

## Annexure 01

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>01</b>	<b>Equipment</b>	<b>Benchtop refrigerated centrifuge</b>			
	Make	Please specify	C		
	Model and Model year	Please specify	C		
	Country of origin	Please specify	C		
	<b>Rotor</b>	The centrifuge should accommodate both 15 ml and 50 ml centrifuge tubes, with separate adapters or rotors for each tube size. Should have other relevant standard accessories. Swing-out capacity: 4x 100 ml, 8 x 50ml or min. 16 x 15ml. Microplate capacity: 2 x microplates or 2 x PCR Plates. Rotors and rotor lids should be made of metallic and must be fully autoclavable at 121°C	C		
	Grade	Research	C		
	Max speed (centrifuge)	14000 rpm/15000 g or better; (Min Speed: RPM: 200)	C		
	Max speed (rotor)	5000 rpm/4000 g or better			
	Timer	1 min to 99 min, with continuous run function	C		
	Dimension [D×W×H]	Please mention	C		
	<b>Centrifuge lid</b>	Soft-touch lid closure, and low opening height for stress-free lid locking			
	Temperature	The centrifuge should feature a refrigeration system capable of maintaining a temperature range of -10° to 40°C for optimal sample preservation during centrifugation. The temperature control should be accurate to within ±1°C.	C		
	User Interface	The machine should be equipped with a user-friendly interface, including a LED digital display for real-time monitoring of parameters such as speed RPM / RCF, time, and temperature.	C		

		Intuitive controls for setting and adjusting parameters or more advanced features			
	Safety Features	The centrifuge should have lid-locking mechanisms to prevent the lid from being opened during operation and to ensure user safety. Imbalance detection and automatic rotor recognition features should be integrated to prevent accidents due to uneven loading or incorrect rotor installation. The refrigeration system should feature over temperature protection to prevent sample degradation due to excessive heating	C		
	Noise Level	The centrifuge should have a low noise level during operation, ideally not exceeding 60 dB or more appropriate.	C		
	Power Requirements	~220-240 VAC, ~50 Hz	C		
	Construction/Material	The centrifuge should have durable and chemically resistant materials to withstand rigorous laboratory use. The chamber and rotors should be designed for easy cleaning and decontamination.	C		
	Certifications	The centrifuge should comply with relevant safety and performance standards, which are essential for operationalization in Sri Lanka. <b>The system must be European CE Certified, with relevant ISO certificates</b>	C		
	Warranty	Comprehensive warranty for the entire system for a minimum of 3 years. Periodic maintenance should be free of charge during the comprehensive warranty period. The supplier should specify service intervals.	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the <b>next 10 Years</b>	C		

Specification “Rotor compatibility” has been removed from the graph.

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>02</b>	<b>Equipment</b>	<b>Centrifuge bench top mini (15000 rpm)</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Maximum speed	14500 rpm or better	C		
	Speed control range:	500-14500 rpm; increment:100 rpm. Max. RCF 15000×g, increment: 100×g	C		
	Speed control accuracy	±20 rpm or better	C		
	Run Time	30 sec-99 min/Continuous	C		
	Acceleration/Braking time	Pulse free acceleration and deceleration, soft break function	C		
	Rotor Capacity	0.2 mL/0.5 mL/1.5 mL/ 2 mL×24	C		
	Body	The centrifuge should be manufactured with quality materials that provide broad chemical resistance and exceptional strength for durability and reliability.	C		
	Driving Motor	Brushless DC motor	C		
	Centrifugation chamber	A Stainless-Steel centrifugation chamber	C		
	Safety Devices	Door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis	C		
	Noise level	≤60 dB	C		
	Dimension [D×W×H]	Please mention	C		

	Weight	Please mention	C		
	Certification	EMC (Compliance with electromagnetic compatibility), CE, relevant ISO certificates	C		
	Advanced features	Speed (RPM)/RCF switch, Short-time run function, sound-alert function	C		
	Power	AC 240 V, 50 Hz/60 Hz,	C		
	Warranty	Comprehensive warranty for the entire system for a minimum of 2 years Periodical maintenance must be free of charge during the comprehensive warranty period. Specify the service intervals by the supplier.	C		
	After sales service	Bidder should have <ul style="list-style-type: none"> <li>1. good after sales facility with trained technicians and</li> <li>2. parts available to carry out any service/ repair immediately</li> </ul>	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	User manual and other relevant documentation should be provided Manufacture authorization for the bidder to represent the given brand The user reference list should be attached Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		

	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		
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Item No	Specification	Requirement	Priority	Bidders Response (Yes/No)	Remarks
<b>03</b>	<b>Equipment</b>	<b>Laboratory bench top pH and Electrical Conductivity meter</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Accessories	<ol style="list-style-type: none"> <li>1. The bench top pH Meter Kit should include all the accessories needed to start testing in the laboratory.</li> <li>2. It should include the meter, probe, heating magnetic stirrer, electrode stand, standard buffers (NIST certified), storage solution, calibration flasks and other accessories for quick start up.</li> </ol>	C		
	Standard	The meter should be water resistant to IP 42 standard	C		
	Display Type	It should have a LCD display with a backlight	C		
	Facilities	<ol style="list-style-type: none"> <li>1. It should have an Automatic Temperature Compensation facility.</li> <li>2. It should have an automatic buffer recognition facility with pH 2.00, 4.01, 7.00, 9.25 and 10.01 buffers.</li> <li>3. It should read parameters pH, mV and Temperature</li> </ol>	C		
	Power Supply	The meter should be operated with mains power supply <b>AC</b>	C		

		240 V, 50 Hz/60 Hz,			
	Electrode	<ol style="list-style-type: none"> <li>It should be supplied with Gel filled pH combination electrode.</li> <li>The electrode cable length should be at least 1 meter.</li> </ol>	C		
	pH Range	0 - 14 with 0.01 resolution.	C		
	EC range	0 – 2000 mS/cm with 0.01/0.1/1mS resolution or better			
	Warranty	<p>Comprehensive warranty for the entire system for a minimum of 2 years and warranty period for the probe for 06 months or better.</p> <p>Periodical maintenance free of charge during the comprehensive warranty period. Specify the service intervals by the supplier.</p>	C		
	mV Range	Range: ± 1900 mV or better with resolution 0.1 mV	C		
	Temperature	Range: -5 to 100°C, with resolution 0.1°C or better	C		
	Accuracy	>0.5°C	C		
	Compliance	CE compliance, relevant ISO certificates	C		
	Other	<p>Should have a good after sales service. Please attach details of after sales service personnel, their qualification, the address of after sales division etc.</p> <p>Documentary evidence of requested specifications should be provided by marking them in the manufacturer's literature.</p> <p>Letter of Authority required from the manufacturer.</p>	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	<ol style="list-style-type: none"> <li>User manual and other relevant documentation should be provided</li> <li>Manufacture authorization for the bidder to represent the given brand</li> <li>User reference list should be attached</li> </ol>	C		

		4. Should mention catalog number, manufacturer and authorized dealer in the quotation			
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>04</b>	<b>Equipment</b>	<b>Relative Humidity Meter</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Range	-10 ~ +50°C, +14 ~ +122°F, 0 ~ +100%RH	C		
	Resolution	0.1°C, 0.1°F; 0.1%RH	C		
	Accuracy	±1.0°C, ±1.8°F, ±3%RH (5~95%RH)	C		
	Sample Rate	1 time sec	C		
	Display	4 digits LCD Display	C		
	Power	220 V / 230 V, 50 Hz	C		
	Warranty	Comprehensive warranty for the entire system for a minimum of 2 years Periodical maintenance free of charge during the comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Other	Should have a good after sales service. Please attach details of after sales service personnel, their qualification, and address of after sales division etc.	C		

		Documentary evidence of requested specifications should be provided by marking on manufacturer's literature. Letter of Authority required from manufacturer.			
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	User manual and other relevant documentation should be provided Manufacture authorization for the bidder to represent the given brand User reference list should be attached Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes/No)	Remarks
05	<b>Equipment</b>	<b>Magnetic stirrer with hotplate</b>			
	Make	(Specify)	C		
	Model & Model Year	(Specify)	C		
	Country Of Manufacture	(Specify)	C		
	Hot plate dimensions	180x180 mm or better	C		



	Hot plate material	SS with ceramic coating or ceramic	C		
	Stirring volume	> 5 L	C		
	Motor	AC/DC motor, brushless	C		
	Speed range	50-1100 rpm or better	C		
	Speed control	Analog/ Digital	C		
	Temperature range	Room temperature - 250 °C or better	C		
	Temperature control	Digital	C		
	Temperature Display	LED	C		
	Heating Output	800 W or better	C		
	External temperature probe	Required	C		
	Stand rod with screw thread	yes	C		
	Protection class	IP21			
	Temperature accuracy	±2°C or better	C		
	Overheating protection	Yes			
	Hot top warning system	Yes	C		
	Stirring v/ heating indicators	Yes	C		
	Power input	230 V - 50/60 Hz.	C		
	Warranty	Comprehensive warranty for entire system for minimum of 3 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system List of users in Sri Lanka	C		

	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>06</b>	<b>Equipment</b>	<b>Vortex mixer</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Speed	1000 rpm in continuous mode 2800 rpm in touch mode	C		
	Orbit	Around 4 mm	C		
	Action type	Touch and continuous	C		
	Accessories Included	-1 rubber cup	C		
		- Plate adapter with rubber disc	C		
		- Plain adapter foam <ul style="list-style-type: none"> <li>• Foam with 96X0.2 well</li> <li>• Foam with 60X0.5 well</li> <li>• Foam with 12mm well</li> <li>• Foam with different well</li> </ul>	C		
	Max. Load	500 g or better	C		
	Power	AC 230 V, 50 Hz/60 Hz,	C		
	Warranty	Comprehensive warranty for entire system for minimum of 1 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		

	After sales service	Bidder should have a good after sales facility with trained technicians and parts available to carry out any service/ repair immediately	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	User manual and other relevant documentations should be provided  Manufacture authorization for the bidder to represent the given brand  User reference list should be attached  Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes/No)	Remarks
<b>07</b>	<b>Equipment</b>	<b>Laminar air flow hood</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		

	Country of origin	Please specify	C		
	Type	The ETL certified vertical laminar flow	C		
	Airflow Velocity	Average of 80~99 fpm	C		
	Filter	ULPA (ISO Class 3 work zone), 99.999% efficiency at 0.1 - 0.3µm	C		
	Pre-Filter	Polyester fiber, 85 % efficiency for particles >0.5 µm (Washable), Particle Count (Better than US Fed Std 209B Class10 and VDI 2083 Class 3)	C		
	Work Surface Height	Avg 750~1010 mm	C		
	Max Opening	Avg 480 mm	C		
	Working area Material	304 stainless steel	C		
	Main Body Material	1.2 mm Cold-rolled steel with anti-bacteria powder coating	C		
	Front Window Material	Manual Sliding Slash, 5 mm toughened glass, anti-UV	C		
	Waterproof Sockets	One socket (Double type), America standard, Max. Power: 500 W	C		
	UV Lamp	30 W x1	C		
	LED Lamp	14 W x1	C		

	Display	LCD Display/ Digital display for air flow rate	C		
	Illumination	≥300lx, High intensity, low wattage >800 lux	C		
	Noise	<55 dBA	C		
	Standard Accessory	Manually height adjustable base stand; LED lamp; UV lamp; Wind speed sensor; Waterproof socket	C		
	Internal Size	Working Size 1200 x 650 x 650 mm or better	C		
	External Size (Approx)	1300 x 750 x 1200 mm	C		
	Gross Weight	Please mention	C		
	Consumption	350 W or better	C		
	Power Supply	220-230 V, 50 Hz	C		
	Airflow Speed	Microprocessor Control System	C		
	Blower	Highly efficient latest generation DC ECM centrifugal type with lifetime lubricated bearings	C		
	Other requirements	<ul style="list-style-type: none"> <li>• Transparent Front Door, Auto switch on/off for U.V. Germicidal tube &amp; fluorescent light</li> <li>• Comfortable lighting and legroom</li> <li>• Intuitive and easy-to-use microprocessor controller</li> <li>• Stable and self-compensating airflow</li> <li>• Compatible UPS is required</li> </ul>	C		

	Manufacturer Authorization	Supplier should submit the manufacturer authorization letter	C		
	<b>Certification</b>	<b>Provision of CE, relevant ISO certificates are mandatory and other relevant international certificates.</b>	C		
	Warranty	Comprehensive warranty for entire system for minimum of 3 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine within three days and if not should provide backup system	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Specification “**Package size**” has been removed from the graph

#	Specification	Requirement	Priority	Bidders response (Yes/No)	Remarks
08	Equipment	Combined Refrigerator and Freezer	C		
	Make	(Specify)	C		
	Model	(Specify)	C		
	Country Of Manufacture	(Specify)	C		
	Cabinet Type	Upright	C		
	Delivery	Within 45 days	C		
	Cooling System	2 Independent cooling systems (2 compressors, 2 condensers, and 2 control systems) for refrigerator & freezer	C		
	Defrost Mode	Ref: manual or auto	C		
	Max speed	Fre: manual	C		
	Refrigerant	Ref: R600a or R290	C		
	User Interface	Fre: R600a or R290	C		
	Capacity	Ref: 250L or more	C		
		Fre: 200L or more	C		
	Noise level	45 – 60 dB	C		
	Internal Material	Epoxy or similar coated steel	C		
	External Material	Epoxy or similar coated steel	C		
	Insulation	High density PU foam	C		
	Shelf/ Drawer Capacity	Ref: 5 adjustable shelves or more	C		
		Fre: 3 adjustable shelves or more			
	Temperature Range (°C)	Ref: 2 to 8°C	C		
		Fre: -20 to -40°C	C		
	Temperature Control System	Microprocessor	C		
	Display	LED digital display	C		
	Precision of Display	0.1°C Or better	C		
	Lighting	LED lighting with smart on/off	C		
	Power Supply (V/Hz)	230V/ 50-60Hz	C		
Power(W)	Less than 600W	C			
Audio Visual Alarms	High/low temperature	C			

		<p>Controller failure  Power failure  Sensor error  Condenser failure  Door ajar  Power failure backup 8 hours</p>			
	Accessories	<p>Universal caster with breaks and leveling feet  Built in locks for security  USB Interface  Internal USB data logger  Compatible Online UPS is required (Time: 15 mins; 2 KV) CO2 backup compatible model</p>	C		
	Manufacturer Authorization	Supplier should submit the manufacturer authorization letter	C		
	<b>Certification</b>	relevant ISO certificates, CE	C		
	Onsite demonstration	Demonstration at the time of installation and commissioning and an on- site training for the staff of the laboratory	C		
	Documentation	<p>Original technical literature in English and relevant catalogues should be provided with the offer</p> <p>Manufacture authorization for the bidder to represent them</p> <p>The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system</p> <p>Guarantee of availability of all spare parts for a minimum of 05 years after purchase of equipment</p> <p>List of users in Sri Lanka preferably medical</p>	C    C		



		laboratories			
	Warranty	Comprehensive warranty for entire system for minimum of 3 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the <b>next 10 Years</b>	C		

Specification “**noise lever**” has been removed from the graph

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
09	<b>Equipment</b>	<b>Shaking incubator (with temperature control)</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Usage	Ideal for cultivation of cell and tissue cultures or microorganisms, molecular biology, cell and insect culture and entomology studies			
	Chamber volume	150 L or better, Shelves 2	C		
	Shaking orbit	25 mm; Shaker motion orbital	C		
	Max load	20 kg			

	Speed range (rpm)	20-250 rpm	C		
	Speed increment	1 rpm	C		
	Communication port	RS 232	C		
	Heating temperature range	Ambient to 60°C or better (with PID type temperature control)	C		
	Power	Approx-800 W	C		
	Temperature accuracy and uniformity	± 0.25°C at 37°C	C		
	Timer	999 (hr): 59 (min) / Continuous/ microprocessor-controlled	C		
	Display	LCD screen	C		
	Dimension Interior (WxLxH)	Approx. 650x500x400 mm or better	C		
	Weight	Please mention	C		
	Rated voltage	230 V~ 50 / 60 Hz	C		
	Loading Capacity	Approx. 20 kg	C		
	Technical requirements	<ul style="list-style-type: none"> <li>Clamps provide for 250/500/100 ml flasks/beakers (for max capacity)</li> <li>Automatic system shutdown in the event of system overheating</li> <li>Outer housing made of electrolytically galvanized sheet steel, powder-coated</li> <li>Programmable or continuous modes of operation</li> <li>Brushless DC/AC motor provides reliable and quiet operation, durable and maintenance-free usage</li> <li>Interior cabinet, inside of doors and shaking table made of stainless steel</li> <li>Front opening doors with viewing windows.</li> </ul>	C		

		<ul style="list-style-type: none"> <li>Compatible online UPS is required (15 minutes operation time)</li> </ul>			
	Warranty	Comprehensive warranty for entire system for minimum of 3 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>10</b>	<b>Equipment</b>	<b>Shaking water bath (circular motion)</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Description	<ul style="list-style-type: none"> <li>Fitted with a water level indicating device.</li> <li>Optional constant water level device.</li> </ul>	C		

		<ul style="list-style-type: none"> <li>• A removable flat drop on lid for concentric rings enables the bath to be used for other work also.</li> <li>• Double walled, insulated, full stainless steel construction.</li> <li>• Concentric rings in steps of 25 and 50 mm ID moulded from industrial grade non-corrosive material.</li> <li>• A precise Digital Temperature Indicator cum Controller having resolution and control accuracy of <math>\pm 1^{\circ}\text{C}</math> in digital model.</li> <li>• Precise and user-friendly temperature control, Automatic waterlevel detection system, Variable water circulation speed, External water circulation</li> <li>• Pump to accurately heat outer items</li> </ul>			
	Inner Dim. WxDxH	500 x 300 x 200 mm or better	C		
	Concentric Rings	12 holes of 75 mm $\varnothing$ with steps of 25 mm	C		
	Operating Temp Range	RT ~ 100°C	C		
	Tem. Uniformity	$\pm 0.2^{\circ}\text{C}$	C		
	Oscillation Amplitude	16 mm or better	C		
	Reciprocating Frequency Range	20 ~ 180 rpm	C		
	Tem. Control Mode	LCD PID Intelligent control	C		
	Setting Mode	Touch button setting	C		
	Temp./ Speed Display Mode	LCD Display	C		
	Timer	0 ~ 9999 min	C		
	Operation Function	Fixed value operation, timing function, auto stop, quickly stop start	C		
	Safety device	over temperature alarm, water full or shortage protection	C		
	Inside Volume	30 L or better	C		

	Current Rating	230V /50Hz	C		
	Heater	800 W x 2	C		
	Gross Dimension / Weight	Please mention	C		
	Warranty	Comprehensive warranty for entire system for minimum of 2 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>11</b>	<b>Equipment</b>	<b>Microwave oven</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Microwave Power	700W - 850W	C		
	Oven Capacity	20 litre - 25 litre	C		
	Microwave Frequency	2450 MHz	C		

	Power	AC 230 V, 50 Hz/60 Hz	C		
	Oven Dimensions	330 mm(W) x 220 mm(H) x 330 mm(D) approx.	C		
	Warranty	Comprehensive warranty for entire system for minimum of 2 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>12</b>	<b>Equipment</b>	<b>Top pan analytical balance</b>			
	Make	(Specify)	C		
	Model & Model Year	(Specify)	C		
	Country Of Manufacture	(Specify)	C		
	Capacity	1200 g or better	C		
	Readability	0.01 g or better	C		
	Repeatability (sd)	0.01 g or better	C		
	Linearity (+/-)	0.02 g or better	C		
	Tare Range (Subtractive)	Full Capacity	C		

	Pan Size (mm)	180x 200 or better	C		
	Response Time	2 - 3 Sec.	C		
	Display	Alpha Numeric LCD Display	C		
	Calibration	Motorized Internal Calibration and standard weights required for external calibration	C		
	Units of measure	gm, mg, ct, GN, mo, oz, dwt, t1T, t1H, t1S, mom, Bat, MS	C		
	Operating Temp.	15° to 35°C	C		
	Sensitivity Drift.	± 2ppm (2 x 10 <sup>-6</sup> / °C)	C		
	Application Modes	PCS, % Weighing, Animal / Dynamic Weighing Check Weighing, Automatic Density, Determination, Formulation Automatic Statistic Calculator etc.	C		
	Power Supply	230 V. - 50/60 Hz.	C		
	Compliance	ISO, GLP, USP Compliance	C		
	Weight Approx.	6 kg	C		
	Weighing pans	Made with chemical resistant and non-corrosive material	C		
	Other requirements	Provide spatula, cover, and reusable weighing boats (small & medium: 50 each)	C		
	Warranty	Comprehensive warranty for entire system for minimum of 2 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer	C		
		Manufacture authorization for the bidder to represent them	C		
		The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system	C		
		List of users in Sri Lanka	C		
	Calibration Service	Should be able to provide annual calibration service free of	C		

		charge during the warranty period			
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

The requirement “GMP” has been removed from the **compliance section**

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
13	Equipment	<b>Hand microtome (Hand and Table Microtome with Razor Manual Microtome)</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Profile	Hand microtome	C		
	Disposable	Reusable	C		
	For Use With (Equipment)	Precleaned Glass Slides	C		
	Includes	Microtome and case	C		
	Height (Metric)	<b>7 cm (Approx)</b>	C		
	Width (Metric)	<b>10 cm (Approx)</b>	C		



	Description	<p>A well-constructed hand operated bench microtome can be securely attached to the edge of any bench, table or work surface with the help of fixing clamp. The section platform has a smooth wide flat top and durable glass surface to guide the sectioning razor &amp; to protect the hand. The feed screw has fine and long threads so that the embedded material may be advanced very gradually to cut thin sections easily. The Razor is made of surgical quality steel with 75 mm cutting edge.</p> <ul style="list-style-type: none"> <li>• Replicate precise cuts as thin as 0.01 microns</li> <li>• Top Plate 75 mm diameter</li> <li>• External milled knob</li> <li>• Clamping mechanism secures specimen of various sizes in place while cutting</li> </ul>	C		
	Warranty	<p>Comprehensive warranty for entire system for minimum of 2 years  Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.</p>	C		
	Documentation	<p>Original technical literature in English and relevant catalogues should be provided with the offer  Manufacture authorization for the bidder to represent them  The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system</p>	C		
	Calibration Service	<p>Should be able to provide annual calibration service free of charge during the warranty period</p>	C		
	Spare parts availability	<p>Should be available spare parts for the next <b>10 Years</b></p>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>14</b>	<b>Equipment</b>	<b>Multi-function digital Illuminance Meter (Lux meter)</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Accessories	With detachable receptor head (Multi-point measurements of 2 to 30 points is possible); Illuminance meter class Conforms to requirements for Class AA of JIS C 1609-1: 2006 "Illuminance meters Part 1: General measuring instruments" Receptor: Silicon photocell Relative spectral response: Within 6% (f1') of the CIE spectral luminous efficiency V (λ): Cosine response (f2) Within 3% Measuring range Auto range (5 manual ranges at the time of analog output): Measuring function Illuminance (lx). Illuminance difference (lx). Illuminance ratio (%). Integrated illuminance (lx·h). integration time (h). average illuminance (lx) Meter should be water resistant to IP 42 standard	C		
	Measuring range (Illuminance)	0.01 to 299,900 lx; 0.001 to 29,990 fcd; Measuring range (Integrated illuminance): 0.01 to 999,900 x 103 lx·h 0.001 to 99,990 x 10*3 fcd·h / 0.001 to 9999 h			
	Display Type	It should have a LCD display with backlight; Liquid crystal display (number of 7 digits); maximum effective display:999; (0 or 0's to indicate the number of digits)	C		
	Facilities	User calibration function: CCF (Color Correction Factor)	C		

		<p>setting function: Measurement value x 0.500 to 2.000</p> <p>Linearity: <math>\pm 2\% \pm 1</math> digit of displayed value</p> <p>Response switching, Range Hold, Timer Hold, Deviation display, Auto power off, Color correction factor setting, Average illuminance computation, Ripple measurement, Light source luminous intensity measurement, Measurement of totalized intensity of illumination</p>			
	Power Supply	The meter should be operated with main power supply 230V; 50Hz	C		
	Accuracy	$\pm 2\%$ rdg $\pm 1$ dgt (under 3000lx); $\pm 3\%$ rdg $\pm 1$ dgt (over 3000lx)	C		
	Warranty	<p>Comprehensive warranty for entire system for minimum of 2 years</p> <p>Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.</p>	C		
	Compliance	CE compliance	C		
	Other	<p>Should have a good after sales service. Please attach details of after sales service personnel, their qualification, and address of after sales division etc.</p> <p>Documentary evidence of requested specifications should be provided by marking on manufacturer's literature.</p> <p>Letter of Authority required from manufacturer.</p>	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	<ol style="list-style-type: none"> <li>1. User manual and other relevant documentations should be provided</li> <li>2. Manufacture authorization for the bidder to represent the given brand</li> </ol>	C		

		3. User reference list should be attached 4. Should mention catalogue number, manufacturer and authorized dealer in the quotation			
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes/No)	Remarks
15	Equipment	<b>Trinocular stereo microscope with camera</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	<b>Application</b>	<b>STEREOZOOM MICROSCOPE SUITABLE FOR THE ADVANCE LABORATORY PROCEDURES AND RESEARCH NEEDS</b>			
	<b>Optical system</b>	<b>Greenough type</b>	C		
	<b>Head</b>	Trinocular 45 degree, <b>Equipped with a microscope camera</b>	C		

		port and a built-in 0.55x C-Mount adapter			
	<b>Zoom Range/Ratio</b>	0.7x - 5x; Zooming, Ratio: 7.5:1 approx or better	C		
	<b>Eyepieces</b>	10x/22 mm FOV; should be have diopter adjuster, Rubber Eye-Shields, Reticle Lead, Equipped with a microscope camera port and a built-in 0.55x C-Mount adapter	C		
	<b>Overall, Mag</b>	<b>3.5X-300X</b>	C		
	<b>Working Distance</b>	Approx. 110 mm or better for Dissection application	C		
	<b>Stand</b>	Plain Stand/ LED Transmitted & Reflected; Illumination in Build; Reflected & Transmitted Illumination should be individually controllable Ball Bearing Boom Stand Min 170 mm stage plate and a min 150 mm gap between the pillar and optical axis.	C		
	<b>Oblique Illumination</b>	Yes			
	<b>Illumination / Fiber Optics Ring</b>	The setup should be features a cone of light directed from above the sample to the center, effectively minimizing unwanted shadows	C		

	Illuminator	The illuminator should be positioned away from the microscope, providing bright, high-intensity illumination for clear observation while preventing any heat damage to the samples	C		
		Should having total reflection prism produces design for brighter images with higher contrast	C		
		Should be having the Air-tight by making joints air-tight	C		
		Fungus-Proof treatment with Antifungal paint is applied around optical system – All the Objective with Anti-Mould	C		
	General	Operating Environment Indoor Use Ambient Temperature 5°C–40°C (41 °F–104 °F) Maximum Relative Humidity around 80% for temperatures up to 31 °C (88 °F), decreasing linearly through 70% at 34°C (93 °F), 60% at 37 °C (99 °F), to 50% relative humidity at 40°C (104 °F)	C		
	Camera specifications	<p>Should be Color &amp; Monochrome mode</p> <p><b>Resolution:</b> 5.0 Mega Pixels or better</p> <p><b>Sensor Type:</b> CMOS sensor</p> <p><b>Connectivity:</b> Direct HDMI or USB output - Can view simultaneously. Direct HDMI output allows for image capture (video capture with remote &amp; image &amp; video recall)</p> <p><b>Software Compatibility:</b> Ensure the camera is compatible with microscopy software for image capture, measurement, and analysis.</p> <p>C-mount lens</p> <p>ISO sensitivity:</p>	C		

		<p>Equivalent to ISO 200 for Colour or better (Should be selectable from ISO 125 to 8000)</p> <p>Equivalent to ISO 800 for Mono or better (Should be selectable from ISO 500 to 32000)</p> <p>Live-display mode and image pixels: 9 fps (6000 x 3984 pixels), 66 fps (1920x1080 pixels)</p> <p>Exposure correction</p>			
		Exposure correction: Average metering: $\pm 1\text{EV}$ 1/6EV step	C		
		Exposure time: Exposure time 100 $\mu$ sec to 30 sec	C		
		<p>Exposure option: One-push auto exposure, continuous auto exposure, manual exposure</p> <p>Exposure correction</p> <p>Peak metering: <math>-1\text{EV} \sim \pm 0\text{EV}</math></p> <p>Or Better</p>	C		
		Image format : BMP / JPEG / TIFF / etc.	C		
		Interface : USB (connect with PC)	C		
	Power Supply	230V; 50Hz	C		
	Software	<p>PC compatible</p> <p>Free Download</p> <p>Image &amp; Video capture, annotation, measurement, etc</p> <p><b>Image Analysis Software</b></p> <p>Should be supply from same brand of microscope &amp; camera for better compatibility</p> <p>Documentation software, should have the following factues</p>	C		

		<p>Measurement acquisition,  AVI Live-stream, image acquisition,  Video (AVI) recording, Live Image, Calibration,  Line intensity, 2D image stitching (Large image),  Time Lapse Imaging, measurement, count, length, area,  angle, circle and ellipse, GUI, Data Base, Vector Layer &amp;  Multi-dimensional file format, LUT, back ground corr.  Automatic camera exposure control for optional image  grabbing for polarized and bright field images.</p> <p>Should have auto calibration facility with 2D linear  measurement and live display of micron bars</p> <p>Fluorescence channel merging, Z-Stack, Annotation, Macro,  Report Generator facility etc....</p>			
	<b>Accessories</b>	Dust Cover, HDMI cable, USB cable, SD card, power cord	C		
	Manufacturer Authorization	Supplier should submit the manufacturer authorization letter	C		
	Warranty	Comprehensive warranty for entire system for minimum of 5 years Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	Documentation	Original technical literature in English and relevant manufacturer catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine within three days	C		
	<b>Calibration</b>	<b>Should be able to provide annual calibration service</b>	C		



	Service	free of charge during the warranty period. Periodical service and service reports required. System must be European CE Certified, relevant ISO certificates			
	Spare parts availability	Should be available spare parts for the next 10 Years	C		

The requirement “Mac” has been removed from the software section

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
16	Equipment	Bacti - Cinerator			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Main requirements	<ul style="list-style-type: none"> <li>▪ Based on the principle of electronic infrared, the products are widely used in the sterilization of inoculation rings or inoculation needles, completely replacing alcohol lamps</li> <li>▪ The temperature inside the heating hole can reach 800 °C or above, sterilization takes only 5-7 seconds and sterilization is thorough</li> <li>▪ The product can be used in an anaerobic chamber</li> </ul>	C		

		<ul style="list-style-type: none"> <li>▪ Small volume, light weight, appearance and easy to clean. Heating body can adjust angle, easy operation</li> <li>▪ Organic substances in the ceramic funnel pipe depths ashing prevent infectious spatter and cross contamination</li> <li>▪ Precise temperature control technology, avoid the heating components work overload, long life</li> </ul>			
	Center Max. Temp	800°C±50°C	C		
	Low Level Temp.	450°C	C		
	Heating Speed	20 min (to max. Temp.)	C		
	Max. Sterilize Diameter	Φ14 mm	C		
	Heating Element Length	Approx. 140 mm	C		
	Adjustable Angle	75°~120°	C		
	Power	AC 220-230 V, 50/60 Hz	C		
	Fuse	250 V, 2 A/3A, Φ5x20	C		
	Dimension	W x D x H. 90 x 150 x 160 mm (Approx)	C		
	Net Weight	Please specify	C		

	Warranty	Comprehensive warranty for minimum of 2 years or better Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine within three days and if not should provide a backup system	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
17	<b>Equipment</b>	<b>Universal centrifuge with swing out rotor bundle</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	<b>Rotor</b>	4 x 250 ml with 15ml x 32 / 50ml x 16 ml rotor and Plate rotor for 2 x 4 MTP / 2 x 4 Cel culture plate / 2 x 2 DWP Maximum speed for swing out rotors maximum speed of 4200rpm/ 3234 x g and for Plate rotors maximum speed 3700 rpm / 2250 x g Rotors and rotor lids should be made of metallic and must be fully autoclavable at 121°C	C		

Controls (Digital/Analog)	Digital	C		
Refrigerated	Yes	C		
Speed Type	Variable Speed	C		
Max Speed Centrifuge	14000 RPM/ 20000 RCF	C		
Run Time / Timer	1 min to 99 min, with continuous run function and separate short spin key with selectable rotational speed	C		
Temperature	The centrifuge should feature a refrigeration system capable of maintaining a temperature range of -10° to 40°C for optimal sample preservation during centrifugation. The temperature control should be accurate to within ±1°C.	C		
User Interface	The machine should be equipped with a user-friendly interface, including a LED digital display for real-time monitoring of parameters such as speed, time, and temperature. Intuitive controls for setting and adjusting parameters or more advanced features. System should have user-friendly operation; key panel with provision to set speed RPM / RCF, radius correction values that can be changed during centrifugation.	C		
Lid	Centrifuge lid with soft-touch lid closure, and low opening height for stress-free lid locking	C		
Safety Features	The centrifuge should have lid-locking mechanisms to prevent the lid from being opened during operation and to ensure user safety. Imbalance detection and automatic rotor recognition features should be integrated to prevent accidents due to uneven loading or incorrect rotor installation.	C		
Noise Level	The centrifuge should have a low noise level during operation, ideally not exceeding 60 dB or more appropriate.	C		
Power Requirements	The machine should be compatible with standard electrical outlets in Sri Lanka and have an energy-efficient design. 230V; 50Hz	C		
Other requirements	Compatible UPS is required	C		

	Construction/Material	The centrifuge should have durable and chemically resistant materials to withstand rigorous laboratory use. The chamber and rotors should be designed for easy cleaning and decontamination.	C		
	Certifications	The centrifuge should comply with relevant safety and performance standards, which is essential to operationalize in Sri Lanka. System must be European CE Certified, relevant ISO certificates	C		
	Warranty and Support	Comprehensive warranty for minimum of 3 years or better Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

The specifications “**Max RCF and timer**” have been removed from the

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>18</b>	<b>Equipment</b>	<b>Laboratory bench top pH meter</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Accessories	The bench top pH Meter Kit should include all the accessories needed to start testing in the laboratory. It should include the meter, probe, integrated magnetic stirrer, electrode stand, standard calibration buffers (NIST certified), storage solution, calibration flasks and other accessories for quick start up. Please provide the necessary details about the calibration solutions.	C		

	Standard	Meter should be water resistant to IP 42 standard	C		
	Display Type	It should have a LCD display with backlight	C		
	Facilities	It should have automatic temperature compensation facility. It should have automatic buffer recognition facility with pH 4.01, 7.00 and 10.01 buffers. It should read parameters pH, mV and Temperature	C		
	Power Supply	The meter should be operated with main power supply of 220-230 V; 50Hz	C		
	Electrode	It should be supplied with gel-filled pH combination electrode. The electrode cable length should be at least 1 meter.	C		
	pH Range	0 - 14 with 0.01 resolution.	C		
	Warranty	Comprehensive warranty for minimum of 2 years or better. Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier.	C		
	mV Range	Range: $\pm 1999$ mV with resolution 0.1 mV	C		
	Temperature	Range: 0-80°C, with resolution 0.1°C	C		
	Accuracy	>0.3°C	C		
	Compliance	CE compliance, relevant ISO certificates	C		
	Power	AC 230 V, 50 Hz/60 Hz,	C		
	Other	Should have a good after sales service. Please attach details of after sales service personnel, their qualification, and address of after sales division etc. Documentary evidence of requested specifications should be provided by marking on manufacturer's literature. Letter of Authority required from manufacturer.	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Warranty and Support	Comprehensive warranty for minimum of 2 years or better Periodical maintenance free of charge during comprehensive	C		

		warranty period. Specify the service intervals by the supplier			
	Documentation	User manual and other relevant documentations should be provided Manufacture authorization for the bidder to represent the given brand User reference list should be attached Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
<b>19</b>	<b>Equipment</b>	<b>Sonicator</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Ultrasonic Power	watts average, 1000 Watts peak (with heater)	C		
	Ultrasonic Frequency	- 33 +/- 3 KHz	C		
	Ultrasonic Generator	<b>Micro Controller base Digital Timer, With</b> Auto Degassing Facility Automatic frequency tuning for maximum output, Modular generator for easier modification/servicing	C		
	Timer	LED display 0 - 20 / 90 minutes Timer with settable & On/Off Keys	C		

	Temperature Control	Blind Thermostat type & maximum allowable temperature is 65 °C Digital Temperature Controller LED Display settable & On/Off Key	C		
	Tank MOC	Stainless Steel 316 grade & buffed from inside. 1.6 mm thickness, Drain Valve 1/2" Ball Valve is provided for cleaning the tank	C		
	Tank housing MOC	Stainless Steel 304 Grade & buffed form, Supplied with Lid, Basket, Power Cord	C		
	Tank Capacity	6.5 liters & Inner Size: 12" X 6" X 6"	C		
	Other accessories	Sound-proof cabinet for the sonicator	C		
	Power (VAC, Hz, A)	220V / 230V, 50 Hz	C		
	Warranty	Comprehensive warranty for minimum of 3 years or better Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier	C		
	Other	Should have a good after sales service. Please attach details of after sales service personnel, their qualification, and address of after sales division etc. Documentary evidence of requested specifications should be provided by marking on manufacturer's literature. Letter of Authority required from manufacturer.	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Documentation	User manual and other relevant documentations should be provided Manufacture authorization for the bidder to represent the given brand User reference list should be attached Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		



Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
20	<b>Equipment</b>	<b>Laboratory incubator</b>			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Temperature	Control $\pm 0.1^{\circ}\text{C}$ or better	C		
		Range Ambient $+8^{\circ}\text{C}$ to $70^{\circ}\text{C}$ or better	C		
		Tracking alarm user-programmable high/low	C		
	Temp. Accuracy/Uniformity	$\pm 0.35^{\circ}\text{C}$ at $37^{\circ}\text{C}$	C		
	Convection type	forced induction	C		
	Display	LED	C		
	Damper	Yes	C		
	Shelves (Approx.)	3 Shelves - stainless steel	C		
	Construction (Approx.)	Interior volume 150 L or better Interior type 304, mirror finish or better/similar, stainless steel Exterior electrolytically galvanized sheet steel, powder-coated	C		
	Electrical	Rated voltage 230v, 50 Hz	C		
		Alarm contacts power interruption; deviation of temperature	C		
	Dimensions (Approx.)	Please mention	C		

	Other	Should have a good after sales service. Please attach details of after sales service personnel, their qualification, and address of after sales division etc. Documentary evidence of requested specifications should be provided by marking on manufacturer's literature. Letter of Authority required from manufacturer.	C		
	Brand name	Brand name should be embedded on the equipment as a permanent mark	C		
	Warranty	Comprehensive warranty for minimum of 3 years or better Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier	C		
	Compliance	CE compliance, relevant ISO certificates	C		
	Documentation	User manual and other relevant documentations should be provided Manufacture authorization for the bidder to represent the given brand User reference list should be attached Should mention catalogue number, manufacturer and authorized dealer in the quotation	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
21	Equipment	Colony counter			

	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	Application	Used for biological procedures for an accurate count of bacterial colonies and cells. Colony counters are used to estimate a liquid culture's density of microorganisms by counting individual colonies on an agar plate, slide, mini gel, or Petri dish			
	Compatible petri dish	35 to 150 mm	C		
	Minimum size of detected colony	0.1 mm or better	C		
	Camera	1 megapixel - zoom x28	C		
	Requirements	Counting on round Petri dishes of 35 - 150 mm or better, Counting on pour, surface, Spiral, circle mode plated dishes, Semi-automatic counting	C		
	Counting range	0 to 999	C		
	Magnification	3 to 9 times	C		
	Display	LED	C		
	Racks	2	C		
	Relative moisture	0.8	C		
	Ambient temperature	5 to 50 °C	C		
	Protective class	IP21	C		
	Total power consumption	20 W	C		
	Power	AC 230 V / 50 to 60 Hz	C		
	Dimensions	Approx. 450 x 400 x 280 mm	C		

	Gross Weight	Please specify	C		
	Warranty	Comprehensive warranty for minimum of 3 years or better Periodical maintenance free of charge during comprehensive warranty period. Specify the service intervals by the supplier	C		
	Documentation	Original technical literature in English and relevant catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days and if not should provide backup system	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next <b>10 Years</b>	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
22	Equipment	Biosafety cabinet – BSL 2			
	Make	Please specify	C		
	Model & Model Year	Please specify	C		
	Country of origin	Please specify	C		
	General	Provide a contained environment to handle hazardous biological materials, including pathogens or samples that may contain	C		

		infectious agents. This containment helps prevent accidental exposure to personnel and the release of infectious agents into the laboratory environment. The cabinet creates a physical barrier between the operator and the biological material being handled, minimizing the risk of inhalation or contact with infectious agents.			
	Power requirement	220-230 V/AC, 50 Hz	C		
	Filter	ULPA (Ultra Low Penetration Air) system; 99.999% at 0.1-0.3 microns	C		
	Control system	Digital display with easy mode operation should have audible and visual alarms Should display all safety information on one screen Selectable fast operation	C		
	Airflow	Stable, despite building voltage fluctuations and filter loading	C		
	Cabinet	Stainless steel side walls, negative pressure system	C		
	Size	Approx. 5 ft	C		
	Other requirements	<ul style="list-style-type: none"> <li>• Transparent Front Door, Auto switch on/off for U.V. Germicidal tube &amp; fluorescent light</li> <li>• Comfortable lighting and legroom</li> <li>• Intuitive and easy-to-use microprocessor controller</li> <li>• Stable and self-compensating airflow</li> <li>• Compatible UPS is required</li> </ul>	C		
	Manufacturer Authorization	Supplier should submit the manufacturer authorization letter	C		
	Warranty	Comprehensive warranty for minimum of 3 years or more better Periodical maintenance free of charge during comprehensive	C		

		warranty period. Specify the service intervals by the supplier			
	Documentation	Original technical literature in English and relevant manufacturer catalogues should be provided with the offer Manufacture authorization for the bidder to represent them The local agent should carry out any repairs in the care of a sudden breakdown/ malfunction of the machine with in three days	C		
	Standards	Should have to have applicable international (EN 12469 and NSF 49) standard certificates, CE compliance, relevant ISO certificates	C		
	Calibration Service	Should be able to provide annual calibration service free of charge during the warranty period	C		
	Spare parts availability	Should be available spare parts for the next 10 Years	C		

Item No	Specification	Requirement	Priority	Bidders Response (Yes / No)	Remarks
23		<b>The Item Removed from the Tender</b>			