

**Quotation Notice No. IRTC/P/ 05 /2024 – 25 Dated 31 – 12 – 2024**

Quotations are invited from the manufactures/authorized distributors for the supply of the following items for the implementing the project under Plan Grant 2024 – 25. Quotation should be sent to the following address: Registrar, IRTC, Mundur, Palakkad, Kerala – 678592, Phone 2832663, 2832324, 9188183296.

Last Date of submission: 07 – 01 – 2025, 5 pm

| Sl.No | Name of Item                             | Specification   | Quantity |
|-------|--|---|----------|
| 1     | <b>Specifications for the Bioreactor</b> | Total Volume – 100 Ltrs.<br>Working Volume – 80 Ltrs<br>Fermenter made of triple wall<br>Wall made of high grade 304 SS sheet<br>Flanges made of Stainless steel<br>Silicon gasket<br><b>Stirring Systems:-</b><br>Agitation has to be done by SS shaft, along with the propeller fitted from the bottom<br>The shaft with a stuffing box and gland packing to avoid leaking while running.<br>Bioreactor vessel mounted on stainless steel structure<br><b>The following provision are to be provided in the fermenter</b><br>Steam inlet valve<br>Media inlet valve<br>PH reference collection valve<br>Safety valve and pressure gauge<br>Thermometer<br>Air inlet valve with perforated tube up to bottom of vessel<br>Drainage valve at the bottom of vessel | 1        |

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|---|---|--|---|
| 2 | <b>Portable pH meter</b>                                  | <p>pH Range: 0 – 14<br/> Temperature Range: 1-55 °C<br/> Resolution: 0.1 pH; Temperature resolution is 0.1 °C/F<br/> Accuracy: +/- 0.2 pH; Temperature accuracy is +/-2%<br/> Calibration: Digital automatic calibration<br/> Minimum EC/TDS: 10 µS/5 ppm<br/> Electrode: Glass sensor and reference tube electrodes<br/> Power source: Button cell batteries</p>  | 1 |
| 3 | <b>Portable ORP (Oxidation reduction potential) meter</b> | <p>Should Measure Oxidation Reduction Potential (Redox) and Temperature<br/> Auto-ranging calibration<br/> Waterproof housing (IP-67 rating minimum)<br/> Digital Calibration<br/> LCD screen with simultaneous temperature display.<br/> ORP Range: -999 to +1000 mV<br/> Temperature Range: 0-80°C; 32-176°F<br/> Resolution: 1 mV;<br/> Accuracy: 0.5% (+/-2mV)<br/> Electrode: Replaceable glass sensor and reference tube electrodes<br/> Battery Powered<br/> Warranty : One Year Warranty</p> | 1 |
| 4 | <b>Cl (Chloride) test kit</b>                             | <p>Kit for 160 tests<br/> Range 0-8 pm</p>   | 1 |

  
Registrar

Registrar  
Integrated Rural Technology Centre  
Mundur, Palakkad - 678 592  
Kerala

