

## Corrigendum

COETC/RARI/2026/196

Dated: 27/05/2026

As per the pre-bid meeting held on 22/05/2026 and the representations received by prospective bidders and recommendations of committee following changes are being done:

**Tender Reference No.:** COETC/RARI/2026/183 Dated: 13/05/2026

**Tender for plant tissue culture lab and protected structures with supply, installation and commissioning of laboratory equipments on Turnkey basis.**

S. No.	Contents in published BID documents	Amendments
1.	<p><b>Page No. 14</b>  <b>Similar work:</b> means any lab setup (Agriculture/ Healthcare/ Institution etc.) in government including civil work, electrical work, sanitary work, HVAC along with lab equipment, protected structures, aeroponics facility and speed breeding facility in a single contract with successful completion.</p> <p><b>Page No. 17</b>  <b>Similar work:</b> means any lab setup (Agriculture/ Healthcare/ Institution etc.) in government/ NGO's/ Private Sector/ PSU's including civil work, electrical work, sanitary work, HVAC along with lab equipment's, high tech nursery, aeroponics facility and speed breeding facility in a single contract with successful completion.</p>	<p><b>Similar work:</b> means any lab setup (Agriculture/ Healthcare/ Institution/Tissue culture etc.) in government/ NGO's/ Private Sector/ PSU's including civil work, electrical work, sanitary work, HVAC/ Clean Room Facilities (BSL-2, BSL-3, BSL-4 and ABSL-3 laboratories) along with laboratory equipment, a high-tech nursery, an aeroponics facility, and a speed breeding facility under a comprehensive turnkey project, all completed successfully.</p>
2.	<p><b>Page No. 16 Point No. 4.1</b>                      The bidder or sister concern must be registered in AA/A Class in civil and electrical category GoR PWD or Equivalent in any central/other states department/PSU/Public Undertakings/Autonomous body etc.</p>	<p>The bidder or sister concern/Joint venture (JV)/ associate with an eligible contractor having such valid registration/certification of the relevant scope of work must be registered in AA/A Class in civil and electrical category GoR PWD or Equivalent in any central/other states department/PSU/Public Undertakings/Autonomous body etc.</p>
3.	<p><b>Page No. 16 Point No. 4.1</b>                      All the items covered in the schedule of requirements, shall carry minimum 3 (Three) years on site comprehensive warranty from the date of its installation and commissioning. The bidder must undertake to provide the on-site support during the warranty at RARI, Durgapura, Jaipur- 302018. The</p>	<p>All the items covered in the schedule of requirements, shall carry minimum 3 (Three) years on site comprehensive warranty from the date of its installation and commissioning. The bidder must undertake to provide the on-site support during the warranty at RARI, Durgapura, Jaipur-302018. The repairing/ rectification/ replacement/ configuration required, if any,</p>




<p>repairing/ rectification/ replacement/ configuration required, if any, must be done at site only. During the warranty, all complaints should be attended within 24 (Twenty-Four) hours and rectified within 3 (Three) working days from the time of complaint. In case the rectification of fault involves replacement of hardware the same should be carried out within 14 (Fourteen) working days from the date of intimation.</p> <p>Failure to do so would result in the invoking of the Performance Security. The Performance Security will be released by Sri Karan Narendra Agriculture University, Jobner only after the submission of satisfactory performance certificate issued by end-user and verified after the completion of warranty period.</p>	<p>must be done at site only. During the warranty, all complaints should be attended within 24 (Twenty-Four) hours and rectified within 3 (Three) working days from the time of complaint. In case the rectification of fault involves replacement of hardware the same should be carried out within 14 (Fourteen) working days from the date of intimation.</p> <p>Failure to do so would result in the invoking of the Performance Security. The Performance Security will be released by Sri Karan Narendra Agriculture University, Jobner only after the submission of satisfactory performance certificate issued by end-user and verified after the completion of warranty period.</p> <p><b>Additional:</b> TESTING, VALIDATION AND COMMISSIONING</p> <p><b>a)</b> After completion of the construction and installation works, all the equipment, systems and services shall be commissioned and tested to check the operation and performance of each equipment and system.</p> <p><b>b)</b> Once all the equipment and systems are found to be working satisfactory, the validation of the Laboratory shall be carried out by us in the presence of authorized representatives/committee of the Institute. The Validation of the Laboratory shall be carried out in accordance with the NIH &amp; ISO14644 Guidelines for commissioning and validation of Laboratories.</p> <p><b>c)</b> The list of test to be performed is as below:</p> <ol style="list-style-type: none"> <li>1) Documentation for DQ, IQ, OQ, PQ with certificates of all brought items.</li> <li>2) Integrity test for HEPA Filter's once.</li> <li>3) Room Pressure balancing once.</li> <li>4) air velocity test</li> <li>5) Particle count</li> <li>6) Recovery Test</li> <li>7) Air Flow Pattern</li> <li>8) HEPA Filter Leak Test – According to the US Federal Standard 209E</li> </ol>
---	---




4.	<p><b>Page No. 45 Point No. 3</b></p> <ul style="list-style-type: none"> <li>➤ Electricity: 3-phase, 5 kW minimum load Water: Distilled or deionized, ~50 liters/day. All expenses of electric connection shall be barn by the party.</li> <li>➤ Drainage: Proper outlet from media and washing areas</li> <li>➤ Air Conditioning: Required in Inoculation and Culture Room</li> <li>➤ Backup Power: UPS or generator for culture room continuity</li> <li>➤ Septic Tank: including contraction of one unit of 50 users' septic tank with soakage well including provision of required numbers of man holes/ inspection chambers etc.</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Electricity:</b> 3-phase, 5 kW minimum load Water: Distilled or deionized, ~50 liters/day. All expenses of electric connection shall be barn by the party.</li> <li>➤ <b>Drainage:</b> Proper outlet from media and washing areas</li> <li>➤ <b>Air Conditioning:</b> Required in Inoculation and Culture Room</li> <li>➤ <b>Backup Power:</b> UPS or generator for culture room continuity</li> <li>➤ <b>Septic Tank:</b> including contraction of one unit of 50 users' septic tank with soakage well including provision of required numbers of man holes/ inspection chambers etc.</li> </ul> <p><b>Additional:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Water:</b> Water supply for the Laboratory will be arranged and provided by the bidder from the existing water storage tank.</li> <li>➤ <b>Gas Distribution System:</b> Gas pipeline for 2 nos of gases with changeover panel.</li> <li>➤ <b>Drain &amp; Sewer Line:</b> The drain from the BSL-3 Laboratory, after decontamination, should be connected to the nearest available drain line. All the penetrations should be sealed. Back-flow prevention devices must be installed on all faucets. The bidder should design and construct the drain and sewer line from BSL3 lab to the available drain line.</li> <li>➤ <b>Utilities for laboratory equipment/s:</b> Utility connections like power, water, drain etc. required for the laboratory equipment should be provided.</li> <li>➤ DG sets and AHUs units should be on RCC Floor and covered with shades.</li> <li>➤ In the Electricity point, 100-meter HT line is required with transformer.</li> </ul>
5.	<p><b>Page No. 54 Point No. 28 Pass Box with UV lamp</b></p> <p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>➤ It shall have overall size 600mm (L) x 600mm (depth) x 600mm (height).</li> <li>➤ There shall be UV -Inbuilt.</li> <li>➤ Pass box cabinet- SS304</li> <li>➤ Covering: Bottom and Top Side</li> <li>➤ Door interlocking shall be</li> </ul>	<p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>➤ Dynamic Pass box (Two way or Three way. (As per Space Availability at site) Installation, Testing &amp; Commissioning SS-304 DYNAMIC Pass Box fully automatic system, with electromagnetic interlocking system, digital display, HEPA Filters, UV &amp; fluorescent light alarm system etc. (working size: 450mm W X 450mm D X 450mm H).</li> </ul>

*Signature*

*Signature*

	<p>electrically operated solenoid locking coil operated/ magnetic sensor to operate the coil.</p>	<ul style="list-style-type: none"> <li>➤ Cross over Bench at entry and exist of clean room and media room (as per approved layout) 1. SS 304, 18 &amp; 16G combination, mat finish 2. Inside horizontal support 3. Bottom both side 30mm color for will be grouting 4. Approx size 1000 mm W x 400 mm D x 600mm H (can be modified to size).</li> <li>➤ UV Garment SS-304 Storage (in Air Lock of entry to clean room) Garment storage cubicle complete SS304 construction SS rod for hanging folded garments. SS perforated shelves / tray (removable) at bottom for keeping mask and shoe cover etc. Fully toughened glass door/Acrylic UV light with fittings &amp; limit switch Leveling legs.</li> <li>➤ <b>SS Dustbin:-</b> Stainless steel foot operated dustbin of appropriate size as per requirement will be provided</li> </ul>
6.	<p><b>Page No. 54 Point No. 29 AHU/HVAC for Growth Rooms and lab</b></p> <p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>➤ Supply Installation, testing and commissioning of Double skin Floor mounted Air handling Unit Panel thickness in mm 43+/-2, panel insulated with cfc free puff of 40+/-2 kg/m3, centrifugal Backward curved blade fan, drive sets, squirrel cage 3 phase induction motor -for all growth room and Inoculation room.</li> <li>➤ Will have 4 row deep DX-coil,</li> <li>➤ 35 mm SP WG, pre filter before cooling Coil, Blower</li> <li>➤ 5% fresh air Damper Unit may be factory/site assembled.</li> <li>➤ Air Pressure Module to be installed in all growth rooms and culturing rooms (Sterilized Zone of Facility) for pressure maintenance.</li> <li>➤ Standard Microprocessor based air-cooled Condensing unit with scroll compressors, air-cooled condenser, and expansion valve control panel equipped with such features display of current/ phase, auto sequence starting and stopping of compressor etc.</li> <li>➤ Split Airconditioning for lab other</li> </ul>	<p><b>Specification:</b></p> <ul style="list-style-type: none"> <li>➤ Supply Installation, testing and commissioning of Double skin Floor mounted Air handling Unit Panel thickness in mm 43+/-2, panel insulated with cfc free puff of 40+/-2 kg/m3, centrifugal Backward curved blade fan, drive sets, squirrel cage 3 phase induction motor -for all growth room and Inoculation room.</li> <li>➤ Will have 4 row deep DX-coil,</li> <li>➤ 35 mm SP WG, pre filter before cooling Coil, Blower</li> <li>➤ 5% fresh air Damper Unit may be factory/site assembled.</li> <li>➤ Air Pressure Module to be installed in all growth rooms and culturing rooms (Sterilized Zone of Facility) for pressure maintenance.</li> <li>➤ Standard Microprocessor based air-cooled Condensing unit with scroll compressors, air-cooled condenser, and expansion valve control panel equipped with such features display of current/ phase, auto sequence starting and stopping of compressor etc.</li> <li>➤ Split Airconditioning for lab other area like -Reception, Office, Meeting room, training room and molecular lab.</li> <li>➤ <b>Additional:</b></li> </ul> <p>The proposed Plant Tissue Culture</p>

	<p>area like -Reception, Office, Meeting room, training room and molecular lab.</p>	<p>Laboratory and support areas shall be air-conditioned through separate dedicated Central AC System comprising of Chiller Pack/Condensing Units, Air Handling Units, Exhaust System, Air Filtration System and Air Distribution System complete in all respect. The system shall be with standby and backup provisions capable to provide uninterrupted continuous 24 x 7 x 365 days operation of the laboratory to maintain the required temperature, humidity, air-change rate, differential pressure gradient and air filtration conditions of the Lab. The HVAC system shall comply with the given specifications and performance requirements and shall be complete in all respect, as required and approved. Laboratory and support areas shall be air-conditioned through independent A/C system to maintain the required temperature, humidity, air-change rate, differential pressure gradient and air filtration conditions of the Laboratory Facility. The Air Handling Supply System, Exhaust System, Air Filtration System and Air Distribution System complete in all respect. The system shall be with standby and power backup provisions in supply Air Handling system, exhaust system and containment HEPA Filter housing capable to provide uninterrupted continuous 24x7x365 days operation of cell Culture Lab. The bidder shall submit the HVAC system and BMS design and working drawings for prior approval. The HVAC system shall comply with the given specifications and performance requirements and shall be complete in all respect, as required and approved. Laboratory Temperature: 22+/- 2 °C Relative Humidity: 55-60% Positive Pressure gradient: As per approved zoning plan Sound level: 50-60 db. Air Conditioning Plant: Inner Laboratory Temperature to be maintained at 22 °C +/- 3 °C. Chiller: Supply, installation, testing, and commissioning of CHILLING/Dx UNITS each complete with compressor, motor, insulated chiller, flow switch, condenser fans, vibration isolators, integral refrigerant</p>
--	---	--

*[Handwritten signature]*

*[Handwritten signature]*

		<p>pipng and wiring, accessories as required and called for. The Chiller Pack shall be skid mounted with Air Cooled Condenser, Evaporator/Chiller, Microprocessor control panel including interconnecting control and power wiring, refrigerant charge etc. complete in all respect. To provide backup capacity, the chiller pack shall have multiple compressors. The noise level should not exceed the permissible government standard. It should also have electronic thermostats for tripping the compressors after reaching set temperature. Approved Eco-Friendly Refrigerant R-134 a / R-410 a.</p> <p>Air Handling Unit (AHU): The AHU constructed over a metallic structure made with normalized steel profiles, covered with sandwich type panel. The panel is made with lacquered galvanized stainless-steel plates, with 120 kg/m<sup>3</sup> rock-wool foam core. The gaps between panel and structure will be sealed with neoprene joints in order to guarantee the air tightness of the AHU. AHU includes the following sections: mixing sections, with regulation dampers for fresh intake air and return air, pre-filtration section, electrical resistance for heat battery, cool battery made of copper pipes and aluminium blades, fan section including high pressure fan, absolute filtration section H-14. All the supply AHUs comprise of following sections: Intake louver, pre-filter section with 20 microns and 10 microns filters, cooling coil section, blower section, driver set and pulley, fine filter section with 5 microns filter. Other accessories like dampers, SS304 drain pan, common base frame with vibration isolators pads, suitable inspection doors for filter, coil &amp; blower sections, are provided. They are connected to HEPA filters for all BSL-3 rooms, corridors, and air-lock rooms. All HEPA filters, the lay-in type, are at 99.99% efficient to @ 0.3-micron particle size, hermetically sealed and ducted aluminum terminal units. The HEPA filter should be capable to withstand corrosive agents and gases used for lab fumigation. Air Flow: No recirculation, one pass design. Air control by</p>
--	--	---

*Stake*

*Sange*

		<p>a series of motorized damper with Controlled actuator. Pressure is measured by digital type pressure differential gauge and feedback into the control software for pressure setting, maintenance, and alarm setting. Air Filtration System: All incoming air filtered by three stages Filtration in AHU. Ultra Violet Germicidal Irradiations (UVGI) System: Supply, installation, testing, commissioning, and handling of the UVGI System for maintaining the indoor air quality. The components of the system must be in strict conformity with the specifications. The prices to include all inter connected wiring between the UVGI lamps. The UVGI system shall be installed in supply air ducts or AHU itself. Three Stages for supply Pre - Filtration: As per ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) ASHRAE 1st stage 30% efficiency ASHRAE 2nd stage 90% efficiency Final Stage HEPA Filtration 99.99% efficiency</p> <p>Ducting and Insulation for Supply and Exhaust Ducts: The supply air and exhaust ducting shall be carried out in GI sheet (class VIII with zinc coating of 120 gm/sqm). All duct fabrication work, thickness of sheet metal, supports, hangers shall conform to Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) standards. All joints shall be sealed with silicone sealant. Duct Insulation: Closed cell, fire-retardant, self-extinguishing type crossed linked polyethylene insulation density not less than 24 Kg/sqmm, "K" value not more than 0.028 Kcal/0C with adhesive tape etc., on duct complete as per specification and drawings. Motorized Airtight Damper: Consists of aluminum casing with factory fitted motorized damper. Casting and attachment should be stainless steel. Fire Dampers: Fire Dampers provided in the supply and exhaust air systems shall be interlocked with the AHU blower motors such that in case of fire, the AHU fan motor should trip automatically. Fire dampers may be linked</p>
--	--	--

*Santh*

*Santh*

		to the control panel. Sound Damper: For reducing the noise level of the air travelling through the duct. To be placed after the air throwing machines to absorb the extra noise and make the surrounding noise proof. Control Pressurization: Laboratories should be maintained at a higher negative pressure than the corridors/airlocks and other non-laboratory spaces. Ultra Violet Germicidal Irradiations (UVGI) System: Supply, installation, testing, commissioning, and handling of the UVGI System for maintaining the indoor air quality. The components of the system must be in strict conformity with the specifications. The prices to include all inter connected wiring between the UVGI lamps. The UVGI system shall be installed in supply air ducts or AHU itself. BUILDING MANAGEMENT SYSTEM (BMS): A customized Building Management System shall be designed, programmed, including pressure sensors, temperature & Rh sensors, control wiring and BMS Control Panel with PLC with software, complete as required
7.	<b>Page No. 50 Item No. 3</b> Weighing Capacity shall be 0.01 mg to 250 gm with accuracy of 10 mg	Weighing Capacity shall be 10 mg to 250 gm with accuracy of 0.01 mg
8.	<b>Page No. 50 Item No. 4</b> Weighing Capacity shall be 500 gm - 5 kg	Weighing Capacity shall be 500 gm - 5 kg with accuracy of 1 g
9.	<b>Page No. 50 Item No. 6, 7 &amp; 8</b> Brand Name: LABMAN / Sper Scientific Ltd/ Equivalent or higher	Thermoscientific/ Mettler Toledo/ Bluelab/Hanna/ Equivalent or higher (Specifications: as mentioned in published tender)
10.	<b>Page No. 51 Item No. 14</b> Brand Name: Labman and Remi/ Equivalent or higher	Remi/Sesw/Bionexis/ Equivalent or higher (Specifications: as mentioned in published tender)
11.	<b>Page No. 62 Glassware Item No. 1-10</b> Brand Name: Borosil and Biohall or equivalent	Borosil/ Duran/Pyrex/Corning/ Equivalent or higher (Specifications: as mentioned in published tender)
12.	<b>Page No. 31 S.No. 1</b> Premium U 410 Upright DeepFreezer (-80 degree C) approx. 410Ltrs	Upright Deep Freezer (-80degree C) approx. 410Ltrs
13.	<b>Page No. 31 S.No. 2</b> Master Cyler nexus gradient230V/50-60HZ (PCR1) – RTPCRMachin	RTPCR Machine
14.	<b>Page No. 32 S.No. 17</b>	Three stage moleculargrade water purifier

*Sanjay*

*Sanjay*

	Millipore-three stage molecular grade water purifier	
15.	<p><b>Page No. 63 Plant Molecular S. No. 1</b></p> <p><b>Brand:</b> Celfrost / Truefrost/ Haier/ Equivalent or higher</p> <p><b>Specification:</b> The deep freezer shall be an upright <b>-80°C ultra-low temperature freezer</b> with a minimum temperature range of <b>-50°C to -86°C</b> suitable for long-term biological sample storage. The system should be supplied with stainless steel inner chamber, lockable insulated doors, storage racks, voltage stabilizer compatibility, and minimum one-year comprehensive warranty. It shall have audio-visual alarms for high/low temperature, power failure, door open, and sensor malfunction with battery backup facility.</p>	<p><b>Brand:</b> Celfrost / Truefrost/ Haier/Thermo/ Eppendorf/ Equivalent or higher</p> <p>Specification: Capacity 410 - 450 L, with LED interface, Green HC cooling liquids, PUF Insulation OR VIP and air-cooling, handle left side, 5 shelves with independent 5 doors, operating temperature from <b>- 50 °C</b> up to <b>-86°C</b> with <b>1°C</b> increment at <b>32 °C</b> Maximum ambient operating temperature. System, with energy consumption when freezer is at <b>80 °C</b> and <b>5.7 KWh/ day (0.37 KWh/ft3)</b> when freezer is at <b>- 70°C</b>. System Exteri or should be made up of powder coated Steel to resist scratch and rust and the interior should be of Polished Stainl ess-Ambient (<b>20 °C +/- 1°C</b>) to <b>-80 °C</b> Pull down time should be <b>3 h 35 min (215 min)</b> or lesser; with freezer being maintain ned empty. Warm up time (freezer 2/3 full, from <b>-85 °C</b> to <b>0 °C</b>) of at least <b>36 hrs</b> or longer; <b>8 hrs</b> for Warm up from <b>-85 °C</b> to <b>-50 °C</b>, freezer 2/3 full or longer. System should have Door open recovery (DOR) of <b>16 min</b> or lesser for <b>15 sec</b> Door opening OR Door open recovery Steel grade <b>304 2B</b> for easy cleaning and to eliminate potential for oxidation. (DOR) of <b>22 min</b> or lesser for <b>30 sec</b> Door opening; freezer set to <b>-80 °C</b> in either case. Freezer must have <b>ISO 9001</b> standard quality test requirements and <b>IEC 61010</b> Electrical safety CE certified.</p>
16.	<p><b>Page No. 64 S. No. 3</b></p> <p><b>Centrifuge</b></p> <p>The centrifuge shall be a bench-top high-speed microcentrifuge equivalent to Eppendorf Centrifuge 5430 R with maximum speed up to <b>17,500 rpm</b> and minimum <b>30,000 × g</b> RCF capacity. The system shall support multiple rotor options accommodating microtubes (<b>0.2–2.0 mL</b>), <b>15/50 mL</b> tubes, and microplate/deep-well plates with automatic rotor recognition and imbalance detection. The refrigerated model shall provide temperature control from <b>-11°C</b> to <b>+40°C</b>, brushless maintenance-free motor, electronic lid</p>	<p><b>Centrifuge</b></p> <p>The centrifuge shall be a bench-top high-speed microcentrifuge with maximum speed up to <b>17,500 rpm</b> and minimum <b>30,000 × g</b> RCF capacity. The system shall support multiple rotor options accommodating microtubes (<b>0.2–2.0 mL</b>), <b>15/50 mL</b> tubes, and microplate/deep-well plates with automatic rotor recognition and imbalance detection. The refrigerated model shall provide temperature control from <b>-11°C</b> to <b>+40°C</b>, brushless maintenance-free motor, electronic lid lock, and low noise operation (<b>&lt;54 dB</b>). The centrifuge must include user-friendly digital interface with programmable operation, storage of user programs, rapid</p>

*Signature*

*George*

	lock, and low noise operation (<54 dB). The centrifuge must include user-friendly digital interface with programmable operation, storage of user programs, rapid acceleration/deceleration, and aerosol-tight QuickLock® rotor system or equivalent safety mechanism. The unit shall be CE/ISO certified and supplied with suitable rotors, installation, demonstration, and minimum two-year comprehensive warranty from authorized service provider.	acceleration/deceleration, and aerosol-tight QuickLock® rotor system or equivalent safety mechanism. The unit shall be CE/ISO certified and supplied with suitable rotors, installation, demonstration, and minimum two-year comprehensive warranty from authorized service provider									
17.	<b>Page No. 68 S. No. 22 Genogrinder</b>	<b>Tissue Lyzer</b>									
18.	<b>Page No. 6 Points No. 25 &amp; 26</b> <b>Point No. 25:</b> Training related to operational and functional aspects has to be provided onsite as well as offsite by the bidder without any extra cost. <b>Point No. 26:</b> Unlimited technical support and training as and when required must be provided by the bidder without any extra cost.	<b>Point No. 25:</b> Training related to operational and functional aspects has to be provided onsite as well as offsite by the bidder without any extra cost for 3 years. <b>Point No. 26:</b> Technical support and training for 10 people of 21 days duration for 5 times must be provided by the bidder without any extra cost.									
19.	<b>Page No. 71 Creation of Polyhouse with Mist Chambers</b> Vestibule (Ante room): 3 x 3 x 2.5m. (L x W x H)	Vestibule (Ante room): 2.5 x 4 x 2.5m. (L x W x H)									
20.	<b>Page No. 82 Point No. 8</b> <b>Pad cooling size and Pad Area:</b> 1.6 mtr tall x 76.8m long x 150mm	<b>Pad cooling size:</b> 1.6 m tall x 19.2 m long x 150mm									
21.	<b>Page No. 83 Point No.</b> <b>B:</b> SLOW SPEED AXIAL FLOW FAN-48" single speed belt driven slow speed axial flow fan 3-phase, 50 HZ): No. 16 <b>C:</b> AIR CIRCULATION FANS - Horizontal airflow fan complete with Heavy duty mounting 415V single speed, 2300 CFM, SS body: No. 16 <b>D:</b> INSECT CAGE Size: 76.8m x 1.8 m x 2.6 m (l x w x h)	<b>B:</b> SLOW SPEED AXIAL FLOW FAN- 48" single speed belt driven slow speed axial flow fan 3-phase, 50 HZ): No. 4 <b>C:</b> AIR CIRCULATION FANS -Horizontal airflow fan complete with Heavy duty mounting 415V single speed, 2300 CFM, SS body: No. 8 <b>D:</b> INSECT CAGE Size: 19.2 m x 1.8 m x 2.6 m (l x w x h)									
22.	<b>Page No. 78 Point No.:</b> Room and Envelope Specifications of Speed Breeding Chambers	<table border="1"> <thead> <tr> <th>Main Particulars</th> <th>Dimensions</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td><b>Total Area Including utility</b></td> <td>12.6m x 8.2m = 103 sq.m.</td> <td>01 Complete Set</td> </tr> <tr> <td><b>Main Working Chamber Area</b></td> <td>5.8m x 4m x 4m = 23.2 sq.m</td> <td>02 Nos.</td> </tr> </tbody> </table>	Main Particulars	Dimensions	Units	<b>Total Area Including utility</b>	12.6m x 8.2m = 103 sq.m.	01 Complete Set	<b>Main Working Chamber Area</b>	5.8m x 4m x 4m = 23.2 sq.m	02 Nos.
Main Particulars	Dimensions	Units									
<b>Total Area Including utility</b>	12.6m x 8.2m = 103 sq.m.	01 Complete Set									
<b>Main Working Chamber Area</b>	5.8m x 4m x 4m = 23.2 sq.m	02 Nos.									

*Handwritten signature*

*Handwritten signature*

		(L x W x H)	
	<b>Buffer/Entry Room</b>	5.6m x 2.5m x 4m = 14sq.m. (L x W x H)	01 No.
	<b>Control Room</b>	2.5m x 2.4m x 4m = 6 sq.m. (L x W x H)	01 No.
	<b>Utility Area</b>	4m x 8.2m = 32.8m <sup>2</sup>	01 No.
23.	<b>Page No. 6 Point No. 22</b> Manufacturer authorization is mandatory for following equipments: colling incubator, transilluminator water bath, millipore-water purifier, shaker and incubator, hot air oven, micro pipette, deep freezer, centrifuge, EC meter and pH meter, analytical balance, weighing balance, RTPCR machine, thermal cycler, gel electrophoresis system, autoclave, air flow, water bath shaker, rotary shaker and protected structure work.	The bidder should furnish undertakings for all quoted lab equipments to provide OEM authorization certificates within 15 days from receiving the order. Failure to do so will treated as cancellation of order on account of non confirmation with tender terms.	

- **Page No. 6.** The additional **point 28** should be likewise All the items covered in the schedule of requirements, shall carry **minimum 3 (Three) years** on site comprehensive warranty from the date of its installation and commissioning.
- **Page No. 48, additional facilities** should be like this:**Area-wise Classification & Environmental Conditions for Plant Tissue Culture Laboratory**

Sr. No.	Area / Room	Classification	Temperature	RH %	Pressure Cascade	Remarks
1.	Glassware Washing	CNC Area	22-27°C	50-65%	Negative	Wet area
2.	Media Preparation Room	ISO Class 8	22±2°C	45-60%	Positive	Controlled environment
3.	Chemical Storage	CNC Area	20-25°C	Below 60%	Neutral	Chemical resistant storage
4.	Sterilization Room	ISO Class 8	22±2°C	45-60%	Positive	Autoclave area
5.	Instrument Room	ISO Class 8	22±2°C	45-60%	Positive	Sensitive equipment
6.	Change Room	ISO Class 8	22±2°C	45-60%	Positive	Personnel

*[Handwritten signature]*

*[Handwritten signature]*

						entry
7.	Inoculation / Transfer Room	ISO Class 6 Background with ISO Class 5 under LAF	21±2°C	45-55%	Highest Positive	Critical aseptic activity
8.	Culture Growth Room	ISO Class 7	24±2°C	50-60%	Positive	Controlled lighting
9.	Incubation Room	ISO Class 7	24±2°C	50-60%	Positive	Controlled culture growth
10.	Packing & Dispatch	CNC Area	22-28°C	40-60%	Neutral	Dispatch
11.	Utility Room	Non Classified	Ambient	Ambient	Negative	Technical services

Parameters to be validated for Tissue Culture Lab: The facility and systems shall be validated and qualified through: • Design Qualification (DQ). • Installation Qualification (IQ). • Operational Qualification (OQ). • Performance Qualification (PQ). • HVAC Validation. • Clean Room Validation. • Calibration & Traceability requirements.

*scingh*

*Ball*