

ANNEX II + III:

TECHNICAL SPECIFICATIONS + TECHNICAL OFFER Part 2 of 2

Contract title: Supply of Laboratory Equipment for Kassala Health Citadel - SUDAN

Publication reference: 

Annex III - the contractor's technical offer

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

[The General Requirements Compliance Form \(click here to go to the general requirements compliance form\)](#)

[The ITEM Compliance Form \(click here to go to Index of Compliance forms\)](#)

NOTES:

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.

X. ITEM NAME // SPECIFY Manufacturer and Model Name of the item offered

1 Spec Line	Technical Specification Required	Technical Specification offered by the Tenderer; please complete	Notes, Deviation, observation
2 Spec Line			
...			
...			
...			
...			
...			
...			
...			
...			
...			

Please attach to the form the complete technical specifications, as declared by the Manufacturer.

Please Attach to the Form the **brochures** as released by the manufacturer, with pictures in colour of the equipment

Please Attach to the Form the relevant technical Document related with the Equipment offered (such as Quality Control Certificate, ISO Standards etc..)

Technical Specification to be completed by the tenderer. Please note that for each numeral, the tenderer has to write out the Technical Specification corresponding to the Technical Specification required. It will not be sufficient for the Evaluation Committee an answer with a simple YES or NO.

In the case in which the Technical Specification offered do not comply with the Technical Specification required, the tenderer should justify or describe, based on its own experience, the reason of the deviation and which aspect such deviation can affect the overall functioning of the equipment.

Publication Reference (CIG):

Tenderer's Name:

PART 2 General Requirements — Compliance Table

#	Mininal General Rerquirements	Tenderer to confirm	Notes of Evaluation Commettee
A	INTERNATIONAL STANDARD		
A.1	All devices must be CE / FDA marked products.		
A.2	Any device that uses an electrical power supply must comply with IEC 61010-1 which covers the safety requirements for Laboratory Equipment.		
A.3	All equipment classifieds as Biomedical equipment must be compliant with IEC 60601-1		
A.4	Every Biomedical Equipment shall be compliant to IEC 62353:2016 for safety and functionality		
B	WARRANTY		
B.1	All Items must have 12 months of warranty starting from the commissioning of the equipment. Warranty must cover all the necessary maintenance work/services including spare parts, equipment substitution/replacement . Additional 12 months warranty will be quoted separately and AICS will reserve the right to extend the warranty at the price stated in the offer		
B.2	All components made in stainless steel must have ten (10) years warranty		
C	TECHNICAL DOCUMENTATION		
c.1	User and Service manuals in English in 2 copies and the corresponding CE certifications and quality certificates.		
c.2	Minimum requirements for the User Manual: Physical description, characteristics and functions, Operational Instructions Manual, technical procedure, Illustrations, and equipment handling.		

c.3	Service Manuals must include the following Issues: General description of the system. Installation instructions. Spare parts list. Wiring diagrams. Maintenance plan. Adjustments, troubleshooting, calibrations, that describe the complete operations of the equipment, the parts, the electronic circuits, the implementation of the programs, etc. All system and configuration passwords will be included in the documentation.		
c.4	The equipment for calibration and maintenance used in the post-sale must have a valid Calibration Certificate. A record sheet must be delivered with instructions for the daily, weekly, monthly and quarterly maintenance checklist, as appropriate. The technician's job description must be clearly explained.		
D	LABELLING		
d.1	All items have to be marked in a clear, visible and permanent way and must include all the information as required by <i>ISO 15223-1:2016 Medical devices -- Symbols to be used with medical device labels, labelling and information to be supplied -- Part 1: General requirements</i> and IEC 60601-1 referring to electrical classification.		
d.2	The tag shall clearly indicate the name and address of the manufacturer or authorized representative, written in full or abbreviated (in case of abbreviation it has to allow the identification of the manufacturer) the date of manufacturing (year and month of production), Lot and Serian Number		
d.3	The Additional tags will be applied on every item (where possible and with all the information at point 2) in a form of QR code) readable by smartphone or tablet		
d.4	All boxes will carry an appropriate labelling for easy identification of the type of items and delivery place (batch number).		
E	PACKAGING		

e.1	Tertiary packaging should be used for bulk transportation, warehouse storage, and transportation. The load must come in palletized unit packages.		
e.2	Reinforced corrugated cardboard with a certain degree of water resistance will be used for secondary packaging. In the case, wooden boxes will be used for the most fragile equipment		
e.3	Shipments of hazardous materials or dangerous goods must have special information and symbols (labels, signs, etc.) as required by the international regulations of the country and the carrier.		
e.4	The shipment will be de-palletized at a break-in-bulk point where the goods will be transferred from one means of transport to another. Suitable packaging must be provided for this purpose. Labels with "Impact Indicators" must be included in each package.		
F	DELIVERY INSTALLATION TESTING AND COMMISSIONING		
f.1	The logistics of the intervention will be defined according to the Contract Special Conditions once the contract is signed.		
f.2	Successful bidder is responsible for site inspection and evaluation of the following:		
f.3	Quality of electric installation (earth, neutral, phases, electric board, etc);		
f.4	Quality of hydraulic installation (water supply, water pressure, intake diameter, etc);		
f.5	Environmental conditions (ventilation, illumination, humidity, radiations, protections, etc.).		
f.6	The successful bidder shall be responsible for timely notifications to AICS concerning any special requirements for the proposed equipment models in order to ensure a successful installation process.		

f.7	At the moment of delivery, all goods supplied under the contract will be inspected and tested in order to verify compliance with the technical specifications, correct installation and full/complete and proper functionality.		
f.8	The contractor must provide all materials, equipment and devices needed to implement a complete and safe installation and commissioning of the equipment supplied. The contractor should provide all the tools, manpower, technical direction, management/supervision, application services and any other services required, although not expressly stated in the Special/General Conditions of Contract.		
f.9	Additionally, the contractor will be responsible for any necessary modifications/changes to existing infrastructure and will be responsible for rectifying any damage resulting from its activity.		
f.10	The successful bidder, after being awarded the contract should inspect the facilities prior to the installation to minimise the issues at the moment of the installation		
G	ELECTRICAL REQUIREMENTS		
g.1	All equipment must comply with the Electrical Standard present in SUDAN. The electrical system in SUDAN is: 220V output, frequency: 50 Hz, single-phase and three-phase		
g.2	The power plugs that are sufficient for the maximum voltage and current of the unit		
g.3	The unit should be provided with a line (power) cord of acceptable durability, quality, length, and capacity and should be secured with adequate strain reliefs		
g.4	When expressly requiquired in Technical data Forms, the equipment Should be supplied with appropriate UPS with Servo Voltage Stabiliser or a Servo Voltage Stabilizer		
g.6	If required, resettable over-current breaker shall be fitted for protection for the most critical items		

g.7	The contractor has to check the power supply provision to prevent injury to people and damage to equipment.		
H	SPARE PARTS AND CONSUMABLES		
h.1	The supplier will guarantee the availability of spare parts during the 5 years following the installation of the equipment.		
h.2	The tenderer shall include in his tender a list of the most common consumables, reagents and spare parts with their relative DDP quoted prices.		
h.3	Mandatory consumables and spare parts indicated in the technical specifications must be included in the offer price and must be calculated for each item to which they refer.		
I	REAGENTS		
I.1	Tenderer must assure a prompt supply of reagents from the purchase request by the user.		
I.2	The supplier should assure the supply of reagents not more than 10 working days from the day of the Purchase request.		
L	AFTER-SALE, CALIBRATION AND QUALITY CONTROL		
L.1	The tenderer has to undertake regular calibrations of all Laboratory Equipment following the methodology and frequency indicated by the manufacturer, except when the calibration can be undertaken by the Laboratory Staff. In this case the Contractor will supply the Laboratory with the kits and reagent required		
L.2	All calibration procedures shall be recorded and submitted to the Laboratory Responsible to assuring the implementation of traceability and Quality Control. In the calibration record will be indicated the method, the means, the analyzers with their certification if used in the test.		

B.3	For every Installation/maintenance intervention, the Contractor shall submit a Report. All those reports/certificates will provide the basis for issuance of a certificate of full implementation of after sale service necessary to issue the Certificate of Final Acceptance and the release of Performance Security.		
B.4	All maintenance works must be carried out in the presence of a Technical Personnel of the healthcare facilities who should be trained on the job. Service shall be undertaken by competent and Manufacturer authorized/trained technical personnel certified by the manufacturer. The bidder shall declare the minimum maintenance intervention foreseen for each item during the warranty period.		
B.5	Number of mandatory intervention per year shall be according with manufacturers recommendations		
M	TRAINING		
M.1	The contractor will carry out comprehensive training aimed at the operators of the hospital facilities assigned to the team.		
M.2	The training will be supervised by the staff of the Contracting Body and certified by the Hospital Management. The training will be carried out in the places where the equipment is installed or assembled.		
	The training will include:		
M.3	1. Complete technical operation and programming of all equipment parameters.		
M.4	2. Components of the system		
M.5	3. Common equipment failures and troubleshooting.		
M.6	4. Preventive maintenance of the equipment to be carried out by the operators.		
M.7	5. Preventive / corrective maintenance by specialized technicians.		
M.8	6. Most common repairs.		

N	ENVIRONMENTAL FACTORS		
N.1	The unit should be capable of being stored continuously in ambient temperature of 0 -50° C and relative humidity of 15-90%		
N.2	The unit should be capable of operating continuously in ambient temperature of 10 -40°C and relative humidity of 15-90%		

Publication Reference (CIG):

Tenderer's Name:

PART 2 – Compliance Forms

SERVICE	ITEM TYPE	UMDNS	DESCRIPTION	QT
LABORATORY EQUIPMENT FOR KASSALA HEALTH CITADEL				
1 GENERAL AND IT EQUIPEMENT				
1.1			Digital Alarm Clock With Timer And Stopwatch	6
1.2			PC WorkStation	3
1.3			Printer, Laser, Color, Multipurpose	4
1.4			UPS, Medical Grade 2000 VA	2
1.5			UPS, Medical Grade, 3000 VA	10
2 LABORATORY EQUIPEMENT				
2.1			Laboratory Tools	1
2.2	16-979		Analyzers, Laboratory, Immunoassay, Photometric, Microplate reader	1
2.3	17-489		Washer, Microplate	1
2.4	20-972		Anaerobic culture Pack/Pouch Kits, Jar, 2.5 L	2
2.5	20-972		Anaerobic culture Pack/Pouch Kits, Jar, 3.5 L	2
2.6	20-972		Anaerobic culture Pack/Pouch Kits, Jar, Rectangular	5
2.7	18-266		Centrifuge, Tabletop, Low Speed, Non refrigerated	5
2.8	15-193		Centrifuge, Tabletop, High-Speed, Refrigerated	1
2.9	16-905		Densitometer, Laboratory, Scanning	2
2.10	15-177		ESR Westergren Method, Manual	2
2.11	15-105		Heating Block	1
2.12	15-148		Hoods, Microbiological	1
2.13	15-151		Incubator, aerobic	1
2.14	12-536		Microscope, laboratory, light	6
2.15	15-164		Ph Meter	2
2.16	15-166		Pipettes, Multichannel	2
2.17	15-166		Pipettes, Variable Volume, 100-1000 Microliters	10
2.18	15-166		Pipettes, Variable Volume, 5-200 Microliters	10
2.19	20-653		Safety Cabinet, Class II, Type A2	1
2.20	15-590		Shaker, Vortex	1
2.21	13-739		Sterilizing Unit, Dry Heat	1

2.22	16-141	Sterilizing Unit, Steam, Bulk	2
2.23	15-178	Stirrer, Magnetic, Hot Plate	3
2.24	-	Stool, Operator	12
2.25	18-449	Weighting System, Analytical Balance	2
2.26	-	Weighting system, electronic	2
3 REFRIGERATORS FOR LABORATORY			
3.1	17-157	Refrigerator, Laboratory, 250 l	5

DIGITAL ALARM CLOCK, W/TIMER AND STOPWATCH

[BACK TO INDEX](#)

[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Clock Stopwatch, Elapsed Time		
2	FRAME MATERIAL	Metal or hard Plastic		
3	SHAPE	Rounded		
4	MECHANISM	Electronic Quartz, digital		
5	STOPWATCH CONTROL	Button for start, stop and reset		
6	POWER	Batteries		
7	CONFIGURATION	Two Dials (Clock and Stopwatch)		
8	DISINFECTABLE	Yes		
9	MOUNTING	Tabletop/handheld		
10	DIMENSION, mm	100 ca (diameter) for Clock and Stopwatch		

PC WORK STATION[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Personal computer with licensed operating system and last Updates with Arabic support.		
2 OPERATING SYSTEM	Windows 10 Pro 64		
3 LICENCED PROGRAMS	MS Office SUITE		
4 CPU PROCESSOR	Intel® Core™ i7-9700		
5 RAM	16 GB di SDRAM		
6 MEMORY	SSD 1 T		
7 GRAPHIC CARD	Graphic card with 128MB DDR-RAM, PCI-X.		
8 CONNECTIVITY	WiFi, Bluetooth connectivity.		
9 PHERIPHERALS	CD RW / DVD		
10 PORTS	USB ports, HDMI, VGA, RS232, DISPLAYPORT		
11 MOUSE	Optical wheel mouse.		
12 KEYBOARD	Keyboard, English Arabic		
13 DISPLAY	Monitor 23,8" LCD TFT Monitor.		
14 DISPLAY RESOLUTION	Maximum resolution 1920 x 1080		
15 STAND	Adjustable height		
16 TRAINING, days	0		

PRINTER, MULTIPURPOSE, LASER[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Colour Laser All-In-One		
2 AVAILABLE FUNCIONS	Print, Copy, Scan and Fax		
3 PRINTER			
4 Printing Speed	Single sided: Up to 18 ppm (A4)		
5 Printing method	Colour laser beam printing		
6 Print Resolution	600 x 600 dpi		
7 Printer Languages	MF641Cw: UFR II MF643Cdw: UFR II, PCL 5c*, PCL6 MF645Cx: UFR II, PCL 5c*, PCL6, Adobe® PostScript		
8 COPIER			
9 Copy Speed	MF641Cw: Single sided (A4): Up to 18 ppm		
10 Copy resolution	Up to 600 x 600 dpi		
11 Copy modes	Text/Photo/Map (Default),Text/Photo/Map (quality)		
12 Double sided copying	1-sided to 2-sided (Automatic)		
13 Multiple Copy	Up to 999 copies		
14 Reduction/Enlargement	yes		
15 SCANNER			
16 Type	Colour		
17 Scan Resolution	Optical: Up to 600 x 600 dpi		
18 Colour scanning depth	24 bit/24 bit (input/output)		
19 Greyscales	256 levels		
20 Scan to E-mail	Yes		
21 Scan to PC	Yes		
22 Scan to USB memory key	Yes		
23 Scan to Cloud	Yes		
24 MEDIA HANDLING			
25 Scanner Type	Platen, 2-sided ADF (single pass)		
26 Paper output	100-sheet		
27 Media types	Plain paper, Recycled paper, Heavy Paper, Thin paper, Colour paper, Coated paper, Label, Post card, Envelope		
28 Media sizes	A4, A5, B5, Legal, Letter, Statement, Custom sizes: Min. 128 x 139.7 mm Max 215.9 x 355.6 mm		

UPS, 3000VA, MEDICAL GRADE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	UPS medical Grade, sinusal, , on line double conversion		
2 NOMINAL POWER (VA)	3000		
3 ACTIVE POWER (W)	1800		
4 TECHNOLOGY	On-line, doble conversione		
5 WAVEFORM	Sinusal		
6 INPUT VOLTAGE	230 V \pm 12% via mains \pm 5% via battery		
7 INPUT FREQUENCY	50-60 Hz +/-3Hz		
8 INPUT VOLTAGE RANGE	160 V-290 V		
9 OUTPUT CHARACTERISTICS			
10 OUTPUT VOLTAGE	230 V \pm 10%		
11 OUTPUT FREQUENCY (NOMINAL)	50/60 Hz +/-0.2%		
12 THD OF OUTPUT VOLTAGE	< 3% with linear load		
13 NUMBER OF BATTERIES	2		
14 BATTERY RANGE	12 V, 9 Ah		
15 SCREEN AND SIGNALLING	Three buttons and three LEDs for real-time control of the status of the UPS		
16 CERTIFICATIONS	EN 62040-1, EN 62040-2, EN 62040-3		

UPS, 2000VA, MEDICAL GRADE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	UPS medical Grade, sinusal, , on line double conversion		
2 NOMINAL POWER (VA)	2000		
3 ACTIVE POWER (W)	1200		
4 TECHNOLOGY	On-line, doble conversione		
5 WAVEFORM	Sinusal		
6 INPUT VOLTAGE	230 V \pm 12% via mains \pm 5% via battery		
7 INPUT FREQUENCY	50-60 Hz +/-3Hz		
8 INPUT VOLTAGE RANGE	160 V-290 V		
9 OUTPUT VOLTAGE	230 V \pm 10%		
10 OUTPUT FREQUENCY (NOMINAL)	50/60 Hz +/-0.2%		
11 THD OF OUTPUT VOLTAGE	< 3% with linear load		
12 NUMBER OF BATTERIES	2		
13 BATTERY RANGE	12 V, 9 Ah		
14 SCREEN AND SIGNALLING	Three buttons and three LEDs for real-time control of the status of the UPS		
15 REMOTE CONTROL	Available		
16 STANDARDS	EN 62040-1, EN 62040-2, EN 62040-3		

LABORATORY TOOLS, BOOKS AND MISCELLANEOUS[BACK TO INDEX](#)

NP		Section	Item	Item Description	Unt	Qty
1		Books	District Laboratory Practice in Tropical Countries, Part 1. First edition	Cheesbrough M. - Cambridge University Press (ISBN 9780521676304)	Unt	6
2		Books	District Laboratory Practice in Tropical Countries, Part 2. Second edition	Cheesbrough M. - Cambridge University Press (ISBN 9780521676311)	Unt	6
3		Books	Manual of Basic Techniques for a Health Laboratory	WHO (ISBN 92 4 154530 5)	Unt	6
4		Books	Bench Aids for the Diagnosis of Malaria Infections	WHO (ISBN 92 4 154524 0)	Unt	6
5		Books	Bench Aids for the Diagnosis of Filarial Infections	WHO (ISBN 92 4 154489 9)	Unt	6
6		Books	Basic Laboratory Methods in medical parasitology	WHO (ISBN 92 9021 245 4)	Unt	6
7		Books	Laboratory Biosafety Manual	WHO (ISBN 92 4 154650 6)	Unt	6
8	Tools	Collecting and transport	Tray for slides	Plastic Tray for 20pcs Microscope Slides	Unt	12
9	Tools	Gen_Lab Glassware	Amber Glass Reagent Bottles, narrow mouth	1000ml	Unt	6
10	Tools	Gen_Lab Glassware	Amber Glass Reagent Bottles, narrow mouth	250 ml	Unt	6
11	Tools	Gen_Lab Glassware	Amber Glass Reagent Bottles, narrow mouth	500 ml	Unt	6
12	Tools	Gen_Lab Glassware	Beaker 50 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
13	Tools	Gen_Lab Glassware	Beaker 100 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
14	Tools	Gen_Lab Glassware	Beaker 250 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
15	Tools	Gen_Lab Glassware	Beaker 1000 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
16	Tools	Gen_Lab Glassware	Bell joy bottle		Unt	2
17	Tools	Gen_Lab Glassware	cylinder 50 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
18	Tools	Gen_Lab Glassware	cylinder 100 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
19	Tools	Gen_Lab Glassware	cylinder 250 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
20	Tools	Gen_Lab Glassware	cylinder 500 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
21	Tools	Gen_Lab Glassware	cylinder 1000 ml	narrow mouth, heat-resistant glass with clear graduations.	Unt	6
22	Tools	Gen_Lab Glassware	Erlenmeyer flask, narrow mouth, heat-resistant glass	100 ml	Unt	6
23	Tools	Gen_Lab Glassware	Erlenmeyer flask, narrow mouth, heat-resistant glass	250 ml	Unt	6
24	Tools	Gen_Lab Glassware	Erlenmeyer flask, narrow mouth, heat-resistant glass	500 ml	Unt	6
25	Tools	Gen_Lab Glassware	Erlenmeyer flask, narrow mouth, heat-resistant glass	1000 ml	Unt	6
26	Tools	Gen_Lab Glassware	Funnel, polyethylene 60 - 70 mm diametre	heat-resistant glass	Unt	6
27	Tools	Gen_Lab Glassware	Funnel, polyethylene 90 - 100 mm diametre	heat-resistant glass	Unt	6
28	Tools	Gen_Lab Glassware	Test tube, glass, heat resistant 100 x 13 mm	box 100 pcs	Unt	1
29	Tools	Gen_Lab Glassware	Test tube, glass, heat resistant 150 x 15 mm	box 100 pcs	Unt	1
30	Tools	Gen_Lab Glassware	Test tube, glass, heat resistant 75 x 10 mm	box 100 pcs	Unt	1

31	Tools	Gen_Lab Glassware	Test tube, glass, heat resistant 75 x 13 mm	box 100 pcs	Unt	1
32	Tools	Gen_Lab Glassware	Test tube, glass, Pyrex with cup 100 x 13 mm	box 100 pcs	Unt	1
33	Tools	Gen_Lab Glassware	Test tube, graduated, 10 ml conical	box 100 pcs	Unt	1
34	Tools	Gen_Lab Glassware	Volumetric flask, with stopper 100 ml	heat-resistant glass	Unt	6
35	Tools	Gen_Lab Glassware	Volumetric flask, with stopper 250 ml	heat-resistant glass	Unt	6
36	Tools	Gen_Lab Glassware	Volumetric flask, with stopper 500 ml	heat-resistant glass	Unt	6
37	Tools	Gen_Lab Glassware	Volumetric flask, with stopper 1000 ml	heat-resistant glass	Unt	6
38	Tools	Gen_Lab Plasticware	cylinder 1000 ml	Polypropylene, with clear graduations.	Unt	6
39	Tools	Gen_Lab Plasticware	cylinder 250 ml	Polypropylene, with clear graduations.	Unt	6
40	Tools	Gen_Lab Plasticware	cylinder 50 ml	Polypropylene, with clear graduations.	Unt	6
41	Tools	Gen_Lab Plasticware	cylinder 500 ml	Polypropylene, with clear graduations.	Unt	6
42	Tools	Gen_Lab Plasticware	Funnel, polyethylene 140 - 150 mm diameter	Polypropylene, preferably ribbed for rapid filtering	Unt	6
43	Tools	Gen_Lab Plasticware	Funnel, polyethylene 230 mm diameter	Polypropylene, preferably ribbed for rapid filtering	Unt	6
44	Tools	Gen_Lab Plasticware	Funnel, polyethylene 35 - 40 mm diameter	Polypropylene, preferably ribbed for rapid filtering	Unt	6
45	Tools	Gen_Lab Plasticware	Funnel, polyethylene 60 - 70 mm diameter	Polypropylene, preferably ribbed for rapid filtering	Unt	6
46	Tools	Gen_Lab Plasticware	Funnel, polyethylene 90 - 100 mm diameter	Polypropylene, preferably ribbed for rapid filtering	Unt	6
47	Tools	Gen_Lab Plasticware	Plastic basin, 5 litre		Unt	6
48	Tools	Gen_Lab Plasticware	Plastic bucket, 15 litre		Unt	4
49	Tools	Gen_Lab Plasticware	Urine test tube 15 ml with cup	box of 100 pcs	Unt	1
50	Tools	Gen_Lab Plasticware	Wash bottles. 250 ml	Polythene, with dispenser tube.	Unt	12
51	Tools	Gen_Lab Plasticware	Wash bottles. 500 ml	Polythene, with dispenser tube.	Unt	12
52	Tools	Gen_Lab Plasticware	Water storage container	Polyethylene 10 litre container with handle and removable tap.	Unt	4
53	Tools	General lab Material	Bulb Capillary filler		Unt	6
54	Tools	General lab Material	Dissection Set (2 forcet, 2 scissor, 2 bistuti blades, scalpel, etc..)		Unt	2
55	Tools	General lab Material	Drying rack for glass and plastic ware	plastic made 100 x 60 mm	Unt	6
56	Tools	General lab Material	forceps Kocher 15 mm		Unt	2
57	Tools	General lab Material	forceps Kocher 17 mm		Unt	2
58	Tools	General lab Material	forceps Kocher 20 mm		Unt	2
59	Tools	General lab Material	Rubber bulb Tits	pack 24	Unt	2
60	Tools	General lab Material	slide boxes		Unt	12
61	Tools	General lab Material	slide drying rack		Unt	12
62	Tools	General lab Material	Slides staining metal racks		Unt	10

63	Tools	General lab Material	Spatulas - Spoon_spatula for weighing reagents		Unt	4
64	Tools	General lab Material	Spatulas big size for weighing reagents		Unt	4
65	Tools	General lab Material	Spatulas medium size for weighing reagents		Unt	6
66	Tools	General lab Material	Spatulas small size for weighing reagents		Unt	6
67	Tools	General lab Material	staining rack		Unt	6
68	Tools	General lab Material	Stainless steel staining rack for a sink		Unt	6
69	Tools	General lab Material	Test tube rack	Plastic hold 50 tubes/ dia.15mm	Unt	12
70	Tools	General lab Material	Test tube rack	Plastic hold 50 tubes/ dia.13mm	Unt	12
71	Tools	General lab Material	Tourniquet		Unt	12
72	Tools	Microbiology	Forceps 18 cm	stainless steel	pcs	2
73	Tools	Microbiology	Petri dishes 90 mm	glass	pcs	200
74	Tools	Microbiology	Scalpel blade n. 10	Pocket of 10 pcs	pcs	10
75	Tools	Microbiology	Scalpel handle n.3	Stainless Steel -	unt	4
76	Tools	Microbiology	Wire loop	metal	pcs	50
77	Tools	Spare parts	Bulbs for microscope Olympus CX23 LED		Unt	6
78	Tools	Washing and Sterilization	Brush - bottles	for cleaning bottles	Unt	4
79	Tools	Washing and Sterilization	Brush - test tube	small sizes	Unt	4
80	Tools	Washing and Sterilization	Brush - test tube	medium sizes	Unt	4
81	Tools	Washing and Sterilization	Water filter	House Water Filter Size - Sediment filter and Smart Filter	Unt	2

Analyzers, Laboratory, Immunoassay, Photometric, Microplate reader[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	ELISA analyzers, enzyme-linked immunosorbent assay analyzers, microplate readers, microplate spectrophotometers. PMRs are used in laboratories to analyze the contents of sample solutions by measuring absorbance characteristics (ref Mod. Stat Fax 4200)		
2 UMDNS	16-979		
3 FDA CLEARANCE	Yes		
4 CE MARK (MDD)	Yes		
5 PHOTOMETRIC METHOD	Single or dual wavelength		
6 OPTICAL SYSTEM	1 channel		
7 PHOTOMETRIC ACCURACY	±1%		
8 MEASUREMENT RANGE, Abs	-0.20 to +3		
9 WAVELENGTH RANGE, nm	400-670, Vis model; 340-670, UV model; 400-750, IR model		
10 PRECISION	±1%, ±0.005 Abs		
11 RESOLUTION, OD	0,001		
12 ISOTHERMAL READING CHAMBER	No		
13 Operating range, °C			
14 TEMPERATURE			
15 Operating range, °C	5-40		
16 Incubator operating range, °C			
17 LIGHT SOURCE	Tungsten halogen		
18 PHOTODETECTOR	Gallium arsenide phosphide		
19 FILTER TYPE	Hard coat, ion-assisted deposition interference filters, 10 nm half band pass		
20 VESSEL	Standard 96-well microplates or strip trays		
21 COMPATIBLE MICROPLATES	Standard 96-well microplates		
22 PROGRAMMABLE ASSAYS	Assays from manufacturer		
23 DATA MANAGEMENT			
24 Analysis	~35; ~50 with data reduction methods		
25 Reading speed, sec/plate	<10/96-well		
26 Calculation modes	Single-point calibration, uptake, point-to-point curve fit, polynomial/log and linear regressions, cut-off absorbance, log/logit; log or linear axes		
27 Display	Required		
28 Computer interface	Windows 2000 or higher		

29 Printer	thermal printer, 80 characters/line; parallel or serial printer can be used; supports Epson, Canon Bubble Jet, HP DeskJet		
30 Bar-code reader	Yes		
31 ROBOTICS COMPATIBLE	Yes		
32 SELF/REMOTE DIAGNOSTICS	Self		
33 QUALITY CONTROL	Yes		
34 POWER CONSUMPTION			
35 Voltage, VAC, Hz	Self-sensing, 110-250 VAC		
36 Consumption, W	50		
37 Fuses, A	2 x 3 AG		
38 Battery backup	UPS recommended		
39 H x W x D, cm	18 x 37 x 43		
40 WEIGHT, kg	13,7		
41 External printer	Yes		
42 ACCESSORIES			
43 Printer & supplies			
44 Cables	Yes		
45 Power cord included (Euro or US plug)	Yes		
46 Microplate	Yes		
47 Cassettes	Yes		
48 Covers	Yes		
49 Supports	Yes		
50 Adapters	Yes		
51 Fuses, bulbs	2 fuses and 1 lamp included		
52 Interference filters	standard replacements		
53 Calibration plate	kit of DRI-DYE check strips		
54 TRAINING, days	3		

WASHER, MICROPLATE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 MODEL	Programmable microwell plate washer. Ref Mod. Stat Fax 2600		
2 UMDNS	17489		
3 CE MARKED	Yes		
4 CONFIGURATION	8-, 12-, or 16-channel strip washer		
5 AUTOMATED/MANUAL	Automated		
6 WASHING PARAMETERS	Dispense volume, well type, single/double aspirate, soak, pause for keystroke		
7 User programmable	All		
8 PROGRAMS			
9 User definable	Yes		
10 Number stored	50		
11 Maximum number of cycles	20		
12 Maximum soak time, sec	999		
13 COMPATIBLE PLATES	96-well plates, strip wells; flat, round, or V bottom		
14 Capacity, number of plates	1		
15 WASH HEADS	8-, 12-, or 16-way interchangeable		
16 FLUID RESERVOIR			
17 Capacity, L			
18 Wash	2		
19 Rinse	1		
20 Waste	2		
21 Liquid-level sensing	Yes		
22 RESOLUTION, µL	1		
23 ACCURACY, %	>2% preferred		
24 PRECISION, % CV	3		
25 MINIMUM RESIDUAL VOLUME, µL/well	3		
26 MAXIMUM DISPENSE VOLUME, mL/well	0,5		
27 H x W x D, cm (in)	19.1 x 34.3 x 40.6 (7.5 x 13.5 x 16)		
28 WEIGHT, kg (lb)	10 (22)		
29 POWER REQUIREMENTS			
30 VAC	120/220; switch-selectable voltage		
31 Hz	50/60		
32 OTHERS	Autoprogrammable rinse; clear-acrylic aerosol shield; auto well sensing; mixing feature.		

33 TRAINING 3

ANAEROBIC CONTAINER; RECTANGULAR

[BACK TO INDEX](#)

[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Jar for Anaerobic Culture		
2	CAPACITY	7 l		
3	DIMENSIONS, cm	30x20x15		
4	MATERIAL	Polycarbonate		
5	Nof PLATES	Specify		
6	TRAINING	0		

ANAEROBIC JAR, 2.5 L

[BACK TO INDEX](#)

[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Jar for Anaerobic Culture		
2	CAPACITY	2,5		
3	MATERIAL	Polycarbonate		
4	LID	Yes		
5	Carrying handle	Yes		
6	Vacuum release	Yes		
7	PLATE CARRIER	Included		
8	DIMENSIONS	90x160x220mm		
9	Nof PLATES	12		
10	TRAINING	0		

ANAEROBIC JAR, 3.5 L[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Jar for Anaerobic Culture		
2 CAPACITY, L	3,5		
3 LID			
4 Carrying handle	Yes		
5 Vacuum release	Yes		
6 Clamps	Yes		
7 GASKET	O-ring		
8 PLATE CARRIER	Included		
9 VALVES, input and output	Schrader valves,		
10 Nof PLATES	12		
11 AFTER SALE, Interv/Year	0		
12 TRAINING	0		
13 SAFETY VALVE	automatic safety valve,		
14 PRESSURE GAUGE	Yes		
15 Plate Carrier	Included		
16 Oxoid Low Temperature Catalyst	Included		
17 TRAINING	0		

CENTRIFUGE, TABLETOP, NOT REFRIGERATED[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Low-speed, tabletop centrifuges to be used for routine separation of sample volumes. The centrifuge has to be easy to use, with low level vibration and level of noise, digital touchpad display to set time and rpm, robust construction with case resistant to various chemical and physical agent. With Alarms and lock.		
2 UMDNS	[18-266]		
3 CE MARK (MDD)	yes		
4 CONFIGURATION	Tabletop Centrifuges		
5 ROTATIONAL SPEED			
6 Max rpm	15000		
7 Max RCF, g	> 12000		
8 REFRIGERATED	No		
9 NUMBER OF ROTORS	1		
10 VARIABLE ANGLE	Yes, preferred		
11 ANGLE RANGE	Between 0 and 90 deg		
12 ROTOR CAPACITY, samples	8 to 12 tubes of 15 ml		
13 DISPLAY TYPE	Digital		
14 TIMER	Yes		
15 Range, min	0 to ≥60		
16 Settings	1 min increments		
17 BRAKING, type	Electric preferred		
18 ADJUSTMENT & CONTROLS	Manual Touchpad		
19 LID INTERLOCK	Yes		
20 BRUSHLESS	Yes		
21 ALERT INDICATORS	audible; Imbalance, lid open, error codes, rotor recognition, end of run		
22 NOISE LEVEL, dB	< 60		
23 SPECIAL WARRANTY	Required 7 years for rotor		
25 TRAINING	0,25		

Centrifuges, Tabletop, High-Speed, Refrigerated[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	High-speed centrifuges, to be used for most preparative applications, refrigerated to cool the rotor chamber. Low Capacity Discrete sampling, that can collect microorganisms, cells, cellular debris, and precipitates and can also effectively sediment viruses and cellular organelles.		
2 UMDNS	[15-193]		
3 CE MARK (MDD)	yes		
4 CONFIGURATION	Tabletop, with rotors, refrigerated		
5 ROTATIONAL SPEED			
6 Max rpm	26000 - 29000 ca		
7 Max RCF, g	70000-100000		
8 rpm adjust method	Microprocessor, 10 rpm increments		
9 TACHOMETER			
10 Display type	Digital		
11 Accuracy, rpm	20 (0-1,000)		
12 ROTOR HEADS AVAILABLE			
13 Fixed angle	20		
14 Swinging bucket	5		
15 MAXIMUM CAPACITY, mL	1,000 (6 x 250)		
16 TEMPERATURE			
17 Range, °C	- 10 to +40		
18 Accuracy, °C	1		
19 TIMER	Yes		
20 Range, min	1 min to 99 hr 59 min, hold		
21 Increments, min	1 sec		
22 PROGRAMMABLE	yes		
23 LID INTERLOCK	Yes		
24 BIOHAZARD CONTAINMENT	Yes		
25 ALERT INDICATORS	Rotor imbalance, overtemperature, overspeed, power failure		
26 BRUSH/BRUSHLESS	Brushless		
27 BRAKING			
28 Type	Electronic regenerative		
29 Number of settings	> 5		
30 Max brake time, sec	175 ca		
31 NOISE LEVEL, dB	65		
32 INPUT VOLTAGE, VAC	208/240, 60/50 Hz		
33 POWER CONSUMPTION	Please Specify		
34 H x W x D, cm (in)	Please Specify		

35	WEIGHT, kg (lb)	Please Specify		
36	TRAINING, days	0,5		

DENSITOMETER, LABORATORY, SCANNING[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Scanning densitometers for measuring the transmitted and/or reflected light from patterns in a support medium resulting from electrophoresis, thin-layer chromatography (TLC), or immunoassay blot sample separation. To provide a rapid, accurate, and cost-effective method of quantifying the separated fractions of various serum components (e.g., proteins, isoenzymes) and detecting very low fraction		
2 UMDNS	16-905		
3 FDA CLEARANCE	Yes		
4 CE MARK (MDD)	Yes		
5 MEASURING RANGES			
6 Density	0 - 3 g/cm ³		
7 Temperature	10 - 95 °C (Peltier temperature control)		
8 Pressure	0 - 10 Bar (0 - 145 psi)		
9 DENSITY			
10 Resolution	0.0001 g/cm ³		
11 Accuracy	± 0.0005 g/cm ³		
12 Reproducibility	± 0.0002 g/cm ³		
13 TEMPERATURE			
14 Resolution	0.01 °C		
15 Accuracy	± 0.05 °C		
16 Reproducibility	± 0.02 °C		
17 SAMPLE PROCESSING TIME	< 30 sec.		
18 MIN. SAMPLE VOLUME	approx. 1.5 ml		
19 FILLING	By injection		
20 BUBBLE DETECTION	Automatic (combined visual – electronic)		
21 DISPLAY	7" color TFT touchscreen		
22 OPTICAL MODE			
23 Transmission	Yes		
24 Reflection	Yes		
25 FLUORESCENCE CAPABLE	Optional		
26 MEDIA	Agarose gel, cellulose acetate; others optional		

27 LIGHT SOURCE(S)	Required		
28 MONOCHROMATOR	Required		
29 WAVELENGTHS, nm	340, 415, 520, 600; optional filters		
30 Fluorescence	200-600, if available		
31 Absorbance	390-770		
32 BEAM CONFIGURATION	Single		
33 PHOTODETECTOR	Required		
34 OPTICAL DENSITY	Range between 0 and 4.2		
LINEARITY, OD			
35 SCANNING OPERATION	Automatic		
36 SCANNING SPEEDS,	6 sec/track		
cm/sec (in/sec)			
37 ZEROING	Automatic or manual		
38 GAIN	Automatic preferred		
39 DISPLAY	CRT, printer, PC, chartable printout		
40 COMPUTER INTERFACE	2 x USB/Ethernet/WLAN (optional)		
41 POWER, VAC	115/220, 60/50 Hz		
42 TRAINING, days	0,5		

Westergren E.S.R. System[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Re-usable tubes for measuring the erythrocyte sedimentation rate (ESR) by the Westergren method, and for a support to hold tubes during the performance of the test.		
2 NUMBER OF TUBES	30		
3 NUMBER OF TUBES ON RACK	20/30		
4 STANDARD	BS 2554:19873		
5 TUBE DESCRIPTION:			
6 MARKING			
7 Graduation lines	Clean and of uniform thickness not greater than 0.3 mm		
8	Graduation lines shall lie in planes at right angles to the axis of each tube, and shall be without irregularity in their spacing		
9 Scale	graduated in millimetres, shall run downwards for at least 150 mm from a zero mark situated 200 mm above the lower end of each tube		
10	There shall be a distance of 1 mm between the centres of adjacent graduation lines.		
11	The lengths of graduation lines shall be varied so as to distinguish clearly every tenth line and every intermediate fifth line as follows.		
12	a) The length of the short lines shall be not less than 10 % and not more than 20 % of the circumference of the tube.		
13	b) The length of the medium lines shall be approximately 1.5 times the length of the short lines. They shall extend symmetrically at each end beyond the ends of the short lines.		
14	c) The length of the long lines shall be approximately twice the length of the short lines. They shall extend symmetrically at each end beyond the ends of the short and medium lines.		
15 Figuring of graduation lines	Every tenth (long) graduation line shall be figured		
16	Figures shall be at least 2 mm high and shall be placed immediately above the long line and not more than 1 mm to the right of the adjacent short graduation lines.		
17 Inscriptions	The following inscriptions shall be marked on the tube and/or on the support:		

18	The inscriptions shall be positioned so that they are visible to the operator when the tube is put in the support for which it is intended		
19	a) the symbol "mm" above "0" on the scale;		
20	b) the temperature "20 ± 3 °C";		
21	c) the maker's and/or vendor's mark or name;		
22	d) the number and date of this British Standard, i.e. BS 2554:19871).		
23	Additionally the inscription "re-usable Westergren ESR tube" may be marked.		
24	Markings shall be clean and permanent		
25 CONSTRUCTION			
26 Material	The tube shall be made from transparent, thick-walled glass tubing complying with class HGB 3 or better of BS 3473-2.		
27	The tube should be as free as possible from visible defects and reasonably free from internal stress.		
28	The tube shall be free from defects which impair observation of the top of the column of blood and the top of the red cell layer		
29	The upper end of the tube shall be ground smooth and square with the axis of the tube, and shall be slightly bevelled		
30	The lower end of the tube shall be tapered as shown in Figure 2, and the tapered portion shall be finely ground or polished		
31	The specified bore of the tube shall be maintained throughout, and shall not be drawn down to form the jet		
32 Labelling	Each package of re-usable Westergren tubes shall be clearly labelled with at least the following information		
33	a) the words "Re-usable Westergren ESR tubes";		
34	b) the temperature "20 ± 3 °C";		
35	c) the words "Wash before use in acetone/water";		
36	d) the words "Disinfect after use";		
37	e) the maker's and/or vendor's name or mark;		
38	f) an identifying reference to the batch of manufacture;		
39	g) the number and date of this British Standard, i.e. BS 2554:19873).		
40 DIMENSIONS OF TUBES			
41 Overall length	300 ± 1		
42 External diameter	6.5 ± 0.5		

43 Internal diameter (bore)	2.55 ± 0.15		
44 Ovality of bore	less than 0.1		
45 Length of measuring part:	200 ± 1		
46 Length of tapering portion:	6 ± 2		
47 Wall thickness of orifice:	at least 0.5		
48 SUPPORT FOR WESTERGREN TUBE			
49 Construction	METAL. The support shall be a rigid structure having clips or holes to hold rigidly one or several Westergren tubes, and shall be fitted with either a plumb-line or spirit-level. The support shall stand on three feet, two of which shall be adjustable.		
50	When erythrocyte sedimentation rates are to be measured against scales marked on the support, the scales shall be marked on a surface fixed vertically behind the tubes and not more than 4 mm from each tube.		
51	The support shall be constructed of such materials, and in such a way, that it is able to withstand repeated disinfection in the laboratory.		
52 Graduation and figuring	Scales, figuring and inscriptions shall be provided on the support, if not marked on the tubes,		
53	Markings on the support shall be permanent		
54 Scales	When scales are provided on a support they shall be fixed behind every tube, within 4 mm of the tube		
55 Figuring	Every figure shall be at least 2 mm high, and shall be placed not more than 1 mm from the right-hand end of the graduation line to which it refers in such a way that an extension of the line would bisect the figure		
56 Inscriptions	Inscriptions shall comply with clause		
57	a) the recommended method for the disinfection of the support after use;		
58	b) the inscription "Westergren ESR".		
59 TRAINING	0		

HEATING BLOCK

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[Manufacturer Name/Model Name/ Version Name]

1	DESCRIPTION	Block Heater		
2	UMDNS	15-501		
3	CE MARK (MDD)	Yes		
4	NUMBER OF BLOCKS	3		
5	TEMPERATURE RANGE	Ambient +5°C to 200°C		
6	TEMPERATURE STABILITY	± 0.1°C		
	AT 37°C			
7	UNIFORMITY WITHIN BLOCK	± 0.1°C		
	AT 37°C			
8	UNIFORMITY WITHIN BLOCK	± 1°C		
	AT 130°C			
9	DISPLAY RESOLUTION	0.1°C		
10	DISPLAY TYPE	Digital		
11	HEATER POWER	ca 450W		
12	ELECTRICAL SUPPLY	230V, 50-60Hz		
13	TRAINING, days	0,25		

SAFETY CABINET, CLASS I[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	Laminar airflow hoods to be used for routine handling of cell cultures and human pathogens . The cabin has to precisely control ventilation to sweep airborne particles produced during routine microbiological procedures away from the user while maintaining a controlled environment for the specimen.		
2 CE MARKED	Yes		
3 CLASSIFICATION	Class I		
4 TYPE	Laminar Airflow Hoods		
5 CONFIGURATION	Freestanding		
6 INWARD AIRFLOW, fpm	120-170		
7 AVERAGE AIR FLOW SPEED	0.3 m/s ~ 0.5 m/s		
8 AIR QUALITY	class 100		
9 AIRFLOW VOLUME			
10 Inflow (m3/h)	900 - 1000		
11 Down flow (m3/h)	900 - 1000		
12 FILTER TECHNOLOGY	>99.99% at 0.1 to 0.3 micron, ULPA as per IEST-RP-CC001.3 USA>99.999% at MPPS, H14 as per EN 1822 EU		
13 SOUND EMISSION	< 60 dB		
14 MOTOR Adjustable speed	Yes		
15 SELF-TEST	Yes		
16 ADJUSTABLE SASH	Yes		
17 Type	Sliding, Limited locking		
18 ACCESS OPENING HEIGHT, cm	50-80		
19 WORKING OPENING, cm	20		
20 INLET/OUTLET VALVES	Yes		
21 DRAIN OPENING	Yes		
22 ELECTRICAL OUTLETS	Yes		
23 MATERIAL			
24 Frame and case	Stainless Steel, Painted, antimicrobial		
25 WORK AREA DIMENSION,mm	900×500×600 mm		
26 CONTROLS			
27 Microprocessor controlled	Yes		
28 Typology	Touchpad		
29 Display	Digital read-out, LCD, alphanumeric		

30	Fan control	Yes		
31	Light control	Yes		
32	UV control	Yes		
33	ILLUMINATION	> 350 lux		
34	ALARMS/INDICATORS			
35	Sash Open	Yes		
36	Airflow	Yes		
37	UV Light On	Yes		
38	ACCESSORIES			
39	Stand	Yes		
40	Cabinet light	fluorescent		
41	Waterproof Socke	2		
42	UV Light	YES		
43	Spare Filters	1		
44	TRAINING	0,5		

INCUBATOR, AEROBIC[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Device used to grow and maintain microbiological cultures or cell cultures. The incubator shall maintain optimal temperature, humidity and other conditions oxygen content of the atmosphere inside. To be used for experimental work in cell biology, microbiology and molecular biology and to culture both bacterial and eukaryotic cells.		
2 UMDNS	15-151		
3 FDA CLEARANCE	Yes		
4 CE MARK (MDD)	Yes		
5 VOLUME	60 Liters		
6 TEMP RANGE [° C]	5-80°C		
7 TEMP VARIATION AT 37 ° C	0,3		
[± K]			
8 TEMP FLUCTUATION AT 37 °	0,1		
C [± C]			
9 HEATING TIME TO 37 ° C	55		
[MIN]			
10 RECOVERY TIME AFTER 30	15		
S OPENING THE DOOR AT			
37 ° C [MIN]			
11 ELECTRICAL DATA			
12 Rated Voltage [V]	230		
13 Mains Frequency [Hz]	50/60 60		
14 NUMBER OF DOORS			
15 EXTERNAL DOORS	1		
16 INTERNAL VOLUME [L]	60 Liters		
18 INTERNAL STRUCTURES			
19 NUMBER OF SHELVES	2		
(STANDARD / MAX) 2/5			
20 TRAINING	0,25		

MICROSCOPE, LIGHT[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Light microscopes used in clinical laboratories or hospitals to examine body fluids, body tissues, and feces by one or more of the following contrast methods: brightfield, darkfield, phase contrast, and/or polarized light. (ref Model OLYMPUS CX23)		
2 UMDNS	12-536		
3 CE MARK (MDD)	Yes		
4 OBSERVATION TUBES			
5 Binocular	Yes		
6 Trinocular	Optional		
7 Eyepieces	10x, 15x wide-field		
8 Interpupillary distance adjus	Adjustable 48-75		
9 NOSEPIECE			
10 Configuration	Quadruple		
11 Objectives Magnification	4x, 10x, 20x, 40x, 50x (oil), 60x, 100x (oil)		
12 Type	Achromatic/apochromatic		
13 CONTRAST METHODS:			
14 Brightfield	Yes		
15 Phase	Yes		
16 Darkfield	Yes		
17 Polarization	Yes		
18 ILLUMINATION			
19 Condenser type:	Focusable		
20 Numerical aperture:	1,25		
21 Light source:	LED; variable intensity; separate on/off switch		
22 TOTAL MAGNIFICATION	40x - 1000x		
23 STAND			
24 Focusing mechanism	Moving stage, continuous fine focus		
25 Coarse, fine adjustments	Coaxial with scale for fine focus		
26 STAGE			
27 Type	Mechanical, graduated		
28 Tension adjustment	Yes		
29 Motion, X-Y, mm	75 x 50		
30 CABINET	Optional		
31 DUST COVER	Yes		

32	INTERNATIONAL STANDARDS	EN 61000-4-8: Level 3		
33	AFTER SALE, Interv/Year	1		
34	TRAINING	0,25		

pH METER, BENCHTOP[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	A pH meter for measuring the pH (acidity or alkalinity) of a liquid consisting of a measuring probe (a glass electrode) connected to an electronic meter that measures and displays the pH reading		
2 UMDNS	15-164		
3 CE MARK (MDD)	Yes		
4 METHOD	Direct reading With the Ion Sensitive Field Effect Transistor (ISFET)		
5 ELECTRODES	Standard glass		
6 MOUNTING	Flexible support arm		
7 CALIBRATION POINT	Min. 3 calibration points		
8 AUTOMATIC BUFFER RECOGNITION	Yes		
9 RANGE			
10 pH	0 ... 14		
11 mV	0 ... ±1800		
12 Temperature	0 ... 100 °C		
13 RESOLUTION			
14 pH	≤ 0.01		
15 mV	≤ 0.1		
16 Temperature	≤ 0.1 °C		
17 ACCURACY			
18 pH	±0.01		
19 mV	± 0.5		
20 Temperature	± 0.4 °C		
21 TEMPERATURE COMPENSATION	0 ... 105 °C		
22 SLOPE CONTROL	automatically from 90 ... 105%		
23 DISPLAY	LCD		
24 POWER SUPPLY	220 - 240 V, 50 - 60 Hz		
25 WARRANTY	12 months warranty period		
26 DOCUMENTATION	User and service manuals, two copies, hard and Soft, EN		
27 TRAINING	0,5		

PIPETTES, MULTICHANNEL

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[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Multichannel pipette		
2	N. CHANNELS	8		
3	DISPLAY	Digital with backlight		
4	MATERIAL	Hard Plastic		
5	AUTOCALIBRATION	YES		
6	VOLUME RANGE, TYPE 1	5-200ul		
7	TRAINING, days	0		

PIPETTES,SINGLE CHANNEL, 100-1000 uI

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[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Single Channel Manual Pipette		
2	N. CHANNELS	1		
3	VOLUME RANGE	100- 1000 uI		
4	AUTOCLAVABLE	Preferred		
5	DIGITAL DISPLAY	YES		
6	TRAINING, days	0		

PIPETTES,SINGLE CHANNEL, 5-200 ul

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[Manufacturer Name/Model Name/ Version Name]

1	GENERAL DESCRIPTION	Single Channel Manual pipette		
2	N. CHANNELS	1		
3	VOLUME RANGE	0.5-200ul		
4	AUTOCLAVABLE	Preferred		
5	DIGITAL DISPLAY	Yes		
6	TRAINING, days	0		

SAFETY CABINET, CLASS II TYPE A2[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	Laminar airflow hoods to be used for routine handling of cell cultures and human pathogens (e.g., bacteria, viruses, fungi, parasites), for tissue culture and tumor virus work). The cabin has to precisely control ventilation to sweep airborne particles produced during routine microbiological procedures away from the user while maintaining a controlled environment for the specimen. The cabinet is required of Class II type A2, of strong and resistant construction. The filtering has to be provided by High-efficiency particulate-air (HEPA) filters with 99.9995% efficiency. After filtering, the airflow will be partly or totally recirculated into the laboratory room.		
2 CE Marked			
3 MODEL	Laminar Airflow Isolation Hoods		
4 CONFIGURATION	Freestanding		
5 TYPE	Laminar flow		
6 INWARD AIRFLOW, fpm	90 ±20		
7 AIRFLOW VOLUME			
8 Inflow (m3/h)	400-500		
9 Down flow (m3/h)	900 - 1000		
10 FILTER TECHNOLOGY	HEPA 99,9995%		
11 MOTOR Adjustable speed	Yes		
12 SELF-TEST	Yes		
13 ADJUSTABLE SASH	Yes		
14 Type	Sliding, Limited locking		
15 ACCESS OPENING HEIGHT, cm	60-80		
16 INLET/OUTLET VALVES	Yes		
17 DRAIN OPENING	Yes		
18 ELECTRICAL OUTLETS	Yes		
19 MATERIAL			
20 Frame and case	Stainless Steel, Painted, antimicrobial		
21 Work area	Stainless steel		
22 WORK AREA SIZE, W x H x D cm	120 - 60/80 - 60/80		
23 CONTROLS			
24 Microprocessor controlled	Yes		
25 Typology	Touchpad		
26 Display	Digital read-out, LCD, alphanumeric		
27 Fan control	Yes		

28	Light control	Yes			
29	UV control	Yes			
30	ALARMS/INDICATORS				
31	Sash Open	Yes			
32	Airflow	Yes			
33	UV Light On	Yes			
34	ACCESSORIES				
35	Cabinet light	fluorescent (> 900 lux)			
36	UV Light	Yes			
37	Footrest	Yes			
38	Armrest	Yes			
39	Lab Stool	Yes			
40	TRAINING, days	0,5			

STIRRER, MAGNETIC, HOT PLATE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Benchtop magnetic stirrer or magnetic mixer that employs a rotating magnetic field to cause a stir bar (or flea) immersed in a liquid to spin very quickly, thus stirring it.		
2 UMDNS	15-178		
3 FDA CLRARED	Yes		
4 CE MARK (MDD)	Yes		
5 MICROPROCESSOR CONTROLLED	Yes		
6 CAPACITY, l	2		
7 MIXING RADIUS	1.5 mm		
8 MIXING FREQUENCY, rpm	300-2000		
9 TEMP RANGE, °C	Room Temperature, Max > 200 °C		
10 TEMPERATURE SETTINGS, °C	1 °C		
11 TEMPERATURE ACCURACY, °C	Max. ±1 °C at 20 – 45 °C		
12 ALARMS	Audible and visual		
13 AUTOMATIC TURNOFF			
14 Over speed by + 2 rpm	Yes		
15 Exceeding pre-set speed	Yes		
16 End of timed cycle	Yes		
17 DIGITAL DISPLAY	Yes		
18 TIMER SET RANGE	from 0.1 to 1 hours.		
19 FLASK CLAMPS	Yes		
20 POWER SUPPLY	220 v. , 50 Hz. , AC.		
21 TRAINING	0,25		

STOOL OPERATOR[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Stool designed to meet the needs of medical Laboratory staff especially. The Stool must be ergonomic, with contoured, padded and upholstered seat, robust construction, seat adjustable in height, adjustable backrest, with antistatic wheels		
2 CONFIGURATION	Floor standing		
3 FLOOR FOOTING			
4 Material	Chromed stainless steel		
5 Foot Ring	Yes		
7 Footing	Heavy duty wheels 50 - 55 mm		
6 CONTROL			
8 Adjustable Height	Yes		
9 Vertical Travel (cm)	50 - 80		
10 Elevation Mechanism	Pneumatic Piston, Foot actuated		
11 SEAT			
12 Dimension	50 cm x 50 cm		
13 Padded	Yes		
14 Upholstery	Yes		
15 Contoured	Yes		
16 Fire Retardant	Yes		
17 Chemical Resistant	Yes		
18 Color	Black		
19 BACKREST			
20 Adjustable	Yes		
21 Upholstery	Yes, leatherette		
22 Fire retardant	Yes		
23 Chemical resistant	Yes		
24 Padded	Yes		

STERILIZING UNIT, DRY HEAT[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Hot air sterilizer , capacity 50 Litre.		
2 UMDNS	13-739		
3 CE MARKED	Yes		
4 OUTER BODY	Stainless steel		
5 INNER CHAMBER	Stainless steel		
6 SHELVES			
7 Material	Stainless steel Meshed wire or perforated		
8 Number	2		
9 Adjustable	Yes		
10 Capacity, l	50		
11 DOOR			
12 Hinged	Yes		
13 Locking system	Yes		
14 HANDLE	Insulated against heat		
15 CONTROL BOARD			
16 Position	Frontal		
17 On/Off Switch	Yes		
18 Functioning Lamp	Yes		
19 Temperature indicator	Yes		
20 Timer	Up to 120 min		
21 TEMPERATURE RANGE	Up to 200°C		
22 CONTROL SYSTEM	Electronic Thermostatic Control		
23 OVERHEAT CUTOFF	Yes		
24 TRAINING, days	0,5		

SHAKER, VORTEX[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Vortex shaker to mix small vials of liquid		
2 UMDNS	15-590		
3 CE MARK (MDD)	Yes		
4 OVERSPEED PROTECTION	Yes		
5 ON/OFF BUTTON	Yes		
6 SPEED SELECTOR	Digital		
7 INTERCHANGEABLE HOLDER	Yes		
8 SPEED RANGE	0-2500 rpm		
9 SHAKING MOVEMENT	Orbital, 4mm		
10 SPEED SELECTION	Analog		
11 MOTOR TYPE	Electric, oilless bearings		
12 CASE	Stainless steel		
13 FOOTING	Rubber stopper to absorb vibrations		
14 POWER SUPPLY	110V, 60Hz		
15 WARRANTY	12 months warranty period		
16 DOCUMENTATION	User and service manuals, two copies, hard and Soft, EN		
19 TRAINING	0,25		

STERILIZING UNIT, STEAM, BULK[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	Metal sterilizing pressure container (Pressure Cooker Pot) to produce superheated steam (saturated steam) to generate moist heat to eliminate viable microbes from non-heat-sensitive medical devices, including heat-tolerant products used for surgical, general patient care, laboratory. Lid with a safety-clamp locking system: 6 retaining bayonet clamps and 6 wing nuts prevent the lid's removal while the sterilizer		
2 UMDNS	16-141		
3 CE MARKED	Yes		
4 MODEL	Steam Sterilizer Unit, Vertical, Pressure cooker		
5 CONFIGURATION	Floor standing		
6 MATERIAL	Heavy Cast Aluminium		
7 CHAMBER			
8 Material	Seamless aluminium alloy		
9 Volume	50 l		
10 Scored Water	level marks inside the chamber		
11 LID			
12 Charging	Vertical		
13 Closing System	Manual closing, double closing with wingnut in bakelite		
14 Handle	Bakelite material		
15 Seal	Without rubber gasket, metal to metal seal		
16 CONTROLS			
17 Manometer / pressure Gauge / Steam gauge	Yes		
18 Manometer colour-coding	Color coding showing sterilizing zone (green) and caution zone (red).		
19 SAFETY			
20 OVER-PRESSURE VALVE	Yes		
21 ALARMS/ INDICATORS			
22 Power on/off led	Yes		
23 Pressure indicator	Yes, Graduation in kg/cm2, PSI, Max Pressure up to 2 bars		
24 Temperature indicator	Yes, temperature Celsius, Max Temp 126°C		
25 Time indicators	Yes		
26 CANISTERS	2		
28 OTHERS	ASME Compliant		
29 DISPOSABLE MATERIAL			
30 Physical Testing	Bowie dick Test (300 units)		
31 Biological Testing	Rolls for Biological Control Tape (200 units)		

32 ACCESSORIES & SPARS			
33	Handle for lid	1	
34	Wing nut	2	
35	Control valve	1	
36	Excess pressure Valve	1	
37	Vent pipe	1	
38	Pressure Valve	1	
39	Over-pressure plugs	2	
40	Over pressure Valve	1	
41	TRAINING	1	

WEIGHTING SYSTEM, ANALYTICAL BALANCE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	Electronic Weighting system to measure small quantities, with high precision level and low deviation. The Analytical balance has to display the result on LCD monitor.		
2 UMDNS	18-449		
3 CE MARK (MDD)	Yes		
4 CASE	Metal		
5 CAPACITY	200 g		
6 SENSITIVITY	0.01 g		
7 STANDARD DEVIATION	0.01 g, approx		
8 LINEARITY	± 0.02g		
9 STABILIZATION TIME	<2.5 sec.		
10 CALIBRATION	Automatic		
11 DISPLAY	Backlit LCD with dual display		
12 WEIGHT UNITS	grams, others		
13 DATA INTERFACE	RS232 bidirectional interface, accessory interface		
14 PRINTER	In built		
15 DUST COVER	Yes		
16 AIR SHIELD CASE			
17 OTHERS	Security Locking point, Capacity Tracker		
18 DOCUMENTATION	User and service manuals, two copies, hard and Soft, EN		
19 WARRANTY	12 months warranty period		
20 TRAINING	0,25		

WEIGHTING SYSTEM, ELECTRONIC, GENERAL PURPOSE[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 GENERAL DESCRIPTION	Electronic balance to be used to find accurate measurements of weight. It is used very commonly in laboratories for weighing chemicals to ensure a precise measurement of those chemicals for use in various experiments		
2 CE MARKED	Yes		
3 Maximum Capacity	1000		
4 Readability	0.1 g		
5 Linearity	0.2 g		
6 Resolution	0.1 g		
7 Adjustment	Internal		
8 Display	4.5" color TFT touchscreen		
9 Dimensions (DxHxW)	319 mm x 100 mm x 200 mm ca		
10 Housing	Die-cast aluminum, ABS		
11 Interfaces	USB Device, USB Host		
12 Balance Size (DxHxW)	319 mm x 100 mm x 200 mm		
13 Weighing Pan Size (DxW) or Diameter	180.00 mm x 180.00 mm		
14 Battery operation	No		
15 Power	AC Power supply		

REFRIGERATOR, LABORATORY, 250 L[BACK TO INDEX](#)**[Manufacturer Name/Model Name/ Version Name]**

1 PURPOSE	Refrigerator and Freezer, laboratory type, to store the laboratory reagents. Equipped with temperature control and display, made of robust construction, fully insulated		
2 UMDNS	17-157		
3 CE MARK (MDD)	Yes		
4 ENERGETIC CLASS	A++		
5 CONSTRUCTION MATERIAL	Stainless Steel		
6 INSULATION THICKNESS	40 mm		
7 CAPACITY	9 cu ft (250 l ca) total		
8 SHELVES	3		
9 DOORS			
10 Number	2, 1 for refrigerator and 1 for freezer		
11 Type	Fully insulated		
12 REFRIGERATION LIQUID	Environmental compatible		
13 DEFROSTING	Automatic		
14 TEMPERATURE			
15 Range	from °0 to 15 °(refrigerator) / -20° - 0° (freezer)		
16 Control Adjustment	Yes		
17 INTERNAL LIGHTING	Yes		
18 ALARMS	No		
19 CONTROL	On/off switch		
20 DISPLAY	Yes		
21 STANDARD	Iso 13485		
22 OTHERS			
23 Automatic condensate water evaporation	Yes		
24 Internal cabinet with shelves	Yes		
25 Drawers interchangeable	Yes		
26 Safety key locking	Yes		
27 LCD Thermometer	Yes		
28 TRAINING	0		