

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

Contract title: IPA —Supply of the equipment for VET schools,

Publication reference: EuropeAid/140496/DH/SUP/RS

Columns 1-2 should be completed by the contracting authority

Columns 3-4 should be completed by the tenderer

Column 5 is reserved for the evaluation committee

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

- Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
- Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
- Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offered specifications.

Annex II.A General Technical Specifications

Description of the project

The subject of the contract is the delivery, installation, putting into operation, inspection, testing, training and warranty by the Contractor of the specified goods, to the delivery addresses defined in ***Appendix to Contract II.C Delivery List and Appendix to Contract II.D Delivery List-Contact List*** of the Contract. The formal signature of the provisional acceptance of the supplies shall be organised at the following address, after locations of delivery and installation have been inspected: MoESTD, Belgrade, Nemanjina 22-26.

Technical requirements

All equipment shall be provided complete with the necessary accessories and/or parts such as to ensure that the unit is capable of operating to the required technical and quality specifications. All specifications details listed for each item is the minimum requirements. Any improvements on the specifications or additional features offered should be clearly identified in the Tenderer's offer. Specifications described as approximate or indicative could vary for +/- 20%.

The mains supply voltage in Serbia is 220 V (single-phase) and 380 V AC (three-phase) with neutral, 50 Hz nominal. In addition to power black-outs, the quality and stability of the supplied voltage may undergo fluctuations (plus or minus) of more than 10%. Therefore, all electrical equipment shall be operated on 220 V \pm 20 V, 50 Hz \pm 0.5 Hz, or 380 V \pm 40 V power supply and be suitable for direct connection to the standard single phase/three phase power outlets in Serbia.

Safety: The Contractor is responsible for advising of any H&S risks associated with equipment provided and of suitable protective measures. Any equipment that requires fixing to either floors, walls or ceiling shall be secured by the appropriate devices in accordance with the manufacturer's recommendations.

The tenderers are required to demonstrate that specifications of the items that they offer are responsive to the requirement set out in the tender dossier and to identify model and manufacturer of each individual item in their technical offer and to provide necessary documentation such as catalogues, brochures, booklets that inform of details of technical specifications that sufficiently define the equipment being offered, and thus should enable the contracting authority to check the information provided in the technical offer.

A project implementation schedule with major milestones shall be provided in the proposals of the tenderers.

The Tenderer shall submit proposed Factory Acceptance Tests (FAT) during the implementation period. These shall be revised and finalized with the Beneficiary and Contracting Authority.

Training

The Tenderer shall demonstrate operation of all items including basic equipment maintenance to the endorsement of the Beneficiary as part of the Acceptance procedure. Training shall be provided to at least 2 staff at each project site where the equipment is delivered.

Technical documents to be delivered during implementation period

Each item shall be provided with users' manuals and where appropriate service books. These manuals shall be supplied in Serbian and English languages.

The obligatory documents for the provisional acceptance:

- Original certificate of origin
- Conformity and quality control documents
- Warranty document, signed and stamped by the Tenderer for each item

No provisional acceptance can be pronounced without the presence of the complete set of documents. These documents or the declarations for the provision of the documents should be delivered with the bid.

Warranty

Tenderers must provide local reliable warranty service agent/s for all items: providing maintenance and the rapid supply of equipment spare parts and consumables (additional supply of equipment spare parts and consumables after provisional acceptance: at the cost of Beneficiary) for the Warranty duration of one year.

Offer must include warranty service description including:

- Service organisation contact data including name, postal address, telephone number, fax number and e-mail address
- Guaranteed that any requests for services will be attended to within 24 hours.
- Guarantee that all items can be repaired or alternatively replaced within a maximum of 72 hours
- Guarantee that genuine spare parts and consumables will be available for a period of minimum 3 years from the date of final acceptance of the equipment.

Annex II.B General Technical Specifications

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
1	Plough Reversible Mounted Under beam clearance: 80 cm Number of furrows: 2 Notched discs: Ø 50 cm Steel mould-board Adjustable working width Weight: 600 kg Working depth: 30 cm Depth regulation wheel Suitable for a tractor of 55 kW			
2	Disc harrow Mounted Weight: 500 kg Number of discs: 28 Disc diameter: 460 mm Working width: 2.7 m Mechanical regulation system Suitable for a tractor of 55 kW			
3	Mechanical seed drill For cereals and small seeds Number of rows: 25 Working width: 3 m Loading platform Hopper Capacity: 500 l Rear cover seed harrow Hydraulic row markers			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
4	Pneumatic planter Number of maize rows: 4 Number of sugar beets rows: 6 V disc Hydraulic row markers Rubber compression wheels System for fertilizing Suitable for a tractor of 55 kW			
5	Transplanter Semiautomatic For seedlings of conical or pyramid-shaped roots as tomato, cabbage, broccoli, etc. Number of rows: 4 Working width: 2.6 m System for irrigation, tank 200 l Fertilizer spreader Suitable for a tractor of 55 kW			
6	Garlic and onion planter Number of rows: 5 Rows distance: 20 cm Number of bulbs per meter: 8 to 12 Mechanical mechanism synchronised with drive wheels Suitable for a tractor of 55 kW			
7	Potato planter Automatic Number of rows: 2 Inter rows distance: 70/75 cm Hooper capacity: 300 kg Suitable for a tractor of 55 kW			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
8	Hydraulic sprayer Mounted Main tank capacity: 600 l Tank with clean water for machine cleaning Tank with clean water for hands washing Pump type: piston membrane Flow: 100 l/min Working width: 12 m PTO shaft included Suitable for a tractor of 55 kW			
9	Manure spreader Single axle Distribution vertical rotors Capacity: 4000 kg Working width: 8 m Suitable for a tractor of 55 kW			
10	Liquid fertilizer tank Tank capacity: 3000 l Measuring equipment Area: 10 m Traffic signalization Suitable for a tractor of 55 kW			
11	Silage combine Mounted Single row Capacity: 0.2 ha/h Length cut range: 4 or 6 mm Number of blades: 12 PTO shaft included Weight: 500 kg Suitable for a tractor of 55 kW			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
12	Square baler Trailed Section compress channel app.: 46x36 cm Bale length range: 30-120 cm Working width: 160 cm Suitable for a tractor of 55 kW			
13	Hydraulic lifter Front/rear 3 points mount Lift height: 3 m Lift weight: 1500 kg Min. tractor weight: 3500 kg Lifting fork width adjustable Suitable for a tractor of 55 kW			
14	Shredder vino Working width: 180 cm Shredding thickness capacity: 5 cm Mechanical side shift 30 cm PTO shaft included Suitable for a tractor of 55 kW			
15	Greenhouse Double foil Dimensions: 8x25 m Height at ridge level: 3.5 m Zinc plated steel tube archers ø 60 mm, 11 pieces with concrete footing Zinc plated steel tube front and rear supporters ø 60 mm, 2 pieces on each end with concrete footing Number of hanged doors on each end: 2 Approx. door size HxW: 2.5x2 m Incorporated ventilation system:			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	<p>Lateral manual wining ventilation Front/rear ventilation 2.5x1 m Archers and supporters must secure stability in local climate conditions Constant distance between foils in range: 0.2-0.25 m Foil: triple UV, anti-drop, anti-virus Thickness: 0.18 mm Compressor, 150 W, mounted on construction, flexi tubes connected with inside foil, variable speed, timer</p> <p>Schools are responsible for electricity supply and necessary installations up to the green house</p> <p>Mulch black film: Black Opaque Width: 1 m Thickness: 0.02 mm Roll length: 500 m</p> <p>Shade net: To fit the greenhouse dimensions 30 % app. opaque</p> <p>Irrigation system System use pipelines water supply pressure and does not require separate pumps For low pressure water supply in range: 1 - 3 bar trickle / drip system Laterals length: 25 m Number of laterals: 8</p>			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	<p>Full set of installation parts i.e. filter(s), valve(s), pipes etc.</p> <p>Sprinkler system</p> <p>System use pipelines water supply pressure and does not require separate pumps</p> <p>For low pressure water supply in range: 1 - 3 bar</p> <p>2 lines with micro sprinklers</p> <p>Fixed on app. height of 2.5 m</p> <p>To cover full greenhouse area</p> <p>Line wetting diameter max. 5 m</p> <p>To use the same installation parts as the irrigation system i.e. filter(s), valve(s), pipes etc.</p> <p>Schools are responsible for water supply and necessary installations up to the greenhouse</p>			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
16	Agro mechanics tool set Refractometer Measuring windshield cleaning liquid, antifreeze and gravity of the electrolyte in the battery, pipette included Compression tester For diesel and petrol engines Up to 40 bar Test hose with quick coupling 5 adapters for petrol engines 5 adapters for diesel engines Carrying case Injector tester For petrol and diesel Range: 0 – 400 bar Standard adapter Transmission oil tester Range: 0 – 25 bar Hose with quick coupling 5 standard adapters Torque Wrench Reversible ratchet Automatic release 1/2" 70-350 Nm Case			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
17	Sieve Shaker with set of sieves Electromagnetic Digital Capacity 8 sieves Sieve and rims: stainless steel Sieve diameter: 200 mm Sieve height: 50 mm Set of 18 sieves, one of each, hole sizes: <ul style="list-style-type: none"> • 11200 µm • 8000 µm • 5600 µm • 4000 µm • 2800 µm • 2000 µm • 1400 µm • 1000 µm • 710 µm • 500 µm • 355 µm • 250 µm • 180 µm • 125 µm • 90 µm • 63 µm • 45 µm • 38 µm 			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
18	Grain moisture analyser Integrated weighting system Accuracy: 0.5% Rechargeable battery AC adapter Temperature and hectolitre weight readout Calibration programmes for: <ul style="list-style-type: none"> • wheat • barley • oats • rye • oilseed rape • triticale • maize 			
19	Sand bath Internal dimensions: 50x300x300 mm Surface temperature: 400 ⁰ C Power: 2500 W Temperature regulation			
20	Psychrometer Aspirated psychrometer by Assmann Measuring range: -30 to +40 Scale division 0,2 ⁰ C			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
21	Spectroscope According to Kirchoff/Bunsen Observation tube: moveable, lock-screw Slit tube: fixed, variable slit objective Scale tube: fixed scale, 200 divisions Adjustable for wavelengths Eyepiece: 18 mm/90 mm Objective: 18 mm/160 mm Flint glass prism: 60°, dispersion C-F = 2°, 20 mm base length, 30 mm height			
22	Heating plate 2 heating elements Temperature: 450°C Ceramic top, resistant to aggressive substances Heating surface diameter: 150 mm Power: 1200 W			
23	Laboratory refrigerator Capacity: 180 l Temperature range: 2-10° C Lockable door			
24	Soxhlet apparatus Extractor capacity: 500 ml Extractor height: 400 mm Condenser Allihn Round bottom flask capacity: 1000 mm Heating unit: For flasks up to 1000 ml Maximal temperature: 450°C Two heating zones Standard grounds Set of hoses			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
25	Ebuliometer Direct and accurate testing of alcoholic content of wine Measurement range: 0-17 % vol. Thermometer: 0.1° C Accuracy: 0.1 % vol.			
26	Water bath with chambers Number of chambers: 6 Capacity: 2 l/per chamber Temperature range from 5° C above ambient to 110° C Temperature regulation for each chamber Separate heating for each chamber Power: 2000 W			
27	Laboratory mill Continuous grinding procedure Speed range: 3000-6000 rpm Speed regulator Sample size at exit: 0.25 mm			
28	Ball mill Stop emergency button Adjustable cylinders Microprocessor Speed adjustable: 50-300 rpm Stainless steel jars: 3 litres – 3 pcs 1 litre – 4 pcs			
29	Microburtte acc. to Bang According to Bang 5ml / 1:50			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
30	Automatic pipette Fixed: 100 µl, 250 µl and 500 µl Variable: 50-200 µl			
31	Gerber set Butirometer: 0-8% - 8 pieces Butirometer cork - 8 pieces Pipette for milk 11 ml - 3 pieces Pipette for H ₂ SO ₄ 10 ml - 2 pieces Pipette for amyl-alcohol 1 ml - 2 pieces Stand for butirometers (8 places for butirometers and 8 places for pipettes) - 1 piece Butirometer cork pusher -1 piece Butirometer cleaning brush – 3 pieces			
32	Kjeldahl distillation apparatus Kjeldahl flask, 500 ml Connecting adapter Funnel, 100ml Condenser, 25cm Stopper glass with canal Metalic clip			
33	Vacuum desiccator Diameter: 150 mm			
34	Measuring stick – big Water-level 120-215 cm height 5-210 cm length 5-210 cm width			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
35	Measuring stick – small Water-level 5 -115 cm height 5-210 cm length 5-210 cm width			
36	Animal restraining equipment set HARMS bull holder Rolling adjuster Stainless steel Length app.: 20 cm Casting hobble 4 hobbles 3 m rope 1,25 m chain Horse twitch Wooden nose twitch Pig holder Handle and steel wire Length: 60 cm			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
37	Insemination instruments and equipment set Insemination gun For mini and medium straws Stainless steel Length: 45 cm Universal sheaths: pack of 50 pieces Insemination catheter For sows Melrose Pack of 100 pieces Vaginal speculum Vaginal tube speculum For cows Length: 380 mm Diameter: 40 mm Thawing unit Water container: 250 ml Temperature accuracy: +/-0,2°C For all types of straws Car adaptor 12 V Fixed temperature 37°C and 50°C Containers for semen For storage and transport Capacity approx.: 10 l Static holding time approx.: 100 days Heat detector For cattle Measuring electric resistance of uterus mucus Length of the probe app.: 35 cm Rechargeable			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
38	Obstetric instruments and equipment set Eye hook – HARMS – blunt – 2 pcs Length: 5 cm Stainless steel Eye hook – HARMS – pointed – 2 pcs Length: 8 cm Stainless steel Calving rope – 2 pcs Nylon Length: 150 cm, with one loop Calving rope introducer Light Stainless steel Calving rope introducer Heavy Stainless steel Flessa vulva sutures With wooden barrels Stainless wire Ultrasound tester Diagnosis of pregnancy in sows and sheep Portable Battery charger Carrying case			
39	Set of surgical instruments Scalpel handle No 4 – 2 pcs Stainless steel Scalpel blades Pack 100 pcs Model: 22 Forceps			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	Anatomic and surgical Stainless steel Length: 16 cm Pea artery forceps 16 and 20 cm straight 16 and 20 cm curved Scissors Straight and curved Stainless steel Length: 16 cm Anatomic forceps – 2 pcs Stainless steel Length: 16 cm Suture needles – 2 pcs Pack of 12 pcs Suture needles – 2 pcs Pack of 12 pcs Model: S Needle holder – 2 pcs Model: Mathieu 14 and 20 cm Absorbent and non-absorbent suture material Absorbent cassette: 25, 50, 70 and 100 m Non-absorbent: 25, 50, 75 and 100 m Serra-emasculator Length app.: 35 cm Stainless steel Emasculator Hausmann's Stainless steel Length app.: 20 cm			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	Animal clipper Universal blades Hoof knives Right hand, broad bladed, blade length 70 mm, stainless steel Left hand, broad bladed, blade length 70 mm, stainless steel Mouth wedge BAYER type Length: 200 mm For horses and cows Instrument tray Stainless steel Dimension app.: 25x20x5 cm Instrument container Stainless steel Dimension app.: 20x15x5 cm Dressing drum Stainless steel Dimension: 20x20 cm Kidney dish – 2pcs Stainless steel Length: 25 cm			
40	Equipment for examination set Reversible stethoscope – 2 pcs Rubber tubing 80 cm Stomach tubes and probangs – 2 pcs Neumann stomach tube: rubber 2.25 m, 16 mm Ø Tigensen: 1.60 m, stainless steel Trocar with cannula Diameter: 7 mm			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	Length: 120 mm Veterinary thermometer Prismatic tube Plastic case Range: 35-43°C Urinary catheter Stainless, 30 cm, 5 mm Ø Plastic-syringes – 5 pcs Elplex Luer-Lock mount 5, 10, 20 ml Re-usable needles Luer-Lock mount Pack of 10 pcs Bleeding needles For cattle - 70 mm length, Ø 2.5 mm, stainless, luer mount For sheep - 65 mm length, Ø 2.5 mm, stainless, luer mount For pig - 120 mm length, Ø 2.2 mm, stainless, luer mount Vacutainer needles 18 G (1.2x38 mm) – 100 pcs Vacutainer tube 10 ml – 100 pcs Vacutainer holder – 3 pcs TT set in plastic case containing: • TT syringe, 2 ml, semi-automatic, Luer-mount • TT calliper • TT needles, plastic Luer-mount – 10 pcs • Needle sanitising system			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
41	Equipment for sampling set Laboratory glass Test tubes: 16x160 mm - 100 pcs Beakers: 100 ml – 10 pcs 150 ml – 10 pcs 250 ml – 10 pcs 400 ml – 5 pcs 600 ml – 5 pcs Round bottom flask Cap, NS 19, 100 ml – 5 pcs Cap, NS 19, 250 ml – 5 pcs Erlenmeyer flask 50 ml – 5 pcs 100 ml – 5 pcs 250 ml – 5 pcs 500 ml – 5 pcs Graduated cylinder 10 ml 25 ml 50 ml 100 ml Petri dish Diameter: 100 mm, height: 20 mm, cover – 10 pcs Volumetric flask 500 ml – 5 pcs Pipette 10 ml – 20 pieces Propipette rubber 5 pieces			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
	Test tube rack Wodden, for 24 tubes, holes diameter 18 mm, 4 pieces Compressorria for meat inspection Glass 28 divisions Dimensions: 20x5 cm Scissors – COOPER model Stainless steel Curved Length: 14 cm			
42	Refrigerator Standard 130 l			
43	Operating table with drainage Stainless steel top Adjustable legs Table top app.: 60x150 cm			
44	Medical cabinet Steel with epoxy coating Upper part: 2 framed glass door cabinet with lock 2 glass shelves inside Bottom part: 2 steel doors cabinet with lock Overall dimensions app.: 90x40x180 cm (LxWxH)			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
45	Precision balance Capacity: 4000 g Readability: 0.01g Repeatability (std. dev.): 0.01 g Pan diameter: 15 cm Digital display Interface			
46	Heating board 2 heating elements, diameter app. 15 cm Temperature: 400°C Ceramic top, resistant to aggressive substances Power: 2200 W			
47	Water distiller Bench top/wall-mounted unit Capacity: 4 l/h Tank capacity: 10 l Power: 3000 W Overheating protection			
48	Vertical autoclave Interior volume: 30 l Temperature range: 115-134°C Safety valve Security thermostat Max working pressure: 2 bar Perforated steel basket			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
49	Binocular microscope Binocular head inclined 30° and rotatable 360° Eyepiece: 10x /18mm Objectives: 4x, 10x, 40x and 60x Abbe type condenser Illumination white LED Macro and micrometric adjustment Coaxial controls Dust cover			
50	Analytical balance Capacity: 200 g Accuracy: 0.1 mg LCD display Scale pan diameter app.: 80 mm Interface Power supply			
51	Dry sterilizer Capacity: 50 l Number of shelves: 2 Temperature range: 5° C above ambient up to 250° C Digital temperature control in steps of 0.1°C Timer Automatic switch-off Interface Lockable door			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
52	Centrifuge Maximum speed: 5000 rpm Capacity: 8x15 ml 8 place angle rotor Timer up to 99 min Digital control Lid lock			
53	Glassware dryer Capacity: 120 l Number of shelves: 2 Temperature range: 40-170°C Fan Over-temperature protection Stainless steel chamber Glass door			
54	Microbiology incubator Capacity: 80 l Number of shelves: 2 Temperature range: 5° C above ambient up to 80° C Digital temperature control in steps of 0.1° C Timer Automatic switch-off Interface Lockable door			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
55	pH meter Laboratory type pH range: 0.00-14.00 pH pH resolution: 0.01 pH pH accuracy: 0.01 pH Temperature range: 0-100° C Temperature resolution: 0.1° C Temperature accuracy: 0.3° C Temperature compensation: automatic and manual 5 standard pH buffer options: (4.01; 6.86; 7.01; 9.18; 10.01)			
56	Hand portable refractometer Measurement scale: 0.0-90.0% Scale division: 0.2% Portable type			
57	Magnetic stirrer Max speed: 2000 rpm Electronic speed control with continuous regulation Maximum temperature: 350° C Resolution: 1° C Diameter of heating plate: 150x150 mm Stirring capacity: 10 l Chemical resistant heating plate			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
58	Spectrophotometer Wavelength range: 198-1000 nm Xenon lamp Bandwidths: 5 nm Wavelength resolution: 1 nm Photometric range: <ul style="list-style-type: none"> • -0.3-2.5 A • 0-199% T • -300-9999 C Photometric resolution: 0.1%T, 0.001A Interface			
59	Gerber centrifuge Capacity: 8 butyrometers (all types) in one cycle Speed: 1200 rpm Heating regulation at 80° C Digital timer Safety lid lock			
60	Muffle furnace Capacity: 6 l Maximal temperature: 1100° C Digital temperature controller Timer			
61	Digital ABBE Refractometer Refraction index: Nd 1300-1700 Precision: Nd 0.0003 Sugar scale: 0-95% Precision: 0.2% Thermometer range: 0-50° C			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
62	Colony counter Illuminated area: 120 mm Adapter for smaller Petri dishes Direct/indirect illumination 4 digit display			
63	Polarimeter Monochromatic light source (589 nm), sodium vapour lamp Measuring range: -1800 to 1800 Scale division: 10 Precision: 0.05% Magnification: 3x Polarimetric glass tubes: 100 mm and 200 mm			
64	Digital Colorimeter Digital display Range: 400-700 nm, with 8 built-in filters Digital display, microprocessor controlled Absorbance range: 0.3-3.5			

1. Item number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
65	Trinocular microscope Trinocular observation head 30 ⁰ inclined and 360 ⁰ rotatable LED light source Inter-pupillary adjustment 48-75mm Wide field eyepiece: 10x Achromatic objectives: 4x/10x/40x/100x magnification Abbe condenser NA= 1.25 Double layer with mechanical sliding stage size 125x115mm Vernier scale on the two axes, accuracy 0.1 mm Dust cover C mount/eyepiece USB camera Resolution 5MP Software			