**Section II: Schedule of Requirements**

**Technical Specifications for Goods and Comparative Data Table:-**

This RFQ is composed of the below 13 Laboratory Equipments. The whole items describe the procurement of the Laboratory Equipment, for Ethiopian Public health Institute (EPHI), Addis Ababa, Ethiopia.

| **S/N** | **Item name/Item description** | **Technical Specifications** | |
| --- | --- | --- | --- |
| 1 | **RM Value Apparatus** | Material: Borosilicate Glass  Capacity: 300 Milliliters | |
| 2 | **C18 solid phase**  **extraction SPE**  **cartridge** | Column capacity:6 ml Particle size: 40 to 60 µm Bed  weight: 1000 mg | |
| 3 | **Vacuum Desiccator**  **with Collar valve,** | Material: Soda-lime glass or better  Capacity: (250 mm diameter and 330 mm Height)+/- 10% | |
| 4 | **Reflux Condensers,**  **Coil Type and Full**  **Length with 24/40**  **Joints** | Material: Borosilicate Glass  Standard Taper Joint No: 24/40  Certifications/Compliance: USP Type I or ASTM E438 Type I class A, or or equivalent | |
| 5 | **Milk Analyzer** | **Parameter** | **Measuring range and Accuracy** |
| Milk Density | * Measuring range= 1,0260 g/cm3 to 1,0330 g/cm3 * Accuracy = +/-0.0005 g/cm3 or better |
| Protein | * Measuring range= 2% - 6% * Accuracy= +/- 0.2% |
| Freezing Point | * Measuring range= 0 to -1.000 Degree C * Accuracy= +/- 0.015 Degree C |
| Added Water to Milk | * Measuring range = 0% to 60% * Accuracy = +/- 5% |
| Lactose | * Measuring range = 0.5% to 6% * Accuracy = +/- 0.2% |
| Conductivity | * Measuring range = 1 to 10 mS/cm * Accuracy = +/- 1 % (18 Degree C) |
| Ambient Air Temperature | * Measuring range = 10 Degree to 30 Degree C |
| Milk Temperature | * Measuring range = 5 Degree to 35 Degree C |
| Relative Humidity | * Measuring range = 30% to 80% |
| **General requirements:** | |
| AC power supply voltage | 220-240 V AC |
| Quality assurance  requirement | The bidder shall provide:  ISO 13485: certificate or an equivalent Quality Management System recognized by one of the Regulatory Authorities of the Founding Members of GHTF shall be submitted along with the bid |
| Installation | Bidder should demonstrate the Installation Qualification (IQ), OQ (Operational Qualification), PQ (Performance Qualification) according to manufacturer instructions. Instrument should be installed according to manufacturer instruction at the customer site without any additional cost |
| Local Agent | Should have a local agent/dealer to support installation, commissioning and complete training  on operation and maintenance of instrument.  If not, it has to commit/agree to arrange a local agent/dealer within a week (7 days) after award. |
| Warranty | Minimum of two-years warranty  on the complete system. |
| Manuals | English version operational and maintenance manual in hard copy & soft copy shall be supplied |
| 6 | **General Purpose**  **Water Baths** | Parameter | Requirement |
| Chamber Capacity | 10L-15L |
| Chamber Material | Stainless Steel |
| Temperature Range | Ambient to 100°C |
| Temperature Stability | ±0.2°C |
| Temperature Uniformity | ±0.2°C |
| Controller Type | Digital |
| Display | Monochrome LCD or better |
| Heating Capacity | Minimum 800 w |
| **General requirements:** | |
| Quality assurance requirement | The bidder shall provide ISO 13485: certificate  or an equivalent Quality Management System recognized by one of the Regulatory Authorities  of the Founding Members of GHTF shall be  submitted along with the bid |
| Warranty | Minimum of one-year warranty on the complete system. |
| Manuals | English version operational and maintenance  manual in hard copy & soft copy shall be  supplied |
| 7 | **FT- NIR Spectrometer** | **Parameter** | **Requirement** |
| Brand |  |
| Model |  |
| Country of Origin |  |
|  | The system should be fully sealed and desiccated. |
| Wavelength range | 850-2500 nm |
| Spectral Resolution: | ≤1 cm-1 or better |
| Wavelength Accuracy: | 0.05 nm or better |
| Wavelength Repeatability: | 0.005 nm or better |
| Wavelength selection: | Interferometer |
| Source: | Tungsten halogen source. |
| Detector type: | High sensitivity Si-InGaAs |
| Analysis time: | ≤ 40 S |
| Analysis time: | Analysis time: Transmission |
| Sample temperature (min): | ≤ RT+ 10 °C |
| Sample temperature (max): | ≥ 80 °C |
|  | It should be suitable for liquids, semi-solids, solids, and processed food samples. Simultaneous frequency measurement. System purging should be available. |
| Connectivity: | USB/RS232 |
| Reflectance: | Near-Infrared Reflectance Analysis (NIRA) system |
| Quantitative analysis: | Appropriate for quantitative analysis |
| Data system: | Suitable and appropriate for communication and signal sampling |
| Software: | A software platform incorporates all of the functions required for infrared analyses; instrument control, data manipulation and analysis, and flexible report utilities |
| Working environment temperature: | ≥15-40 °C |
| Working environment humidity: | ≥ 20-80% |
| Working altitude above sea level: | ≥ 2,400 m |
| Power supply: | 220-240 V, 50-60 Hz, European plug, Single phase main supply |
| **Following items should be supplied with the instrument** | |
| PC: | CPU (≥4GB RAM, 500 GB hard), LCD/LED/OLED Monitor (≥17''), printer, Windows XP or highest licence software should be supplied with the instrument |
| License | latest and upgradable instrument software |
|  | NIST-traceable standards for validation |
| Installation | Bidder should demonstrate the Installation Qualification (IQ), OQ (Operational Qualification), PQ (Performance Qualification) according to manufacturer instructions. Instrument should be installed according to manufacturer instruction at the customer site without any additional cost |
| Accessaries | All standard accessories shall be supplied |
| Warranty: | 2-years comprehensive warranty for the system should be provided from the manufacturer |
| Manufacturer's authorization letter | Confirming the bidder's authority to sell brand-new, non-refurbished, and traceable products in Ethiopia |
| Local Agent | Should have a local agent/dealer to support installation, commissioning and complete training on operation and maintenance of instrument. If not, it has to commit/agree to arrange a local agent/dealer within a week (7 days) after award. |
| Manual | One set of operation manual and service manual (English language) should be supplied with instruments. |
| Quality assurance requirement: | Manufacturer ISO 9001 or ISO 13485 certificate (English version should be provided with offer). Product should be USFDA approved or comply with CE (Conformity of Europeans via notified body or declaration of conformity) certificate |
| Shipping information | Should display the project logo, project name, UNOPS logo and end-user name each cartoon for easy identification during shipping |
| 8 | **Glass filter crucible** | * Material: Borosilicate Glass * Capacity 30 – 50 ml Disc diameter 30 – 46 mm * Having a fitted borosilicate/Silica plate of mean pore diameter   40 to 90 micrometer | |
| 9 | **Hot Plate** | **Parameter** | **Requirement** |
| Highest temperature (℃) | 250℃ or better |
| Body material | Stainless steel |
| Plate material | Aluminum or Ceramic or Stainless steel. |
| Temperature range  (plate surface temperature) | Adjustable heating range (starting from 0℃ to the max) |
| Temperature control accuracy | ±7.5 °C or better |
| Approximate Plate  dimensions (mm) | min dimension 450 x 300mm |
| Certifications | The bidder shall provide:ISO 9001: certificate or equivalent |
| Warranty | One-year warranty on the complete system. |
| 10 | **Glass Lactometer with**  **100 mL Plastic Test Jar** | Material: Borosilicate Glass  Measuring range : (g/mL) 1.020-1.040  Reference temperature 20°C | |
| 11 | **PH/mV meter** | * pH Range: -2.00 to 18.00 * pH Resolution: 0.01 * pH Accuracy: ±:0.01 * mV Range: 2000 to 2000mv * mV Resolution: 1mV * mV Accuracy: ±1mV | |
| 12 | **Safety Tongs** | * Length = 508mm - 600mm, * Material : Stainless steel (Stainless steel tongs with serrated tapered tips, which meet precisely when closed, ) * For Laboratory purpose | |
| 13 | **Fully Automated Rapid**  **Bacterial Identification**  **&**  **Drug Susceptibility**  **System**  **Model: Vitek 2**  **Compact 60**  or  **Equivalent** | 1. Compact and fully automated system for identification of bacteria and yeasts & antibiotic susceptibility testing 2. Intuitive software 3. Voltage 220/240 VAC at 50/60 Hz 4. Easy to handle; a “Load and Go system” 5. Capacity 60 cards/tests 6. Same day results for both identification and antibacterial susceptibility   testing Accessories, consumables and Startup reagents included dimensions  72 x 68 x 60 cm   1. Environmental requirements: Operating ambient temperature range of 15°C   to 30°C. Operating humidity range: 20% to 80% relative humidity, non-condensing   1. Connections: 4 instruments can be connected to the same PC 2. Heat dissipated: 1025 BTU/Hr. (nominal) 3. Altitude: Up to 2,000 m | |
| **General Requirement** | |
| Manufacturer/Dealer  Authorization | Confirming the bidder's authority to sell brand-new, non-refurbished, and traceable products in Ethiopia |
| Certifications/Compliance | The bidder shall provide:ISO 13485: certificate  or an equivalent Quality Management System recognized by one of the Regulatory Authorities of  the Founding Members of GHTF shall be submitted along with the bid |
| Warranty | Minimum of two-years warranty on the  complete system. |
| Installation | Bidder should demonstrate the Installation Qualification (IQ), OQ (Operational Qualification), PQ (Performance Qualification) according to manufacturer instructions. Instrument should be installed according to manufacturer instruction at the customer site without any additional cost |
| Local Agent | Should have a local agent/dealer to support installation, commissioning and training activities.  If not, it has to commit/agree to arrange a local agent/dealer within a week (7 days) after award. |
| Manuals | English version operational  and maintenance manual in hard  copy & soft copy shall be supplied |

**Delivery Requirements and Comparative Data Table:**

| **UNOPS Requirements** | | **Is quotation compliant?**  Bidder to  complete | **Details**  Bidder to complete |
| --- | --- | --- | --- |
| **Sustainability**  **Requirements II** | The bidder shall describe and provide support documentation on their approach towards ensuring Health and Safety in its organization including the reduction of Health and Safety related incidents | ☐ Yes ☐ No | Insert details |
| **Delivery time** | Bidder shall deliver the goods FCA 45 days or DAP 60 days after Contract signature. | ☐ Yes ☐ No | Insert details |
| **Delivery place and Incoterms rules** | DAP, Ethiopian Public Health Institution, Addis Ababa Ethiopia, as per Incoterms 2020 including customs clearance | ☐ Yes ☐ No | Insert details |

**Additional required information:**

**Bidders are expected to provide the following information with their submissions.**

• Country of origin

• Product data sheet.

**Inspections and tests**

The following inspections and tests may be performed

UNOPS or its representative may inspect and/or test any or all items of the goods to confirm their conformity to the contract, before dispatch from the manufacturer’s premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the goods on receipt at the destination.

To incorporate comments from the pre-clearance officer.

UNOPS 2024