3. Technical Specifications

The Bidders must provide detailed item-by item commentary on the Purchaser’s technical specifications demonstrating the substantial responsiveness of the offered Goods to the technical specifications specified in Section VII, Schedule of Requirements and a statement of compliance to the provisions of the Schedule of Requirements. The detailed item-by–item commentary must contain explicit cross references to the relevant supporting information included in the bid, respectively technical support documentation issued by the manufacturer(s) of the offered equipment, in the form of technical data sheets, manuals, brochures, catalogues or any other manufacturer technical documentation.

General Requirements for all the equipment:

1. The equipment offered must have the CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives for the offered equipment. The Bidder must include as part of its Bid the copy of CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives for the offered equipment.
2. Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest current edition or revision of the relevant shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.
3. WARRANTY and Services: The warranty period - service period is specified in the technical specifications for each item. During the Warranty Period the Supplier must remedy the defects or replace the out of order equipment in maximum 72 hours or the term specified in the technical specifications for each item.
4. The Supplier is responsible (upon delivery to the site) for all the activities necessary to make the equipment ready for use (i.e. unloading, unpacking, removal of packing materials, assembly, installation and testing of each piece of installed equipment at the project sites). The Supplier must provide technical support to beneficiaries' staff for operation of the equipment.
5. Delivery and installation of the Goods: The Supplier is required under the Contract to transport the Goods to a specified place of final destination within the Purchaser’s country. Transport to such place of destination in the Purchaser’s country, (including insurance and storage, assembly and installation on site and related services), shall be arranged by the Supplier, and related costs should be included in the Bid Price. The Supplier will notify by e-mail the beneficiaries (with copy to Purchaser) with the dispatching schedule.
6. After the completion of each stage of the contract, i.e. the delivery of the goods (partially or totally) and the completion of the related services - assembly, installation, testing and training (partially or totally - all the goods under the contract), the Supplier will sign with the representatives of the Beneficiaries reception protocol/protocols confirming the delivery of the goods and/or completion of the related services, in EN and RO language. Based on the signed reception protocols for each stage (delivery and/or completion of the related services), a “Quantitative and qualitative reception protocol” shall be issued by a reception committee designated through ministerial order at the Ministry of Environment, Waters and Forests level, which certifies that the Goods are according to the Contract requirements, all equipment was delivered and/or related services were completed, and for the purpose of processing the payments to the Supplier.

LOT NO. 1

* 1. UV-Vis Spectrophotometer, with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. GENERAL DESCRIPTION** |  |  |
|  | UV-VIS Spectrophotometer with cu accessories |  |  |
|  | **2. TECHNICAL SPECIFICATIONS** |  |  |
|  | Wavelength range: 190 - 1100 nm |  |  |
|  | Scan rate: 24000 nm/min or higher |  |  |
|  | Dual detectors for simultaneous detection of sample and reference sample |  |  |
|  | Czerny-Turner monochromator or double monochromator |  |  |
|  | Grading: holographic, minim 1200 lines/mm |  |  |
|  | Photometric range: -4 to +4 A |  |  |
|  | Photometric accuracy: <±0.0007 A ( 1A, NIST 930D filter) |  |  |
|  | Photometric reproducibility: 0.00005 A |  |  |
|  | Photometric repeatability: <0.0001 A |  |  |
|  | Wavelength reproducibility: ± 0.01 nm |  |  |
|  | Wavelength accuracy:± 0.06 nm sau mai mica |  |  |
|  | Photometric stability (drift) : < 0.0004 A/h. |  |  |
|  | Photometric noise at 500 and 260 nm: <0.00002 A (0 Abs, RMS). |  |  |
|  | Stray light: < 0.02%T la 220 nm (ASTM NaI 10g/l method) |  |  |
|  | Data interval: 0.15-5 nm |  |  |
|  | Measurement modes: A, %T, %R., Concentration |  |  |
|  | Xenon flash lamp source with minimum 80Hz |  |  |
|  | Typical lifetime of the lamp: 3 years guaranteed on continuous working |  |  |
|  | Room light immunity |  |  |
|  | **Software specifications:** |  |  |
|  | Analysis based on using a calibration curve |  |  |
|  | Whole spectrum scanning |  |  |
|  | Fixed wavelength measurements |  |  |
|  | Analysis methods as a function of time |  |  |
|  | Cyclic readings either at fixed wavelengths or scans with programmable time intervals. |  |  |
|  | Common arithmetic calculations: area, mean and standard deviation, derived up to order 4, interpolation. |  |  |
|  | Full functions for checking the performance of the instrument. |  |  |
|  | Color analysis application with the following functions/calculations   * + - * Tristimulus       * Chromaticity       * CIE Lab       * CIE LUV Hunter Lab       * Whiteness       * Possibility of choosing 21 illuminants       * Calculation interval 1, 5 or 10 nm       * Thickness correction       * Colour difference calculation |  |  |
|  | **Required accessories:** |  |  |
|  | **1. Optical fiber with removable tip for absorbance measurements:** |  |  |
|  | * Stainless steel material; |  |  |
|  | * Spectral range: 200-1100 nm; |  |  |
|  | * Length: minimum 75 cm. |  |  |
|  | **2. Stainless steel replaceable tips with the following pathlengths: 2,5,10, 40 mm** |  |  |
|  | **3. Optical fiber for reflection measurements; will be delivered with work support** |  |  |
|  | **4. Optical fiber coupler to the spectrophotometer** |  |  |
|  | **5. Accessory for diffuse reflectance measurements:** |  |  |
|  | * Integrated hemisphere for diffuse reflectance measurements; |  |  |
|  | * Built-in video camera so that it allows collecting the image of the scanned area; |  |  |
|  | - 1 inch color standards for reflectance (minimum 4 colors). |  |  |
|  | **6. Optical cell with a path of 10 mm** |  |  |
|  | **7. Optical quartz cells with 10 mm path** |  |  |
|  | **8. The system is delivered with a computer and monitor, of the latest generation, in the configuration recommended by the manufacturer for the optimal functioning of the entire system; Microsoft Windows 10 operating system** |  |  |
|  | **Other requirements** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment |  |  |
|  | * verification of the functionality of all components of the equipment |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 days of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  | Service Manual, digital and paper copy in English and optionally in Romanian. |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (with payment by the beneficiary if the defect is his fault) and perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Multi-channel evaporator with nitrogen flow – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. GENERAL DESCRIPTION** |  |  |
|  | Multi-channel evaporator with nitrogen flow |  |  |
|  | **2. TECHNICAL SPECIFICATIONS** |  |  |
|  | **Characteristics:** |  |  |
|  | - Multichannel evaporator, in nitrogen atmosphere, with automatic control |  |  |
|  | - Software interface that allows programming of working methods from the software |  |  |
|  | - Control panel with a minimum 7 inch touch screen, which allows controlling the evaporator, editing, saving, deleting and loading working methods |  |  |
|  | - Allows evaporation of samples to dryness |  |  |
|  | - Automatic control of the nitrogen flow rate and the adjustment of the needle height automatically according to the size of the tubes |  |  |
|  | - Also provided with a manual needle level control button to manage their position and vertical movement (up/down) |  |  |
|  | - With 8 working channels that will work individually or simultaneously |  |  |
|  | - To allow adjustment of the temperature in the water bath and the nitrogen flow rate during the evaporation process according to the boiling point of the solvent and its volatility |  |  |
|  | - With a built-in exhaust system |  |  |
|  | - To be equipped with an exhaust hose of at least 3 m in length, |  |  |
|  | - With front glass and interior lighting for viewing the samples in during the evaporation process without the need to open the evaporator lid |  |  |
|  | - Water bath equipped with: |  |  |
|  | * volume: 5 liters |  |  |
|  | * temperature range: ambient÷100°C; |  |  |
|  | * temperature accuracy: ±0.1°C |  |  |
|  | * with level sensor and alarm for low liquid level in the bath with drain valve with easy access |  |  |
|  | - Automatic shut-down of nitrogen flow on unused channels |  |  |
|  | - Power: 1300 W |  |  |
|  | - Power supply: 230V/ 50Hz |  |  |
|  | - The multichannel evaporator in nitrogen flow will be delivered with a nitrogen generator with built-in air compressor and the connection tubing to the multichannel evaporator. |  |  |
|  | - The nitrogen generator has the following technical characteristics: |  |  |
|  | * Equipped with touch screen interface |  |  |
|  | * Electrical control by pressure transducer. Electromagnetic control by pressure switch. Safety valve |  |  |
|  | * Auto-Run function |  |  |
|  | * Output flow indicator |  |  |
|  | * Maximum N2 flow: minimum 65 liters/minute |  |  |
|  | * Purity: 99.5% |  |  |
|  | * Output pressure: up to 10 bar |  |  |
|  | * Power supply: 220-240 VAC, 50 Hz, with power cord |  |  |
|  | **Accessories:** |  |  |
|  | - 1 holder with 64 positions, suitable for glass and plastic tubes with a capacity of 10 ml; |  |  |
|  | - 1 holder with 48 positions, for PP tubes of 50 mL; |  |  |
|  | - 200 polypropylene tubes, graduated, colorless, capacity 50 ml, provided with screw cap; |  |  |
|  | - 100 glass tubes with a capacity of 10 ml; |  |  |
|  | - 100 polypropylene tubes with a capacity of 10 ml; |  |  |
|  | - 64 plugs to close unused nitrogen channels; |  |  |
|  | - 1 drain tube for the water bath; |  |  |
|  | - eelectric power cable; |  |  |
|  | - 1 Spare fuse set; |  |  |
|  | - 64 needles for nitrogen channels/ |  |  |
|  | **Other requirements** |  |  |
|  | The equipment will be new, unused. |  |  |
|  | The winning company is responsible for any defect found during the installation and/or qualification of the equipment; |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The winning company will ensure the transport to the beneficiary, installation, commissioning and testing of the system, warranty and post-warranty service. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment |  |  |
|  | * verification of the functionality of all components of the equipment |  |  |
|  | **Training:** |  |  |
|  | - 2 days of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  | Service Manual, digital and paper copy in English and optionally in Romanian |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period of each equipment module is 24 months from installation. |  |  |
|  | The products will be accompanied by a certificate of conformity, a warranty certificate and a technical book. |  |  |
|  | Time limit for intervention in case of breakdown: maximum 48 hours from notification. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (with payment by the beneficiary if the defect is his fault) and perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Multi-samples shaker – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. GENERAL DESCRIPTION** |  |  |
|  | Multi-samples shaker |  |  |
|  | **2. TECHNICAL SPECIFICATIONS** |  |  |
|  | - speed range: 500-2500 rpm, accuracy ±25 rpm; |  |  |
|  | - timer: 1-9999 minutes - programmable pulse mode; |  |  |
|  | - can operate with programmed time or continuously; |  |  |
|  | - LCD/LED display of speed and time; |  |  |
|  | - digital programming of speed, time and PULSE function; |  |  |
|  | - equipped with stainless steel bars and support plates up/down, easily adjustable and suction cup feet to prevent the unit from moving on the work table; |  |  |
|  | - power supply: 220-230V, 50-60 Hz; |  |  |
|  | - possibility to shake at least 6 centrifuge tubes of 250 ml simultaneously; |  |  |
|  | - support for centrifuge tubes, for tubes with an outer diameter of 29 mm and for tubes with an outer diameter of 12 mm; |  |  |
|  | ~~- to be equipped with an exhaust hose of at least 3 m in length.~~ |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (with payment by the beneficiary if the defect is his fault) and perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Water purification system – 3 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. GENERAL DESCRIPTION** |  |  |
|  | System that can produce pure and ultrapure water, with application in HPLC-MS, chromatography |  |  |
|  | **2. TECHNICAL SPECIFICATIONS** |  |  |
|  | - the system is based on ion exchange and reverse osmosis technologies; |  |  |
|  | - ultrapure water conductivity (25°C): 0.055µS/cm; |  |  |
|  | - pure water conductivity (25°C): ˂0.1 µS/cm; |  |  |
|  | - ultrapure water resistivity (25°C): 18.2MΩxcm; |  |  |
|  | - pure water resistivity (25°C): >10MΩxcm; |  |  |
|  | - particles > 0.22 μm: < 1 / per mL; |  |  |
|  | - LCD display; |  |  |
|  | - conductivity sensor; |  |  |
|  | - pure water flow: 10l/h; |  |  |
|  | - direct supply from the drinking water network, with all necessary accessories included; |  |  |
|  | - supplied with: 25 l tank with tap, CO2 filter for the tank, automatic UV sanitization module; |  |  |
|  | - supplied with 2 sets of external filters, with pressure gauge (C/PP filter, PP1µm, anti-scale); |  |  |
|  | - 220V power supply. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning, validation and testing of product. The supplier must be authorized by the manufacturer for sale, installation, validation, training and service for the territory of Romania |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 4 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (with payment by the beneficiary if the defect is his fault) and perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge, if applicable. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

LOT NO. 2

* 1. Analytical Balance with 5 decimals and accessories – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - weighing capacity: 100÷120g/200-220g; |  |  |
|  | - accuracy: 0.01mg/0.1mg; |  |  |
|  | - repeatability: 0.05mg/0.1mg; |  |  |
|  | - automatic internal calibration, stabilization time: 0.1mg:≤3s, 0.01mg:≤8s; |  |  |
|  | - LCD display; |  |  |
|  | - weighing plate size: 80-100mm; |  |  |
|  | - operating temperature: +10°C ÷ 40°C; |  |  |
|  | - with 3 automatic sliding doors for easy access to the weighed product; |  |  |
|  | - interface: RS232, USB; |  |  |
|  | - power supply: 220÷240V, 50Hz; |  |  |
|  | - equipped with power cables and connectors necessary for operation; |  |  |
|  | - specific thermal printer; |  |  |
|  | - certificate of conformity and calibration; |  |  |
|  | - certificate of initial metrological verification. |  |  |
|  | **Other requirements :** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning, validation and testing of product. The supplier must be authorized by the manufacturer for sale, installation, validation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 4 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Technical balance – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - Capacity: 3 ÷ 4.5 kg; |  |  |
|  | - Accuracy: 0.01 g; |  |  |
|  | - Repeatability: 0.01 g; |  |  |
|  | - Linearity deviation: 20 mg; |  |  |
|  | - Stabilization time: 3 s; |  |  |
|  | - Possibility of external calibration and automatic internal calibration; |  |  |
|  | - Overload protection; |  |  |
|  | - Units of measurement: mg, g; |  |  |
|  | - Power supply: 220V, 50-60 Hz; |  |  |
|  | - Equipped with power cables and connectors necessary for operation; |  |  |
|  | - specific thermal printer; |  |  |
|  | - certificate of conformity and calibration; |  |  |
|  | - certificate of initial metrological verification. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning, validation and testing of product. The supplier must be authorized by the manufacturer for sale, installation, validation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided  . |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Sample homogenizer – 5 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | The equipment homogenize the sample by knife mill technique: |  |  |
|  | - grinding container volume: min. 1.4 l; |  |  |
|  | - stainless steel knife, with 4 blades; |  |  |
|  | - possibility of setting the grinding time depending on the hardness of the ground products; |  |  |
|  | - final fineness: ≤300 μm; |  |  |
|  | - adjustable speed: min. 4000 rpm; |  |  |
|  | - motor power: min. 1000 W; |  |  |
|  | - used for homogenizing samples of vegetables, fruits, cereals, frozen products; |  |  |
|  | - possibility of memorizing min. 8 standard operating programs. |  |  |
|  | Accessories included: |  |  |
|  | * 1 resistant plastic container with lid; |  |  |
|  | * 1 stainless steel container with lid; |  |  |
|  | * 2 stainless steel knives, autoclavable. |  |  |
|  | - power supply: 220V, 50Hz. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment |  |  |
|  | * verification of the functionality of all components of the equipment |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge, if applicable. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Ultrasonic Bath – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - capacity: 28 liters; |  |  |
|  | - temperature range: 20°C - 70°C; |  |  |
|  | - inner height: max. 200 mm; |  |  |
|  | - stainless steel basket, stand for glass tubes with a diameter of 40mm; |  |  |
|  | - to allow power control from 20 to 100%; |  |  |
|  | - power supply: 220V, 50Hz. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Vortex Shaker – 5 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | Vortex stirrer with a stirring frequency between 0 RPM and 3000 RPM and rubber feet that prevent movement from the desired position. |  |  |
|  | Rubber feet that prevent movement from the desired position. |  |  |
|  | Housing with high resistance to chemicals. |  |  |
|  | Two operating modes: continuous or tactile operation. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Multi-channel electronic pipette (50-1200 microliter) – 2 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - Multichannel - 8 channels, |  |  |
|  | - Multiple pipetting, |  |  |
|  | - Variable volume (50-1200µl), |  |  |
|  | - Ergonomics with good grip, |  |  |
|  | - Electronic tip ejection, |  |  |
|  | - Adjustable calibration in 1, 2 or 3 points, |  |  |
|  | - Volume lock button, |  |  |
|  | - Autoclavable lower part, |  |  |
|  | - Recharges on support via micro USB cable, |  |  |
|  | - Li-polymer batteries, charging time 1 hour, |  |  |
|  | - Equipped with a charger. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Automatic extraction system – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - the extractor can be used with samples in the solid phase of vegetables, fruits and cereals for the determination of pesticide residues; |  |  |
|  | - capacity: 12 samples with a volume of 60ml; |  |  |
|  | - equipped with LCD touch screen, with pre-programmed methods, min 1 USB port; |  |  |
|  | - necessary component parts and accessories, included: |  |  |
|  | * gas collection and exhaust chamber and exhaust hose, |  |  |
|  | * min. 1 Liter bottle for collecting solvent residues, with integrated filling sensor, |  |  |
|  | * barcode reader, |  |  |
|  | * 24 metal containers 60 mL for sample extraction, |  |  |
|  | * 24 stainless steel sieves for sample stabilization during extraction, |  |  |
|  | * 84 collection vials of 60 mL glass, |  |  |
|  | * stands for glass collection vials, |  |  |
|  | * caps made of aluminum foil, which tighten with the caps of the vials (250 pcs.), |  |  |
|  | * 6 bottles for solvent of 500 ml, with caps, |  |  |
|  | * special filter discs for GC-MS, LC-MS, 250 pcs. |  |  |
|  | - solvent evaporator, in a nitrogen atmosphere for the resulting extracts. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 days of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  | Service Manual, digital and paper copy in English and optionally in Romanian. |  |  |
|  | **Warranty and services:** |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

LOT NO. 3

* 1. UPS 20kVA – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | Uninterruptible power supply (UPS) 20 kVA |  |  |
|  | TECHNOLOGY |  |  |
|  | Double conversion online |  |  |
|  | INPUT |  |  |
|  | * Main Input Voltage 380, 415 VAC 3 phases; |  |  |
|  | * Input voltage limits 304 - 477V at full load; |  |  |
|  | * Nominal frequency50/60Hz; |  |  |
|  | * Network frequency 45-65Hz; |  |  |
|  | * Input Power Factor at Full Load 0,99; |  |  |
|  | * THDI <4% at full linear load; |  |  |
|  | BYPASS |  |  |
|  | * Nominal Voltage 380/400/415 VAC 3 phase with neutral; |  |  |
|  | * Nominal frequency50/60Hz (selectable); |  |  |
|  | * Frequency tolerance ±1, ±2, ±4, ±5, ±10. Standard ±10 (but it can be changed); |  |  |
|  | OUTPUT |  |  |
|  | * Maximum configurable power in VA: 20 KVA; |  |  |
|  | * Maximum active power: 20 kW; |  |  |
|  | * Power factor 1; |  |  |
|  | * Nominal voltage ( 220/230/240 VAC); |  |  |
|  | * Frequency stability 0,01%; |  |  |
|  | * Output harmonic distortion ≤ 1% with linear load ≤ 5.5% with non-linear load The source ensures automatic voltage stabilization, without the use of batteries (AVR); |  |  |
|  | * Overload capacity in normal operation; |  |  |
|  | * at 110%: maximum 60 minutes; |  |  |
|  | * at 130%: maximum 10 minutes; |  |  |
|  | * at 150%: maximum 1 minute; |  |  |
|  | * at >150%: maximum 200 milliseconds; |  |  |
|  | BATTERY |  |  |
|  | * 80 PCS 12 V batteries of minimum 9 Ah in the UPS cabinet, and with the possibility of mounting another 40 batteries; |  |  |
|  | * Battery Type: VRLA AGM/GEL , Ni-Cd, wet type; |  |  |
|  | * Operating time on batteries at 50% charge, minimum 27.5 minutes; |  |  |
|  | SYSTEM |  |  |
|  | * Efficiency at charging 50% at normal operation 95.4%; |  |  |
|  | * LCD display that will have to indicate at least: |  |  |
|  | * Status (On Line / On Battery); |  |  |
|  | * Degraded batteries; |  |  |
|  | * Overload; |  |  |
|  | * Bypass; |  |  |
|  | * Protection factor IP20; |  |  |
|  | * The source must have a computer network connection module that ensures at least: |  |  |
|  | * Network connection via RJ 45 interface; |  |  |
|  | * Protocols HTTP, HTTPS, IPv4, IPv6, NTP, SNMP, SSH and SSL; |  |  |
|  | * Remote stop/start of load power; |  |  |
|  | * The bidder must deliver with the source a software application for network management; |  |  |
|  | * Operating temperature 0-40ºC; |  |  |
|  | DISTRIBUTION PANEL |  |  |
|  | The distribution board must contain: 6 schuko sockets; 1 industrial outlet 32A; 1 industrial socket 16A, all at 230V, including protections for them. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 days of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  | Service Manual, digital and paper copy in English and optionally in Romanian. |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

**LOT NO. 4**

* 1. Chemical Fume Hood with accessories – 3 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | The chemical fume hood must have a design and manufactured in order to ensure the safety of the operator at all times and must comply with the minimum requirements listed below: |  |  |
|  | Chemical Fume Hood with aspiration, manufactured, tested and certified according to SR EN 14175-1-2-3 |  |  |
|  | - external dimensions: 1660x900x2400 mm; |  |  |
|  | - internal dimensions: 1500x750x1100 mm; |  |  |
|  | - work surface made of anti-acid technical ceramics with anti-spill perimeter edge, dimensions 1500x750x32 mm, with built-in ceramic sink with dimensions: 300x150x140 mm (with PP drain trap) and cold water tap, cf. EN13792; |  |  |
|  | - pivoting door (sash) sliding vertically that can be stopped in any position; |  |  |
|  | - internal lighting; |  |  |
|  | - min. 2 laboratory electrical sockets (IP44,230V16A) with protective cover; |  |  |
|  | - internal walls and all joints must be made of materials resistant to corrosive chemical agents; |  |  |
|  | - solvent filter box with 6 cassettes, 900 mc/h, 250mm; |  |  |
|  | - suction system - electric motor with single-phase electric power supply, 1450 rpm, power consumption 0.55 KW + anti-acid centrifugal fan (with PP housing and turbine), connection diameter 250 mm; |  |  |
|  | - fixed metal storage cabinet, connected to the exhaustion system with 2 drawers and 2 full doors, with internal shelf and anti-leakage PP tray, with lock; |  |  |
|  | - Installation kit (cylindrical anti-acid PP/PVC anti-acid PP/PVC tubing diam.200/250mm and length approx. 20m, connections, sleeves, collars, clamps, clamps, fittings and everything necessary for the commissioning of the chemical fume Hood); |  |  |
|  | -the quality of the products must be certified by documents issued by accredited bodies in the field of the respective quality system; |  |  |
|  | - the certificate of conformity with SR EN 14175 for the manufacturer will be attached to the technical proposal. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment, |  |  |
|  | **Training:** |  |  |
|  | A minimum of 2 hours of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Laboratory Freezer – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | * Capacity: 270 liters; |  |  |
|  | * Temperature range: -10 grd C÷ – 24 grd C; |  |  |
|  | * No. shelves: minimum 5, with drawers; |  |  |
|  | * 4 wheels/ 2 lockable; |  |  |
|  | * With manual defrost; |  |  |
|  | * Digital display with alarm system; |  |  |
|  | * Door locking system; |  |  |
|  | * Alarm in case of power failure; |  |  |
|  | * Power supply: 220V, 50-60 Hz; |  |  |
|  | * Equipped with power cables and connectors necessary for operation. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Combo Laboratory Refrigerator-Freezer – 4 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - Total volume: minimum 510 liters; |  |  |
|  | - Useful refrigerator volume: min 320 liters; |  |  |
|  | - Useful freezer volume: min 190 liters; |  |  |
|  | - Temperature range: refrigerator: +2°C .. +8°C, freezer: -10°C .. -30°C; |  |  |
|  | - Refrigerator: min 3 shelves; |  |  |
|  | **-** Freezer: min. 3 drawers; |  |  |
|  | **-** 4 wheels/ 2 lockable; |  |  |
|  | **-** With manual/automatic defrosting; |  |  |
|  | **-** Digital display with alarm system; |  |  |
|  | **-** Door locking system; |  |  |
|  | **-** Alarm in case of power interruption/ exceeding the set temperature; |  |  |
|  | **-** Equipped with 2 compressors and with separate controls of the refrigerator and freezer; |  |  |
|  | **-** Power supply: 220V, 50-60 Hz; |  |  |
|  | - Equipped with power cables and connectors necessary for operation. |  |  |
|  | **Other requirements:** |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Climatic chamber with light and humidity control, with accessories – 2 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - volume: minimum 700 liters; |  |  |
|  | - temperature range (without humidity and lighting): min. 0 - 70°C; |  |  |
|  | - temperature range (with humidity and lighting): min. 10°C - 60°C; |  |  |
|  | - humidity range: 10% - 80%; |  |  |
|  | - 3 lighting boxes with two variable positions with 5 fluorescent lighting tubes, each in switching steps; |  |  |
|  | - the lighting system to ensure the homogeneous distribution of light; |  |  |
|  | - temperature and humidity monitoring system with internal sensor; |  |  |
|  | - controller with touchscreen display and real-time programming; minimum 20 -programs with day/night cycles; |  |  |
|  | - humidity sensor-controlled humidification/dehumidification system |  |  |
|  | - internet connection; |  |  |
|  | -controller with minimum 5.5 inch LCD display; |  |  |
|  | - setting temperature profiles; |  |  |
|  | - temperature safety system that provides overheating protection with alarm |  |  |
|  | - visual and acoustic; |  |  |
|  | - heated door; |  |  |
|  | - 5 stainless steel shelves; |  |  |
|  | - load per shelf: at least 45 kg; |  |  |
|  | - visual and acoustic temperature alarm according to ISO 12880; |  |  |
|  | - noise level (db(A)): <59; |  |  |
|  | - enclosure material: stainless steel; |  |  |
|  | - number of external doors: 2 pcs.; |  |  |
|  | - interior glass doors: 2 pcs.; |  |  |
|  | - external dimensions (mm): approximately 1260x1930x890; |  |  |
|  | - internal dimensions (mm): approximately 980x1250x580; |  |  |
|  | - power supply: 50/60HZ; 200-240 V; |  |  |
|  | - power: 3.5 kW; |  |  |
|  | - system for the complete preparation or desalination of tap water, delivered with the device measurement and all connections included. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 1 day (8 hours) of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. PCR cabinet – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. GENERAL DESCRIPTION** |  |  |
|  | PCR hood specially designed for operations with DNA/RNA samples and other work methods and which offers effective protection against contamination. |  |  |
|  | Work surface made of steel. |  |  |
|  | Equipped with a UV lamp installed in the upper part of the enclosure, which disinfects the work area in 15 - 30 minutes of exposure. |  |  |
|  | With the function of automatic shutdown of the UV lamp when the front protection panel is opened. |  |  |
|  | The UV recirculator ensures permanent aseptic operating conditions inside the hood. |  |  |
|  | Equipped with a digital timer for controlling the duration of direct UV irradiation. |  |  |
|  | Shock-resistant walls, low noise and low energy consumption. |  |  |
|  | UV lamp with an average lifespan of 9000 hours. |  |  |
|  | **2. TECHNICAL SPECIFICATIONS** |  |  |
|  | Working surface dimensions (L\*W) minimum 1200x500 mm. |  |  |
|  | Accessories included input for power cables (230 V/120 V). |  |  |
|  | Maximum external dimensions (L\*W\*H) 130 × 600 × 600 mm. |  |  |
|  | Maximum weight 40 kg. |  |  |
|  | Power supply 220-240 V, 50 Hz. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Combo Laboratory Refrigerator-Freezer – 2 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | The temperature can be precisely set through the precision electronic system with digital temperature display. The operating states of the device should be displayed by symbols |  |  |
|  | Integrated alarm systems |  |  |
|  | Optical and acoustic alarm systems for warning in case of unwanted temperature deviations or in the case of an open door. All alarm parameters can be set individually |  |  |
|  | Safety thermostat so that sensitive products remain protected in case of failure. |  |  |
|  | Power supply – 220-240V, 50/60 Hz |  |  |
|  | Consumption class A+ |  |  |
|  | Freezer temperature: -10/-25˚C |  |  |
|  | Freezer volume 100-150 L |  |  |
|  | Min. 3 freezer drawers |  |  |
|  | Refrigerator temperature: 4-8 ˚C |  |  |
|  | Refrigerator volume 250-300 L |  |  |
|  | Min. 3 refrigerator shelves |  |  |
|  | Material – steel |  |  |
|  | Display |  |  |
|  | Mandatory accessories: calibrated instruments for measuring the temperature for both the refrigerator and the freezer |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Microbiological hood, class II, with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - Approximate external dimensions: ≈ 1338x825x1450 mm (LxWxH); |  |  |
|  | - Approximate internal dimensions: ≈ 1190x548x666 mm (LxWxH); |  |  |
|  | - Laminar flow speed: ≈ 0.35 m/s; |  |  |
|  | - Frontal inlet air speed: ≈ 0.65 m/s; |  |  |
|  | - Power 200W Lighting: ≥ 1000 lux; |  |  |
|  | - Noise ≤58dBA; |  |  |
|  | - Equipped with two HEPA H14 filters (one on intake and one on exhaust) and a G3 prefilter; |  |  |
|  | - Air quality ISO 4 according to: ISO CD 14644-1; |  |  |
|  | - In accordance with EN 12469 Class II standard and according to NSF/ANSI 49 Class II A2, JIS K3800, SFDA YY-0569 and AS2252; |  |  |
|  | - Safety glass side windows; |  |  |
|  | - Electrically operated front safety window (partial and total window sliding); |  |  |
|  | - LED lighting; |  |  |
|  | - Segmented work surface, made of AISI304 stainless steel; |  |  |
|  | - Provided with 2 sockets; |  |  |
|  | - UV germicidal lamp; |  |  |
|  | - ECfans with 2 sensors (intake and exhaust air flow monitoring). |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period |  |  |

* 1. Laboratory Vertical Freezer – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - Minimum useful volume 500 l; |  |  |
|  | - Temperature range: -10°C.÷ – 35 °C; |  |  |
|  | - No. shelves: minimum 5, with drawers; |  |  |
|  | - 4 wheels/ 2 lockable; |  |  |
|  | - Automatic defrosting, fast (< 10 min); |  |  |
|  | - Digital display with alarm system; |  |  |
|  | - Door locking system; |  |  |
|  | - Alarm in case of power failure; |  |  |
|  | - Power supply: 220V, 50-60 Hz; |  |  |
|  | -Equipped with power cables and connectors necessary for operation. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Laboratory Refrigerator – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **1. TECHNICAL SPECIFICATIONS** |  |  |
|  | - minimum useful volume 450 liters; |  |  |
|  | - aluminum or stainless-steel interior; |  |  |
|  | - painted metallic exterior, stainless steel (INOX/G) or polished stainless steel (INOX/S); |  |  |
|  | - thermal insulation - polyurethane foam; |  |  |
|  | - solid door; |  |  |
|  | - forced air convection (optional fan speed adjustment); |  |  |
|  | - cooling systems to maintain the set temperature; |  |  |
|  | - defrost function; |  |  |
|  | - temperature range: 0...+15°C; |  |  |
|  | - graphic LCD display; |  |  |
|  | - illuminated buttons; |  |  |
|  | - temperature controller with microprocessor; |  |  |
|  | - alarm in case of damage to the temperature sensor; |  |  |
|  | - voltage drop control system; |  |  |
|  | - real time clock; |  |  |
|  | - acoustic alarm; |  |  |
|  | - self-diagnosis function; |  |  |
|  | - automatic shutdown of the fan at the end of the program; |  |  |
|  | - memory test results. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

**LOT NO. 5**

* 1. High Speed Centrifuge with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | Table Top Centrifuge, with stainless steel housing for durability and easy cleaning with the following technical specifications: |  |  |
|  | 1. Maximum rotational speed: |  |  |
|  | * Maximum relative speed (g): minimum 65,000 x g; |  |  |
|  | * Absolute maximum speed (rpm): minimum 30,0000 rpm; |  |  |
|  | 2. Maximum capacity: 6 x 250 ml (maximum volume of solution or suspension that can be centrifuged simultaneously) |  |  |
|  | 3. Speed control: |  |  |
|  | * Type of control: electronic speed control; |  |  |
|  | * Automatic rotor recognition with overspeed protection; |  |  |
|  | 4. Handling: |  |  |
|  | * Programs: storage of up to 99 different programs; |  |  |
|  | * Handling options: Customization of speed and spin time; |  |  |
|  | 5. Display: |  |  |
|  | * Type: large LCD display with microprocessor; |  |  |
|  | * Displayed information: Current speed, remaining time, program settings, etc. |  |  |
|  | 6. CFC-free refrigeration system |  |  |
|  | * Temperature range: - 20°C to + 40°C: 1°C; |  |  |
|  | * Pre-cooling and standstill program options; |  |  |
|  | 7. Safety: |  |  |
|  | * Lid locking system: Yes; |  |  |
|  | * Automatic imbalance shut off system: Yes; |  |  |
|  | * Automatic shut off function: Yes; |  |  |
|  | * Acoustic signals: Yes; |  |  |
|  | 8. Power: |  |  |
|  | * Supply voltage: 230 V; |  |  |
|  | * Frequency: 50 - 60 Hz; |  |  |
|  | 9. Required accessories and consumables: |  |  |
|  | * Angle rotor 6 x 50 ml, max speed 20000rpm, 1pc.; |  |  |
|  | * Adapter for 16ml tubes, compatible with 6x50ml rotor, 2pcs; |  |  |
|  | * Adapter for 15ml tubes, compatible with 6x50ml rotor, 2 pcs; |  |  |
|  | * Angle rotor 20x10ml, max speed 16000rpm, 1 pc; |  |  |
|  | * Angle rotor 12x1.5/2ml, max speed 30000rpm, 1 pc; |  |  |
|  | * Angle rotor 30x1.5/2ml, max speed 20000rpm, 1 pc; |  |  |
|  | * Adapter for 1.5ml tubes, compatible with 12x1.5/2ml, and 30x1.5/2ml rotors, 24pcs; |  |  |
|  | * PP centrifuge microtubes 1.5ml, 2000pcs; |  |  |
|  | * PP centrifuge microtubes 2ml, 2000 pcs; |  |  |
|  | * PE centrifuge tubes 10ml, 25 pcs; |  |  |
|  | * PE centrifuge tubes 30ml, 25 pcs; |  |  |
|  | * PE centrifuge tubes 50ml, 25 pcs; |  |  |
|  | * PE centrifuge tubes 16ml, 70 pcs; |  |  |
|  | * PP centrifuge tubes 16ml, 50000rcf, 20 pcs ; |  |  |
|  | 10. Quality and conformity: |  |  |
|  | * Standards: Manufactured in accordance with international safety regulations, IEC 61010; |  |  |
|  | * Certified: DIN EN ISO 9001, compliant with IVDR -products class "A"; |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Laboratory pH meter with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | - pH range: -2 ... +20; |  |  |
|  | - pH resolution: 0.1 / 0.01 / 0.001; |  |  |
|  | - pH accuracy: ± 0.002 pH; |  |  |
|  | - Calibration: min 2 points; |  |  |
|  | - mV resolution: 0.1 / 1; |  |  |
|  | - Temperature range: -20 … +120°C; |  |  |
|  | - Resolution °C: 0.5; |  |  |
|  | - Color LCD display for simultaneous display of pH/mV value, temperature and status indicators; |  |  |
|  | - Automatic or manual temperature compensation; |  |  |
|  | - Measurement stability indicator (low-medium-high); |  |  |
|  | - Selectable pH display resolution 0.1/0.01 / 0.001; |  |  |
|  | - Water and dust resistant, in accordance with protection class IP67; |  |  |
|  | - To be included: |  |  |
|  | - pH electrode, |  |  |
|  | - temperature probe, |  |  |
|  | - magnetic stirrer, |  |  |
|  | - standard solutions, |  |  |
|  | - external keyboard, |  |  |
|  | - support for measuring probes, |  |  |
|  | - printer, |  |  |
|  | - usb cable. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Micro-Centrifuge, with accessories – 2 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | Laboratory minicentrifuge min. 5,000 RPM |  |  |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | * Automatic shutdown system when the lid is raised, automatic start when the lid is closed; |  |  |
|  | * The rotor clamping system that facilitates the replacement process; |  |  |
|  | * Completely transparent cover to be able to follow the centrifugation process; |  |  |
|  | * Control system located on the front panel for easy operation; |  |  |
|  | * Large LED display indicating rotation speed and time; |  |  |
|  | * Reliable engine that guarantees a long life. |  |  |
|  | **Accessories**: |  |  |
|  | * Tube band rotor 2x8/12 tubes; |  |  |
|  | * Rotor tubes 0.2 mL; |  |  |
|  | * Rotor/tube adapter 0.5 mL; |  |  |
|  | * Rotor tubes 1.5/2 mL. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Refrigerated Benchtop Centrifuge, with accessories – 2 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | Refrigerated laboratory centrifuge |  |  |
|  | Tableware |  |  |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | 1. Maximum rotation speed: |  |  |
|  | • Maximum relative speed (g): minimum 20,000 x g |  |  |
|  | • Maximum absolute speed (rpm): minimum 14000 rpm |  |  |
|  | 2. Speed control: |  |  |
|  | • Type of control: Electronic speed control |  |  |
|  | • Automatic rotor recognition with over speed protection |  |  |
|  | 3. Programming: |  |  |
|  | • Programming options: Customize the speed, temperature and spin time |  |  |
|  | 4. Display: |  |  |
|  | • Type: Large LCD screen with microprocessor |  |  |
|  | • Information displayed: Current speed, remaining time, temperature, etc. |  |  |
|  | 5. CFC-free refrigeration system |  |  |
|  | • Temperature range: - 20°C to + 40°C: 1°C |  |  |
|  | • Possibility of pre-cooling. |  |  |
|  | 6. Safety system: |  |  |
|  | • Lid locking system: Yes |  |  |
|  | • Imbalance protection system: Yes |  |  |
|  | • Automatic shutdown function: Yes |  |  |
|  | • Acoustic signals |  |  |
|  | 7. Power supply: |  |  |
|  | • Supply voltage: 230 V |  |  |
|  | • Frequency: 50 - 60 Hz |  |  |
|  | 8. Required accessories: |  |  |
|  | - Plate rotor minimum 2x96, 1pc |  |  |
|  | - Rotor minimum 24 x1.5/2ml, 1pc |  |  |
|  | - Rotor minimum 30x0.2ml, 1pc |  |  |
|  | 9. Certifications of conformity: |  |  |
|  | • Standards: Manufactured in accordance with international safety regulations, IEC 61010 |  |  |
|  | • Certifications: DIN EN ISO 9001 |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users:** |  |  |
|  | * starting and checking the functionality of the entire system |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Floor-standing centrifuge without refrigeration, with swing bucket rotor, with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | - Rotor swing out for 4 adaptors, capacity adaptors 250-290 mL; |  |  |
|  | - Rotational speed, min. 2200, max. 15000 rpm, with timer; |  |  |
|  | - Tubes 250/290 mL, with covers - 4 pcs. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Centrifuge – 3 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | - Cover and casing made of durable metal; |  |  |
|  | - Capacity: minimum 4 x 250 ml; |  |  |
|  | - Adapter for 250 ml bottles; |  |  |
|  | - Speed ​​min. 4000 rpm, RCF: 4800; |  |  |
|  | - Timer: 0-99 minutes, with continuous operation function; |  |  |
|  | - Good stability at high speeds; |  |  |
|  | - Compatible rotor included in the price, with adapters with lid; |  |  |
|  | - 250 ml flat bottom bottles with lid, compatible with the centrifuge (min. 50 pcs). |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The winning company will ensure the transport to the beneficiary, installation, commissioning and testing of the system, warranty and post-warranty service. |  |  |
|  | The winning company is responsible for any defect found during the installation and/or qualification of the equipment. |  |  |
|  | The equipment will be new, unused. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The products will be accompanied by a certificate of conformity, a warranty certificate and a technical book. |  |  |
|  | Time limit for intervention in case of breakdown: maximum 48 hours from notification. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide software upgrades regularly whenever they are available over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Dispenser – 9 pcs.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | - Ceramic piston dispenser; |  |  |
|  | - Adjustable volume between 5.0-25 ml, in 0.5 ml increments; |  |  |
|  | - Digital volume setting; |  |  |
|  | - A 32 mm thread, plus 3 adapters (A 28, S 40 and A 45); |  |  |
|  | - One suction tube, 1 dispensing tube; |  |  |
|  | - Resistant to organic solvents (dichloromethane, petroleum ether, acetone, acetonitrile, isooctane, toluene); |  |  |
|  | - Certificate of conformity; |  |  |
|  | - Brown bottle for solvent, volume: 1000 ml. |  |  |
|  | **Installation and Testing** |  |  |
|  | The winning company will ensure the transport to the beneficiary and installation. |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge. |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Labware washer with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | - The washing enclosure and the door must be made of stainless steel (material resistant to acids and organic solvents). |  |  |
|  | - The plastic materials inside the washing machine must be resistant to heat, corrosive substances and organic solvents. |  |  |
|  | - Standard programs: minimum 10. |  |  |
|  | - The programming system must be able to set and control the following parameters: execution/operation time, amount of detergent, temperature, etc. |  |  |
|  | - To be provided with a drying system. |  |  |
|  | - To be provided with a dispenser for liquid alkaline detergent and liquid neutralizing agent. |  |  |
|  | - To be provided with safety systems. |  |  |
|  | - To be provided with a built-in water softener. |  |  |
|  | - External dimensions: max. 900x650x850 mm. |  |  |
|  | - Equipped with a pump for supplying demineralized water from an external tank. |  |  |
|  | - Equipped with a universal injection bottle washing system with a drying system: compatible with volumetric flasks (10-100 ml), Erlenmayer flasks, Berzelius beakers, 250 ml centrifuge flasks, 50 ml evaporation flasks, etc. |  |  |
|  | - Delivered with alkaline and neutralizing liquid detergent (minimum 5 l). |  |  |
|  | - Power supply: 220V/380V, 50-60 Hz. |  |  |
|  | - Equipped with power cables and connectors necessary for operation. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | In the technical offer, each technical specification must be supported with extracts from the equipment brochure, technical sheets or equipment manuals, documentation developed by the manufacturer, training certificates, etc. In the technical proposal, the bidder will not limit himself to mentioning that he meets the requirements. The technical proposal will contain a comment article by article of the requested requirements and will indicate the document in which it is made reference to compliance with each requirement. All requirements and technical specifications are minimum and mandatory. Any requirement or technical specification that cannot be demonstrated by these methods will not be taken into account and it will be considered that the equipment offered does not meet the requested requirement. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  | * stopping the equipment, the order of operations and the precautions and safety measures that must be taken into account before accessing the stop controls, in order to avoid blocking the software, damaging the proper functioning of sensitive spare parts and the occurrence of malfunctions at the next start of the equipment; |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A minimum of 1 day of training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |

* 1. Floor-standing refrigerated centrifuge with accessories – 1 pc.

Type / Model: ……………..

**Manufacturer/Country: …………………..**

| **No.** | **Minimum technical specifications** | **Yes/No** | **Statement of compliance and reference to the supporting documents (data sheet, brochures, manual, etc.)**  ***[to be filled in by the Bidder]*** |
| --- | --- | --- | --- |
|  | **TECHNICAL SPECIFICATIONS** |  |  |
|  | Capacity – 4 L; 6 x 100 ml with angular rotor. |  |  |
|  | Intuitive control panel with high-contrast digital display that allows easy programming of speed, time and temperature. |  |  |
|  | Control – by microprocessor. |  |  |
|  | Maximum speed – 15,200rpm with angular rotor; RCF - 25.830 x g with angle rotor. |  |  |
|  | Memory - up to 6 programs. |  |  |
|  | Timer: - 9 hrs. 59 min. plus HOLD. |  |  |
|  | Rotor imbalance detection system. |  |  |
|  | Adjustable temperature range in the range -10 ° + 40 ° C. |  |  |
|  | Secure lid closure system. |  |  |
|  | Cover with motorized opening. |  |  |
|  | The rotors must be fixed through a "push button" type system without the need for other keys, for their quick installation or change; changing the rotor should be done in less than 5 seconds. |  |  |
|  | Easy access to the rotor chamber for quick cleaning; a clean working environment and the extension of the operating period. |  |  |
|  | Stainless steel centrifuge chamber. |  |  |
|  | "Click" system for fixing the rotor cover for rotors with a cover. |  |  |
|  | Advanced rotor management system maximizes acceleration, braking and prevents imbalance in case of unequal volumes for each rotor option. |  |  |
|  | The centrifuge must allow the use of a wide range of rotors: |  |  |
|  | - angular carbon fiber rotors, |  |  |
|  | - swing-out rotor with buckets and lids certified for biosafety, the lids have a closing/opening system without screwing, closing and opening can be done with one hand, |  |  |
|  | - rotor for microplates equipped with a certified cover for biosafety. |  |  |
|  | The centrifuge must be delivered with: Carbon fiber "angular" type rotor with the following characteristics: |  |  |
|  | - Capacity - 6 x 100mL |  |  |
|  | - Maximum speed/minimum RCF: 13000rpm/18500xG |  |  |
|  | The rotor must be fixed through a "push button" type system without the need for other tools, which allows for quick installation or changing of the rotor. |  |  |
|  | The rotor must be delivered with a complete set of adapters for 15 ml tubes. |  |  |
|  | Fixed rotor for 50 ml tubes. |  |  |
|  | **Other requirements:** |  |  |
|  | Bidders must submit the offer for the entire package of equipment that constitutes the lot. The disassembly of the lot, is not accepted. It is mandatory to offer the complete lot of equipment. |  |  |
|  | The product must be delivered within the delivery schedule requirements. |  |  |
|  | **Standard/Regulation/Law:** |  |  |
|  | CE certificate from notified bodies and/or the producer’s Declaration of Conformity with the Directives applicable for this type of equipment |  |  |
|  | **Installation and Testing** |  |  |
|  | The supplier must provide the transport to the beneficiary location, installation, commissioning and testing of product. The supplier must be authorized by the manufacturer for sale, installation, training and service for the territory of Romania. |  |  |
|  | **Joint testing with users** |  |  |
|  | * starting and checking the functionality of the entire system; |  |  |
|  |  |  |  |
|  | * verification of the functionality of all components of the equipment. |  |  |
|  | **Training:** |  |  |
|  | A training on the operation of the equipment at the beneficiary's premises, carried out by the supplier's authorized staff, is provided. |  |  |
|  | **Manuals:** |  |  |
|  | User Manual, digital and paper copy in Romanian and optionally in English. |  |  |
|  |  |  |  |
|  | **Warranty and services:** |  |  |
|  | The warranty period is 24 months from the date of installation and commissioning function. |  |  |
|  | The warranty service will be performed by the supplier free of charge. |  |  |
|  | The Supplier/Specialized Agent must provide technical assistance, spare parts (will be paid separately by the beneficiary) and to perform servicing over the warranty period, free of charge |  |  |
|  |  |  |  |
|  | **Post warranty services:** |  |  |
|  | Post warranty service and availability of spare parts and consumables for a period of minimum 3 years after the end of the warranty period. |  |  |