

Quotation notice No. 02/21-22

Sealed quotations are invited from the manufacturers/authorised distributors for the supply of the under noted items for implementing various projects for the year 21-22.

Sl.No.	Name of item	Quantity
1.	Incubator and Anaerobic chamber	1 Nos
2.	Microscope with 100x magnification and digital camera facility	1 Nos
3.	Gel documentation system	1 Nos
4.	TDS meter	1 Nos
5.	Deep freezer	1 Nos
6.	Balanced Cell Colorimeter	1 Nos
7.	Double Beam UV visible spectrophotometer	1 Nos
8.	COD Digestion Unit	1 Nos
9.	Turbidity meter	1 Nos
10.	ArcGIS Desktop Basic 10.8	1 Nos

Further details are available during working hours from our office or from website www.irtc.org.in. Last date of accepting quotation 31-1-2022.

Mundur
 20-01-22



Vinodan
 Director
 Integrated Rural Technology Centre
 Mundur, Palakkad - 678 592
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Detailed specification

Instruments	Specifications
1. Anaerobic chamber	- Incubation chamber, operating chamber sampling chamber, pneumatics systems bottle rack, melting wax sterilizer etc. - Intelligent temperature controller - UV disinfection to avoid contamination - Gas flow adjusted by pneumatics system
2. Microscope with 100x magnification and digital camera facility	Specifications > 9 inch LED Screen > 2 GB RAM >8 GB Internal Memory with External SD Memory Card (>32GB) Build-in Microscopy Software (Measuring and Particle Analysis) Android OS HDMI Output, SD Card Support, Bluetooth Camera Lens : 100x Magnification Condenser with Color coded position guide markings of aperture diaphragm, corresponding to objective magnifications

3.	Gel documentation system with Horizontal Electrophoresis Unit	<p>Gel Doc - Description: microDOC basic system with lift-off dark room hood and camera only</p> <p>Specifications Camera:</p> <p>Effective Pixels: Type: 24.1 megapixels TTL-CT-SIR with CMOS sensor</p> <p>Lens:</p> <p>Maximum Aperture: f/2.8 - f/5.6</p> <p>Image Resolution: 720 × 480 up to 5,184 × 3,456</p> <p>Data Type Still images: Exif 2.3 (JPEG), RAW (CR2)</p> <p>Videos: MOV (Image data: H264 ; Audio data: Linear PCM (stereo))</p> <p>Filter: Inner White Light: Ethidium Bromide or SYBR Green (58 mm) 2 x 3 W white light LED</p> <p>Monitor: Display Format: 8" LED</p> <p>Luminance:</p> <p>Display Mode: NTSC/PAL mode</p> <p>Electrophoresis unit -</p> <p>UV transparent casting tray for 10cm standard gel unit</p> <p>Combs for horizontal submarine electrophoresis unit for Standard gel 10 cm wide</p> <p>Digital display of both Amps and Volts</p> <p>AC Power On and DC Power On LED indicators</p> <p>Current - 0 to 2.5 Amps</p> <p>Voltage – 0 to 400 V</p> <p>Operating temperature range – 0 to 30° C</p>
4.	TDS Meter	<p>Measuring Range: 0-1000ppm;1000-10000ppm;10.1 to 200.0ppt (Convert range automatically)</p> <p>Resolution: 1ppm; 0.1ppt</p> <p>Accuracy: +2% FS</p> <p>Salinity Measuring Range: 0.01% to 25.00%</p> <p>Resolution: 0.01-5.00(0.01% 5.10-25.00%(0.1%))</p> <p>Accuracy: 0.01-5.00%(±0.1%) 5.10-25.00%(±1%)</p> <p>PH Measuring Range: 0.01-14.00 pH</p> <p>Resolution: 0.01pH</p> <p>Accuracy:±0.05 pH</p> <p>Temperature Compensation :ATC 0-60°C</p> <p>TDS Factor:0.4 to 1.0</p> <p>Operation Environment: 0 to 60.0°C(32.0-140°F); RH100%</p> <p>Temperature Accuracy: ±0.5°C</p> <p>Temperature Range: 0.1-60.0°C 32.0-140°F</p> <p>Temperature Resolution: 0.1°C/°F</p> <p>Automatic Shut-Off mechanism</p>
5.	Deep Freezer	<p>Manual defrost -20°C and automatic defrost -30°C laboratory freezer.</p> <ul style="list-style-type: none"> • Environmentally-friendly, non CFC and HCFC refrigerants • Energy savings without sacrificing protection • Alarms built in

		<ul style="list-style-type: none"> • Quiet operation • Keyed security, including power switch and set-point • Easy mobility plus lockable casters
6.	Double Beam UV-Visible Spectrophotometer	<p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> • With built in PC and touch screen color monitor • Wavelength range: 190-1100 nm with ± 0.5 nm accuracy, resolution 0.1 nm • Automatic wavelength calibration and programmable wavelength for lamp change over • Repeatability: ± 0.2 nm • Repeatability: ± 0.002 absorbance • Accuracy: 0.005 absorbance • Readability: 0.01 %T, 0.0001 Abs • Stray light: $< 0.05\%$T at 220 nm • Monochromator: concave holographic grating with 1200 lines per mm • Spectral bandwidth: 1.8 nm • Absorbance range: -3 to +3 absorbance • 3 USB port • Light source: deuterium lamp & tungsten halogen lamp • Detector: silicon photodiode • Warranty: minimum 2 year
7.	Balanced Cell Colorimeter (Digital Photo Electric Colorimeter)	<p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> • Display scale: 0-1000 • Display: 4-digit LED • Test tubes: 12 mm (pathlength) • Quantity of sample: minimum 5 ml • Wavelength range: 400-700 nm with eight optical features • Filters peak wavelength: 420 nm, 440 nm, 490 nm, 520 nm, 540 nm, 570 nm, 600 nm, 700 nm • Measuring modes: %T, absorbance, concentration & K factor • Photometric resolution: 0.1 %T, 0.01 absorbance <p>FEATURES:</p> <ul style="list-style-type: none"> • Micro controller based • Long-life solid-state light source • Long life photo diode detector • User friendly operation • Automatic reference adjustment • Sample holder – to accommodate 12.4 mm diameter test tube

8.	COD Digestion Unit	<p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> • With 8 tube Air Condenser • <u>BOROSIL</u> PRODUCT CODE-100COD000008
9.	Turbidity Meter	<p>SPECIFICATIONS:</p> <ul style="list-style-type: none"> • Micro controller-based instrument • Range: 0 to 4000 NTU • Resolution: 0.1 NTU • Range selection: automatic • Accuracy: $\pm 3\%$ <p>Light source: tungsten filament lamp Micro controller-based instrument Range: 0 to 4000 NTU Resolution: 0.1 NTU Range selection: automatic Accuracy: $\pm 3\%$</p>
10	ArcGIS Desktop Basic 10.8	ArcGIS Desktop Basic 10.8 ESRI ^R



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