foul odors.
 3. Sediment Filter (Fine): For secondary particulate removal.
 4. RO Membrane: High-rejection Thin Film Composite (TFC) membrane for TDS reduction.
 5. UV Disinfection Column: Positioned after RO to ensure zero microbial carryover.
 6. Alkaline Booster: To balance pH and add essential minerals (Ca, Mg, K).
 7. Active Copper/Carbon Post-Filter: For final polishing and copper enrichment.
- Booster Pump: Heavy-duty DC Pump (75/100 GPD) with low noise levels.
 - Input Voltage: 140V – 300V AC, 50Hz (Equipped with SMPS to handle voltage fluctuations).
 - Chassis/Cabinet: High-impact ABS Food Grade Plastic (Wall-mount or Table-top).
 - Auto-Cutoff: Automated float-switch to prevent tank overflow.

5. STEEL ALMIRAH

Robust Build Steel almirah - 7 feet height, double door, 5 racks with glass shutter

6. INVERTER

The system shall be a high-performance, industrial-grade Pure Sine Wave Inverter/UPS utilizing High-Speed DSP (Digital Signal Processor) control. The unit must be designed for continuous 24/7 operation and be capable of handling high-starting current inductive loads (e.g., motors, compressors) and sensitive electronic medical or IT equipment without harmonic interference.

Technical Compliance Matrix

The bidder must provide a point-by-point response to the following specifications:

| Clause | Parameter | Technical Requirement | Bidder's Compliance (Yes/No) |
|--------|------------------|--|------------------------------|
| 2.1 | Rated Capacity | 5000VA (5kVA) / Minimum 4000W Continuous Output | |
| 2.2 | DC Input Voltage | 150ah and minimum 4 batteries | |
| 2.3 | Inverter Tech | DSP-Based PWM technology with MOSFET/IGBT switching | |
| 2.4 | Output Voltage | 230V AC \pm 2% (In UPS Mode) | |
| 2.5 | Output Frequency | 50Hz \pm 0.5Hz | |
| 2.6 | Waveform | Pure Sine Wave; Total Harmonic Distortion (THD) < 3% | |
| 2.7 | Efficiency | \geq 90% at Rated Full Load | |
| 2.8 | Transfer Time | \leq 15ms (Mains to Backup mode) | |
| 2.9 | Overload Limit | 110% for 60s; 150% for 2s with auto-reset attempt | |

- Warranty: Minimum 24 months comprehensive onsite warranty from date of commissioning.
- Certifications: Manufacturer must be ISO 9001:2015 certified; equipment must comply with CE/IEC safety standards.

7. DESKTOP COMPUTER

- The desktop computer shall be supplied as a complete system including CPU, monitor, keyboard, and mouse.
- Processor: Intel® Core™ i3 10th Generation or higher, or equivalent.
- Motherboard: Compatible motherboard (H110 chipset or equivalent) supporting the offered processor and DDR4 RAM.
- Memory (RAM): Minimum 8 GB DDR4, expandable.
- Storage: Minimum 256 GB SATA Solid State Drive (SSD).
- Cabinet: Standard desktop cabinet with adequate ventilation and power supply unit.
- Monitor: Minimum 20-inch LED/LCD monitor, with appropriate resolution and connectivity.
- Keyboard& Mouse: Standard USB keyboard and optical mouse to be supplied with the system.

- Operating System: Preloaded with licensed operating system (if required by purchaser).
- Power Supply: 220–240 V AC, 50 Hz.
- The system shall be suitable for office and institutional use with stable and reliable performance.
- All components shall be new, unused, and from an ISO-certified manufacturer.

8. PRINTER CUM SCANNER

Feature Details

Functions - Print, Scan, Copy

Printer Type On-demand inkjet (Piezoelectric), Nozzle Configuration 180 x 1 nozzles (Black), 59 x 1 nozzles per color (CMY)

Connectivity USB 2.0 (High Speed)

Dimensions (Closed) 375 x 347 x 179 mm (W x D x H) Weight ~3.9 kg (8.6 lb)

Printing Performance

- Maximum Resolution: 5760×1440 dpi
- Print Speed (Draft, A4):
- Black: Up to 33.0 ppm

Print Speed (ISO 24734, A4 Simplex):

- Black: Up to 10.0 ipm

Scanning & Copying

- Scanner Type: Flatbed color image scanner (CIS sensor)
- Optical Resolution: 600×1200 dpi
- Input Capacity: Up to 100 sheets (Plain Paper, 80g/m²); 20 sheets (Premium Glossy Photo Paper)

Output Capacity: Up to 30 sheets (Plain Paper); 20 sheets (Premium Glossy Photo Paper)

Supported Paper Sizes: A4, A5, A6, B5, 10×15 cm (4x6"), 13×18 cm (5x7"), Letter, Legal, Indian-Legal (215×345 mm)