Annex A. Section VII. Revised Technical Specifications

Item	Specification	Statement of Compliance
[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]		

Item No.	Description	Quantity	Statement of Compliance
	2023-03-0399 LSD NSHP		
1	Technical and Scientific Equipment for Laboratory Services Division	1	
	Nitrogen Distillation Unit		
	Specifications:		
	housing: polyurethane		
	Distillation time: 3 - 5 min per sample		
	Detection limit 0.1 mg N		
	Retrieval rate > 99.5%		
	Reproducibility ± 1%		
	Adjustable steam output (10% – 100%)		
	easy, menu-driven operation using a single control		
	Programmable reaction time		
	Programmable distillation time		
	USB interface		
	Level monitoring for the canister set		
	Practical quick-release clamping device, which the user can also easily operate with their left hand		
	Width (in cm): max 50		
	Depth (in cm): max 60		
	Height (in cm): max 70		
	Power (in W): max 1700		
	Current (in A): 9A		
	Cooling Water Consumption (in L/min): max 5		
	Max Distillation Time (in min/sample): approx 2-4 min per sample		
	with supply container		
	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
2	**Horizontal Reciprocating Shaker**	2	
	Specifications:		

	Motor DC 250W		
	Shaking type : Horizontal/vertical		
	Speed 0~350 rpm		
	Stroke: 20-50 mm		
	Timer 0~60 min.		
	Control Step-less speed adjust system		
	Size: minimum 430 x 430 x 580 mm		
	Weight (kg): minimum 59		
	Funnel holder (ml x pcs) : 100 x 6 200 x 6 300 x 4 500 x 4 1000 x 3		
	with accessories:		
	Funnel Holder 100ml up to 1000ml		
	Triangular Flask Holder (1pc)		
	Centrifuge Tube Holder (1pc)		
	Test Tube rack Holder (1pc)		
	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
3	**Drying Oven**	2	
	Specifications:		
	Temperature Range: min. 5°C above ambient up to +300°C		
	Temperature Sensor: 1 Pt100 sensor DIN class A in 4-wirecircuit		
	Timer: Digital backwards counter with target time setting, adjustable from 1 minute to 99 days		
	Convection: natural convection		
	Vent: vent connection with restrictor flap		
	Temperature Control: adjustable electronic overtemperature monitor and mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 20°C above nominal temperature		
	Internals: 2 stainless steel grid(s), electropolished		
	Door: fully insulated stainless steel door with 2-point locking (compression door lock)		
	Interior: easy-to-clean interior,made of stainless steel, reinforced by deep drawn ribbing with integrated and protected large-area heating on four sides		
	Volume: up to 256 L		
	Dimensions WxHxD: minimum 640 x 800 x 500 mm		
	Max Loading of Chamber: max 300kg		
	Voltage Electrical Load: 230 V, 50/60 Hz approx. 3400 W		
	Inclusions:		
	4 pc - Digital Burette		
	4 pc - Bottletop Dispenser		
	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
4	**Block Digester with scrubber (40 placer)**	1	
	Specifications:		

	High-performance heating and extraction hood with exhaust collector		
	one-button operation for extremely easy and quick programming		
	25 freely configurable programs for block temperature and digestion time		
	Storeable applications		
	with 40 sample slots, for digestion vessels with a volume of 100 ml		
	width: minimum 48 cm		
	depth: minimum 51 cm		
	height: minimum 76.50 cm		
	weight: minimum 40 kg		
	Power Consumption: 2200 W		
	Current Consumption: 10A		
	Sample Positions: 40		
	Temperature Range Max: 430°C		
	Digestion Vessel size: 100mL		
	Inclusions:		
	fume evacuator with vacuum pump 40 l/h		
	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
5	**Hot Plate**	2	
	Specifications:		
	Type: Analog Corrosion Resistant Hot Plate		
	Solid ceramic heater surface for excellent chemical resistance		
	Heater plate mounted in cast aluminum frame that remains cool for safety		
	Heater Temperature Range: 100 C to 450 C		
	Heater Plate Size: minimum 12" (308 mm) x 12" (308 mm)		
	Heater Power: max 1400 watts		
	Temperature Control: +/- 2.5 C of setting		
	Heater On Indicator: red lamp		
	Operating Voltage: 220 VAC		
	with fuse		
	with detachable line cord		
	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
6	**Laboratory Refrigerator**	2	
	Specifications:		
	Capacity: minimum 415L		
	Temperature Range: 2°C to 8°C		
	No. of Shelves/Drawers: 6 Shelves/1 basket		
	Internal Material: Sprayed Steel Plates/Powder Coated		
	External Material: Sprayed Steel Plates/Powder Coated		
	Refrigerant: R134a or equivalent		
	Outer Door/Type: One heating glass door with automatic rebound		
	Power Consumption (kWh/24hr): 2.66		
	Power: min 230W		
	Current: min 1.18A		
	Power Supply: 220V/50Hz		
	Inclusions:		
	with plug adaptor		

	with 3 years warranty		
	with PMS (1st year) and service visits/checkup within warranty period (3 years)		
	<mark>**2023-03-0478 LSD NSHP**</mark>		
7	Technical and Scientific Equipment for Calibration Laboratory	1	
	Calibration Climatic Chamber		
	Specifications:		
	Type: bench-top temperature and humidity test chamber		
	Temperature range: -40 to 150 °C		
	Temperature fluctuation: ±0.5 °C		
	Temperature Resolution: 0.01°C		
	Cooling rate:		
	150 to 25°C (1 to 2°C /min)		
	25 to -40°C (0.7 to 1°C /min)		
	Heating rate: 3 to 5°C /min		
	Temperature Uniformity:		
	±1.0 °C (-40 to 100°C)		
	±1.5 °C (100.1 to 150°C)		
	Humidity Range: 20.0%RH to 98%RH		
	Humidity Fluctuation: ±2.0%RH		
	Humidity Uniformity: ±3.0%RH		
	Humidity Resolution: 0.1%RH		
	Internal Material: SUS304 stainless steel (1.2mm)		
	External Material: cold-rolled plate (1.2mm), powder coating		
	Heat insulation: polyurethane foam (100mm) + glass wool (10mm)		
	Fan: centrifugal fan (impeller fan)		
	Refrigeration compressor: hermetic compressor		
	Cooling mode: air cooling		
	Refrigerant: R404A/R449A		
	Evaporator: finned-tube exchanger		
	Heater: nickel chrome strip heater		
	Humidifier: steam humidifier		
	Observation Window: multi-layer hollow tempered glass belt with automatic defrosting function, which can guarantee the frost-free and condensation of the glass surface during any test		
	Sample Rack: Stainless steel sample holder 2 layers, height is adjustable, load-bearing (uniform): 40kg/layer		
	Water Storage Tank Capacity: minimum 15L		
	Display: TFT color LCD display		
	Communication: Ethernet, RS485, RS232 interface		
	Interior Size mm (WxHxD): at least 300x300x250		
	Exterior Size mm (WxHxD): at least 480x835x990		
	Power Supply: 220V/AC 50/60Hz 12 A		
	Inclusions:		
	One (1) year warranty		
	Free PMS within warranty period		
	Training for four (4) end users at Manufacturer's Training Site, inclusive of all expenses		
	15 units - Dehumidifier with Air Purifier function		
	Specifications:		
	Efficient compressor & Low Noise Operation		
	Silver ion dustproof, bacteriostatic and mold-proof filter		

	Waterproof and Splashproof 7L large capacity water tank		
	Pull-out control panel		
	Real-time air humidity display		
	360 degrees rotating wheel		
	Coverage Area: up to 125 sqm		
	Fog output: 30000ml/d (30°/80% Relative Humidity)		
	Water Capacity: 7 Liters (water tank)		
	Application compatibility: yes, smartphone		
	Power: 420W		
	Voltage: 220V		
	Dimensions: minimum 59 x 25 x 38 cm		
	with remote management system per unit via wifi		
8	**Calibration Equipment Management System**	1	
	Specifications:		
	One (1) concurrent license (perpetual)		
	end-users: three (3)		
	centralized deployment		
	unlimited individual accounts		
	unlimited assets, users, groups		
	manage schedules, documents, test standards		
	automated email reminders		
	70+ standard reports		
	deployed internally on SQL Server/Oracle		
	includes test type packages: manual Pass/Fail, Switch Test, Test Omission, Task List and Pressure Safety		
	On premise: Planned Maintenance/Work Order solution		
	per block of 5 users		
	supports planned maintenance tasks		
	overlapping schedules		
	ADHOC requests and work order management		
	allows for Alternate Calibration Specs		
	Parts and Inventory module		
	easily import work to the core system		
	allows users to automatically email reports on a calendar schedule to an unlimited number of recipients		
	allows designated users to launch on-demand reports and create maintenance requests via secure web access		
	Uncertainty Calculation:		
	allows user to calculate an Expanded Uncertainty value for a given engineering unit and Coverage Factor (k), expressed in the desired number of significant figures		
	the user can manipulate component values, add components or remove components from the list of values that are used to calculate the uncertainty. These values can be displayed on customized reports or viewed in the electronic record		
	document uncertainty contributors for instrument under test		
	document uncertainty contributors for test standards used		
	calculate combined uncertainty		
	present a list of tasks for maintenance or calibration related steps to be recorded on a calibration record		
	easy to use utility that allows for upload of existing excel data		
	create records for instruments, standards and loops		
	Inclusions:		
	Server specs:-Oracle 9i release 9.2.0.5.0 or higher-Microsoft SQL Server latest version (including all Editions, both x86		

	and x64)-compatible with (VMware, Citrix, Terminal Server, etc.)-Minimum of 16MB of RAM per user (20MB per user or more recommended)-compatible with (e.g. Citrix Metaframe, Citrix Presentation Server, Citrix XenApp, etc.)		
	Desktop PC workstation specs: Processor: minimum Core i7-10700F, 16mb cache, 8 cores 16 threads, 2.9GHz to 4.8 GHz Operating System: minimum Windows 10 Home, 64-bit GPU: minimum 6GB GDDR6 Memory: minimum 16GB, 1 x 16GB DDR4 RAM Storage: minimum 512GB M.2 PCIe NVMe Solid State Drive Office: MS Office Home & Student 2019 Licensed with minimum 23.8in FHD Monitor, UPS/AVR		
	mobile workstation specs: -minimum core i7-1260P (up to 4.7 GHz) -minimum 16 GB DDR4-3200 MHz RAM (2 x 8 GB) -minimum 1 TB NVMe M.2 SSD -minimum 39.6 cm (15.6") diagonal, FHD (1920 x 1080), IPS, micro-edge, anti-glare, Low Blue Light, 300 nits, 100% sRGB -with genuine OS		
	compatible AVR and UPS		
	24/7 annual support via phone/fax/email/web		
	One (1) year warranty		
	Free PMS within warranty period		
	Training for four (4) end users at Manufacturer's Training Site, inclusive of all expenses		
	2023-03-0398 LUPEZ RD-HYDROPONICS		
9	Access Tube Vaccum Pump	1	
	A hand vacuum pump with gauge and tubing adapter is used for applying vacuum to the tube for sample collection.		
10	Core Extractor 6" specimen size	1	
	Features: No repeat drilling required due to damaged samples Adjustable top screw offers a secure grip on the perimeter of the core Best for removal of "stubborn" cores Lock feature prevents damage from improper removal		
11	Temperature / Humidity Data Logger w/ USB & Display with extra battery	1	
	Temperature Range -31°—176°F (-35°—80°C)Accuracy Temperature: 0.55°C (1.04°F) typical (5—60°C)Humidity: 2.25%RH typical (20—80%RH)ResolutionTemperature: 0.5°C (1°F)Humidity: 0.5%RHMemory Capacity 16,000+Power Supply 1/2AA Lithium Battery		
12	Digital Thermometer,	1	
	Temperature Range (-50°—300°C) Accuracy ±1.8°F (±1.0°C) Resolution 0.1°; 1° above 199.9° and below -19° Display 3.5-digit LCD display with 0.25in (6.35mm) high digits Probe Length 11.5in (292.1mm) Power Supply 1.5v Battery		
13	Soil pH and Moisture meter	1	
	Measures pH values from 3.5 to 8, Measures soil moisture from 0 to 100 percent		

	Requires No chemical, distilled water, or outside electric power source Numerous readings can be easily taken over large area Conditioning film sold separately		

Name and Signature of Authorized Representative

Company Name

Date Signed